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Working with the Fogbow Design and reconfiguration of services and participation in eGovernment

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Abstract

This thesis is about the metaphors of the rainbow and the fogbow, investigations and evaluations, public internet monitors, writing women, reflections and discussions about politics, design and democracy. It is also about the ongoing re-structuring of participation in service design within the development of eGovernment. The aim behind the drive towards eGovernment is to modernise administration and make it more efficient. The transformation and modernisation of public services are proclaimed to bring about a change in services based on a 'citizen-centred approach.' In such a process, communication between citizens and public authorities should play an essential role. Themes such as accountability, accessibility and participation all form part of the reconfiguration and at the same time these themes is shaped by the transformation. The papers in this thesis discuss, in different ways, how this reconfiguration is enacted in practice.

Theories and methodologies from feminist theories, participatory design and informatics, are used in order to develop broader and more complex understandings of ongoing development within eGovernment.

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Both chimpanzees and artefacts have politics, so why shouldn't rainbows?

_

 $^{^{\}rm 1}$ The quote about the politics of rainbows is a respectful parody of a quotation from the preface in How Like a Leaf, by Donna Haraway, 2000.

1. Introduction

Writing a licentiate thesis is a task often described with the aid of metaphors. As this introduction indicates, I have also decided to join the tradition. The image of wild water racing gradually materialised as the writing process progressed. In both tasks, i.e. writing and paddling, the aim is to come out the other side unscathed despite the feeling of being trapped in deep water. The arduous struggle against invisible undercurrents and the constant lurching between a feeling of being more or less in control only to be thrown the next second into a mental water fall are common to both activities. In the academic world, which surrounds me as an employee of an institute of technology, the waterfall model¹ can also be said to have a special significance for traditional technical and design development. I describe my challenging and occasionally dangerous wild water race with the metaphors of the rainbow and the fogbow, investigations and evaluations, public internet monitors, writing women, reflections and discussions about politics, design, democracy etc.

The subtitle of my thesis is intended to indicate a re-structuring of participation in service design and development. But what about the main title Working with the fogbow? Why use the metaphor of a fogbow and then try to discuss it in relation to a rainbow? Everyone may know what a rainbow is, but what exactly is this other phenomenon? A fogbow (also called a mist bow or white rainbow) may be defined as 'an optical phenomenon, which manifests itself as a white arc which is visible in fog'². The web site 'Atmospheric Optics'³ describes fogbows as follows: 'Fogbows are formed by much smaller cloud and fog droplets which extensively diffract light to reproduce a broad and pale bow.'⁴

The fogbow is for me an illustrative and useful metaphor, which makes possible a multi-faceted discussion of technical development. It symbolises the possibility of including that which is not obvious at first glance and which can only be distinguished by studying actions and activities in everyday situations and by reflective reinterpretations of what is normally taken for granted. The comparison to a fogbow thus incorporates both the context of the action and the action itself. The fogbow metaphor also constitutes a comment on and suggests an expansion of one of the models used in my analyses, namely *The Access Rainbow model* ⁵ which is

¹ The waterfall model is a traditional, linear life-cycle model, which describes a systematic method of approach employed in technical development. It is considered to be the oldest and most-used model for system development, see Pressman, 2001.

² National Encyclopedin, [The Swedish National Encyclopaedia] (1995)

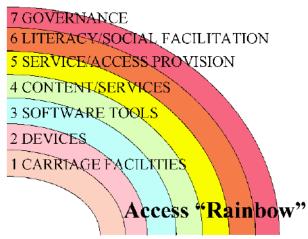
³ See http://www.sundog.clara.co.uk/atoptics/phenom.htm by Les Cowley [Accessed 02-11-26]

⁴ Quoted from the section 'Fogbow formation,'

http://www.sundog.clara.co.uk/droplets/fogform.htm [Accessed 02-11-26].

⁵ Clement & Shade, in Gurstein, 2000.

discussed in greater detail in one of the papers in this thesis, see *Paper II*. It should also be said that I have intentionally chosen an aesthetical picture in order to illustrate my discussion in a creative way.



Clement, Andrew and Shade, Leslie, July 1998
The access rainbow: conceptualzing universal access

The access rainbow: conceptualizing universal access to the information/communications infrastructure Information Policy Research Program, Faculty of Information Studies, University of Toronto. Working Paper No. 10. July 1998.

http://www.fis.utoronto.ca/research/iprp/dipcii/workpap10.htm

Figure 1 "The Access Rainbow"

1.1 Patchworking

The report we wrote on the Dialogue project⁷, and sent to our client within the EC, the Information Society Project Office (ISPO), was presented in storybook form. It resembles a literary collage or 'patchwork' of stories written by the project leaders, local actors and participants.⁸ This approach was considered unusual in an EC context, where forms and formal project descriptions are the norm. A composite licentiate thesis of the present kind is reminiscent of the storybook form. The aim is not to provide a synthesis; rather, it provides a multitude of pictures of processes and activities. The present thesis consists of an introductory paper, which presents a general discussion, and includes several additional papers, which expand on and

⁶ Published with permission of the authors, see Clement & Shade, in Gurstein, 2000, p. 36

⁷ The project is further described in Paper VI in the Appendix of this book. See also http://www.ronneby.se/dialogue/ [Accessed 02-11-28]

⁸ Available at http://www.ronneby.se/dialogue/storybook/default.htm [Accessed 02-11-26]

discuss the special aspects related to my research focus. The patchwork concept can be described as '. . . a way to make a selection of /. . ./ writing presented within an interpretative reflective framework which brings out and explores the overall theme in relation to the individual pieces of writing'9.

2. Different personas 10 , or an exercise in splitting a subject

'As though I learned to see, and to speak of what I saw, although there is no word, for that which I know now'11

In a world increasingly dominated by echnical consumption I see myself as a creative human being. Production and consumption are seen as two incompatible extremes. Is a member of the general public then just someone who consumes services? All of us become personally involved at some time or other, e.g. when we discuss things with others, think and reflect, and when we are upset and react. Involvement in turn nurtures creativity.

Certain words and expressions have special connotations for me, e.g. citizenship and participation, computer use, dialogue, making visible, taking responsibility, democracy and feminism. These words take their place alongside poetic stanzas and isolated quotations, which for different reasons have attracted my attention among a multitude of day-to-day impressions. These words, expressions and poetic 'snap shots' are not merely a literary reinforcement of my real interests or the basic justification for my reflections on public service, they are also the means of creating a balance between different needs, illustrating that there is often a pleasurable, creative moment in our day-to-day existence which exists alongside all the 'musts' which characterise our daily lives.

2.1 The post-graduate student

I have had a variety of roles during the years but not until I carried out the field work for the present articles had I been so conscious of the fact that people have many different parts to play at the same time. Sometimes I felt like a wandering gallery of different 'personas', which changed form every time the representation (i.e. the role I was supposed to play) was reinterpreted in various contexts. I was, for example, 'the researcher,' 'post-graduate student,' 'user,' 'practitioner', 'theoretician,' and

3

 $^{^{\}rm 9}$ See $\,$ Rydhagen, $\,$ p. 13 (2002) and Scoggins & Winter, 1999, pp 485-500.

¹⁰ Personas is a relatively new interactive design technique and refers to the creation and use of a fictional user in collaborative design situations. See Grudin & Pruit (2002). Available at: http://research.microsoft.com/research/coet/Grudin/Personas.pdf. [Accessed 02-11-26]

¹¹ From the poem 'Key to the kingdom' by Susanne Vega, 1999.

'politician' to name but a few. I rarely considered myself a technician despite the fact that I am a post-graduate student at an institute of technology. I have a formal, theoretical background in the humanities, and ethnology and the history of ideas are my main subjects. I have reflected on why I have ended up where I am. It perhaps has something to do with all the discussions and searching questions I asked during my years as a journalist and librarian, and had to deal with new technology, which was more or less imposed on me. I addressed my frustration on bad functionality and other questions to computer technicians, IT co-ordinators and web designers, all of whom were themselves involved in a learning process and who were thus interested in helping me to learn more about computers. These practitioners also came to understand that I sometimes had something to offer because my position was different to theirs, i.e. I could speak from the user's point of view. The exchange of experience was based on mutual respect for one another's different areas of expertise, perspectives and needs. The many discussions, misunderstandings and mutual understanding, concrete negotiations over resources and time, and, on occasions, creative activities, were essential to ensure that the practical working day would flow smoothly or at least tolerably well for given periods.

My experiences of these "everyday negotiations" made me start to think about what constitute artificial boundaries between developers and users of technology, and between design and use as these concepts are understood in traditional system development. What happens if you consciously decide not to see the boundaries? Is it even possible to think this way? What does participation in design processes look like, if it is not based on assumed foundations? Who in fact co-operates with whom – and in what activities?

2. 2 What is design?

As I see it, design in a technology context is not solely the task of professional system developers. It is a collective activity involving several actors with different positions and functions, and with different views of and relations to what is to be developed. The predominant understanding of what constitutes design must be further elaborated, as must the basic understanding of what information technology is. ¹² According to the group of researchers I am cooperating with at Blekinge Institute of Technology, 'participatory design is /. . ./ no longer primarily a professional issue for software developers but has to be extended to the relations between them and their clients/customers/service-seeking citizens in general'. ¹³ These relations are discussed in greater detail in *Paper V*, Suchman writes: 'Understanding design as artful integration of different social as well as technical

¹² Elovaara , 2001.

¹³ Developed further in Dittrich et al, 2002, p. 132.

contexts allows for taking working relations of technology production and use into consideration, rather than negating them' 14

Why is it so essential to try to redefine the concept of design and present alternative understandings and interpretations? My thesis attempt to explore these questions; at the same time, I also try to formulate the arguments.

2. 3 The practitioner

'You see, I don't believe that libraries should be drab places where people sit in silence, and that's been the main reason for our policy of employing wild animals as librarians¹⁵

My interest in writing gradually steered me towards a double-edged professional career, as a journalist and a librarian. But the librarian's role has changed a great deal in the last thirty years. Librarians are responsible for handling books, teaching how to find information in electronic databases and on the Internet, criticism and evaluations of sources, and production of homepages and information management. The job of a librarian is thus has a far broader scope than it used to be. Changes in the librarian's professional role affect status development, competence and how expertise is viewed.¹⁶

A librarian in Ronneby Municipality, where I was employed for several years, must satisfy demands, which greatly exceed those normally placed on a librarian. In accordance with the municipal IT policy, 17 libraries in Ronneby are to become increasingly technologically oriented. The development is described as follows: 'The libraries can offer their visitors equipment and user-friendly software, and recently the Internet has become increasingly in demand at libraries. Investments made in library computers from 1994 onwards have caused the number of visitors

recently the Internet has become increasingly in demand at libraries. Investments made in library computers from 1994 onwards have caused the number of visitors and books borrowed to rise. The web is used more and more in Ronneby, although it is also recognised that 'not all members of the municipality have access to the internet and the web.'

Thanks to the school development project 'New Forms', ¹⁸ I became involved in a sub-project called 'IT for everyone', the aim of which was to investigate the need for

¹⁴ Suchman, 1994, p. 22.

¹⁵ Taken from a Monty Python sketch, found at http://www.ifla.org/I/humour/subj.htm [Accessed 02-11-26]

¹⁶ Elovaara, 2001, p. 56

¹⁷ See http://www.ronneby.se/projekt/2003e.asp [Accessed 02-12-12]

¹⁸ Project description (in Swedish) at http://www.ronneby.se/projekt/nyform.asp [Accessed 021128]

computer support as well as introduce and develop this to serve the needs of the visually impaired and children with reading and writing difficulties. I became the coordinator of a group of specialist teachers, class 19teachers and others working with computer support on a daily basis. A plan of action was worked out at a number of meetings and within the framework of the project. It was my task to compile and direct the plan of action. Financial resources were attached to the project making it possible to employ resource personnel. The upper-secondary school library where I was ultimately employed was equipped with public computers, which forced me to develop my computer skills and information, communication and technology (ICT) pedagogy. This in turn led to my participation in a European project called 'Dialogue'20, the aim of which was to develop new forms and methods for democracy. 'Women writing on the net'21 was a sub-project included within the framework of the Dialogue project. We decided to focus on how women write on the net. The participants were women of all ages, some of whom were immigrants. Using the model of the study circle we made homepages, tested recipes and created a virtual cookery book. We also wrote poems and discussed cultural differences, sent letters to the EU Parliament and together composed contributions to local on-line debates introduced by the municipality during the 1998 election. We met women from Italy and England, both in a physical and a virtual sense; these women shared our desire to develop their computer skills and learn more about other cultures.

2. 4 What is democracy?

What has all this got to do with democracy, one might ask?²² The answer to this question depends a great deal on one's view and model of democracy. Ilshammar & Aström²³ discusses the central dimensions of democracy, based on theories of democracy, divided up into three categories: quick, strong or thin democracy. Radical proponents emphasise that quick democracy makes direct democracy possible, and that representative democracy is outdated. The thin variant comprises the idea that the public is uninterested in politics, advocates an elitist model and regards the citizens primarily as customers. Strong democracy emphasises the discussion as a political tool and is also described with terms such as deliberative, discursive and participatory democracy. ²⁴Strong democracy comes closest to my own definition of democracy. The practical exercise of citizenship in society today not only presupposes skills in using technology, it also necessitates the ability to shape one's role as a citizen and to take part in forming the content and design of public services,

¹⁹ This is taken from a memo presenting the mission of a local investigation of Public Services.

²⁰ Description at http://www.ronneby.se/dialogue/dgieng.htm [Accessed 02-11-26]

²¹ See Paper VI, in section Appendix

²² See the section called 'Democracy and Citizenship' in paper VI, section Appendix in the present book for a discussion of democracy.

²³ Ilshammar & Åström, in Grönlund & Ranerup (eds.) 2001, p 93 pp

 $^{^{24}\,\}mbox{\normalfont\AAstr\"om}$ in Communications of the ACM (The Magazin for Association of Computing Machinery), 2001, p.49.

examples of which are provided in the papers that follow. A living democracy requires active, involved citizens who are conscious of their position in society and are prepared to take responsibility for their actions. Some have the ability to see themselves and their actions in relation to their fellow human beings, social structures and courses of events. For me, democracy- as well as technology must be continuously configured in a mutual, respectful dialogue, which is constantly reinterpreted, negotiated and actively recaptured, shaped and formed.

Another answer to the question, 'what is democracy?' is that the accepted forms for exercising democracy are not always viable. Democracy, politics and knowledge are no longer produced within given frameworks or under given preconditions. Michael Gibbons, Director of the Science Policy Research Unit at the University of Sussex, and his fellow authors discuss changes in traditional knowledge development in *The New Production of Knowledge* (1994). Knowledge does not always develop where it is most expected; rather, it takes place in other contexts and ways which Gibbons calls 'mode 2', which he defines as follows: 'A new mode of knowledge production affects not only what knowledge is produced but also how it is produced; the context in which it is pursued, the way it is organised, the reward system it utilises and the mechanisms that control the quality of what is produced'.²⁵

This change in knowledge development is important for democratic and political development. It is thus appropriate to talk about a new form of 'politics production.'26 How does the above-described change manifest itself in different local practices?

2.5 The politician

'You are a politician as soon as you get up in the morning. You influence your environment even if you are not a party politician . . . you are a political creature. . . ²⁷

The above quotation when viewed from an idea historical perspective can be traced back to Aristotle's famous *Politics*. Aristotle defined 'man as a political animal' ('politik?n z?on, which actually means 'political creature') and that mankind lives by choice in a state. ²⁸I do not regard myself as a politician in all situations of life, but

²⁶ These paragraphs grew out of a research seminar, which took place on November the 11 here in Ronneby, when we discussing the Norwegian researcher Elisabeth Gulbrandsens way of using the term.

²⁵ From the preface of Gibbons et al, 1994.

 $^{^{27}}$ This quotation comes from an interview with a local politician from Ronneby, performed on 020828.

²⁸ From "Kön, makt och medborgarskap" (Sex, power and citizenship), 1983.

nevertheless I am interested in taking part in society building. I decided to get involved in local political work in the late 90:s. Even if I did not feel particularly comfortable when thinking of the traditional politician's role I still hoped that I would be able to influence political developments in my immediate environment through direct political involvement in the governance of the municipality, of which I am a member. Eevi Beck, a researcher from Norway who studied the development of home service in Ronneby for a number of years, has described the municipality as follows: 'During 1992-2001, central officials of the Swedish municipality of Ronneby moved towards 'IT- samhället' (Information Technology Society) as an ideal for citizens and for governance. The formal adoption of the IT society stemmed from a visionary document steering municipal policy. The stated aim was to develop a society in which all citizens were familiar with IT (later modified to all municipal employees). Ronneby would become known as an IT society and attract software companies and workplaces.'²⁹

In January 2001 I was called to the first meeting of a group of fellow politicians and civil servants who had been allocated the task of carrying out an investigation of future developments within public services (hereafter abbreviated as the PS investigation) in the municipality. The idea came originally from a municipal investigation of municipal organisation in 1998 and was followed up by a formal decision in the local council in 1999.30 In the official description, the group's assignment was defined as 'carrying out a thorough investigation of the need for public service.' A number of questions were to be illuminated. These may be summarised as follows: 'What does developed PS entail in the present municipal organisation? What qualitative and quantative measures already exist with regard to PS? What citizens are included in the investigation? What should PS be allowed to cost in the future? Which divisions (i.e. internal sections and external authorities, companies, economic associations and organizations) will co-operate to provide the necessary services? Are the investigation and its results an integral part of a comprehensive IT strategy? How comprehensive will IT support be, and is it the task of the investigation to determine the details of such support?'31

The accompanying memo also presented ongoing co-operation and other initiatives in the area. The Information Division and the libraries were given special emphasis, and the IT Division was described as 'strongly influenced by municipal investments in IT' ³² (this refers to the 2003 project), use of the web and development of the intranet. The memo focused on IT- training courses for municipal employees, e.g.

²⁹ Beck, 2002, p. 204.

³⁰ Information regarding the preparatory measures has been taken from the summons sent out by the civil servant who was the group's secretary at the time.

³¹ The investigation is described in full in Swedish, DNR 1999.70 018.940 Available at Ronneby Municipality.

³² See http://www.ronneby.se/projekt/2003e.asp In Swedish. [Accessed 02-11-26]

teachers. Participation in regional, national and international IT projects was contrasted with the reduction in the amount of traditional information material produced. The memo also points out that questions from the general public were increasingly sent via e-mail or were asked in person during visits to the Information Division. Emphasis was placed on the co-operation between different divisions: 'as it became clear that local tax offices were to be closed down, discussions began between the municipality and the offices about how IT support could reduce the negative effects of such closures.' Service telephones, information on the internet, provision of public internet monitors at libraries, the town hall, local computer cottages and a citizen's office in the region are examples of co-operation between different divisions and organisations. One so-called 'One-Stop Service Project'33 was given special attention. Other ongoing and possible new co-operative projects within the framework of the EU,34 e.g. call centers for public information and communication via video links', where also mentioned in the memo. The memo concludes with the following statement: 'When we consider how public service should be designed as we approach the year 2000 there is a danger that we will base our ideas on old needs and preconditions is our attempt to find solutions.' I was there, in the middle of the configuration, reinterpretation and negotiation deriving from the authorities' dialogue with the general public. One question gradually became important, 'how do we get a hold of the citizens opinions in this subject?'

2.6 What is science?

And from the standpoint of the politician I suddenly start to wonder: where is the boundary between science and politics? Are there any base line differences between "doing science", that is, being actively involved in research where the results are expected to be of relevance for understanding the development of the so-called information society - and what this concept might actually mean and encompass - and "doing politics", that is, being actively involved in local development on a municipal level? Could research be a central part of local development? Are science and local development mutually dependent on each other? Politics and local development are heavily dependent on visions and rhetoric, which science seems to feed in to as though from nowhere, but where is the actual meeting place for science, research and politics?

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³³ See http://www.scn.org/tech/the_network/Proj/ws99/Andersson-and-Eriksin-pp.html [Accessed 02-11-26]

³⁴ See http://www.ronneby.se/project/edefault.asp [Accessed 02-12-16] for a short description of projects in which the municipality currently is involved.

2.7 Post script - in the middle of everything

What am I trying to say in the introductory odyssey of what at first sight appears to be separate perspectives and starting points (the post-graduate student, the practitioner and the politician)? My aim is to show that my role as a politician is not unrelated to my role as a post-graduate student, and vice versa. As a user, my role is not separate from my role as a creative being and a practitioner. I am all these things at the same time. A person can never be an empty surface or take a neutral stance. If you do not define your own role in a particular context, you will be placed and defined by other actors and your own history, which you carry with you. In other words, as Donna Haraway expresses it, 'there are no innocent positions' 35

In the following section I present the aim of my project, its subject and its limitations. I then describe my choice of method and material and the interdisciplinary basis of my research.

3. Aim, subject and limitations

'We never look at just one thing; we are always looking at the relation between things and ourselves. Our vision is continually active, continually moving, continually holding things in a circle around itself, constituting what is present to us as we are' 36

My research area, i.e. design, democracy and public influence and how these are enacted in the development of public services, places me within the research field which is concerned with the development of eGovernment, which is at the same time the official name of the European Union's political initiative aimed at bringing about a rationalisation and modernisation of public administration and development of services and democracy. 37

The plans and actions to bring about these changes are specified in the official action plan for eEurope 2005³⁸. An information society for all states the following: 'eEurope puts users at the centre. It will improve participation, open up opportunities for everyone and enhance skills. eEurope contains measures regarding e-inclusion in all action lines . One important tool to achieve this is to ensure multiplatform-provision of services. /---/ The eEurope 2005 Action Plan is based on two groups of actions which reinforce each other, on one hand it aims to stimulate services, applications and content, covering both online public services and e-

³⁵ Haraway, 1991, p. 183 pp

³⁶ Berger, 1972, p 9

³⁷ Grönlund & Ranerup, 2001, p 9.

³⁸ http://europa.eu.int/information_society/eeurope/news_library/eeurope2005/index_en.htm [Accessed 02-12-12]

business; on the other hand it addresses the underlying broadband infrastructure and security matters." ³⁹

This highlighting of service provision in public administration and development is in a way "old news". The Swedish investigation on bureaucracy⁴⁰ pointed out as early as the 1970s that an essential aspect of public authorities' work ought to be improving services to the general public. Public accessibility in terms of time and space was considered to be a vital factor as well as support in handling errands and helping the public to interpret the authorities facts and instructions.⁴¹ Treatment of the public by various authorities was also taken up in the official report. Since the latter, simplification and effectiveness of social information have been major concerns in an attempt to facilitate public access to relevant information. In the last few decades, municipalities, county councils and national bodies have made considerable efforts to create an administrative system, which is user-friendlier for the general public.42A gradual shift has taken place from a rule-oriented official culture to a goal-oriented service one. Emphasis was placed on service and democracy, with a focus on increased efficiency and reduction of central administration. The Liberal Party introduced motions on public computer monitors ⁴³emphasising their importance for making available information about local politics and planned regional and central measures. There was also a proposal that electronic letterboxes for political debate should be introduced. Dan Eriksson (Christian Democratic Party) recommended citizens offices offering computer equipment for the general public, access to information about official documents, a register of official business conducted, access to public data bases, consumer information and information in different immigrant languages.44

The main themes, which I have chosen to investigate and discuss in relation to eGovernment in general related to different practices are: accountability, accessibility and participation. These themes recur in the public discussion of time; in order to restructure services and citizenship in line with the aim to achieve a 'citizen-centered approach'⁴⁵. The thesis discusses different dimensions of these themes in relation to different local practitioners and with the aim of contributing to a problematisation and broader understanding of these terms. Participation and a broader citizen perspective are, for example, discussed in Papers III and IV. Reconfiguration of citizenship is addressed in Papers I and II. Paper V goes deeper into the accountability dimension, discussing accountability from citizens' and civil servants perspectives.

³⁹ ibid.

⁴⁰ See SOU 1979:31

⁴¹ See Ds 1994:9, p. 11

⁴² ibid. p. 15

⁴³ Mot. 1991/92: K801. Available through http://www.regeringen.se/ [Accessed 02-11-26]

⁴⁴ Ds 1994:9, p. 21.

⁴⁵ See i.e. Microsoft Insight: Executive briefings for the agile enterprise, 2002, pp 1-32

3.1 The focus of the questions

My questions focus on the ongoing restructuring of the dialogue between members of the public and representatives of official bodies, and on how discourses and local practitioners influence and recreate participation in and design of services and new technology. This ongoing restructuring has an effect on several different levels of the public sector. A restructuring of a specific activity or place of work influences the internal organisation, i.e. the co-operation, learning and development of new expertise, working conditions and the work itself. ⁴⁶The relationship to the citizens who use the services is also affected to a considerable degree. How are the themes, i.e. accountability, accessibility and participation expressed and manifested in official discourses⁴⁷ and local practices? These are some of the questions, which I have tried to problematise and develop in my thesis.

3.2 Choice of method and empirical material

A research strategy based on ethnography falls within the framework of what is normally described as qualitative research. It is based on several important principles: descriptive studies of everyday activities in a natural environment and the application of a holistic perspective, i.e. a focus on the relations between activities and not exclusively on individuals or individual activities. Researchers applying an ethnographic perspective strive for an insider perspective. 48 The ethnographically inspired methods of fieldwork, focusing on the everyday organising of work and use of technology, which are currently applied within Human Work Science and Human Computer Interaction have their roots in anthropology. This research method makes possible studies of the situated context of the use of technology as well as the local work organization. It is a 'field experience comprising personal, improvisational multimethod approaches and iterative processes'. 49 As my field material exemplifies, this may take the form of a study of the relations between a member of the public who needs help to find information on a public internet monitor and the relevant local host, or alternatively it may describe what happens in a workshop to which members of the municipality have been invited to discuss improvements in the municipal website.

⁴⁶ Eriksén, 1998, p. 51

 $^{^{47}}$ "Patterns of understanding through which meaning is created for physical and social realities" Trojer, 2002, p. 10

⁴⁸ This section about etnography and interpretation originates from a lecture with professor Jeanette Blomberg, during the Work Practice and Technology course at Blekinge Institute of Technology, 2001-2002. Also discussed in Eriksén, 1998, p. 52pp ⁴⁹ See above.

3.3 Ethnography and interpretation

Ethnography was originally developed within a natural science tradition. The latter assume that an empirical and social world exists and can be discovered. The social phenomena are separate from the physical ones, and human activities are meaningful and can be interpreted on the basis of partial and situated perspectives. The positivistic links derive from the researcher's view that social phenomena are objective that the researcher is external to the research process, that searching for universal truths is important and that data should be collected in a standardised manner. Critical theories challenge this assumption by claiming that social products reflect the character of society. This includes scientific work. There is 'no way of speaking from nowhere in particular'50. Production of knowledge has consequences irrespective of whether one acknowledges them or not.

My primary material consists of open-ended interviews – individual as well as group – with members of the general public, politicians and civil servants in different positions. All interviews were audio taped. I have also used observations and workshops with municipal civil servants, students and other groups of citizens, e.g. the senior citizen groups during the PIM Project (The Public Internet Monitor Project). An evaluation of public services was carried out in conjunction with individual members of the general public, public employees and a group of women who had taken part in the 'Women Write on the Net Project'. I have also used notes from informal conversations. Politicians and civil servants taking part in the PS investigation gave me permission to refer to the meetings and discussions, which took place within the framework of the project.

3.4 Problems with my method

One methodological problem of an ethical nature, which was difficult to handle on occasions, especially in the context of interviews and observations in environments where I had previously played the role of practitioner, was an uncertainty about my current position in relation to the role I had previously played in such contexts. Sometimes this problem expressed itself in a poorly concealed scepticism, on the part of the person being interviewed, sometimes it resulted in more or less facetious comments which were, in fact, quite serious at root. One civil servant asked me, 'is there any danger in quoting you word for word?' as we were taking part in an information meeting about a new e-democracy project launched by the municipality during the election of 2002.51 My interpretation of this comment was that he was

⁵¹ See http://val2002.ronneby.se/15sept.asp [Accessed 02-11-28]

Out of Blomberg, during lecture on the WPT Course, see description in http://www.iar.bth.se/forskning/arbv/Work Practice and Technology.asp [Accessed 02-11-28]

teasing me about my opportunity to influence the writing of directives governing municipal action in my role as a politician. Rarely was I asked the question directly and I thus had little chance to discuss it in depth or consider how civil servants understand, interpret and define the role of research when viewed from their own particular needs and perspectives. Since I had received instruction and training in web design from some of the civil servants involved in the investigation, there was some confusion about my role: was I still one of them, i.e. a practitioner, or was I a researcher? What was the difference, anyway? I also experienced a certain amount of scepticism about whether or not I had the necessary expertise to talk about design, since I had once been their pupil. Here again is an excellent opportunity for discussing how design is understood from different perspectives, making it possible to introduce a broader concept of design and thereby accomplish what Donna Haraway would call a "modest intervention".⁵²

Another dilemma was that a major part of my field material was collected for a dual purpose. Some took the form of summarising evaluations, other parts evolved as a result of active participation in proceedings and user evaluations. The evaluations were carried out as an EC and Swedish national authorities assignment although the intention from the very beginning was that they would also be included in my licentiate thesis. I came in at the end of the evaluation of one project and at a turning point in the pilot project (The PIM Project), when it had to be decided if a new project would be started or the present one be disbanded. To find new ways into the material while at the same time adhering to my problem formulation I was forced to modify my research focus by conducting detailed interviews with individuals once the evaluations had been completed.

The following section describes the interdisciplinary basis of my research and presents the different research areas from which I have taken my conceptual tools.

4. Where am I coming from?

'The limit reached by science is never the ultimate one.

There are always others beyond this one.

There will always be countries, which we have not investigated, untouched wild forests that no one has ever walked in, peaceful islands a long way out to sea and numerous meadows where there is still room for secrets and miracles.' 53

Since I belong to two research groups, the Technoscience Studies research unit in the Department of Work Science and Media Technology and a research group in the

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⁵² See Haraway, 1997.

⁵³ Larsson, 1997, p. 11. [Translated from Swedish by Jane Mattisson]

process of being formed, namely Informatics and Work, I sometimes find it difficult to maneuver in a border country. A traditional scientist would regard such a position as a disadvantage because one is regarded as theoretically and methodologically 'impure', a difficult hybrid to place. The advantage of this position is that it is possible to vary one's perspective and take conceptual tools from different fields, though it is important to show respect for the basic values, which the different disciplines represent. The combination of different perspectives has opened up a variety of approaches and provided the preconditions for creating a nuanced understanding both of the research process itself and of my chosen subject.

4.1 Technoscience Studies

Technoscience Studies offers a basic challenge to the post positivistic tradition and the belief in objectivity, which permeates techno scientific disciplines. Traditional technology science in the words of Lena Trojer, professor in Technoscience studies at Blekinge Institute of Technology, is 'dominated by the belief that it is possible to map and read a true reality (objectivity, neutrality, a cumulative growth of knowledge, reproducibility, a sharp divide between the subject of research and the object of research, between basic research and applied research, between what is true and what is false).⁵⁴ This view is no longer sustainable in an ever-changing society. As a result, our basic understanding of what science is must be re-negotiated, as must the relationship between science and society, and quality and objectivity. 55In a feminist project, the focus must be moved from purely female/gender questions to a review of the theoretical and methodological foundations of the discipline. This critical standpoint emphasises the nature of research as a producer of reality, a standpoint which can be expressed as follows: 'It is a great challenge for us as researchers to see ourselves not only as producers of solutions and improvements but as part of the problem' 56. This has inspired me to reflect on what pictures of reality I help to produce as well as on my different roles as a researcher and actor in a research community and a politician and active member of a local community.

The scientific critical discussion presented by Donna Haraway, and her assumption that 'feminist objectivity is about limited location and situated knowledge,⁵⁷ [and] not about transcendence and splitting of subject and object', ⁵⁸ has led to the research process concerning itself primarily with attempting to ascertain the social and

⁵⁴ Trojer, 2002, p. 55

⁵⁵ ibid. p, 16

⁵⁶ ibid. pp. 30-31

 $^{^{57}}$ Situated knowledge is often interpreted as; what your identifying marks are, and, literally, where you are. However "situated" means not only to be in one specific place, Haraway stresses an epistemological concern or what she calls the "situatedness of situated", meaning the multiple modes of embedding that are about place and space/.../requiring a knowledge tuned to resonance, not to dichotomy. Haraway, 2000, p 71

⁵⁸ Haraway, 1991, p. 188

epistemological positions which form the basis of the researcher's written and interpretative production. These positions affect the expression of the standpoint and how this is interpreted by the surrounding world, an interpretation that in turn is based on someone else's situated understanding. If objectivity is regarded as partial and situated (i.e. is related to a specific position), this will affect the understanding of science and knowledge in general. Such conclusions have caused me to reflect on my own position and how it is related to the different relationships I am studying, as well as how this position relates to the different roles I am expected to play.

4.2 Accountability - as a conceptual tool and in practice

Donna Haraway's re-definition of objectivity makes possible a deeper discussion about responsibility in research and development processes. Responsibility is also stressed in eGovernment contexts, where accountability is a central theme. Accountability is often associated with the aim of increasing the individual citizen's insight into government routines and principles, producing transparency and providing a presentation of government work processes. Accountability is then used in the sense of 'making visible', i.e. presenting and describing the process which leads to a decision. The ethnomethodologist Harald Garfinkel has minted a classic definition of accountability, describing it as 'visible-rational-and-reportable-for-allpractical-purposes'59. 'In doing sociology [...] every reference to the "real world", even where the reference is to physical or biological events, is a reference to the organized activities of everyday life. [...] Ethnomethodological studies analyse everyday activities as members' methods for making those same activities visiblyrational-and-reportable-for-all-practical-purposes, i.e. "accountable", as organizations of common-place everyday activities. 60 Accountable refers here to people's organsiations of commonplace everyday activities. Accountability is central in ethnomethodology, and is used to help us understand how people manage and structure everyday activities and daily interaction. Or as described by John Hughes, professor in sociology at Lancaster University: "Accountability is members methods for making activities observational-reportable, not to be understood as a stable theoretical concept, it is better seen as a set of methodological proposals for ethnomethodology". 61

Sara Eriksén observes that in software engineering literature, accountability is mainly seen as a goal for ensuring the quality of design processes. It is also part of a 'business administrative terminology, implying and referring to institutionalised audit, documentation and certification mechanisms and technologies of managerial control and intervention' ⁶²

⁵⁹ Garfinkel, 1984,[1967].

⁶⁰ ibid. p. vii.

⁶¹ This explanation was presented during a lecture on the Work Practice and Technology Course at Blekinge Institute of Technology, 01-11-08.

⁶² Eriksén, 2002

Accountable is defined in *Longman's Dictionary of Contemporary English* as being 'responsible for the effects of your actions and willing to explain or be criticised for them'⁶³. This is clearly related to Donna Haraway's insistence on a firm anchoring of responsibility. Accountability is from her standpoint, all about emphasising the importance of taking a personal stand and accepting responsibility for the reality producing process in which we are all deeply involved: 'In this way we might be answerable for what we learn how to see',⁶⁴

The different understandings of accountability presented above raise certain questions, such as: 'accountability for whom?' In what ways can citizens, researchers and officials take responsibility for how eGovernment-related projects should be interpreted and carried out in relation to the day-to-day existence, which they help to create? I suggest that it may be fruitful to discuss what I would call a *situated accountability* based on Donna Haraway's description of situated knowledge:'Situated knowledge means not to be in one place or take a standpoint of situatedness, it is "a way to get at the multiple modes of embedding that are about both place and space in the manner in which geographers draw that distinction. Another way of putting it is when I discuss feminist accountability within the context of scientific objectivity as requiring a knowledge tuned to resonance, not to dichotomy'.⁶⁵

Situated accountability, then, aims at making visible the multiple modes of embedding within accountability production.

4.3 Informatics

While technoscience studies has moved me in the direction of a scientific, critical perspective, I also apply perspectives from informatics and work science to understand how technology is used and what it has meant for technical development. ACM and IEEE 66 computing curricula, 67 present a generally accepted definition of informatics (also referred to as information systems) both as a subject and a discipline. It is described as an academic field, which focuses on two broad areas: 'Acquisition, deployment, and management of information technology resources and services (the information systems function) and (2) development and evolution of infrastructure and systems for use in organization processes (system development)/. . ./ Information systems is unique in that its context is an

⁶⁶ ACM (American Computing and Machinery Association, see http://www.acm.org/ [Accessed 02-12-13] and IEEE (Eye-triple-E or in full name Institute of Electrical and Electronics Engineers, Inc) See http://www.ieee.org/portal/index.jsp?pageID=home [Accessed 02-12-13]
 ⁶⁷ The definition is currently being re-worked. See http://www.computer.org/education/cc2001/index.htm [Accessed 02-12-03]

⁶³ Longman Dictionary of Contemporary English, p. 10.

⁶⁴ Haraway, 1991, p 190

⁶⁵ Haraway, 2000, p 71

organization and its information systems. This leads to important differences with Computer Science in the context of the work to be performed, the types of problems to be solved, and the types ofsystems to be designed and managed, and the way the technology is employed. Information Systems concentrates on the organizational mission and objectives and the application of information technology to further these goals. §8

4.4 A new name and a new place

As new computers in the sixties were used more and more as information systems, attention was focused increasingly on the opportunities for managing large quantities of data. This was important for official bodies when it came to registration and supervision. In the last two decades, a re-orientation has taken place in Sweden: administrative data processing has gradually given way to informatics and there has been a move towards 'design oriented study of information technology use, an artificial science with the intertwined complex of people and information technology as its subject matter,' to use the words of Bo Dahlbom, Professor of Informatics at Gothenburg University (see his presentation of the discipline in his The New Informatics, 1997). The change of name also gives a clear indication of what the discipline is all about: 'the term informatics implies something that is lost in the terminology of science, that is the capacity to act on and through the technology with which one is working. Where computer "science" suggests the dispassionate gaze and the formal engagement of the scientists, "informatics" looks towards the applications of the technology, towards its use on and in the world in which we are living'.69

Informatics is different to computer science in that it defines information technology as a social phenomenon. A pronounced design orientation is fundamental to the development of a new kind of informatics. Dahlbom argues that if people increasingly use information technology to exchange services rather than to observe and control, the focus must shift. According to Dahlbom, a general introduction to information technology could then consist of four subjects: 'development, use, management and technology. Use of technology, information technology as infrastructure, an interest in activities and in organization and mission, are new focuses in the new curriculum for informatics', all included in Dahlbom's broad definition of information technology ⁷⁰.

http://www.iktoria.se/~dahlbom/get/getContent.php3?style=../config/styleIEwin.css under section Articles [Accessed 02-12-03]

 $^{^{68}}$ See http://www.is2000.org/ [Accessed 02-12-03], section 'Information Systems, IS97, IS as Academic Study.

⁶⁹ Gurstein, foreword, 2000

⁷⁰ Dahlbom, available at

In Sweden, informatics is included in the social science disciplines, unlike in Norway, for example, where no distinction is made between computer science and informatics.

The Norwegians Tone Bratteteig, system developer and researcher, and Guri Verne, currently Section Manager at 'Statskonsult' (a national consultancy agency), claim that a broader focus within informatics enables people and society to be introduced into the discipline and thus legitimises questions concerning values, politics, interpretations and the significance of the experiences of use in relation to the development of technology.⁷¹ The two Norwegian authors discuss the importance of an ethical standpoint in technical development. ⁷² Bratteteig and Verne suggest: 'As informaticians we do find it difficult to work with a technology if it is considered that it can never be used for emancipation: technology will always be a servant to the dominating groups in a society, and at some level it will conserve existing societal structures (e.g. power structures). One may even argue that technology or informatics is in the process of becoming naturalised stripped of origin, context and consequences. We need to uncover those "forgotten" issues, and reinterpret these concepts in a better-described environment. ⁷³

4.5 Community informatics – a perspective on accessibility

A new and interesting international research field, which has developed within informatics, is Community Informatics (CI), or Community Networking (CN)⁷⁴. This focuses on and studies the appearance of virtual groups in society. The public discourse around eGovernment often focuses on the individual's need for and access to service, but when I worked with the Public Service (PS) investigation, it was obvious that citizens are often treated as a uniform group: when I visited a public service one-stop shop in the region, several civil servants said in their discussions of citizens' needs for service that 'we know what they need'. In this context citizens were divided up into groups, e.g. interest groups, municipal inhabitants, experienced and inexperienced users, immigrants etc. The discussion regarding accessibility was a central feature of the citizen service investigation. It was also a basic argument for the democratically motivated Public Internet Monitor Project. The argument for accessibility rested on the individual's right to access to new technology, new services etc. In practice, however, it was the 'group' category that dominated.

In the course of my studies I have discovered a holistic view of the discussion of access. This has been developed within the research field of community informatics,

73 ibid

 $^{^{71}}$ Bratteteig & Verne, 2000, p. 43.

⁷² ibid. p 50

 $^{^{74}}$ Grönlund, 2001, p. 24 and Grönlund & Ranerup [eds.] 2000, p 76.

and is presented in a socio-technical model called 'The access rainbow'75. This sociotechnical architecture expands the concept of access beyond mere physical connectivity to embrace internet-based information and services. It acknowledges the complexity of the notion by describing multiple and interdependent aspects of access ⁷⁶. Different layers are described with the aid of the following terms: 1) carriage facilities (to store, serve and carry information, i.e. cables, internet connection), 2) devices (e.g. public kiosks, workstations), 3) software tools (web browsers, applications) and 4) content and services (content of databases, government information). The model includes 5) service access points (public access places, e.g. schools, libraries, community networks), 6) literacy and social facilitation (computer literacy, local experts in work places and neighbourhoods) and 7) governance (i.e. public consultation processes) 77. Clement and Shade's analysis takes a pronounced citizen perspective as it argues from the active citizen's point of view and needs. Their basic systemisation of different aspects of access inspired me to reflect on what exists beyond the rainbow. Is it possible to discover and distinguish new formations? Might these formations be described and accounted for using the image of the fogbow?

4.6 Can Work Practice and Technology inform Informatics?

If informatics increasingly focuses on service design, rather than design, it is natural to turn to the branch of human work science, which focuses on the significance of work and activity for technical development. One interdisciplinary research program that has been developed in the U.S.A. is *work practice and technology*. The research program, which is the result of collaboration between anthropologists and computer scientists at Xerox Palo Alta Research Centre (PARC) had as its goal to 'explore relations between everyday practices and technology design and use' and to develop a methodology for 'ethnographically-based design of digital technologies'. ⁷⁸Three interrelated lines of inquiry were applied: critical analysis of technical discourses and practices, ethnographies of work and technologies-in-use, and design interventions. The aim was to 'reconstruct technologies as social practice. A central problem for the design of artefacts then becomes their relation to the environments of their intended use' ⁷⁹.

Lucy Suchman, Professor of Anthropology of Science and Technology at Lancaster University, was one of the founders of the work practice and technology research group. She was inspired by Donna Haraway's theories. In a number of articles she

⁷⁵ Clement & Shade, in Gurstein, 2000, p. 32ff

 $^{^{76}}$ Clement and Shade, in Gurstein, 2000, pp 32-51 $\,$

⁷⁷ ibid. p 36

⁷⁸ Suchman et. al, 1999, p. 392

⁷⁹ ibid. p.392

presents an 'alternative basis for politics of design practice.'80 Suchman discusses three contrasting design positions: the view from nowhere, detached intimacy and located accountability. Her notion of accountability is related to Donna Haraway's, i.e. 'we might be answerable for what we learn how to see' 81 and Suchman's says: "And, I would add, for what we learn how to build." 82Suchman draws the conclusion that to produce 'located accountability', subjects must localise their situated positions 'within an extended web of connections, and [take] responsibility for [their] participation' 83It is relevant in this context to discuss the effects on traditional technical development if the focus is turned away from the periodically locked dichotomy of designer/user and is instead put on discussing complex relations and multi-perspectives as basic preconditions for development. How would the new focus affect citizens' opportunities for influence and joint creation at the stage when it is possible to exert a strong influence on technical development? Suchman and her co-authors⁸⁴ maintain in another article that 'systems development is not the creation of discrete, intrinsically meaningful objects, but the cultural production of new forms of practice. As practice, technologies can be assessed only in their relations to the sites of their production and use'.85

As informatics shifts from the study of information systems to the study of design of services, ⁸⁶ and networks of information and communication, design itself becomes more situated, and thereby situated accountability becomes a central issue. Design in this view is about co-construction of technology, both in its production and its use.

4.7 Interpreting participatory design

Scandinavian research on system development has traditionally emphasised active involvement of the user and the development of democracy at the place of work.⁸⁷ A number of research projects have been run during the past decades aimed at involving future users of a computer system in the making of decisions at different stages of development. Participation of the user can include everything from representation to direct involvement and may consist of contributions from consultants or active involvement as partners in co-operation ⁸⁸. Participatory Design (PD) research is similar to the Scandinavian approach to system development

84 Suchman et al. 1999, pp. 392-408

86 Dahlbom, available at

http://www.viktoria.se/~dahlbom/get/getContent.php3?style=../config/styleIEwin.css under section Articles [Accessed 02-12-03]

⁸⁰ See, for example, http://www.comp.lancs.ac.uk/sociology/soc039ls.html [Accessed on 02-11-28] and Suchman, 1994.

⁸¹ Haraway, 1991, p 190

⁸² Suchman, 2000, p.5

⁸³ ibid

⁸⁵ ibid. p , 401.

⁸⁷ See, for example, Nygaard, 1979, Floyd et. al, 1989, Ehn, 1993.

⁸⁸ Bjerknes and Bratteteig, 1995, p. 73

described here. PD is based on a desire to involve users as active partners in design activities, the original aim being to increase democracy at the place of work⁸⁹. A number of studies have been conducted in Scandinavia from the '70s onwards on technology and its relations to the work place and the development of working life from the point of view of democracy and legal rights.⁹⁰

According to Clement and van den Besselaar⁹¹, PD can be roughly defined as a tradition within system development, which emphasises the importance of the user playing an active part in design development. According to them the aim of PD is also to stimulate changes in technical production in a broader perspective. The main components of the PD project are 'access to relevant information, an independent voice in decision-making, user-controlled development resources, time, facilities, expertise, appropriate development methods, e.g. prototyping, organizational/technical flexibility' ⁹²

Among the 10 projects, which were evaluated in Clement and van der Besselaar's review, some have focused on the public sector, e.g. Ciborra's project in southern Italy in the '80s, the aim of which was to develop an information system for local socio-economic information for use in planning operations by local authorities. Other examples dealing with the development of public services are to be found in Germany, where Mambrey and his colleagues at GMD-FIT (a German research institute)⁹³ were involved at the end of the '80s in developing a local information system for schools. Another project aimed at developing a system, which would provide citizens with information on local government. An example of a more recent Nordic PD project can be found in Finland, where Marja Vehvilainen has developed a study-circle approach⁹⁴, which is concerned with knowledge development and technical expertise among female civil servants. The project 'Women Writing on the Net', which is referred to in Paper VI in the Appendix, had a similar focus, but was not anchored in a work context. It was also more concerned with the role of the citizen or member of a municipality, in developing and using new technologies.

4.8 Different motives and focuses

The justifications of PD are three-fold: pragmatic, theoretical and political⁹⁵. The pragmatic argument stresses the possibility of a better and firmer product development. The PD project has multiple effects, i.e. concrete work praxis is developed at the same time. The theoretical perspective emphasises the importance

90 See for example Kensing & Blomberg, 1998, p. 169ff, Bratteteig & Verne, 2000, p. 41

⁸⁹ ibid.

⁹¹ Clement and van den Besselaar, 1993, p. 29ff

 $^{^{\}rm 92}$ Clement and van den Besselaar , 1993, $\,$ p. 31.

⁹³ Information on http://www.fit.fraunhofer.de/index_en.html [Accessed 02-12-03]

⁹⁴ Vehvilainen, 1997.

⁹⁵ Greenbaum, 1993, p. 47

of PD as a means of solving communication problems from a philosophical perspective, 'involved action, not detached reflection' ⁹⁶is important, and according to the best way for people to relate to i.e. a prototype by use in a work situation, and finally the political perspective stresses democratic aspects, citizens' rights to exercise influence over their places of work and their own life situations. According to the Norwegian researcher Eevii Beck, the focus should be on the third leg: 'PD must develop a stronger demand for analyses of societal/political/ethical consequences of ICT development, management or use'.⁹⁷

In recent years a shift in focus has taken place within PD-related projects: instead of supporting a special group of users at a specific place of work, the target group has become more diffuse, and there has been a move towards more unspecified use of technology. Clement and van den Besselaar emphasise the importance of a strong anchorage in the local context and recommend that an action research approach⁹⁸ be adopted in order to bring about practical and political improvements in individual participants' lives, direct involvement of researchers and constant moving back and forth between practical work and analysis. The researcher cannot therefore be 'objective' in the traditional sense of the word. Participation processes do not come about automatically, they require a desire to challenge traditional dichotomies such as user/expert. Clement and van den Besselaar claim that a project must be anchored on several different levels. This may, for example, entail the involvement of political leaders in change processes. Long-term change can only be produced where PD is seen as an ongoing, sustainable process and not merely a project-based short-term phenomenon. Participatory design does not take place in a separate organisational space in same way as isolated researcher-initiated projects. PD projects are not selfsustainable. It is thus necessary to involve politicians and senior civil servants in the process.

4.9 Persepctives on participation

'People want more power over their lives and their surrounding community, in their working lives and in society at large' 99

The 'citizen-centred approach' comprises the dominant discourse in eGovernment and takes its place alongside the desire to modernise, rationalise and increase

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⁹⁶ Greenbaum quotes the philosopher Heidegger, 1993, p 47

⁹⁷ Beck, 2001, p. 77.

⁹⁸ Action research could be explained as a strategy for research, characterised by a practical, pragmatic or problem-oriented approach, strong emphasis on change and cyclic processes and on including the participants actively in the research, as well as on the researchers being actively involved in the practices they are studying, Denscombe, 1998 and Eriksén, 2002.

 $^{^{\}rm 99}$ The Citizen Office in development, 1999, p. 3

efficiency¹⁰⁰. This can be seen as partially contradictory and suggests that the aims within the development of public services are incompatible. For *whom* is the concept of citizen participation useful? What is the underlying purpose? Many related questions come to mind when the citizen perspective is adopted: what degree of participation is required? Is this in any way connected with some form of distribution of power? How can participation be organised?

Sherry A. Arnstein, a political scientist in local government in the U.S.A., worked out in the late '60's a basic typology for participation in which he defined the different layers or degrees of participation, the so-called 'ladder of participation.' ¹⁰¹ The ladder is divided up as follows:

8.Citizen control	citizen power
7.Delegation	citizen power
6.Partnership	citizen power
5. Placation	tokenism
4.Consultation	tokenism
3. Informing	tokenism
2. Therapy	non-participation
1. Manipulation	non-participation

Figure 2 102

The different steps can be explained as follows: Steps 1 and 2 refer to non-participation, where the main purpose is to gain citizens' support for decisions and measures which use PR methods. Step 3, according to Arnstein, is the first step towards a legitimisation of participation, though the flow of information is in one direction only. Step 4 covers investigations of attitudes, consultation and questionnaires. Step 5 offers the possibility to exercise a degree of influence via advisory boards, although the initiative and assessment of the value of any advice is still in the hands of the governmental decision-makers. Step 6 is based on a partnership between different actors, where the responsibility for planning and decision-making is shared. Step 7 is the stage where power is delegated. Step 8 entails full citizen control over planning, policymaking and implementation of decisions, i.e. through co-operation, which excludes middlemen.

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¹⁰⁰ Antiroikko, 2001 and Grönlund & Ranerup, 2001.

¹⁰¹ Arnstein, 1969, p. 217

¹⁰² Based on Arnsteins's ladder of participation, 1969, p 214ff

Today Arnstein's model can be seen as somewhat obsolete because a built-in dichotomisation between authorities and citizens does not fully represent our current understanding of reality. The reality has many more layers than those represented in the model, and practitioners both recreate and maintain dichotomies between, for example, participation and non-participation. Practitioners are at the same time participants in the recreation of a base, which was once the starting point of dichotomisation. What happens if citizens are excluded from a practice, which advocates inclusion? What happens if participants wish to be on steps 5 to 8 but make mistakes according to the 'experts'? What happens if computer systems, databases and community areas are built out of the assumption that citizens is supposed to take a more active role, than they in fact do? And what will be the consequences if they refuse to be "feedback-providers", or if the authorities want to stimulate participation, but do not know how to accomplish this? What are the consequences if citizens deliberately choose not to participate, or if citizens prefer to be on steps 1 and 2 rather than at the top of the participation ladder? How does participation work in an 'upside down world'?

Participation and non-participation can thus be further elaborated within eGovernment by accepting the complexity of the process of transformation and with a broader understanding of what participation actually entails.

5. Where are we now? Framing research on and development of e-Government

'Within the next five years the Internet will transform not only the way in which most public services are delivered but also the fundamental relationship between government and citizen.

After e-commerce and e-business, the next revolution will be e-Government 103

In Sweden, the Swedish Agency for Public Management¹⁰⁴ works actively with issues related to democracy and public administration. Among other things, the agency evaluates eGovernment-related activities on a national as well as local and regional level. eGovernment is regarded as an important aspect of the overall modernisation of public administration, which uses IT. Developments within Sweden are characterised as rapid but we are still far from realising the visions of the '24/7 agencies,' according to a recent follow-up of the subject.¹⁰⁵ The goal of e-Government in Sweden is to stay in the frontline of developments, to increase networking, foster a 'seamless' organisation and a one-stop procedure for handling

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 $^{^{103}}$ Matthew Symonds, 'Government and the Internet: The next revolution', The Economist, June 24, 2000, pp

¹⁰⁴ See http://www.statskontoret.se/english/index.htm [Accessed 02-12-12]

¹⁰⁵ See above.

an errand, and to facilitate citizens' participation in decision-making within public administration. The slogan, which, according to the action plan, will become reality by 2005, is 'one errand, one authority.' 106

The aim behind the drive towards eGovernment is to modernise administration and make it more efficient. Åke Grönlund, Professor of Informatics at Örebro University, describes the EC initiative eEurope2005¹⁰⁷ as 'an effort to achieve uniformity and rational management within the public sector, a structuralisation and construction of an infrastructure'108. Grönlund identifies three main elements: efficiency (rationalisation), quality (of service) and democracy (influence of citizens). Grönlund points out that in the European eGovernment policy document the democracy element is stressed, but in the programmes for action IT is seen as a competitive factor.¹⁰⁹ EGovernment is no more than what used to be described as 'informatisation of the public sector'110. Two researchers within the field, Lenk and Traunmüller, describe developments over the past few years and stress the importance of acknowledging the complexity of the ongoing development of electronic government: 'Electronic government is commonly understood to focus upon relatively simple transactions between identifiable customers (citizens, enterprises) on the one hand and a multitude of government organisations in charge of particular activities on the other. Attention is chiefly directed towards Electronic Service Delivery. If the promise of eGovernment as the key component in modernising government is to be kept, the concept must be broadened so as to include the full enabling potential of IT, as well as the complex reality of government and public governance. There is encouraging political support for eGovernment, yet implementation problems could inhibit further success. 111

Lenk and Traunmüller also claim that developments thus far have been steered by analogies to eCommerce rhetoric and have focused on how external relations should be managed without checking that the promised improvements actually corresponded to the needs of the different operations and citizens. Political forces focus on the desire to present fast solutions, on action and productivity, but what form should such action take in concrete terms? Lenk & Traunmüller advocate a broad focus on the concept of eGovernment and issue the warning, 'if we do not succeed in showing a way out of the narrow corridor of improving access to simple

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 $^{^{106}}$ Basically this means integration of different authorities on and between different levels of governance in order to make it easier for the citizen in their contacts with the authorities.

 $^{{}^{107}\,}See\ \underline{http://europa.eu.int/information\ society/eeurope/index\ en.htm}\ [Accessed\ 02-12-12]$

¹⁰⁸ Grönlund in Grönlund & Ranerup, 2001, p. 173.

¹⁰⁹ Grönlund & Ranerup, 2001, p. 173

¹¹⁰ Lenk & Traunmüller, see http://www.uni-oldenburg.de/fb3/lehre/lenk/dexa.doc [Accessed 02-12-13]

¹¹¹ Lenk & Traunmüller, see http://www.uni-oldenburg.de/fb3/lehre/lenk/dexa.doc [Accessed 02-12-13]

and highly automated business processes within a given institutional frame, eGovernment might soon become another example of exaggerated "hype". ' 112

5.1 Discussion of papers – accountability, accessibility and participation shape reconfiguration

The transformation and modernisation of public services are proclaimed to bring about a change in services based on a 'citizen-centred approach.' In such a process, communication between citizens and public authorities should play an essential role. As stated earlier, reconfiguration incorporates activities, which aim to define, represent, restrict and control the dialogue as well as facilitate the use of ICT. This process is to a certain extent a mutual one: citizens also take an active part in defining, representing and steering this process by, for example, providing feedback on the services provided. The crucial point is whether this is taken care of or not. This ongoing structural rationalisation has an effect on several different levels within the public sector. Lenk and Traunmüller maintain that the focus thus far has been on how external relations should be managed, but no one has investigated the extent to which the needs of authorities and citizens have been satisfied. Restructuring of a specific activity or work place influences both the internal organisation, i.e. cooperation, learning and development of new expertise, working conditions and the work itself. 113The relationship to the citizens who make use of the services is also strongly affected.

The discussions in the following sections are based on the themes, which I consider central, i.e. *accountability, accessibility and participation.* These themes are directly related to my empirical material.

5.2 Accountability - based on an ethical standpoint

The concept 'accountability' can be interpreted as describing the desire to create a greater transparency of actions, considerations and responsibilities in the sense of making a phenomenon visible. This is not, however, the interpretation of accountability which I have chosen to stress. Instead, I have focused on the taking of greater responsibility for the consequences of one's actions or choice not to act. When action is related to the actions of government authorities (discussed in Papers I and II) it is possible, with the aid of the latter definition of accountability, to identify and discuss the weaknesses in the management of feedback; in this way, it becomes possible to involve the user in the development of services and software. In consequence, the demand for accountability means that the local hosts and sponsors who bear the practical responsibility for restructuring services, i.e. who act as

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¹¹² ibid.

¹¹³ Eriksén, 1998, p. 51

facilitators for users and citizens, are not only responsible for maintaining a good technical infrastructure, they must also be able to restructure the organisational infrastructure. As a result, professional knowledge and expertise, division of labour and other aspects affecting organisation of labour must be renegotiated and changed.

When I presented the case of the cleaner (described in detail in Paper II on page?) in different contexts, I was soon made aware of the reality-producing effects of describing the case. In talking to representatives of the control group of the Public Internet Monitor Project, the case of the cleaner was seen as proof that a large target group had been reached; it was also regarded as a confirmation of the assumption that the individual citizen has a need for autonomy in his/her contact with government authorities. For the journalist who interviewed me at a design conference, the cleaner personified a woman with low education, a powerless employee who has no real influence in a far-reaching wave of out-sourcing within the public sector. For a local politician, the cleaner was additional proof of how important it is to take up the whole issue of fairness in discussing access to technology.¹¹⁴ The truth for me is to be found in a mixture of all of these interpretations, a construction of different understandings and motives. The most interesting factor in this context is, in my opinion, that the cleaner was not described as a participating actor in the above-presented reality producing conversations; she was reduced to a representation, a source, a resource for others' situated and context-bound understanding. At the same time, she was, in my own original interpretation based on my interviews with her, extremely active in producing her own reality.

I could have striven more strongly for accountability while participating in the PS investigation. I could have initiated and argued more strongly for the importance of situated, contextual investigations of the use of technology, direct interviews with the general public and argued more energetically against politicians' somewhat sceptical comments and questions, e.g. 'Do you mean that we should use citizens as a sounding board?'¹¹⁵ There were several local civil servants who advocated participation of the user and adopted a pronounced citizen perspective. This made it possible, among other things, to call in a reference group of 'ordinary' citizens when it was time to renew the Ronneby Municipal Authority's homepage. The group consisted of users of both sexes, of different ages and those who represented a wide variety of aspects/qualities/values, which are essential for a broad representation; in this way, the group members represented a wide cross-section of the general population. A young participant with dyslexia who was studying at the local upper-secondary school was encouraged by his teacher to participate in the project. ¹¹⁶ He

¹¹⁴ It should be noted that all the above interpretations of examples are my own and are based on conversations with those concerned.

 $^{^{115}}$ From a meeting with the PS investigation group on 010215

¹¹⁶ I took part in this particular workshop and was able to conduct short interviews with participants.

thought, for example, that the first page contained far too much unstructured information, and it was indeed partly thanks to him that the first page was made less compact, resulting in a better design solution. I also talked to individual employees about the content of the services provided, their opinions about the interface, the appearance of the site and its functionality. There was, however, no great focus on developing new services. Users were presented with a ready-made suggestion, which they were asked to make comments on. The discussions thus resembled evaluations., rather than design sessions. Ronneby Municipal Authority's homepage – http://www.ronneby.se - recently attracted attention during a preliminary study of electronic social services carried out by The Swedish Agency for Public Management. In this study, Ronneby is described as a model municipal authority, providing 'a well-designed, easily accessible, pedagogically designed and informative portal based on visitors' areas of interest. '.117

5.3 Participation - citizens as feedback providers or collaborators?

Participation for citizens on eGovernment is a consequence of the practical application of citizenship with the aid of technology. This is discussed in Paper II and assumes that the citizen is an active creator or feedback provider, has a sense of responsibility and moral duty to express opinions about content and functionality of webpages. However, in this view, citizens are hardly seen as strategic partners in technology development.

Lenk and Traunmüller¹¹⁸ in their article identified the danger of importing business models and trying to apply these to public administration practice with the aim of spurring on a desirable development of eGovernment without giving sufficient thought to the process and its consequences. Paper III describes different attempts to create more frequent and better quality relations with citizens. I have called such attempts 'relationship-based interactivity' and related them to relationship-based marketing.¹¹⁹. Both public representatives and citizens point to a need for changes in the contact, which takes place between the different partners in a municipality. How can such contact become more frequent, and what form of contact is required to fulfil the expectations and demands for renewal expressed by citizens as well as official representatives? A concrete example of an attempt to apply business models to a context which has completely different preconditions to those which are steered by the demand for financial profit is described in the Global Accenture Study on eGovernment,¹²⁰ where the CRM (Customer Relationship Management)¹²¹ model

¹¹⁷ Information from Hans Lindgren, project leader at the Swedish Agency of Public Management (SAPM).

¹¹⁸ See Lenk & Traunmüller, http://www.uni-oldenburg.de/fb3/lehre/lenk/dexa.doc [Accessed] 02-12-13

¹¹⁹ See Paper III for an elaboration of these aspects.

¹²⁰ See http://www.accenture.com/xdoc/en/industries/government/eGov-April2002-3.pdf [Accessed 02-12-13]

was first launched. This model was backed by Microsoft¹²² and represents a formal attempt to bring about closer contact with citizens. CRM is described as 'an emerging force in eGovernment'. ¹²³It is also pointed out that 'a key to successful eGovernment is the citizen-centric approach of customer relationship management – treating citizens and businesses like customers by tailoring services to their needs rather than the needs of the agency delivering them'. ¹²⁴

The question is how much room for manoeuvre is left when business models are applied uncritically without afterthought to local practices? Also, who are the actors who contribute to the development of a reality producing eGovernment; is it the system developers, employees, authorities, management, business or the citizens themselves or all of these?

The advisory meetings, which have taken place in Ronneby, for example, where users have been consulted about the design of the municipal homepage as well as the follow-up questionnaires on the homepage, can be compared with steps 4 and 5 of Arnstein's participation ladder, i.e. to 'degrees of tokenism' (see, for example, Paper III on relation-based interaction). Authorities' pilot projects and the introduction of the Public Internet Monitor should be placed at the bottom of the ladder, on steps 1 to 3, and fall into the category of non-participation. Steps 6, 7 and 8, i.e. participation, are exemplified in design-in-use activities (see, for example, Paper V).

5.4 Accessibility - restricted by local practice

As a part-time politician taking part in the PS investigation, I was experiencing several constraints that had to be handled. The time, resources and desire to investigate the users' views of public services was given little prominence in the discussions, even though it was brought up during the meetings. The citizen-centric approach was emphasised in the discussion, although increased efficiency within authorities was the overall aim of the investigation. Had the starting point been different, i.e. if the aim had been to make a more general investigation of how different actors (citizens, civil servants and intermediaries such as i.e. the hosts providing the PIM Monitors) define good service, the results might well have been very different.

Paper II describes how the introduction of eGovernment also defines and establishes boundaries for citizenship. Access to new technology and participation as a right and a duty are mutually dependent. Citizens' sense of responsibility to provide feedback and participate in different activities can be seen as an active taking of

 $^{^{\}rm 121}$ See Microsoft Insight: Executive briefings for the agile enterprise, 2002, pp 1-32

¹²² See above.

¹²³ Hawkins in Microsoft Insight: Executive briefings for the agile enterprise, 2002, p. 4.

¹²⁴ Jupp in Microsoft Insight: Executive briefings for the agile enterprise, 2002

responsibility by citizens. In discussing access, it is important to clarify who is 'in' and who is 'out', an issue that is exemplified in the case of the cleaner in the library described in Paper II. In the drawing up of boundaries, citizenship becomes visible as a right and as a duty to give feedback on developments. This right proves to be restricted, as it does not include everyone and because employees are not prepared to react to and act upon citizens' new ways of action.

6. Working with the fogbow - points of departure

'It has been my intention to observe in certain areas what happens at a time of change, during which knowledge becomes intuitive.

/.../ at the very point or boundary where change takes place, at the boundary where everyday or scientific observations merge. '125

Finally, what does the fogbow look like? What barely discernible phenomena need to be noted exposed and elaborated still further in the ongoing development of eGovernment? The following is a list of some of these phenomena., as I have come across them in my studies. This is not a list of normative statements; rather it is a set of suggestions as to areas, which can be developed in research as well as in local development of eGovernment in the future:

- 1) Pay more attention to the phenomenon of 'exclusiveness within inclusiveness' as described in the case of the cleaner and the authorities failure to take care of feedback in a proper way. This needs to be explored further from the point of view of different practitioners.
- 2) Explore what it might mean to design for what I would call a *situated* accountability
- 3) Facilitate the relation of different design processes to one another, strengthen the overall picture
- 4) Introducing co-development of technology more deliberately and purposefully with a focus on design-in-use activities
- 5) Explore what form design of a situated creation of citizenship should take, seen from another starting point than the understanding of citizens primarily as "feedback providers"
- 6) Strengthen the argument that the forum for participation must be defined in a participatory way

¹²⁵ Hans Larsson, 1997, p. 77 [Translated from Swedish by Jane Mattisson]

6.1 Post script – at the end at last	
	'On the surface simplicity but the darkest pit in me is pagan poetry ¹²⁶

¹²⁶ From the song 'Pagan Poetry' by the Icelandic singer Björk

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7. Introduction to the papers

Paper I

Everyday dialogue and design for co-operative use: An evaluation of the Public Internet Monitor Project

Accessibility is a central issue in the achievement of democracy, i.e. with respect to the opportunity for and right to 'access' to new technology and information - an argument also used when justifying the Public Internet Monitor Project. 'Access' in this context refers not only to purely physical access to new technology and information, it is also about the opportunity to take part in community business on several different levels. The present sub-report presents the project and its background. The paper also discusses the way in which the Public Internet Monitor Project as a whole has contributed to the development of a social interface or contact surface between citizens and public authorities, as well as how it has stimulated processes of change within public administration and in contacts between public authorities and citizens. Among the questions raised during the evaluation are; how local networks and activities can be stimulated by the citizen monitor and how the user's ideas and experience can be utilised in local adaptations so that they become an essential part of a continuous development of services and technology. The paper also describes the linked chains of responsibility exemplified in the excerpts from the interviews. These also include final users as a means of creating a personalised service adapted to local praxis and user environments. The question is posed "is it possible to talk in terms of interactivity on several different levels, not only in the sense of transmitting information or communicating, but also as a means of creating a relation-based interactivity?"

Paper II

Reconfiguration of citizenship: Rights and duties in development of public services

This paper presents the case of the cleaner in the library and some examples of feedback failures. Access to information, technology, and to some degree, participation in development of new services, is a central issue in the prevailing eGovernment discourse. This vision also comprises the idea of the active, contributing citizen and considers the development of local public participation as a process of co-construction of citizenship and services engaging several actors on different levels. At the same time, access must be seen as a contemporaneous process of inclusion and exclusion, a defining and drawing up of the boundaries of a new electronically mediated membership, where access is becoming a prerequisite for activating citizenship, transforming "the right to have access" into a "duty to

participate", not just for citizens but for the employees who must manage the reconfiguration of citizenship and relations. The foundations for participation, however, turn out to be relatively restricted in practice. The original title of the paper was: Co-Construction of Citizenship: Rights and duties in development of public services.

Paper III

Consulting the citizens - Relationship-based interaction in the development of eGovernment

This paper investigates current practices for involving citizens in the development of web-based services in public administration and tries to track their motives. With respect to democratisation, I argue that there is a large potential in adopting participatory design methods for establishing relation-based interaction between administration and citizens. The paper presents an analysis of eGovernment initiatives. More particularly_it explores the discourse of the materials surrounding these initiatives, particularly with respect to value systems derived from the marketing perspective contra democratic values. It demonstrates that conventional images of democracy have only a background role to play in such efforts.

Paper IV

Mapping out and constructing needs in the development of online public services

This paper is based on a study concerning experiences of, access to and requests for public services on-line, within the RISI+ Project. 127 The paper presents a pilot study of the setting up of public services in the local context of the county of Blekinge, in south east Sweden. The study was conducted as a peer evaluation of a selection of methods, or types of needs analysis, used by different actors and producers of public services in order to gain a picture of various needs among users. One part of this study focuses on the views expressed by service providers about the dialogue between themselves and citizens on the provision of public services. This is

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Blekinge was one of the 22 regions within the EU which, during 1997 and 1998, carried out the development project called RISI (Regional Information Society Initiative) in order to explore the ways in which the region could make continued and extended use of the emerging information and knowledge society's possibilities whilst avoiding the possible disadvantages of these developments. One result of the knowledge and experiences of the RISI project was a plan, which set out a strategic framework for Blekinge's development towards an information and knowledge society. Within the RISI-project – and as a result of the project – a <u>Strategic framework</u>] was developed. The RISI+ project is a follow-up on the first project, aiming to further develop action-plans and startegic dimensions from the <u>Strategic Framework</u> See http://www.ronneby.se/learning-lab/risi/doc/rispeng.doc [Accessed 02-12-16]

compared with the practical use or, in some cases, lack of use, of explicit techniques, such as questionnaires, larger surveys and work carried out with the help of focus groups. A basic question is, 'what role does citizen involvement play in the analysis of needs and services and in the choice of design?'. Parts of this report were presented in a poster display at the NordiCHI 2000 conference, "Design versus design" ¹²⁸ in Stockholm in October 2000 and, in a different version, as a work-in-progress report at the PDC 2000 (Participatory Design) Conference "Bringing in more voices" ¹²⁹, in New York in November.

Paper V

Making eGovernment happen : Everyday co-development of services, citizenship and technology

This paper describes the use of a metaphorical figure used in different contexts as part of a discussion of working relationships of the co-development of services, citizenship and technology change. The paper discusses the challenge of developing a supportive infrastructure for the ongoing local adaptation and development of public services as citizens use them. Developing supportive structures for cooperation in the design task involves incorporating ways of including the general public, mapping out networks, developing tailorable software and cultivating shopfloor management. If continuous joint co-development of services is made a central part of the co-development of services, citizenship and technology, this also blurs the boundaries between governmental and municipal authorities, private sector employees and other actors within, for example, the voluntary sector - but above all, continuous joint co-development blurs the boundary between citizens and local authorities. The citizens become key figures in the 'web of connections' that makes up the design, content and use of new technologies. In the discourse on participation in eGovernment, few reflections are made concerning the basic issue of the democratic values that could be gained by early involvement of local employees and citizens in developmental work or technology-based changes. Making more deliberate use of participatory design methods for incorporating multi-perspectives in service design as well as technology production and use could be a way to stimulate a broader, more inclusive and sustainable participation in local development of eGovernment.

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¹²⁸ See http://www.stimdi.se/arrangemang/konf/nordichi2000/index.html [Accessed 02-12-13] 129 See http://www.cpsr.org/conferences/pdc2000/ [Accessed 02-12-13]

Paper VI

Discourses and Cracks - A Case Study of Information Technology and Writing Women in a Regional Context

This is the first of the papers I wrote, where empirical material from a local IT project is discussed and mirrored against the dominating discourses of information technology. Paper VI discusses information technology as a political and practical discourse, which is in part shaped by the repetition of an exalted rhetoric. This repetitive discursive model can be distinguished in global, regional and local contexts and reflects an optimistic belief in technology as an independent power that automatically furthers democratic development. The second part of the paper presents empirical material and experiences from the Women Writing on the Netproject (this was included in the framework of the DIALOGUE project, which was partially funded by ISPO/EC). The aim of the project was to create a virtual space for women on the Internet, and to explore the writing process in terms of aims, tool and method. The method of approach incorporates reflections and discussions about empowerment, democracy and representation of women. This contributed to a more complex understanding of the values of the predominant IT discourses, and revealed the "cracks" in, and possibilities of feminist redefinitions of, these values.¹³⁰

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¹³⁰ Abstract based on Pirjo Elovaaras writings, see Elovaara, 2001, p.10

Paper I

[This is an abridged version of the original report on the evaluation of the PIM Project; Vardagsdialog och design för samverkan i användning:utvärdering av projekt Medborgarterminalen. (Everyday dialogue and design for codevelopment by using: An evaluation of the Public Internet Monitor Project). The project has been presented on several occasions, i.e. in a workshop and during a poster display at the conference ECSCW'2001 in Bonn, Germany, 16-20 of September, 2001: Ekelin Annelie and Eriksén, Sara: *The Swedish Public Internet Monitor Project: notes from a cooperative evaluation of e-government in practice.*]

Everyday Dialogue and Design for Co-Development by Using : An Evaluation of the Public Internet Monitor Project

by Annelie Ekelin

Summary

The Public Internet Monitor Project evaluated in the present report falls within the framework of what is normally described as the development of a self-service system; after closer investigation, the significance of this system has proved, however, to be much more complex than such a classification would suggest when it is viewed in its local context. This report discusses examples of how the introduction of a self-service station can stimulate the formation of networks as well as the development of activities on and between different levels. Accessibility is a central issue in terms of democracy, i.e. with respect to the opportunity for and right to 'access' to new technology and information – an argument also cited when justifying the Public Internet Monitor.

'Access' in this context refers not only to the purely physical access to new technology and information; it is also the opportunity to take part on several different levels. The present sub-report discusses the way in which the Public Internet Monitor Project in its entirety has contributed to an initiation of the development of a social interface or contact surface between citizens and public authorities as well as how it has stimulated processes of change. The project and its background are also presented.

The final chapter discusses the role of the internet monitor as a mediator and boundary crosser, the occurrence of processes characterised by mutual configuration of user and use, different attitudes to responsibility for and participation in the Public Internet Monitor Project the design of the gateway as well as the physical design and placement of the monitors. Among the questions raised during the evaluation are how local networks and the citizen terminal can stimulate activities, and how the user's ideas and experience can be utilised in local adaptations and made an essential part of a continuous service- and technical-process development. In the long-run, this process can also contribute to a development of integrated services and extended co-operation between different operations and participants from within the public sector.

1. Introduction

1.1 Digitalised services

In the past few years the public service sector has become more and more digitalised. National and local authorities and municipalities increasingly provide services and information using information communication technology (ICT). The Swedish Government actively encourages this development and has charged the Treasury with the task of ensuring that such development continues.¹ The government mission is based on an earlier investigation of the -hour public authority and the referral of the official proposal to selected bodies. The '24-hour investigation' focuses on the need for and use of increased interactivity between public authorities and citizens as well as the importance of wider co-operation between different public bodies. Public and local authorities are required to develop and adapt their information management systems and provide new electronic services.

1.2 The unexpected effects of self-service

Different actors, commercial as well as official, have developed a whole series of technology-based self-service solutions on different levels. These are only accessible via the Internet or by telephone. New forms of local and national organisation in which communication with citizens takes place via web pages, e-mail and public monitors is a part of the new scenario. The Public Internet Monitor Project evaluated in the present report falls, at least on a superficial level, within the category of a 'self-service system'; on closer inspection, however, it is much more complex and has greater significance as a catalyst for network construction and associated factors for many activities on and between several different levels; several examples of such complexity are described in the present report. The development of electronic or virtual citizen offices² is also part of the renewal of public services. Such offices provide citizens with a wide variety of services, information and opportunities to communicate based on a physically or digitally defined starting point or entrance.³

1.3 Effective service and its development

The examples mentioned thus far can be viewed as the result of an ongoing modernisation process in the public service sector to render it more effective. This

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¹ See http://www.statskontoret.se/projekt/projfor.html#24 [Accessed 02-12-02]

² See "*Medborgarkontor i utveckling*", p 36. (In Énglish "The Developing Civic Office", only available in Swedish.

³ Eriksén, 1998

development is in line with a general wave of rationalisation within the Swedish public sector and a parallel shrinkage of the Swedish welfare system. It can also be described as a way of testing new organisational and administrative forms as part of a move to improve the accessibility, quality and breadth of public services⁴.

The modernisation debate, which has focused on how to improve services and accessibility in the public sector, is not a new one; it has, indeed, been going on for decades. At the beginning of the 1990s, several parliamentary motions were submitted demanding a greater level of effectiveness within social services⁵. According to the so-called 'Investigation of Swedish Bureaucracy' 6 improvements in public services should include greater clarity of information and improved accessibility as well as greater assistance to the general public when it comes to managing and interpreting different questions and issues. The investigation defined the public authorities' responsibilities towards the general public in terms of providing information and guidance.⁷

1.4 Co-ordinated services

Developments in Sweden are very much in line with those in the rest of Europe. An increasingly prominent trend in the modernisation of public services and one which can be identified in England, for example, is the development of so-called 'joined-up-services' aimed at providing citizens with integrated services. The idea is that public authorities work in a more coherent and integrated way, across organisational borders and in co-operation with different types of institutions and actors.⁸

In conjunction with the above developments, attempts have been made to satisfy the needs of the individual citizen by presenting information and services based on episodes in the human life-cycle; this is very different to the common official praxis, which is public-authority centred. Two good examples are the English government's UK Online⁹ and the development of Hamburg.de.¹⁰

1.5 Digital democracy

The development of electronic administration is also expected to promote democracy. Such experiments are normally dubbed 'digital democracy' ¹¹or e-

⁴ Eriksén, 1998 and Milner, in Hague & Loader, 1999, p 63ff.

⁵ 'Medborgarkontor i utveckling' (The Developing Civic Office), 1999.

⁶ Byrakratiutredningen, (Investigation of Swedish Bureaucracy), SOU 1979:31

⁷ Medborgarkontor i utveckling (The Developing Civic Office) p 11.

⁸ Cornford et al., 2001

⁹ http://www.ukonline.gov.uk/Home/HOHome/1,1031,~801b22~fs~en,00.html [Accessed 02-12-02]

¹⁰ Bleek, 2001

¹¹ See Hague & Loader, 1999.

democracy, i.e. electronic democracy. Digital democracy should be interpreted primarily as a move to reinforce existing practices rather than revolutionise traditional ones. The concept currently refers to a number of different trials based on a common belief that the purpose of new technology is to develop. This can be a matter of establishing panels of citizens, voting via the Internet, access to e-mail communication and dscussion groups via the Internet as well as upholding and providing public 'information kiosks' or other self-service systems ¹²

1.6 Accessibility - a discussion

A central issue in any discussion of democracy and dialogue is the opportunity for and right of every individual to 'access' to new technology and information, an argument, which has also been invoked when justifying the existence of public Internet monitors. Such monitors are essential to the development of digital democracy.

Democracy is not, however, just about using the Internet as a means of providing citizens with official information in a cost-effective and innovative manner, it is also a question of accessibility in a much deeper sense and is incorporated in such terms as the right of self-determination, participation, voice and autonomy.¹³

In a technical context access is not just a question of physical and practical access to new technology and information or presenting relevant information in a user-friendly format, at different points of time, in a variety of places and at a reasonable cost - it is also very much a question of opportunity for participation on many different levels.

1.7 Unidentified obstacles

The question is, 'who has access to the most recent technology, and who does not?' This is clearly exemplified in the present evaluation in the form of the cleaner who uses the Public Internet Monitor at work when she is alone and without any audience, just before the library where she cleans opens for the day. All the preconditions for accessibility are fulfilled in this example, although other factors such as work organisation and professional traditions are an obstacle.

In the final analysis, access and democracy are not only a question of who does or does not have access to the finished product; it is also who is given the opportunity to develop their knowledge and expertise and who has influence over the development of the different stages of the integration of service and technology.

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¹² ibid. p 11

¹³ ibid. p 7

1.8 Meaningful citizen dialogue

Much of the discussion and rhetoric related to the development of ICT and existing praxis focuses on the possibility for interactivity and two-way communication between citizens and authorities and they concern the flow of information from authorities as well as how one facilitates feedback and stimulates citizens to take an active part in the process. The enormous increase in regional and national Internet sites should be seen as an attempt to improve or change the interface between citizens and the state. English research and evaluations within the field show thus far that the spread of information has been a primary objective for both national and regional authorities in England and the U.S.A. ¹⁴The desire to use technology to make use of feedback from citizens and encourage active participation has not, on the other hand, been equally strong. In addition, researchers also highlight a tendency to focus on the provision of information and service to users or clients rather than providing information and service to *citizens*; 15 it is the latter function, which incorporates responsibilities and rights and is not a purely passive consumption. English researchers also show that in those rare cases where re-connection to the user is required, this takes place by means of gathering together opinions about predecided questions rather than encouraging debate and a offering a chance to exercise influence over the agenda. Researchers draw the conclusion that it is essential to have authorities that are willing to have an open and meaningful dialogue with citizens 16

1.9 The Public Internet Monitor as interface

A different tradition has developed in Sweden, one that emphasises a more informal relationship or at least a higher degree of informality in communication between citizens and authorities. The transformation from an official to a service culture has been gradual. 17

It is thus extremely important to study the extent to which the Public Internet Monitor Project has contributed to an initiation of the development of an interface between citizens and public authorities. Also, to what degree can an internet monitor whose primary purpose is self-service and which has been given all kinds of flattering and less flattering names by its hosts and users, e.g. 'piece of furniture',

¹⁴ See for instance Hague & Loader, 1999 and Bellamy & Taylor, 1998.

¹⁵ See "Medborgarkontor i utveckling" (The Developing Civic Office), 1999.

¹⁶ Hague & Loader, 1999; Bellmany & Taylor, 1998.

¹⁷ Medborgarkontor i utveckling (The Developing Civic Office), p 11, 1999.

'hulk', 'apparatus' or 'Russian computer' become a mediator in the process of developing a dialogue between citizens and authorities? And how can a gateway which, according to the project managers, has only been used as a provisional arrangement¹⁸ during a trial period, be developed into an interface allowing cooperation between different actors, and by means of which design and use will be better integrated in the future?

2. Overview of the report

After this more general introduction to the report, the following sections are presented: a background to and presentation of the project itself; a presentation of the aims and goals of the evaluation; introduction of the material and interview results; a description of the theoretical framework; a presentation of results as quotations;19 analytical comments on the results - and finally, a summary in the form of a short discussion.

3. The Public Internet Monitor project - background and a presentation

The pilot project started at the beginning of 1999 and is currently managed by five national organisations: the National Swedish Labour (Arbetsmarknadsstyrelsen, AMS), the National Swedish Tax Board (Riksskatteverket, RSV), the National Swedish Social Insurance Board (Riksförsäkringsverket, RFV), the Central Student Grants Committee (Central Studiestödsnämnden, CSN) and the Premium Pension Board (Premiepensionsnämnden, PPM). Three elements work together: a common gateway²⁰ for transferral of information and services, public monitors, and increased co-operation between the participating authorities. ²¹ The primary goals of the Public Internet Monitor Project are to provide official information and service via the Internet (this also applies to those who do not have access to a computer connected to the Internet) as well as an extended network of IT work places or self-service equipment for the clients of participating authorities. In concrete terms, the monitor consists of a computer connected to the Internet, which is mounted in specially adapted furniture, so called Client Workstation Units that are developed by the Swedish National Labour Market Administration and connected to a printer. 22 With the help of the respective local authority,

¹⁸ This has been emphasised, for example, in a letter to the Swedish government and has also been explained at a meeting of the project managers.

¹⁹ This section has been removed from the present revised report in order to save space.

²⁰ See http://www.medborgartorget.nu [Accessed 02-12-03]

²¹ Serving together, 1999 (only in Swedish).

²² See http://www.medborgartorget.nu/ [Accessed 02-12-14] for description of the project in English.

approximately 140 monitors have been installed in public places such as libraries and civic offices throughout Sweden: in the countryside, cities and suburbs to major towns and cities. Citizens can, with the aid of a monitor, gain access to a wide variety of information and services from different authorities. It is the joint responsibility of the participating authorities to ensure that the monitors are maintained and also to develop the shared internet gateway known as the 'Public Service Market" and the services provided via the portal. The latter covers a wide range of services such as vacant jobs, taxes, social insurance, student grants and the new pension system. In addition to pure information, a range of self-service options is offered including downloading and ordering official forms, brochures, birth certificates etc, assistance in calculating tax reductions or accommodation allowances and contact with authorities via e-mail or address and telephone lists.

3.1 The design of the gateway

The gateway itself, which can be described as a collection of links, is constructed as follows:

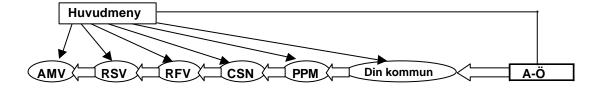


Figure 3 The design of the gateway. Huvudmeny (main menu) and Din kommun (Your local authority)²³

There are text and icon links for each participating authority's homepage as well as links to the local authority, a word list and a description of the project. All the links to current news about the project are listed under the heading 'New and Current'

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²³ This model was originally designed by Elisabeth Andersson, a former student within the MDA (People Computers and Work-programme) and project assistant in Ronneby. It has been modified for the purposes of the present report.

(Nytt & Aktuellt). The above model shows arrows pointing to each authority's homepage. These arrows are uni-directional since the link is not a shared one. There are no links to Medborgartorget.nu (The Public Service Market) from any of the linking homepages of the respective authorities, and not all of the homepages display information about the Public Internet Monitor Project. Searches using the National Swedish Tax Office's internal search engine on the website resulted in 32 hits containing information about the project. An equivalent search on the Central Student Grants Committee (CSN) homepage resulted in two hits. There is no information, however, about the project on the Premium Pension Board, the National Swedish Labour Board or the National Swedish Social Insurance Board websites. Several local authorities do, however, have links to the project's website.

3.2. A co-operative model

Medborgartorget.nu (The Public Service Market) ²⁴ is accessible via the Internet. It is thus not necessary to store any information on the local internet monitor. It is possible to store information on the latter where required but most of the information is accessible by the Internet. Since each authority is responsible for its own information and service there is no need for separate updating of the information on the gateways index page, apart from the earlier described news links. There is also an internal website protected by a password; this internal site can be accessed by project participants and contains links to statistics, a discussion forum, internal information, press releases, questions and answers and other important information. The internal website functions as a mutual report and work interface.

The National Swedish Labour Board was responsible for the equipment and technical support during the trial period. The routines governing co-operation at local level were drawn up in the form of a co-operative model in which the central functions are host/sponsor/local work group. These functions are described in the authorities' evaluation report *Service i samverkan* ²⁵ as follows: **"The host** is the organisation in which the public internet monitor has been placed. It provides suitable premises, is responsible for the local internet monitor service and is a partner in dialogue with project members. A local representative of one of the four authorities is appointed **sponsor**. Sponsors are representatives of the project, acting as an interface between the latter and the host; they are also contacts for the local authorities, and work as partners in dialogue between the host, local work group and the co-ordinating group. The **local work group** is a forum whose primary task is to discuss the pilot project. Hosts, sponsors and representatives of the remaining authorities represented in the project have all taken an active part in the project." ²⁶

²⁴ See http://www.medborgartorget.nu/ [Accessed 02-12-03]

²⁵ Service i samverkan [Serving in co-operation], 1999

²⁶ ibid. p. 6

The public internet monitors were located in country areas and in towns, in public institutions such as libraries and civic offices as well as in other places where people meet, e.g. commercial centres and petrol stations.

3.4 The evaluation - its role and purpose

The *Public Internet Monitor Project* ran as a pilot project for two years. The five authorities participating in the project must now decide if the latter is to continue, and how continued joint efforts to provide all citizens with a digitalised service can be extended, developed and financed in such a way that it is viable in the long-term. The results of the *Public Internet Monitor Project* will influence the further development of civic services via the Internet. During the Spring 2001 researchers from three different university colleges: Blekinge Institute of Technology (BIT), the Centre for User-Oriented User Design at the Royal Institute of Technology (Centrum för användarorienterad IT-design, Kungliga Tekniska Högskolan — CID) and Mitthögskolan University College in Sundsvall, Sweden, have evaluated the project. A variety of perspectives from different work fields (work science, computer technology, ethnology and political science) have been applied in the evaluation process.

The investigation, which is presented in two sub-reports, focuses on how public internet terminals in approximately 10 places in Sweden have been used.

In the present section of the evaluation (carried out by Blekinge Institute of Technology)the *dialogue* focuses on the public internet monitors as well as selected *design aspects*. Dialogue in this context refers primarily to local, everyday dialogue, e.g. discussions between different users and those responsible for the monitors as well as how introductions and directed activities were organised and carried out. Other examples of everyday dialogue include the ongoing communication; consultation and co-operation centred on the public internet monitors.

In general it can be said that the role of the evaluations is not only to describe consequences but to act as instruments to re-connect and provide useful knowledge. What then can be said to characterise an evaluation? Above all, it is necessary to differentiate between an evaluation and a follow-up. Both concepts refer to a similar process: information is gathered, processed and analysed, and conclusions are then drawn. A follow-up is more short-term and there is little concern with systematic gathering of information. A follow-up is part of the daily work of those active in the organisation and often results in measures for improvement. In an evaluation, information illuminating conditions from different perspectives is collected in a more systematic fashion, and the purpose of the evaluation is made clear. Theories are more frequently applied in an evaluation with the aim of bringing about a deeper understanding. The two basic activities are to survey and evaluate.

A qualitative assessment should also be included. An external evaluator most frequently carries out an evaluation. Five questions should be asked in an evaluation, beginning with: Why? What? For whom? By whom? How? ²⁷

Each evaluation model has a different focus and differs with regard to aim, construction and execution as well as to how the results are used. As examples of models can be mentioned *explanatory*, *product* and *process-focused*. The first kind of model, i.e. the explanatory is the one closest to that used in the evaluation of the Public Internet Monitor Project. Evaluations are also carried out to *justify* the use of public revenue and as *the foundation* of new decisions. An evaluation can also function as a *checking device* to assist project participants. Evaluations also help to *disseminate experience* to outside actors. An evaluation may also be a means of *legitimising* a project, i.e. of presenting and creating a justification of the project. All the above-mentioned roles of evaluations have proved to be significant in my research.²⁸

3.5 Methods and material

Since the focus of the evaluation has been on *the users'* experiences from the project as well as their opinions on the latter, I have decided to include direct quotations from all categories of users, i.e. sponsors, hosts, 29 local participants and final users. 30 The category of 'user' is a complex one not just because it can literally change as new people come and go 31 but also because the way in which it is described and defined may be the result of certain prejudices.

All the above-described groups (hosts, sponsors, local participants and final users) fall into the category of 'user', but each one has very specific requirements and expectations when it comes to the noun form *use*. The hosts and participants in the local work groups function as intermediaries, helping to identify and interpret others' needs as well as instructing and guiding them to the required information or service. Sponsors and hosts also need to use the monitor for marketing purposes and as a starting point for or means of co-ordinating collaboration. The final user needs to find relevant information in accordance with his/her specific needs.

3.6 Qualitative research

The research methods used in the evaluation are qualitative. The gathering of material has mainly been carried out by means of observations on site and in open

²⁷ Ekelin, 2000

 $^{^{28}}$ See further "M\"oten mellan retorik och verklighet" [Meetings between rhetoric and reality], 2000.

²⁹ Most of the hosts interviewed have also worked directly with the final users.

³⁰'Final user' means citizen who have used a public Internet monitor.

³¹ See Mackay., 2000

interviews with different kinds of users. In order to gain a multi-faceted picture of the public internet monitor and how it is used, I have sat with users and asked them to demonstrate how they use the monitor, to make comments and explain their thoughts and actions. In some cases I have also studied the dialogue and interaction between final users and local participants during the introduction of the public internet monitors. My methods are based on ethnographic studies of how systems and equipment are used and fall within the framework of what is commonly called 'ethnographically influenced design studies' or 'work practice and technology' ³²

4. Theoretical basis

The central aspects of the present sub-report are, as already established, the 'user', 'everyday dialogue' and various 'design aspects'. It is of interest in this context to study how people react to and communicates with, through and around the artefacts themselves, i.e. the public internet monitor. What actually constitutes design can, of course, be interpreted and defined from a variety of perspectives. In this sub-report, however, the definitions of interpretation and analysis are based on the view that design comprises several complex and complementary processes, which embrace and at the same time also become part of the way in which the user responds to the system sometime after the system or web development has developed into a finished product.

The Danish researcher and system developer Susanne Bödker ³³talks in terms of 'design in use' or 'design through use', a process in which work and artefacts play a central role. She describes computers as mediators of day-to-day activities. The public internet monitor from this perspective can play the part of a mediator in a network of activities in which people react to and communicate with, around and through computer technology.

A computer program or technical system should, according to Bödker, be seen as something which is changeable in itself and at the same time an essential part of a greater process of change. The computer program or system becomes a source of change in praxis, developing a *local adaptation* culture for a technical system. ³⁴In a local adaptation the focus is on the activities, tools, conditions and all that is required of people to adapt and develop the technical tools used to the local user environment. Susanne Bödker defines a computer system as 'clay, which is modelled by use and design'. ³⁵

 $^{^{\}rm 32}$ See Blomberg et al., 2001, p 5

³³ Bödker, 1999.

³⁴ ibid. p 88

³⁵ Bödker, p 88

For the present writer the design process is thus not complete just because the program has been produced or, as in the case of the public internet monitor, the gateway is open and the monitor installed: the process continues to be influenced by local adjustments, interpretations and translations. As a result, I have chosen to describe the concept of 'use' in the form of four processes of execution, each one initiated *by* the design itself; these processes can also be said, however, to be of significance for *how* the design will be ultimately viewed by the user and are thus important for the development of service and design in the future.

4.1 Implementation process 'A'

It can thus be assumed that the public internet monitor has an important mediating role to play between different levels in an organisation, as well as between different organisations. It constitutes a form of 'boundary object'. In a recent article by Greeenbaum and Stuedahl (2000)⁸⁶ a research project is presented, which was carried out by designers at a web company. Among other things, Greenbaum and Stuedahl analyse specific moments during the design process which they regard as interactive and which provide opportunities for real involvement by the user. They have also endeavoured to trace material, which has functioned as a form of *boundary object*³⁷ for different groups of professionals.³⁸

Activities and work tasks often overlapped in the project and the common features of the work tasks carried out by the different professions changed continuously. A *boundary object* has the ability to incorporate several 'common features of the work tasks'³⁹ carried out by the different groups as well as satisfy users requirements.

If one views the introduction of public internet monitors as an extension of the actual design process (in product development) in accordance with Bödker's interpretation, it is important to study the extent to which the public internet monitor can be said to have functioned as a sort of 'boundary-crossing object" which furthers co-operation between different authorities and actors in the subsequent execution processes. Is it relevant to give users the position of central co-actors in the overlapping and common work task features? Is there any previous experience of local adjustments on which to draw; is there, indeed, any indication that such adjustments are needed?

³⁶ Greenbaum & Stuedahl, 2000.

 $^{^{37}}$ This concept was originally developed by Geoffrey C. Bowker and Susan Leigh Star, 1999, p 296ff.

³⁸ Greenbaum & Stuedahl, p 71.

³⁹ ibid. p 73.

4.2 Implementation process 'B'

A central feature of the implementation process is the configuration ⁴⁰ or adaptation of the user/use, which can be said to take place via everyday dialogue. The public internet monitor is for everyone, and yet a target group which is considered to be particularly important is the computer literate who do not have personal access to the Internet. Concentration on this group is emphasised in the authorities' stated aims ⁴¹ and in interviews with users. The importance of 'user-friendliness' is stressed in many development contexts involving new forms of technology. Producers of all kinds of technology are placing greater emphasis on involvement of the user during the design process. ⁴²Steve Woolgar maintains that it is not only technology, which must be adapted or configured'⁴³ but also users/use by defining users identities in advance as well as producing limitations and instructions for the use of the technology. Such configuration occurs where knowledge of the user is socially distributed. ⁴⁴

Mackay and his co-authors add to the discussion about the configuration of users and stress that it is a mutual activity: configuration is *not* a one-way process, they maintain. Designers are also influenced by the users of their products and by the expectations imposed on them by the organisation. Configuration covers a range of different activities such as defining, enabling, limiting, representing and steering how the technology is used; all these are very different activities. Mackay and his coauthors have, with the aid of empirical material, distinguished several user models. Among these, the role of ambassador, which is characterised by 'divided loyalties' towards the organisation and final users, is the most applicable when it comes to understanding the 'host function' and the local participants' active involvement in the establishment of a public internet monitor. 46

The type and capacity of user and his/her actions in the future are structured and defined in relation to the computer interface. The public internet monitor mediates the relation of the user and vice versa. The public internet monitor and its gateway is a metaphor for the organisation. The monitor and the gateway comprise the boundaries of the organisation; the borders also symbolise the user's relation to the organisation. Insiders 'know' their organisation and thus also the public internet monitor interface. The user has a configured relation to the organisation, which is

⁴⁰ Woolgar, Steve 1991

⁴¹ Service i samverkan, ('Serving in Co-operation').

⁴² Mackay, 2000.

⁴³ Technical term meaning 'adaptation to a system'.

⁴⁴ Woolgar, 1991.

⁴⁵ Mackay et al. p 753

⁴⁶ ibid. p. 739

mediated by the interface as it encourages a certain kind of use. ⁴⁷A mutual inauguration of the dialogue thus takes place, and design and use are adapted in accordance with a pre-defined model – this is clearly exemplified by the user introductions to and presentations of the public internet monitors made in certain areas during the pilot project.

4.3 Implementation process 'C'

Participation and responsibility are important descriptive concepts when it comes to the implementation of a project. Accountability is considered to be one of the most basic democratic values, next to participation and responsiveness⁴⁸. These concepts are also relevant to studies of design-related projects in general, and the present one in particular, with its connection to service and electronic administration and where the ability to take responsibility is of supreme importance both for the individual citizen and the authority itself. Questions of responsibility are closely connected to what are commonly referred to as 'social and organisational questions'; these cannot be reduced to questions of how one produces user-friendly interfaces or focuses on the reliability of the system from the user's point of view, e.g. the type and content of the feedback ⁴⁹

Part of the 'everyday dialogue' when it comes to the public internet monitors concentrates on questions of responsibility. As examples can be mentioned, 'who is responsible for planning and carrying out introductions'? 'Who is responsible for ensuring that co-operation takes place on different levels and who receives and responds to the opinions and remarks – the continuous feedback – received from the various levels while the monitor is in use'?

4.4 Implementation process 'D'

Questions concerning the design of the interface and degree of interactivity are naturally of paramount importance in an evaluation of the present kind. The physical design and situation of the public internet monitor can, of course, also be seen as part of its design.

The interactive nature of the new technology makes possible circular communication between individuals and institutions in time and space. Nonetheless, a number of websites under official management are often developed and designed for a passive public rather than for two-way communication. Commercial websites often include extra options, which permit communication between the organisation and its clients,

⁴⁷ Woolgar, p?

⁴⁸ Bellamy & Taylor, 1998, p. 91

⁴⁹ Eriksen, 2001.

e.g. e-mail and discussion lists. They are designed in such a way as to involve the general public in different functions, e.g. registering a desire for additional information. It has become clear that customers prefer websites designed as an interactive surface as opposed to a 'display window' ⁵⁰. A number of criteria are normally specified when the decision is made to develop a user-friendly internet service. The need for consistency is fundamental ⁵¹both with respect to the structure of the information and its presentation as well as a developed navigation support.

I have decided to concentrate on those aspects of the gateway and monitor discussed during the conversations with different users. I have not carried out any functionality tests in the full sense of the word.

The public internet monitor is not just a gateway, an interface or a possible surface for co-operation, it is also a highly reliable 'piece of furniture' to be placed in a specific, concrete place, in a room as well as an official context. It is thus important to address experiences and opinions related to the physical monitor as well as developments in service and technology appearing in the interview material.

5. Results – values, local partners, sponsors and end-users

Final users and hosts described the usefulness of the monitor in terms of *simplicity*, *clarity and topicality*. Following are a few important comments from citizens who have used the terminal:

'I prefer to use this [pointing at the public internet monitor] than sit there [pointing at the public computer with internet connection]. You've got everything you need here' (Final user 1).

'It's because of the simplicity in our complicated society. We don't really have the energy . . . this is simple. It tells you dearly to press the button. I don't need to sit and hunt . . .(Local group 2).

During the interview the final user number one explained that he is divorced and appreciates being able to receive information in peace and quiet. He was one of several interviewees who emphasised the importance of *autonomy*:

'I don't have internet at home. That's why I come here $/\ldots$ / The important pages are here . . . since I have children from a previous marriage . . . and have maintenance to pay . . . it's necessary to check information for yourself, no one's going to tell you anything . . . so I've sat here for a while and read' (Final user 1).

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⁵⁰ Lohse & Spiller, 1998.

⁵¹ Schneiderman, 1998.

It was felt that the public internet monitor facilitates contact with authorities for certain groups of citizens:

'I see it as a way for citizens to get hold of material from different authorities instead of having to use more difficult channels. There are some people who are almost frightened to go to an authority /. . ./ If you are a foreigner it might be easier to come here than go to the authority concerned to get information. Some authorities can be a little imposing. I think the point of public internet monitors is to move information to where the people who are going to use it are' (Host A).

'A well-educated lawyer wouldn't sit in front of a public internet monitor; it's more for people who for different reasons are looking for a job, need help in getting money, training and education, insurance etc. It's also a question of democracy: those who have a computer at home- the majority, most people believe - don't come here – you can wonder why all are computers are booked if everyone really does have a computer. It's also a strange idea that just because many have a computer, everyone does. That's just not the case' (Host A).

The public internet monitor's role as mediator and boundary-crossing object:

'I think co-operation and integration between different authorities are a good thing as things tend to be interrelated. If you're going to study or are unemployed . . . things go together, and one of the difficulties is that you get sent to a number of different authorities. The monitor can't do everything as you normally need contact with a person, but it's a move in the right direction by trying to get everything in one place . . . so I think the idea is a good one' (Host A).

'I think the gateway is incredibly important. It could probably be developed even more. The monitor itself . . . the one that's here is an old type and there's a funny story to tell. A few years ago, when we showed the computer to a young lad he wondered if it was Russian as it was so big [laughter] at the same time some research was done by university students in which they called our computer 'the grey piece of furniture', saying they thought it was good it was so unpretentious and looked so non-technical that it wouldn't frighten people' (Sponsor B).

One sponsor (B) described how the co-operation between the different authorities worked; noting that 'this was something we could share and a host (E) assured me that 'I know how difficult it is to get authorities to work together. When five large authorities decide to work as one it's worth backing'.

An example of the configuration of 'user' and 'use':

'I think that in the countryside there is a greater need for personal companions than in the towns, where people are more used to going and getting information for themselves. It's not like that here. At one time we used to be a local authority in our own right but then we were integrated into a larger authority and social services gradually disappeared somehow. Now all of a sudden you are getting something back $/\dots/I$ think that's the big difference between town and country. We can't advertise that we have started this and then just wait for the customers to come. That's not the way it works. You have to be more active for sure' (Local workgroup 1).

It was generally thought that the monitors are intended for those who are not used to computers:

'There are only five icons. It's absolutely clear to those who aren't computer literate that "this is for me". This is just the right kind of user, of course, because personally I'd never use anything that works this slowly' (Host C).

The chance to steer how one uses the monitor was felt to be an advantage:

'We look at it and think it works well. It's great that it's locked. There are those, of course, who can get past the locks but most people use the monitor for the right purpose; this is shown by the statistics. Even if 50% of the searches are not the right sort, the other 50% are and that is excellent' (Host C).

Many commented on the authorities' co-operative model and on issues of responsibility and participation:

'I must say that as a host I didn't really know what kind of role I was supposed to play. But the hosts drew up the guidelines by themselves and we got so inspired – which I think you must be if the idea is going to work. It's different if you have something pushed on you on top of everything else going on' (Host E).

'It worked like this: the monitors were just installed. There wasn't really anymore to it. There were no demonstrations as such. We were just told that this was how they worked and were given a number to ring in case of any problems. That was it' (Local workgroup 1).

'I know about the sponsor/host/local workgroup model. I've read about it and it was presented at the introduction. But nothing's happened since then' (Host D).

'Nothing can grow from underneath, especially not in authorities. You must get approval from above if you're going to get anywhere . . . in this project they tried to build up something from underneath. But everything costs money and authorities have none - and haven't had any for some years $/\ldots$. / The service we're building up now should ideally cost nothing. It sounds fine but at the same time we're cutting down all the time. No real money was invested in the project. Nothing in advertising or anything else \ldots it's always easy to be wise after the event but \ldots the organisation [meaning the co-operative model] worked all over the country and it was difficult to hold everything together during the pilot project' (Sponsor B).

The entrance page of the gateway was considered to be easy to use and during the interviews with the users (hosts, local partners and final users) it was clear that most think it works well and that it answers their needs. Some of the hosts and local partners - and even final users - felt it would have been a good idea to have a shortcut or a meta index for the gateway. Most navigated with the aid of the icons; only a few used the text links or the A-Ö list (index). Several interviewees commented that the information was sometimes context-dependent:

"... it is assumed that you know what the logotype means. And you do know, of course. You know all about the employment exchange. I mean, if they'd changed the icon you might not have recognised it' (Final user 12).

Shortcomings in the *categorisation system* were also mentioned:

'I think it works well. There aren't too many questions. Perhaps it's a bit difficult to find the right form with the help of the heading alone. I tried, for example, to find information about the sale of a woodland property and found it under business sales; it's not so easy for everyone to find what they're looking for' (Host E).

The search function is sometimes felt to be inadequate. Some users want a free search function. Others want greater integration of official information and more interactivity:

'When it comes to the homepages . . . yes, it is clear that there are different camps; it's again the authorities that are being developed and there are walls in-between. It's almost as if the local authority works in different compartments: planning permission and childcare, for example, are completely separate entities with their own specialist knowledge – general knowledge on the other hand . . . we have to wedge ourselves in sometimes and it must be the same thing for citizens too' (Host F).

'People don't beat about the bush, they come right out and say: "we've separated, what shall I do"? I have to fall back on experience and it's definitely easier if the information is all in one place. Sometimes it's difficult to understand official language - a translation is needed' (Host E).

'As a citizen and member of the local community I perhaps don't care if it's the tax authority's or social insurance office's matter to sort out. It's the question that's important to me. Sometimes you can go to the wrong place, of course, when trying to find an answer to a question. It's the birth certificate, the tax return or maternity/paternity allowance that's the important thing and not the authority itself' (Host F).

6. Summary and discussion

A starting point in this evaluation is that the user's experiences should be illuminated while at the same time providing a description of the Public Internet Monitor Project. I also wished to demonstrate *why* different categories of users accepted and used the form of digitalised service provided by the internet monitor as well as actively participated in the marketing and creation of an everyday dialogue based on the use of the monitor. My aim has been to increase the general public's understanding of the contents and diversity of services provided.

Some users describe how they discovered the monitor by coincidence, how they started to use it perhaps because they did not have access to the Internet at home, and how satisfied they are with the service provided. A new piece of technical equipment in a familiar environment can have an appeal in its own right. It is clear, however, that above all it is specific needs which steer how equipment is used. People use the internet monitor because it is easy and convenient, and because it saves time. It is seen as one of several ways into public authority prvice. The information provided is regarded as easy to grasp, accessible and up-to-date.

From the different authorities' point of view, the internet monitor is considered to fit in well with other areas of activity and raises the general value of the work carried out. Mutual advantage is stressed, and using the monitor is described as a way of developing and extending services. The project is seen as the authorities' own initiative and part of an effort to simplify official information and make it more accessible. Co-ordination is felt to be essential.

The interviewees felt that co-operation between the different authorities has improved at local level. At the same time, a few obstacles and some opposition have been observed within official organisations; this is exemplified in concrete terms by the lack of links to the Public Internet Monitor Project from the individual authorities' homepages. The internal marketing of the Public Internet Monitor Project within and between the different authorities was sometimes felt to be inadequate. The role of the public internet monitor as mediator and boundarycrossing object was also emphasised in the interviews. The focus of the project on co-operation has stimulated a number of co-operative activities, which are still running. It is possible that it is the public internet monitor which is the object that has facilitated boundary crossing, having as it does an overlapping effect and contributing to the development of new co-operative working methods. Authorities and businesses have begun to collaborate more; final users and businesses have also had the opportunity to discover new interfaces after being introduced to one another and as a result of the concentration of operations in certain specific directions. In some cases, representatives from the authorities concerned participated, e.g. when inhabitants needed help with their tax returns or student grant applications.

In a number of the test areas introductory/information meetings for hosts and users were introduced on the initiative of local authorities and businesses. This was viewed as part of the marketing process and a means of stimulating interest in the terminal, although it can also be interpreted as part of the 'configuration' of the user and application in the sense of *defining, enabling, limiting, representing* and *steering* a given activity and how it is used.

An important part of configuration is creating the optimum pre-conditions for making service as accessible as possible for the individual. Formal or less formal introductory sessions demonstrating how to use the monitors or perform other directed activities are not only aimed at providing information, they also aim to create an understanding of the content and variety of services provided as well as help users to interpret and sift complex information and direct users not familiar with the Internet in the right direction. The main target group for such directed activities is inexperienced users. Introductions and activities are regarded as a form of exchange and a stimulation to learn and discover more. It was generally felt in the interviews that people not used to seeking information by themselves need personal support and guidance as well as help with interpreting the contents of social services. The final users also indicated a desire for autonomy, i.e. the chance to adopt the new technology and services in accordance with their own expectations and needs. One example is the cleaner at the library, who uses the public internet monitor in the morning, before the library opens, to glean information for her son and friends. She has learned to use the monitor by herself and she tells other, potential users, all about what she does.

The cleaner has a job, which unlike many other professions does not prioritise the development of knowledge or gathering of information during work hours. At the same time, she is a citizen with specific requirements and responsibilities and she the right to obtain as much information and services as she desires and in the way she likes. The public internet monitor has become her way of gathering information and gaining access to services.

Another example of configuration is the so-called 'kick-off meetings' at local level. The host/sponsor/local work group model was described by the interviewees as an important contact chain, which is also dependent on reciprocity and all actors taking responsibility for their part of the communication for the chain to achieve its maximum potential. These meetings were a forum in their own right for discussing practical questions. But they were also a means of constituting mutually agreed role divisions and areas of responsibility. One way of stimulating responsibility is to create the preconditions for participation at all levels. Finding routines and methods for maintaining continuous feedback related to everyday activities is an essential part of local adjustment. This is not a self-evident process. When it is felt that a person with responsibility does not live up to expectations, the chain of responsibility is broken.

When it came to the design of the interface, the interviewees felt that the gateway homepage was simple to use, most users clearly navigated with the help of icons and only in a few cases were the text links or A-Ö list used.

The search function was sometimes considered to be inadequate. It was felt that the chance to search for free text would have been useful and a more developed integration of official integration would have been appreciated. Some interviewees also expressed a desire for more interactivity. The physical design of the monitors may cause certain limitations. The monitors have a built-in navigation system in the form of a menu on the right side of the screen; this is not visible if the user uses a conventional web browser on an ordinary computer connected to the internet. The conclusion is thus that the public internet monitor is intended primarily to work in a physical monitor something which has stimulated different reactions, as the following demonstrates.

The monitor itself is rather large and looks old-fashioned' was one comment made by several interviewees; a flat screen and more modern design would have been preferred. The monitor was described as a piece of furniture, which is difficult to handle; a greater level of flexibility is required. Some felt that it could be an advantage that the monitor does not look too technically advanced; indeed, the final users seem to be pleased with its appearance. Some argued that it is difficult to find certain official forms if you just use the headings. A number of interviewees commented that the monitor should be closely linked to the local authority in which it is situated and that at present such information is too low down in the information structure. It was acknowledged that the project has received support in the form of meetings, upstart meetings and new contact channels, but at the same time there has been a shortage of time and resources, which has hindered progress. The internal website was a step in the direction of creating an interactive interface for continuous reporting of local activities and project results.

A few of the interviewees (hosts and sponsors) said that they did not know about the internal work interface; if this was due to inadequate information from the authorities, misunderstanding or quite simply missing the information is not clear. However, the positive reaction to the fact that it was possible to gain access to user statistics shows the importance of continuously confirming and transmitting positive project results to all participators. Hosts and local citizens gave several concrete examples of how a local adaptation process could be stimulated yet more. They expressed a desire that services should be adapted at local level and on a continuous basis. This could be encouraged by, among other things, the recognition and active support of the linked chains of responsibility described in the excerpts from the interviews and which also include final users as a means of creating a personalised service adapted to local praxis and user environments. This can be justified by the different preconditions prevailing among geographical areas with a high density of information and sparsely populated areas, where the public internet monitor is of much greater significance as a centre for service network construction and

information. Here it is necessary to combine different types of service in order to survive, unlike in towns and cities, where a broad spectrum of cultural and social differences necessitates different demands for adaptation in the form of translation and interpretation problems. Final users talked in terms of their duty to report problems and possible shortcomings to members of staff. They also expect their opinions to be transmitted to those responsible.

It is justifiable to talk in terms of interactivity on several different levels, not only in the sense of transmitting information or communicating but also as a means of creating a *relation-based* interactivity, which the present evaluation illustrates is – perhaps somewhat unexpectedly – an effect of a monitor designed for self-service. This effect also demonstrates that an artefact can, in fact, stimulate development in itself that it can stimulate the development of activities based on the services offered and the building of an extended network. The success of the public internet monitor can thus be largely attributed to the boundary-crossing networks and local activities built up during the pilot project rather than to the specific design, physical construction or technical design of the monitor and website as a self-service station.

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Paper II

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Reconfiguration of Citizenship Rights and Duties in Development of Public Services

by Annelie Ekelin

Abstract. Access to information, technology and to a certain extent, participation in development of new services, is a central issue in the prevailing eGovernment discourse, a vision that also comprises the idea of the active, contributing citizen. The empirical material, which forms the basis for this paper, was originally gathered during an evaluation of a pilot project and implementation of a self-service system in order to increase accessibility for the public. Other examples are given from current research work in local municipalities and in a region in south-east of Sweden. The municipal cases, as well as the pilot project on accessibility for all, allows me discuss the development of local public services as a process of co-construction of citizenship, engaging several actors on different levels. At the same time it may be seen as a contemporaneous process of inclusion and exclusion, on defining and drawing the boundaries of a new electronically mediated membership, where access is becoming a prerequisite for activating citizenship, transforming the "right to have access" into a "duty to participate", not just as a citizen, but for the employees who have to practically manage the reconfiguration of relations and citizenship. However, the foundation for participation turns out to be restricted in practise.

1. Introduction

The introduction and spreading of networking technologies¹ is seen more and more as an important way to enhance the development of what could be labeled an electronic citizenship (e-citizenship) or digitized citizenship. This reconfiguration of relations between citizens and official authorities is of great importance for the ongoing renewal and transformation of services in the public sector. The strivings to achieve cost efficiency by increased digitalization of information and services, and at the same time include citizens more actively in the governing of society on different levels, are some examples, which also have implications for the understanding of the notion of citizenship and in what way it is constructed. Transactions, information

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¹ The ongoing transformation towards an information intense society, based on networking structures, has been thoroughly described in Castells, 1996-1998.

retrieval, meetings and relations have to be managed electronically by wired officials as well as active citizens.

According to on-going debate on development towards the "24x7 Agency" ² in Europe, including Sweden, it is necessary for i.e. democratic reasons³ to change the hierarchical communication between authorities and citizens, and gradually transform it into a dialogue-model based on horizontal structures and networking, enhanced by the use of new technology. ⁴The relation, as well as the mutual, constantly ongoing, social construction of citizenship has to be mediated by electronic means.

1.1 Questions of concern

After this brief introduction, I will proceed by presenting the questions of concern guiding the discussion in this paper. In the following sections I will introduce my research approach, theoretical influences and empirical background. After these sections two empirical examples are introduced, followed by a conclusive discussion at the end. My interest for the topic of "access as right and duty", was originally triggered by the following questions:

- E-citizenship on whose terms?
- What is it like to be a citizen and/or official employee today, dealing with new technology in every-day practice, in order to exercise or mediate citizenship?
- How, and to what extent, are people being excluded in everyday practice?
- Citizenship consists of both rights and duties. Normally e-citizenship is emphasised as the *right* to have access, but isn't accessibility a *duty* too? If so, in what way are these rights and duties made visible and enacted in practice, besides the written or publicly spoken discourse?

1.2 Research methods and empirical background

The theoretical and methodological influences in this paper are best described as an interdisciplinary mixture of discourse analysis, Participatory Design (PD) Political Science and Informatics. In accordance with Suchman and co-authors⁵ which summarizes the last twenty years of research in the field of PD, I am following three interrelated lines of inquiry in this paper, which are to be seen as the main constituents of what could be defined as an approach striving to achieve

http://www.stiftung.bertelsmann.de/index.cfm?lan=en&nId=39 [Accessed 02-12-16] or http://www.cdt.org/egov/handbook/ [Accessed 02-12-16]

² See http://www.statskontoret.se/pdf/200131.pdf [Accessed 02-12-09]

³ See for example Bertelsmann's report,

⁴ Bellamy & Taylor, 1998, Hague & Loader, 1999

⁵ Suchman et.al, 1999.

"ethnographically-based design of digital technologies". According to the authors, the core research within the PD field consists of: *critical analyses* of technical discourses and practices, *ethnographies of work and technologies-in-use* and *design interventions.* ⁶However, in this paper the emphasis is put on the two first mentioned lines, due to the fact that my writing still is to be considered as work-in-progress. The design inventions will have to be further discussed and developed in future work.

The discussions in this paper are based upon experiences from work with two separate studies, regarding development of public services at a local and a national level, as well as on on-going research work. The first inquiry, the RISI+ project, was initiated by the EC, DG Employment and Social Affairs, and carried out as a commission and follow-up on the Regional Information Society Initiatives, mapping stakeholders' and citizens' experiences, access to and requests for public services online. The second study was an evaluation of a Swedish e-government project, The Swedish Public Internet Monitor Project, (the PIM project) partly conducted in cooperation with researchers from two other Swedish universities (The Royal Institute of Technology and Mid Sweden University). Public Internet monitors, basically a self-service system and a web-portal aiming at coordinating several authorities services, were studied in a number of different places in Sweden. Observations and interviews were conducted with end-users, as well as with the persons who are locally responsible for the monitors.

1.3 Defining a multi-layered access

Two Canadian researchers, Clement and Shade⁸ working within the research area Community Informatics, suggest a workable definition and method of defining a holistic view on the concept of "universal access", named The Access Rainbow⁹, which I take as a starting-point for the discussions in this paper. This socio-technical architecture model ¹⁰expands the thinking of "access" merely as a question of creating physical connectivity to Internet-based information and services, acknowledging the complexity of the notion, by describing the multiple aspects of access, all interdependent of each other. The layers are described with the following terms: Carriage facilities (to store, serve and carry information, i.e. cables, Internet connection), devices (i.e. public kiosks, workstations) software tools (web browsers, applications), content and services (databases, government information). Service access points (public access places i.e. schools, libraries, community networks) literacy and social facilitation (computer literacy, local experts in working places and

⁶ ibid. p. 392

⁷ See http://www.ronneby.se/learning-lab/risi/en/index.htm [Accessed 02-12-09]

⁸ See Clement & Shade in Gurstein, M. [ed.] (2000)

 $^{^9}$ For a more comprehensive description of this model see Clement & Shade, in Gurstein. M [ed.] 2000, p 36-37

¹⁰ ibid. p, 35.

neighborhood), governance (i.e. public consultation processes). They emphasize that public services should help people to "fulfill their roles as citizens, producers, consumers and caregivers". 11

They also point out the fact that recent statistics in Canada show that users access the Internet mostly at their workplaces, which also often provide free access to equipment and connection as well as ideally a supportive use environment. This is also the case in Sweden, where 80 percent of the gainfully employed people have computer-access during work hours. Within official administration the figure is 95 percent who have access to computers (81 percent for Internet-access within the category) according to recent statistics.¹²

1.4 Citizenship as co-construction

Traditionally, citizenship consists of both rights and duties, and is regarded simultaneously as a status and practice. ¹³ There are different types of citizenship: individual citizenship (the right to freedom of expression); political citizenship (the right to vote); and social citizenship (various social benefits such as child allowance), the latter mostly related to the "rights"-discussions. ¹⁴Everyone is assumed to have the same rights and responsibilities. This is what is normally dubbed "universal citizenship" ¹⁵. Exercising citizenship today, by electronic means, could be described as an activity that is a part of a distributed and partial, continual co-construction of content and affiliation. The notion of e-citizenship in the context of e-government is generally described as a way to create *increased autonomy* ¹⁶ for the individual, rather than focusing the collaborative aspects of creating citizenship and membership of a community.

If citizenship is regarded as a continual activity based on co-construction, as well as distributed work or a electronical articulation of a membership and a joint creation of content, this also blurs the boundaries between governmental and municipal authorities, private sectors employees' and other actors within, for example, the voluntary sector as well as the citizens. This on-going co-construction of content and services could be described as a central part of creating an active citizenship 17, and it does in many ways prerequisite a wide range of qualifications, knowledge and

¹¹Clement & Shade, in Gurstein [ed.], 2000, p 40.

 $^{^{\}rm 12}$ Statistics from the Governmental Institute for Communication Analysis, see:

http://www.sika-institute.se [Accessed 02-12-09]

¹³ Lister, 1997.

¹⁴ See for example Marshall, 1950 and Lister, 1997, p. 15.

¹⁵ ibid. p. 66

¹⁶ The notion of autonomy, of the ability to determine the conditions of one's life and life projects recurs in contemporary theorisations of social citizenships rights, according to Ruth Lister, 1997, p

¹⁷ This "active citizenship" is strongly envisioned by the EU, see http://europa.eu.int/comm/education/citizen/citiz-en.html and further developed in Lister, 1997, p 22)

engagement of multiple voices. The dependencies seem to be gradually shifting, acknowledging the citizens and their experiences as a vital part of creating content in the databases. Sections such as "personal experiences" and FAQ (Frequently Asked Questions) could be taken as concrete examples. They form a significant part in these examples of multiple knowledge bases, making it no longer possible to state that the creation of content within information and services are only dependent on individual employees' or governmental agencies' specialized? and thereby also limited? knowledge. Local activities in developing and designing public services, may be better understood as "boundary areas", 18 where the firm positions between users and producers are gradually shifting.

1.5. New design processes

Aspects of participation and democracy, related to the design of technology, have been of central concern for the participatory design community during the last decades. ¹⁹One way of putting it is to emphasise the close relation between design and use:

"Use has to come to design and design has to come to the users, in order for developers and users to co-operate around the design of software or other technology." 20

But if use is seen as an important part of design, is it then possible to distinguish the beginning and the end of the design-processes? Posing this question makes it possible to expand the thinking of the development of technology, in this context public services and their supportive technologies, as a clearly defined task, performed solely by management- and software consultants, towards an understanding of design processes as closely interwoven with use. ²¹

Thereby it is possible to regard citizens as key actors, implicitly or explicitly influencing design processes and development of services in the public sector. The design processes could be extended by activities of local adaptation and development in use. The empirical examples in this article gives several concrete examples of how to accomplish such an approach, acknowledging co-construction of services as a vital part of co-construction of citizenship as well as examples on obstacles for establishing these new partnerships.

²⁰ Dittrich, Eriksén and Hansson, 2002.

 $^{^{18}}$ My interpretation, based on the notion of "boundary object", originally developed by Bowker & Star, 1999.

¹⁹ See Kensing & Blomberg, 1998

²¹ See for example Suchman, 1999 and Dittrich, Eriksén and Hansson, 2002.

2. Scenes from Practice

Since the empirical material was originally gathered for evaluation purposes, I have experienced difficulties in re-thinking the results, and finding an alternative strategy to approach the material from a research angle. The material was certainly rich and diverse enough, but in a way "fixed" by the conclusions that had been drawn during the evaluation process. I started to look for "break-downs" ²² and explicit situations that challenged the current understanding, in order to find new openings into the fieldwork.

During these two studies of public service-development, I came across several examples of what I would describe as inconsistencies in practice, compared to the rhetorical visions of "access to all". In short, the interplay between rights and duties in co-construction of e-citizenship, such as in the case with the cleaner in the library, who was not allowed to use a self-service system during work hours. There was also the example of the local hosts who were supposed to provide facilitation and support to users of the self-service system. The end-users expressed their "duty" to report and give feedback on the content and functionality of the system to the local hosts, at the same time as the local hosts experienced several feedback failures towards the authorities providing the service. I will also present a third example where the citizens, involved in a referee group, engaged at reshaping the municipality web site and, finally, another electronically managed attempt to involve citizens in development of the region.

The question is; what do these examples tell us about the every-day practice of use and service provision, when having the possibility to access information and services, is interpreted both by practitioners and users as a tacit instruction or "duty" to take an active role in co-construction of citizenship and services – but on whose terms?

2.1 Not during working hours- exclusion in practice

A key issue, concerning the democracy-development discussion within e-government and e-citizen discourses, is the right to have access to new technologies and information, an argument called upon when justifying the diffusion of the authorities' services and the initiation of the PIM project as well as the continuation and expansion of the project in the future. Accessibility is, according to

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²² A common, ethnographic method for analysis. (Blomberg, Jeanette slides at Work Practice and Technology Course in Ronneby, 2001-2002).

Hague & Loader ²³, an issue of *participation, voice and autonomy* and the definition of the Access Rainbow ²⁴ emphasizes it as an intrinsically complex issue.

When I was visiting different places where the PIM projects' terminals were placed, I by chance heard about a cleaner in the library who was not allowed to use the terminal during working hours. One of the local hosts described the background for me:

"In the beginning, I introduced the terminal for the staff. I did that in the morning, before the library opened. I thought everyone ought to have an interest in knowing about the authorities and their services on the Internet. One morning, when I came down to the library hall, I found one of the cleaning ladies in front of the terminal. Since I didn't know if she could manage on her own, I asked her if she wanted me to show her. But she had already used it several times and know exactly how to handle the machine..." ²⁵

Later, I asked the host if I could get in contact with the cleaner, and the management arranged a meeting. She was supposed to let me in through a door in the basement, below the main entrance, before opening-hours. She was a middle-aged immigrant woman, originally from Bosnia-Herzegovina, working at the library. When I asked her to tell me how she got in contact with the terminal, she told me that she had learned to use it on her own, on lunch-breaks and whenever she felt she had the time to explore the new device that suddenly had been placed in her working-environment.

When management found out that she was using the terminal, she was stopped from doing so. The motivation was that she had to work her scheduled hours, and not conduct personal errands on working hours. This could be seen as an example of how traditions and work practice could work as a hindrance to an individual, having a job that traditionally does not support personal initiatives on enhancing skills and personal development in order to activate their citizenship. We sat down and talked for a while and she showed me how she was searching the web for new jobs, looking for education for herself and her son, (she was interested in finding an education in gardening), but she was also searching for information and on-line forms and health insurances. When I was doing the interview and she showed me how she used the terminal, she initiated a discussion on the placing of the terminal and how the light in the environment made reflections on the screen and thereby also affected the comprehension of the interface and WebPages. She turned out to have valuable insights, which could have been of importance for future placement of the terminal, if only she had had the opportunity to put forward her ideas, and there had been formal ways to gather such feedback.

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 $^{^{\}rm 23}$ See Hague & Loader, 1999, p. 9ff

²⁴ Clement & Shade, in Gurstein. M [ed.] 2000, pp 36-37

²⁵ Host No.3

This example allows me to pose a number of questions for further discussion; could this woman be regarded as a "member" of a digitised and active citizenship? The rhetorical discourse on accessibility emphasise that the services are provided "all around the clock". But what happens with the electronically mediated citizenship if the right to have access turns out to be restricted in reality and the accessibility does not include working-hours for all individuals? What are the implications, for the visions on increased autonomy for citizens by the use of technology, if their acts are restricted by these unwritten rules, made up by old traditions? There is an obvious risk here that the electronic mediation transforms the continuous co-construction of citizenship to delimitation into a digitised membership, including only a chosen few.

2.2 Relationship-based interactivity - on whose terms?

During an evaluation meeting in which I took part, where representatives from all the steering groups of the involved authorities in the PIM project were represented, the issue of feedback from citizens was addressed in terms of "how to create better interactivity". The discussion could be summed up in an articulated ambition to move beyond the basic level of spreading information to enhanced communicating aiming towards attaining and supporting a relationship-based interactivity26. In the discussion several ideas were given as examples, such as managing errands on-line, putting more emphasis on the planning and conducting of needs assessments, how to develop more inclusive techniques or methods for incorporating users' or citizens' feedback in design and continuous development of public services.

The national authorities had an intention to stimulate the local actors in establishing chains of anchoring processes and marketing activities concerning the PIM terminals, involving local authorities and local hosts, but this was unsuccessful in many places, due to lack of resources. The evaluation of the PIM project highlights several aspects related to accessibility issues and service design. But the crucial question is if the different actors involved in reality are prepared to engage in an extended service design, including developing processes for active incorporation of users' feedback?

The local hosts and facilitators, providing the PIM project's terminals were, according to the Access Rainbow Model, dealing directly with the phases of social facilitation. In practice, this means, giving extra support to immigrant-women (helping women in veils, asking for help when their husbands were out of sight, as one of the hosts put it), arranging special introductions and training for groups of

²⁶ Basically, various examples on new processes of relationship forming built on a long-term basis, comparable with and inspired by business management models of customer relationship, and equal partnership between authorities and citizens, such as dialogues around service design.

retired people as well as children and individuals asking for help, acting as mediators and assistant authorities and much, much more. But they were not allowed to take active part in processes and activities of local tailoring and service design, where they could have put forward opinions on functionality, gathered during the numerous sessions with the citizens:

When we asked them to come and take part in our activities with users, we also tried to give them response on content and functionality of the website, and talk about our needs and what is good and what work less well, and how we want to change it in order to make it better. We've seen it as an opportunity to pass this feedback on, and quite a good evaluation of the pages. But nothing has happened. It would be marvellous if we could talk to some people in management on these issues. It is possible to develop further, because we gather opinions and information on possible improvements, but now no one knows who is responsible, and it takes such a long time before it reaches the right person, if it ever gets there. 27

Focusing the issue of providing accessibility for disadvantaged groups is of course a good thing per se. But the rights quickly turn into a duty for the local hosts and members of the local working-groups, to adapt their organizations and work practice to the technology, not vice versa, by i.e. increased co-operation with adult education centers and by developing new, roles, mediating between technology, authorities and citizens. At the same time they are excluded from taking part in further development of the services, even though they emphasize it both as their right and obligation to further feedback from the citizens as well as their own experiences of failing functionality of the authorities web pages.

2.3 Citizenship and services communicating vessels

"If we hadn't had as many PCs per household as we now have in Sweden we would not have contemplated setting up self-services on the Internet. Certainly, this is a matter of communicating vessels, where one part of it is the claims we place on the public, which in turn lead to new needs. On the other hand it's the customers themselves who target the organisation." ²⁸

The quotes above illustrates the flip side of the access-coin, where participation is restricted to the area of "social facilitation" and the process of mutuality and civic engagement, heavily emphasised in eGovernmental discourse, is out of order. What happens when feedback failures get more common than the vision of "communicating vessels"?

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 $^{^{\}rm 27}$ Excerpt from an interview with a local host (no. 2) providing the PIM terminals to citizens in Mid-Sweden.

²⁸ Host No.1

Let me introduce a couple of regional examples. Recently there was a presentation of a new web site, aimed at involving the citizens of a specific region in Sweden in creating a common strategy for growth and development for the future. The index page shows happy faces of young people, a new person every day, expressing their opinion about the current state of the region and their dreams for the future. They are all so confusingly alike, since their presence seems to represent a go-ahead spirit rather than the diversity of the local population. The visitors on the web page are encouraged to take an active part and "form" the future, write an essay, answer an opinion poll on what they regard as the most important regional question for the future. It is also possible to download a news bulletin, or express an opinion in a debate forum on predefined issues such as "The picture of the region"; asking how do you perceive the picture of the region, and how do you think other people perceive us? What are your expectations for the future of the region? Under the headline "Multiplicity" it is possible to discuss gender issues, integration of different cultures and environmental issues. Other examples of topics are; development, democracy, the local environment as well as the "surrounding world", infrastructures, culture, education and tourism. After two weeks there are just a few statements made, most of them by one signature. The campaign is supposed to last for three months and opinions are also gathered during physical meetings to which you need to have an invitation. During a meeting, in which I took part, there were mostly local politicians and higher official clerks present, and someone raised the issue on how to get "ordinary" people involved. The web site was brought up as an example of renewing the dialogue, but one of the local politicians was very reluctant:

"Now they expect me, as a voluntary politician, to take an active part in the debate in the electronic forums, and I just don't want to do it, I haven't got the time and what do they really get out of it?" ²⁹

Another example of bottlenecks in communication is the pilot study on the introduction of Citizens' cards³⁰. The pilot study was conducted within a regional ICT project, which consisted of a co-operation between a local bank, two municipalities and a national telecom company. The aim with the project was to work on broadening the use of ICT by promoting several projects, such as; supporting community building on the net (where inhabitants were expected to fill a web portal with content by themselves), initiatives for schools, giving them the opportunity to present their class on the Internet and supporting small enterprises to in discovering the advantages of going online. During the project time there was also a training package on computer skills, distributed to the employees of the two municipalities.'

²⁹ This comment was said to me in a personal conversation, later on I was given the permission to quote the politician in this context

quote the politician in this context. 30 Formed as a credit card, filled with access to services besides access to money.

The municipalities were meant to be the stakeholders of the card and the card was envisioned as a "way to take a step towards creating e-citizenship" ³¹ for the local inhabitants. The aim with the card was to provide people with municipality services combined with commercial services; electronic payment and other useful locally distributed services, such as possibility to have entrance to official buildings. The pilot study emphasises that the public interest for such a card is high and a set of "added values" for the citizens identified, such as the possibility to combine functions (paying-card, entrance-card, access to services combined with commercial benefits), stimulation of relationship building between the interested parties involved, and on a long-term basis, changes in shopping habits and attitudes towards paying with cards among the citizens. But the interviews also showed that many citizens were unaware or unsure of what could be defined as public services and what role the municipality was supposed to have as well as where and when the obligations of the municipality begin and end.

The decision was not taken to introduce a card. It turned out to be too expensive to develop, and there were too many demands from the citizens to live up to and also difficulties in co-ordinating the services and disagreements on responsibilities and roles among the project partners. The former project leader has now got a job in one of the municipalities and has to face another reality:

"We need to start from zero and we are not interested in huge efforts involving citizens, we just want to find new ways of packaging services".³²

A card was obviously not a good package, at least not from a management point of view.

2.4 Involving the citizens- practices of co-construction

There are, however, also examples of tentative efforts to involve the public actively in development of services in the region. One of the municipalities was planning to reshape their web site. The chief- of-information adopted a participatory approach and invited a group consisting of users representing different ages and groups within society, as referees to a meeting, in which I took part as an observant.

During the meeting the citizens were merely asked for opinions about the functionality of the new web site. After a short introduction they all got a questionnaire where they were asked to compare the old design with the new one and they also had to search for special tasks such as; is it possible to receive lectures on percussion instruments and if so, is it possible to find the phone number and e-mail address of the responsible teacher? Where are the timetables for the archipelago boats? Who is responsible for handing out security alarms to elderly people? There

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 $^{^{31}}$ Quote from the pilot study, internal and unpublished material, which I have chosen to keep anonymous.

³² This comment was said during a planning meeting with the management.

were also questions on the political deputies, fees for child-care and much more. The participants also had to grade the design on a scale of one to five (from bad to good), including layout, graphics and content as well as navigation possibilities. They were also asked to point out if they thought the web site was not suitable for any special group in society and if they thought so, they also had to motivate their opinion. Several inconsistencies were highlighted in the navigation, such as: confusion in description of categories, and there were for example two head categories of Citizens Public Service with a sub category, named Official Services, which was a bit confusing. The point of departure for the presentation of the services turned out to be the organisations' needs instead of the citizens', which was clearly seen by the assistant employees as well as the chief-of- information during the discussions and walkthroughs with the participants. A woman insisted on her need for a comprehensive index, and she also managed to convince the others, including the employees, whereby technological issues were directly addressed in terms of: how to store the information, "should the site be database-driven or not"? The practical result was that the new site got an alphabetical index.

3. Concluding discussion

What is e-citizenship, according to practises described in this paper? Central features of this new kind of citizenship are the explicit expectations, expressed in policy documents as well as by local administrators, on the lay persons to enter content and opinions in databases and to interact with the official employees as well as with other citizens, by the use of networking technologies. It could also be described as a partial citizenship based on duties, rather than on rights, even though the discourse on access for all and increased autonomy for individuals (24 hour services) emphasizes the opposite.

The examples of the cleaner as well as the local hosts, who wanted to perform active citizenship, and who were not allowed to take part in the development of services show in what way people are being excluded in everyday practice and also illustrate the ambiguity of this "new" kind of citizenship, proving that there are certain unwritten rules concerning who is regarded as a member of this electronical citizenry. Restrictions occurs and move in unexpected ways in reality, transformed into a duty stating that some have to exercise their citizenship during their spare time, others can do it whenever they choose to do it.

Focusing the issue of providing accessibility for disadvantaged groups is of course both necessary and a political correct behavior. But on the other hand the rights quickly turn into a duty for the local hosts and members of the local working-groups, when they realize that they have to adapt their organizations and work practice to the technology, not vice versa. They are not consistently included but rather planlessly excluded from taking part in further development and local tailoring of the services, even though they emphasize it both as their right and duty to pass on

feedback from the citizens as well as their own experiences of failing functionality of the authorities' web pages, that are supplied by the Citizens' terminal – despite the authorities' generally expressed strivings to establish "relationship-based interactivity

What if the citizens do not want to exercise their right to have universal access and do not want to fulfill their obligation to put in content? In connection to public service development it is possible to argue that a municipality constructs its own needs and is thereby also dependent on the citizens' willingness to participate in this ongoing creation. Is it not then necessary to develop services that are useful? The problem with providing new public services occurs when the infrastructure is defective, when the "communicating vessels" are cracked, and people who are supposed to take part don't want to (the local politician) and people are not allowed to do it anyway (the cleaner).

In the context of developing a digitised, or electronically mediated citizenship, access is not just a right to acquire relevant, timely, well-packaged information whenever you want to, it can also be regarded as a duty for the individual to put in content, in order to make the system and ultimately also the technology, work. The citizens are supposed to be constantly present electronically, ready and willing to have a say and to hand in personal information. In the empirical examples this comes through as an important contradiction in the rhetorical discourses. These emphasise an approach, involving citizens partly, but not fully, in the sense that they may be prohibited from contributing actively in a design process that might be of much more concern for them personally, as for example in their working environments.

However, examples of co-construction of citizenship and services are evolving in small steps, making the dichotomy between users and producers gradually shift, as in the municipality case, where citizens took an active part when reshaping the municipality website. The interviews that were conducted with citizens during the pilot study concerning the Citizens' card, showed that many citizens were unaware or unsure of what could be defined as public services and what role the municipality was supposed to take on and where and when the obligations of the municipality as well as themselves as citizens start. Here is an example of a grounded, experienced need that could be taken seriously with another approach of citizenship as a continual articulation and reshaping of obligations and rights. Would it be possible to facilitate such a constant formulation of citizenship by the help of networking technologies? With an action-oriented understanding of what it means to be a citizen as a starting-point? This clarifies the subtle distinction between the two perspectives mentioned here; to create a "relationship-based interactivity", could be seen as a topdown perspective which in a way demands people to "hand in themselves" on request, compared to a citizens' oriented approach, emphasising co-construction of services and content.

This brings on the question: how do we provide technology and public services that allow and support people in *developing* their citizenship and not only in *being* a citizen with certain needs?

Not much, one may object, but maybe a beginning of a different understanding of the process of adaptation of networking technologies, not solely as an opportunity "to have access" to services but also as a possibility to "have access" to development of those services, and to take an integral part of co-construction of citizenship through and by technology.

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Paper III

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Consulting the Citizens Relationship-based Interaction in the Development of eGovernment

by Annelie Ekelin

ABSTRACT This work-in-progress report explores the multi-layered discourse on interaction within the field of e-government, a field that is heavily influenced by marketing-, and democracy-related values. The discourse holds out the prospect of an on-going transformation towards what could be labelled "relationship-based interaction", aiming at actively involving citizens actively in the development of public information and services on a regular basis. Municipalities and official authorities are taking various initiatives to reconfigure their relations with citizens on a local, regional and a national level in Sweden; some local examples are presented in this paper. This article also reflects upon possible ways to promote public involvement in the development of government, by using methods and tools influenced by participatory design.

1. Introduction

Local governments and municipalities have a wide range of societal expectations and demands to face, when it comes to a total renewal and transformation of public administration in accordance with the notion of the 24x7 Agency³³, which is generally seen as "The Way" to future government in the Western world.

³³ SAPM[the Swedish Agency for Public Management], 2000.

A key issue, according to the on-going debate on development towards the "24x7 Agency" in Europe³⁴ is how to move beyond a prevailing tradition of hierarchical communication between authorities and citizens towards, a dialogue-model based on horizontal structures and networking ³⁵. The main objective of this paper is to initiate a discussion about what could be characterised as new processes of relationship forming, including various actors, in order to establish and stimulate relationship-based interaction between authorities and citizens.

Practical examples of this are the declarations and dialogues ³⁶around service design³⁷, which are taking place on a local and regional level in various parts of Sweden.

1.1 Models of e-government

Research on and evaluation of egovernment, in Great Britain and the United States³⁸, primarily within political science, show that distribution of information has been the main goal of national and regional authorities in England and the USA ³⁹. The use of new technologies for citizen feedback and stimulating participation has not been of the same importance. In the rare cases when feedback is gathered from citizens, this is carried out by collecting opinions about predetermined issues rather than giving citizens the opportunity to have a say on design issues ⁴⁰. The transformation from an "authority culture" to a "service" one" has proceeded gradually during the last decades in Sweden. ⁴¹ The focus has shifted – at least in the ongoing discourse – from enlightening and guiding the citizen towards taking a starting point the citizens' point of view, and lately there has been a move to consult the citizens and actively involve them in the development of public services.

1.2 Empirical Background

The discussions in this paper are based primarily on experiences and materials gathered during two separate inquiries, both conducted within the framework of the

³⁷ Basically, including citizens' needs in development of online public services.

³⁴ The Swedish version of this concept is developed further in SAPM, 2000.

³⁵ Bellamy & Taylor, 1998 and Hague & Loader, 1999.

³⁶ SAPM, 2001.

³⁸ The development of e-government in both Great Britain, the USA should bee considered as role-model for the Swedish Government according to The Swedish Agency for Public Management (SAPM)

³⁹ Bellamy & Taylor, 1998 and Hague & Loader, 1999.

⁴⁰ ibid

⁴¹ See Eriksén, 1998 and Citizen Offices in development, 1999.

DitA project, Design of IT in Use⁴². As a third source, I have used experiences and reflections from my previous work with the Dialogue project, a Trans-European project, aimed at developing the use of ICT as a means for furthering democracy and methodological development.⁴³ I am also currently involved in research on municipality initiatives to set up and work with user evaluations.

1.3 The RISI+ evaluation and the PIM project

The first inquiry (henceforth called RISI+ -evaluation) was a study initiated by the EC, DG Employment and Social Affairs and carried out as a commission and follow-up to the Regional Information Society Initiative. The aim was to map stakeholders' and citizens' experiences and their access to and requests for public services on-line. The material was mostly gathered through interviews and observations of technologies-in-use. The second inquiry, The PIM-project, is an evaluation of the implementation of a self-service system, which was initiated by official authorities in Sweden, The *Swedish Public Internet Monitor Project*, (henceforth called the PIM project), and conducted in co-operation with two other Swedish universities – The Royal Institute of Technology and Mid Sweden University (Mitthögskolan). Public Internet monitors and how they were used were studied mainly through observations and interviews with local "monitor-hosts" and endusers.

1.4 Text analysis

My theoretical and methodological basis is also inspired by critical discourse analysis as, originally developed by Norman Fairclough ⁴⁴. This method may be, concretely exemplified as readings and analysis of both national and local official texts as well as formulated visions concerning developmental work within the area of e-government.

1.5 Theoretical influences

In accordance with Suchman et al.⁴⁵, where the last twenty years of research in the field of work practice and technology are summarised - there are three interrelated-

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⁴² The DitA project. Design of IT in Use; supportive technologies for public services. More information at http://www.iar.bth.se/forskning/arbv/dita/index.htm [Accessed 02-12-11], and in Dittrich et.al, 2002.

 $^{^{\}rm 43}$ See http://www.ronneby.se/dialogue/default.htm [Accessed 02-12-14], and Ekelin & Elovaara, 2000.

⁴⁴ Winter-Jörgensen & Phillips, 2000.

⁴⁵ Suchman, 1995.

lines- of- inquiry, which should be seen as the main constituents of what could be defined as an approach which aims to produce an "ethnographically-based design of digital technologies". ⁴⁶ According to the authors the core research within the field consists of: *critical analyses of technical discourses and practices, ethnographies of work and technologies-in-use* and *design interventions.* ⁴⁷The main focus in the present report is the first mentioned line, critical analysis; the other lines will be emphasised in future work. The history of participatory design research is described by Kensing & Blomberg, ⁴⁸Gärtner & Wagner ⁴⁹and the Scandinavian Research projects on system-development inspiring participatory design are also discussed by Bjerknes & Bratteteig. ⁵⁰ In another article Lucy Suchman ⁵¹ addresses the complexity of design at work, ⁵²the blurring of borders between professionals and more-or-less "invisible" actors, among whom, I suggest, citizens are an example.

2. Relationship-based interaction

Tracking the main route in the discourse on interaction in e-government leads us to what can be defined as a management- and marketing- related discourse. Philip Kotler, an American expert and initiator of the concept of *relationship-based marketing*, suggests that: "Our thinking [...] is moving from a marketing mix focus to a relationship focus." ⁵³

Several of the respondents in the RISI+ evaluation relate development of e-government to the issue of marketing the municipality or local region. Citizen involvement in service design is considered essential for qualitative reasons, and is regarded as an important instrument in future for marketing of a municipality. A respondent relates *relationship-based marketing* with development of public services in the following way:

"The main idea with the notion of 24 hour authority is to make interactive interchange around services possible but...we haven't got this thinking yet, as they have in marketing, that there are possible channels, but we have to manage them." 54

In Swedish marketing literature, the approach of *relationship-based marketing* is outlined and substantiated with the aid of such terms as *long-term co-operation* and *equal*

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⁴⁶ ibid

⁴⁷ Suchman et.al, 1999.

⁴⁸ Kensing & Blomberg, 1998.

⁴⁹ Gärtner & Wagner, 1996.

⁵⁰ Bjerknes & Bratteteig, 1995.

⁵¹ Suchman, 1994.

⁵² Suchman, 1994 and Greenbaum& Kyng, 1991.

⁵³ Kotler, 1991.

⁵⁴ Interview with a municipal officer, conducted 01-03-29.

partnership ⁵⁵. All parties are accountable for what goes on as well as what does not happen, i.e. failure of establishing interactivity in the relationship. These values are defined as core relation- and service values and seen as intrinsically 'good'. Increased value for the customer has to be the main goal; this is achieved by creating *activity links* and *resource ties* and by developing *actors' bonds.*⁵⁶

2.1 Governmental "wishes upon a star" Dialogue

At the request of the Swedish Government, the Swedish Agency for Public Management (SAPM), presented in 2000 a proposal for a definition of criteria for the 24x7 Agency and how it should be applied in the ongoing development of e-government in Sweden. The emphasis is on "increased accessibility" and "availability" for the citizens, as well as improving of the "quality of services". The citizens are placed in the centre and the development of "network-based electronic interactivity" between different actors is considered the main goal. A follow-up on how the development of a 24x7 service is progressing was conducted and presented last year by SAPM. The government commission on the 24x7 Agency stresses the importance of developing methods for analysing the need for information- and service based on a customer perspective. SACCORDING to this commission the authorities must apply a range of methods for supporting and stimulating the development of a relationship-based communication, i.e. through management dialogues, service charters, continuous follow-ups and customer surveys, focus groups and so on. This is all in the name of renewing the dialogue around services offered. As stated in the report:

"The 24 hours agency must be keenly alive. It has to be alert and constantly listening to the citizens - it must consult the citizens. Consulting means seeking advice from, taking counsel, deliberating, but also listening to and thinking upon. The consultation then becomes a way to create participation." ⁶⁰

2.2 Case number one: municipalities

A strategy for the development of public services was recently discussed and accepted by the local city council in one of the municipalities within my empirical

⁵⁵ Gummesson, 1998.

⁵⁶ ibid

⁵⁷ All quotes are excerpts from reports published on the SAPM's website, available in Swedish at http://www.statskontoret.se [Accessed 02-12-14] (Translated by author)

⁵⁸ ŜAPM, 2001b.

⁵⁹ SAPM, 2000.

⁶⁰ SAPM, 2000.

study. Several proposals for how to force the development of public services are presented in a policy document. 61The citizens are "included in project work, invited to join courses and to provide feedback". A scenario is presented:

"On the Intranet, you can find an education-package for politicians describing how to enhance democracy. A focus group consisting of local inhabitants and politicians is testing how the ideas are to be implemented in "real life". This is just one of many ambitious ideas about how to create better communication among different actors...."62

The same Swedish municipality was planning to reshape its website. A young designer was commissioned to make a fresh, new design. The re-designed site was sent out to the municipal employees with a request for feedback on the new design. The response was overwhelming, and certainly not as positive as expected. One commentator remarked, for example, this looks like "Disney World Park or a candystore"63. The Director of Information then adopted a totally different approach and set up a group of referees consisting of users representing different ages and groups within society. During the meeting the citizens were merely asked for their opinions about the functionality of the new website. The Director of Information chairman made the following remark, at the first meeting with the selected user group: "I think there is a need for continuous consultation with users in order to develop the website and all the services."

The citizen's feedback thus was taken in account in the remaking of the website that followed. Another municipal officer in the same town commented the plan for a recurrence of user evaluations as follows: "...we are thinking of combining these activities with training, giving people an opportunity to develop their computer skills."

2.3 Case numbers two: a governmental pilot

⁶¹ Taken from a policy document on creating an E-centre or "Learning-resource-centre, a virtual and physical arena for development of applied ICT; citizens' services and learning". Presented during a city council -meeting in 2002

⁶³ The originally quotation referred to a well-known Swedish amusement park.

The European Commission and the Swedish government emphasises the policy of "IT for all".⁶⁴ One concrete example of an initiative to increase access for disadvantaged groups in society is the *Swedish Public Internet Monitor Project* (the PIM project)⁶⁵. This project was started as a co-operative initiative between different authorities with the aim of co-ordinating their public services and making them accessible to the general public in different locations, e.g. in libraries and other local meeting places. The self-service system (basically a built-in terminal and a shared Internet portal, called 'The Citizen's Square') is intended to guarantee one of our basic democratic rights: easy access to comprehensive public information and services. Five Swedish authorities were co-operating at the time of the evaluation: the Employment Office, the Social Insurance Office, the National Board of Student Aid, the Premium Pension Authority and the National Tax Board. The Swedish Migration Board and the Swedish Consumer Agency have also joined the project.

During an internal meeting in which representatives from all the steering groups of the authorities took part, the issue of feedback from citizens was addressed in terms of "how to create better interactivity". In the discussion which followed, several ideas were given as examples, such as: managing errands on-line, careful planning and conducting of needs assessments, and actively incorporation of users' or citizens' feedback in service design. However, when the organisational schemes for further development and maintenance of the project were sketched on the white-board, the word citizen was not mentioned at any point.

The hosts⁶⁶, and other members of local working-groups, give concrete examples in the interviews of how to manage increased interactivity by sharing work-practice experience and by taking active part in a continuous process of "local tailoring" of services: "...we have discussed establishing some sort of continuous sharing...the simplest way could be to man the various authorities' help-desks and thereby get inservice training. /.../In the evaluative sections concerning accountability⁶⁷ issues and influence, the authorities had visions of establishing a chain of interlinking anchoring-processes in order to sustain responsibility of interaction and management. Things did not always work as planned, however, as exemplified by the following comment from a member of a local working-group:

"We could have developed the dialogue around support- and activities for users further, but the question is who is responsible for doing so? If the authorities put more emphasis on this, we will gladly take part. They can't mean we have to start a

⁶⁴ This was emphasised in the words of the Prime Minister of Sweden, Göran Persson, at the opening of the parliamentary session on 14 September 1999.

http://www.riksdagen.se/debatt/9900/prot/2/htframe.htm [Accessed 02-12-11]

⁶⁵ See http://www.medborgartorget.nu [Accessed 02-12-11]

⁶⁶ Basically the person within a local institution, responsible for providing the Public Internet Monitors.

 $^{^{\}rm 67}$ The concept of accountability is further developed in Eriksén , 2001.

lot of training of people, without getting any support or resources with which to accomplish this."

The citizens who were using the self-service system also talked about feedback in terms of "their duty of reporting things to the staff", who are in turn expected (by the citizens') to pass on the information to the developers and ultimate owners and managers of the monitor.

3. Concluding discussion

The analysis of the discourse on interaction within egovernment in texts and practices shows that different actors, including stakeholders from the governmental arena as well as local municipal officers and citizens, respond to the changing approaches to interaction in different ways. The relationship-based interaction is justified by quality reasons, as an instrument for marketing. The concept is described in terms of interchange around services, management of relations and mutual accountability. The discourse depicts the interaction as a constant activity of consultation and listening, deliberation and "thinking upon" the citizens. In local practice the linking of citizen's services and continual learning, as well as incorporation of citizen's feedback in service design, are emphasised. The actual users of the services (local employees and citizens) express their need for defined responsibilities, support and resources and state that they have a "duty" to report breakdowns and inadequate functionality. There seems to be a need for developed methods and techniques by which to consult the users. This is a gradual transformation and is already taking place. Is shaping and influencing the ongoing dialogue in the direction of what is often referred to in the current discourse and without further problematisation, as relationship-based interaction. Long-term cooperation is discussed and explored in terms of developing regular methods for gaining access to and expressing "the public will". The service declarations can be seen as a way for authorities to account for their service and establish a contract with the users, thereby stimulating discussions on development of services with citizens. At the same time as this willingness and readiness to take into account users' or citizens' feedback and start up a continuing dialogue are expressed, we see several examples of feedback failure in local practice highlighting the risk of creating what could be described as a "detached engagement".

A basic question must be; what is in it for the citizens? There is definitely an opening here for further exploration and expansion of the notion of relationship-based interaction, by acknowledging the connection between developing skills and providing feedback for different purposes. The will to create activity links such as continuing evaluation of homepages and identification of needs through focus group interviews is still rare in the examples, and the resource ties are exemplified by the authorities will to offer basics in computing to citizens. The actors' bond could be exemplified by the demands on citizens to give feedback on request. Interaction is

still performed as single activities, (the user-evaluation of a proposal on a renewed website), but there is potential for developing a continuous consultation with citizens. Relations need to be structured, though, and mutual exchange and transformation of knowledge and information need to be enhanced. The vision of seeing the citizen as a strategic partner in this development is an important one for this kind of interaction, but what does it really mean when it comes to the basic involvement and participation of citizens in design-related issues? The aim of developing public services is closely interwoven with that of achieving organisational change as well as societal development and to strengthening democratic values.

The various attempts to establish a relationship-based interaction seem to be conducted in an unconscious way, which is, of course acceptable in the initial stages.

However the methods employed could be strengthened by taking into account the potentials of participatory design methods to incorporate a multi-perspective on service design and technology production/use, and thereby stimulate other efforts aimed at relationship-based interaction.

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Paper IV

[Parts of this report, originally carried out as a study within the RISI+ Project (Regional Information Society Initiative) have been presented at the NordiCHI 2000 Conference, "Design versus design" in Stockholm in October 2001 and, in a different version, as a work-in-progress report at the PDC 2000 (Participatory Design) Conference "Bringing in more voices", in New York in November 2000.]

Mapping Out and Constructing Needs in the Development of On-line Public Services

by Annelie Ekelin

1. Introduction and background

1.1 New forms of public services

In Sweden there is a tradition which has been developed during the past few decades of informal relations, or at least of informality in certain types of communication between the citizen and the authorities. The most striking example was the legendary campaign described in "Hi, this is your Social Insurance Bureau".68 During this period many local so- called citizens offices were established as a reaction to the increasing bureaucracy and specialised sectors of society. The citizen offices reflected a desire to switch to a culture of services instead of one based on the exercise of authority. At the same time, it should also be said that this development was also the result of reduced public resources. 69

During the last decade, the development of public services online, e.g. governmental and municipal information and services has become more and more common in Sweden. The Swedish government encourages these experiments and a recently conducted enquiry concerning the concept of "24x7 Agency", (A proposal for Criteria for Central eGgovernment in the Services of the Citizens) shows that the need for increased interactivity and co-operation between public authorities is most essential. They also emphasis the need for "customer surveys and a developed dialogue around these issues. 70 The municipalities and public authorities are in a way competing with each other in providing both useful and attractive digitalised information and new services for citizens. Different actors are developing technological solutions for self-service on different levels; these are provided entirely on-line through Internet or by phone. As mentioned above, a new form of coordination and development of public services has been spreading among Swedish

⁶⁸ Described in "Hej, det är från försäkringskassan: informaliseringen av Sverige" [ed.] by Orvar Löfgren "Hi, this is your Social Insurance Bureau: Informalising Sweden."

⁶⁹ Background picture presented by Sölvesborgs Citizen office. Interview in October 2000.

⁷⁰ This report was presented in Computer Sweden on 14 May, 2000.See http://nvheter.idg.se/display.pl?ID=000514-CS3 [Accessed 02-12-11]

municipalities in the form of local "one-stop shops" or citizen's offices. Here, the general public is offered different kinds of public services at one and the same reception desk. 71A recently conducted national survey shows that municipality homepages get more hits than the most frequently visited commercial sites. About thirty-three percent of all Swedes paid a private visit to their municipality homepage during September 2000.72

These examples could be seen as results of an on-going effort to make public services more efficient, a development that has coincided with a rationalisation of the Swedish civil service and reduction of the Swedish welfare system. But they can also be seen as a way to test new organisational and administrative forms or as an effort to achieve improved accessibility, quality and range of public service as well as stimulate the development of local democracy. 73In the County of Blekinge, in the south east of Sweden, some municipalities have been involved in experiments such as the ones described above, with varying degrees of success. Yet there is still room for development of initiatives like these.

An alternative that has been advocated lately is the possibility of increased citizen involvement and development of democracy in society through the digitalisation of services and expanded interactivity. It seems that the focus is shifting from "doing things just because the new technology gives us the opportunity to do it", to a wider perspective based on the idea that the development of on-line services must focus on the use of certain services and must have added value for the users. Implicitly, business-oriented approaches such as "once we manage to create the 'right' kind of product or service it is also possible to awaken the interest of citizens - whether they have the needs or not" are perspectives, which surface from time to time in the debate on this issue. This type of approach could, however, lead to the reaction "these needs are not mine, these services are not close to me".

It is thus highly relevant to focus on and explore the practical use of needs analyses or needs assessments as well as the final forming of the content and shape of public services on-line. In addition, it is important to make clear where the needs basically emanate from, i.e. an individual, a group of citizens, an organisation or society itself.

1.2 The Study

This study is a short pilot study, the aim of which is to initiate discussions about the questions that arise as a result of this presentation and bring about a discussion.

⁷¹ Eriksén, 1998, p. 17

⁷² This report has been discussed in an article in Computer Sweden, 22 September 2000. See http://nyheter.idg.se/display.pl?ID=000922-CS30. [Acessed 021209]. The report is presented online in Swedish (with a short summary in English) at http://www.webbarometern.com/ [Accessed 02-12-14]

⁷³ Eriksen, 1998, p 17pp.

The study is also intended to contribute to the development of an ongoing dialogue on the relation between citizens' practical *experiences of everyday life* and the *construction of* needs.

The analysis will be compared to and discussed in relation to other examples of local projects aiming to achieve increased citizen involvement. This project was also a way of supporting the setting up of communities on the web from a grassroots perspective, where citizens were provided with time and space to explore and articulate their needs and options. ⁷⁴

The charting and construction of needs described here should also be seen as an important part of the framework of a larger on-going research and development project which is financed by the Swedish Council for Work Life Research and focuses on the continuous design and development of IT in use in public service. 75

Some basic evaluation questions addressed in this paper are:

- 1. What kind of **techniques/methods** are currently being used in order to identify and distinguish various needs?
- 2. **Why** do service producers/providers find it necessary to conduct these kinds of surveys? Why do they choose the methods they do? How do they define such significant concepts as "needs", "citizenship", "service", "technical products", "user-orientation", "interaction and dialogue"?
- 3.**What** are regarded as the primary and/or most frequently encountered needs in public services? What are the basic elements when developing these services?
- 4. How are **target groups** defined? Whose/which needs are legitimate or predominant? Are the categories seen as univocal or is there room for diversity, and if so, how is this great variety dealt with? How are different perspectives catered to, for example, by providing products that are adapted to a specific situation or an individual's specific needs?
- 5. **By whom**? How do the service producers/providers define and describe themselves and their relationship to the users of their services/products?
- 6. What are the thoughts on/expectations of **future services**?
- 7. Is it possible to balance demands for quality **and content against the need for low-cost alternatives**, e. g. forced development of technical solutions aiming mainly at rationalisations through further automation, in contrast to the need for a content that is dealt with thoroughly?

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⁷⁴ See Ekelin & Elovaara, 2000.

⁷⁵ Sara Eriksén, Blekinge Institute of Technology, is in charge of this project. A project description will be provided on application to the Swedish Council of Work Life Research, 2000. Design of IT in Use: technologies for supporting services to citizens. (Project no. 2000-0476)

2. Method and material

During the autumn, in-depth interviews were conducted with key providers of public services in Blekinge 76 as well as with representatives of various groups of citizens, mainly women, aged between 40 and 65.77 Group interviews with representatives from various interest groups, such as associations working for the rights of the disabled and mentally handicapped, also formed part of the material. 78

Another example of the empirical material used in this study is the results of an inquiry that is taking place in Ronneby. A group of local politicians and a municipal officer from the Municipality of Ronneby are currently working on a survey investigating how to develop public service in the future. This survey covers public service in general and not just on-line functions. During the first six months of 2000, the writer has had the opportunity to take part in this group as a participant observer. Workshops and discussion meetings were arranged with groups of generalists⁷⁹, such as receptionists and librarians, as well as formal meetings and study visits, e.g. to the Citizen's office in Sölvesborg.

I will also briefly discuss government bodies and their efforts to provide public services on-line. Four workshops were also conducted on the subject of "Designing (in) context" during the period of the pilot study and in co-operation with PhD student Pirjo Elovaara. The participants were third-year Master's students on the "People, Computers and Work' at Blekinge Institute of Technology.

3. Theoretical framework

My starting point for the present analysis is the desire to shed light on evaluation questions from different angles; this includes such concepts as the *reversed perspective*

⁷⁶ Five in-depth interviews with five key providers of public services were carried out. In two of these cases, there was a follow-up interview by e-mail.

⁷⁷ These individuals are former participants in the DIALOGUE-project, which was carried out on both a local and transnational level during 1998-99. See http://www.ronneby.se/dialogue/. [Accessed 02-12-09]A subproject, Women writing on the Net

http://www.ronneby.se/dialogue/wwn/Ksn/default.htm, [Accessed 02-12-09] has been presented and described during the WWC2000 conference in Vancouver, See Ekelin & Elovaara., Pper VI.

⁷⁸ Altogether, eleven different group interviews were carried out during the autumn.

A work role commonly referred to as that of the generalists, or so called front office staff, which generally have a background in public service clerical work and are expected to handle a number of different administrative tasks. Also called "community guides". (Eriksén, 1998, p. 18)

⁸⁰ The People, Computers and Work" educational program is a Master's program for future system designers_and combines studies in Computer Science with Human Work Science.

and *convergence of communities and design* through ongoing *communicative processes*, as well as citizens' involvement in shaping *technology* and public services.

3.1 The reversed perspective

Susan Leigh Star discusses the relationship between standardisation of technologies and local experience in her essay *Power, technology and the phenomenology of conventions: on being allergic to onions* ⁸¹She points out that we are all members of more than one community of practice and that we combine knowledge from all kinds of experiences, creating metaphors or bridges between these worlds as we act. It is not possible to create a special needs assessment that could find technical solutions for every special case, according to Leigh Star; neither can one say that all conventions and standards are useless. The question is instead, "where should one begin analyses for development of standards and technologies?" Star emphasises the need to start such analyses at "zero point" The following discussion is based on the citizens' perspective, which is often regarded as a peripheral one. This is what I mean by *reversed perspective*, it is not the traditional bureaucratic perspective on the provision of public services.

3.2 Shaping technology and services

Technology can be defined as a social construction, that is to say, it is formed in a network of various actors with different interpretations of the technology". 82It is therefore possible to view the development of future on-line public services as an important part of this continual reshaping and forming of technology. The identification of needs could be seen as a fundamental activity in this process, i.e. as a basic resource for further development. The transformation is somewhat unavoidable; the question to ask is, "are there enough opportunities for citizens to take part in the planning and decision-making processes?" Or are citizens just given their portion of ready-made services and products, all of which have been developed and produced somewhere else, and at someone else's initiative?83

Birgit Jaeger, a Danish researcher, discusses in her essay an evaluation that was carried out of the Copenhagen Base (CB), with particular focus on the structure of information, technology and user's' opinions. The evaluation concluded that the CB was uninteresting it failed to differentiate between different user groups, the information was structured in a much too rigid manner, and it failed to reach the user⁸⁴a user group was subsequently set up to co-ordinate development. The database was a means of disseminating information to citizens; the information was

82 Jaeger, 1999, p 2

103

⁸¹ Leigh Star, 1991

⁸³ Described in detail in Ekelin & Elovaara, 2000.

⁸⁴ Jaeger, 1999, p 7

not targeted towards the individual user. The evaluation showed that the CB provided static information instead of the user-oriented information required. There was also a need for more interactivity and the opportunity for individuals to provide information of their own.

Opportunities to do transactions and communicate with authorities and other citizens were also asked for. The evaluation concludes that it is absolutely necessary that users are included in the future development of the CB. 85

3.3 Converging communities and design?

Birgit Jaeger continues her discussion by concentrating on the concept of "representation", relates to the designers' use as it forms the basis for the configuration of the technology. 86I will emphasise that there are several groups of actors involved in the development of the technology in addition to those who are practically engaged in the design projects. Such groups also include policy makers and project leaders such as the respondents included in the present study. Birgit Jaeger points out that when the users themselves are not directly present in the process of development, the designers (and the producers) must design the technology on the basis of their own hypotheses concerning the users. It is still rare that representations of users are tested, for example via the involvement of user groups or social experiments. One of the major Internet consultant firms in Stockholm, Icon Medialab, and perhaps firms elsewhere, use so called "personas" in the form of large life-sized paper dolls in order to visualise the user when discussing projects. Each "persona" is styled with a specific personality and life-style, as well as what are considered reasonable attributes and relations for the individual concerned. Perhaps this helps to make the users come alive, but it is still like building a picture of the real potential user and is not a way to collect informed opinions on various issues from real people. 87

Representation concerns the conception of users and the technology designers' dilemma when configuring the technology as they must decide if they wish to reach the broadest possible number of potential users or if the technology is to be configured for a certain user group, thereby excluding many potential users. The result of the former strategy, i.e. aiming for 'everyone in general and no one in particular,' is often that the technology does not reach any users at all. ⁸⁸It is also relevant to my objective to shed light on the service producers' understanding of user needs, and the users' understanding of their own needs, as well as to relate these findings to future development of on-line public services.

⁸⁶ ibid. p, 12

⁸⁵ ibid. pp, 9-10

⁸⁷ The paper "doll-project" was presented during a study visit to Icon Medialab, at the NordiCHI conference in Stockholm in October 2000.

⁸⁸ Jaeger, 1999, pp 13-15.

3.4 Communicative processes

Many books have been written over the years on the subject of needs assessment. A comprehensive and fundamental study on the latter which is relevant to the present study and which investigated needs in different organisational contexts is *Planning and conducting needs assessments:* A practical guide by B R Witkin and J W Altschuld. 89

There is a distinction between needs analyses (basically, identifying and listing needs) and needs assessments (a more comprehensive process including an evaluation of needs and making priorities) according to Witkin and Altschuld. This distinction is confirmed by the results of the present study.

There is also a tendency to use needs analysis as a kind of measuring instrument *after* the products/services are presented in to see whether the target has been reached, or to justify decisions already made. This is not the original purpose of a needs assessment, according to Witkin & Altschuld. A needs assessment should lead to action, change and improvement. It is carried out in order to derive information and gather perceptions of values as a *guide for making policy and program decisions* that will benefit specific groups of people. ⁹⁰

The use of needs assessments could also be seen as a way to enhance democracy. Earlier experience of work with local groups of citizens aimed at increasing democracy shows that citizen's' involvement must be carried out on a basic level. In order to make things happen, two parallel aspects must be stimulated: the supports of the individual's own strengths and the general stimulation of engagement in the development of society. ⁹¹ Constructing needs in context through an ongoing dialogue, which aims to discuss and identify needs, is one example of such basic involvement.

In a keynote speech at the Participatory Design Conference, PDC'98, in Seattle, Washington, U.S.A., Mark Nichter talked about such low cost techniques for "reading the community" as focus groups which are beginning to replace surveys as a method. Nichter pointed out that none of these approaches seems to foster active community participation. A number of important questions are surfacing: Are there any alternatives? How do we take stock of intermediate competencies when bringing together people who need to communicate? This leads on to another basic question related to my objective: what is the significance of accessibility, democratic solutions,

⁹¹ For further details, see "Citizen's' involvement - on a basic level", OnTheInternet May/June 1999.

⁸⁹ Witkin & Altschuld, (1995).

⁹⁰ ibid. p.5

participation and co-operation between laymen and professionals when it comes to the production of on-line public services?

Involving citizens in discussions about their needs and how to use new technology to improve their lives could be a way to empower citizens and give them control, or at least a sense of control, over the local environment and everyday life. This could be a way to stimulate the development of cohesive communities and design.

4. Discussion about the concept of "need"

What is a need, then? It could be defined quite simply as the gap between *what is* and *what could be.* All needs are in a way created, e.g. the phenomenon that modern citizens suddenly feel it necessary to be constantly accessible and must therefore buy mobile telephones. The question is what this need emanates from, or how it is constructed and developed. What is the basic origin of this need, and is the development of public services in reality based upon needs?⁹²

On another level one must distinguish between precise needs that are easily recognised and taken care of and "unknown" ones, i.e. needs that are not yet formulated, recognised or understood. This can also be exemplified in the distinction between absolutely fundamental needs, such as the need for fresh water and a clean environment, and those that are created on some other basis. In the case of the latter, the order is reversed: the conclusions are presented first, and these in turn generate a need. There are also a lot of vague demands on public services made by various interest groups, individuals, and businesses, which suggest that an instrumental approach is not enough, thereby indicating that a constant process of mutual formulation is needed.

One of my respondents pointed out the need for a more complex understanding of the construction of needs and services: "I think it is important to question people – beyond these requirements you spontaneously feel like talking about, what more is there? /---/ Such a needs analysis is, I think, as important as anything else, and it is not done today in this municipality; indeed, I have seen very few examples of other municipalities where they have tried in a sustainable, strategic, purposeful way, and in a constructive manner to measure public needs. That is why I try to separate the two concepts of "citizens' public services" and "providing municipal utilities", meaning, " to supply something". Citizens' public services also say something about quality." 93

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 $^{^{\}rm 92}$ This section is based upon discussions during workshops with students within the program

[&]quot;People, Computers and Work" at Blekinge Institute of Technology.

 $^{^{93}}$ Excerpt from an interview with Respondent 2, head of a local authority in Blekinge, conducted 00-04-23.

In the above quotation the respondent places the word "citizen" on an equal footing with quality. Or rather, the starting position for development of public services is seen from the citizens' point of view. A second respondent also referred to the creation of needs as an ongoing, mutual process:

"The issue of fatherhood is an example of an area where we create new needs all the time. /---/ Pappamalet (Targeting fathers)⁹⁴ that says that daddy shall stay at home a certain number of months with his child, is also an example of a created need that has come about through increased knowledge of the way in which a good relationship with both parents can influence childhood and future life." (R1)

By concentrating solely on the clearly expressed needs one runs the risk of missing the point: what could be developed into new needs. In design this could be exemplified by testing the functionality of the interface within a user group at a late stage in the development and design process, instead of beginning with a communicative process that involves several actors who jointly define what the demands are and how to meet these in the best way. The reverse order in this process would be to create needs, then a product or service, which corresponds to the user's requirements, which in turn leads to new kinds of needs based on those, which the user, has already experienced. The problem with providing new public services occurs when the infrastructure is defective. In a way one could talk about the process of identifying user needs in the same way; a defective needs analysis is not a good basis for the acceptance of the services.

What would happen if the function of needs analysis were reassessed and looked upon from a different perspective, namely that of the citizen? Would it be possible to facilitate personal development to such an extent that it would enable individuals to formulate their own needs? Would it be possible to facilitate an action-oriented understanding of what it means to be a citizen as a starting-point? This gives rise to the question, "how can one provide on-line public services that allow and support people in *their efforts to develop their* citizenship and not only in *their capacity of* a citizen with certain needs?

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⁹⁴ Recommendations by the authorities targeting fathers as a special target group, encouraging them to stay at home with their small children and claim childcare allowance.

5. Needs assessments - a general presentation

When a salesman offers a product to a customer, it is presumed? at least in theory? that a proper needs assessment has been conducted. In marketing literature and training-courses writers point out that it is important to take into account the customer's full needs, that is, those of the present and the future.

In a thorough study of needs assessments in different organisational contexts, Witkin and Altschuld⁹⁵ present a way of clarifying the idea of needs by thinking in terms of *three levels*, each representing a target group for the needs assessment. The primary need level is that of the *service receiver*, in this case, the citizen. The secondary level is the *service providers and policymakers or the organisation*, e.g. municipalities, governmental authorities and other producers of service, third and tertiary level is *resources or solutions*, e.g. supplies and technologies. They point out that the primary group for analysis is level one, but the salaried employees can also have unmet needs related to their functions towards the users, and the organisation also has needs as an organisation. The most important level must still be the first. Before the survey is carried out it is important to clarify whose needs are going to be studied, level 1,2, 3 or a combination of all three?

5.1 Questionnaires

Questionnaires are the most frequently used means of gathering data when conducting a needs assessment. They are also often regarded as synonymous with a needs assessment. Witkin and Altschuld recommend that questionnaires comprise but one part of the strategy, and that they be used to gather very specific kinds of data. Moreover, they suggest that a questionnaire should be implemented only after other, more exploratory methods have been employed. ⁹⁶

Witkin and Altschuld emphasise that constructing a questionnaire is an exacting task, which requires skills and specialised knowledge about the criteria of reliability and validity, criteria that are rarely evaluated in such surveys. Among the advantages of questionnaires are that they are relatively easy to administer and can be handed out to small or large groups. The questionnaire method also allows the researcher to keep his/her distance to the respondents. ⁹⁷It produces less side tracking and irrelevant information than interactive group processes. It is also less expensive than other methods. A great deal of data can be gathered in a short period of time. The disadvantages are, however: there are, for example, often expectations that the survey will provide information for which the method is unsuitable. If the

⁹⁵ For more details of the concepts mentioned, see Witkin & Altschuld, 1995.

⁹⁶ ibid. p. 8

⁹⁷ ibid. p. 12

questionnaire is too short, it is often too general to be useful, and if it is too long, it is costly and respondents may not want to take the time to fill it in. Witkin and Altschuld claim that the method is not an appropriate one for directly determining discrepancies as it simultaneously seeks responses to "what is" and "what should be?" questions. A needs assessment is often used incorrectly to elicit people's "list of wishes" rather than, as a means of determining needs. One point to consider is that questionnaires have become so common that many people discard them without taking the time to respond. 98

The survey should be focused on information regarding a specific need or set of needs or issues or concerns that cannot be gathered in any other way. Superficially questionnaires might look like opinion polls but they differ in important ways both as regards their purpose and formal features.

All the above-stated disadvantages surfaced when we were discussing the formulation of the questionnaire that was distributed to citizens as part of the present investigation.

5.2 Community forum

Community consultations are common in municipal contexts in Sweden. They are analogous with "town meetings", which is a term used in other cultural settings. Basically, elected politicians call a community together to discuss a pressing issue sometimes on the initiative grassroots level and sometimes. A community forum can also be a local discussion forum on a website. Witkin and Altschuld emphasise the importance of actively encouraging the expression of different views. Some of the respondents had experiences of organising and participating in such meetings.

5.3 Focus group interviews

Focus group interviews (FGI) are a structured process for interviewing a small group of people, usually about 8-12 people. Obtaining consensus is not the primary goal; it is more important to elicit how the participants feel about the topic and to identify the range of perspectives, allowing them to interact and hear the views of others. This technique has its origin in market research, and is now used widely in education and social science research to investigate attitudes and opinions about many kinds of topics. When used properly, group processes can be a key element in a needs assessment. 99

The above listed methods (questionnaires, community forum, focus group interviews) were used along with more informal methods of communication, according to the respondents.

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⁹⁸ ibid. p.129

⁹⁹ ibid p.183

There are several group techniques, such as future workshops, and in-depth interviews that can be used within the framework of a comprehensive needs assessment.

This part of the study focuses primarily on five cases of service provision to citizens where citizens have been provided with special service, all within Blekinge. This chapter gives a brief introduction to each case. I will then start to explore the presented cases on the basis of the evaluation questions, and will exemplify the current situation with quotations from the interviews on which the main part of the analysis is based.

6. Five local cases

6.1 Infoskogen

The creation of Infoskogen (The Information Wood) http://www.infoskogen.nu 100 began in 1996 when an independent consultant was hired by the regional HSO (an umbrella organisation for associations of disabled persons). The consultant's report highlighted the problems of access to information for these groups. Access was identified as the primary focus for future development. An identification of different methods of influence and participation was also carried out, and the associations were asked to elect people to be responsible for the information in their associations with the aim of stimulating a continuous dialogue focused on members' needs. Public meetings are arranged regularly, where different target groups present their needs and expectations. As the project leader has pointed out, the issue of accessibility not only focuses on physical access to official places and official information, it is also a matter of skills and knowledge Several development projects concentrating on raising computer literacy and skills such as "Brukarstöd" (User support) and "Egen kunskap" (Knowledge on my own terms) have been launched lately. There are also plans to join a national campaign that will co-ordinate several sites under a common gateway. The idea is to acquire help with the technical development of the site and concentrate local efforts on the contents, in order to satisfy local needs. 101

6.2 The Karlskrona municipality web site

The Karlskrona municipality site, located on, http://www.karlskrona.se ¹⁰²has featured recently in the local press. I will refer to this discussion briefly in another chapter, in the section on citizens' experiences. The information on the Internet is going to be connected to the municipality Intranet. The goal is increased openness and transparency for citizens.

¹⁰² [Accessed 02-12-09]

¹⁰⁰ This site is unfortunately not maintained.[Accessed 02-12-06]

¹⁰¹ Later on this has become a company called the Funka Nu AB, see http://www.funkanu.se/start.asp?sida=84. [Accessed 02-12-09]

It will be possible to follow a case before decision-making is completed, making it possible for citizens to influence the decisions made. 103

The municipality website contains a Democracy square, which was set up by a political working-group whose target is to develop local democracy. They have recently distributed a questionnaire to current and former participants in the municipal council to gather material for a discussion about changes in the organisation of the municipal council. A halfway report, published on the municipal website, includes a chapter on how to develop the public services offered to local inhabitants. Technical development of the municipal website is emphasised, but the report also includes a brief discussion on how to reach citizens who have no Internet connection. Work with associations such as local sports clubs and immigrant associations are among the proposals. In the discussion forum there is a category for Users' influence, containing six contributions discussing town planning and transportation. Three of these were from one and the same politician.

6.3 The Ronneby municipality web site

The third case is the ongoing enquiry in Ronneby about future citizen services, exemplified by the municipal site at http://www.ronneby.se/ 104 According to the vision and development plan, Ronneby 2003, Ronneby is aiming to develop a full-scale ICT (Information and Communication Technology) community. A local infrastructure is being set up which emphasises usability, perspectives such as applied technology, raising competence among municipality employees as well as citizens in general and democratic values. The development of Ronnebyguiden is a way to present schools and social services, local politicians, the organisation of the municipality and tourist information 105. The commission is to formulate a proposal on how to develop future public services together with other authorities. Some basic questions to be covered are:

"What exactly is a developed public service? How is it possible to measure "good" public services? Which categories of citizens are being addressed?" The ability to function in a community can vary depending on level of education, experience, income, place of residence and so on. How much are services permitted to cost? Is it presumed that public service should be free of cost for users? The directives specify that there should be co-operation with other authorities. But is co-operation with enterprises, economic associations and other types of organisations also to be considered? Should the task and the results be seen as a part of the visionary 2003-project?

¹⁰³ Quote from a local newspaper, Blekinge Läns Tidning, 00-10-04.

¹⁰⁴ [Accessed 02-12-09]

¹⁰⁵ See *Medborgarkontor i utveckling* (Citizen Offices in development) Ds 1999:26, pp. 39-40

Have any estimates been made of future IT supports for citizens, staff in middleman positions and so on? What is the right context for the inquiry into the design of such IT support?" ¹⁰⁶

6.4 Vision Karlshamn

The fourth case is the site "Vision Karlshamn", a presentation of possible development areas and run by the municipality of Karlshamn, http://www.karlshamn.se/ 107the development project focuses on five areas, working places (to create conditions, environments and cluster between companies in order to establish new job opportunities) terminal (to develop the harbour and commercial shipping traffic), competence (to establish new forms of education), living (to market Karlshamn as a good place in which to live) and finally, events (to stimulate development of the entertainment business). The Vision also includes a marketing strategy for how to develop public services of an international standard.

6.5 The Blekinge Social Insurance Bureau and the Public Internet Monitor

The fifth case concerns governmental co-operation. The Social Insurance Bureau in the county is undergoing intensive development in the area of setting up of public self-services via the Internet. The regional office in Blekinge, http://www.blekinge.fk.se/ ¹⁰⁸, is a forerunner in this field and is also interested in adopting new technology. The management focuses on customer relations and the citizens' perspective by considering the way in which clients view public services from a broader perspective. On a national level, this co-operation is exemplified by the http://www.medborgarterminal.nu/l09, which has also been placed in different locations in Blekinge. These monitors are accessible via the Internet and in physical form.

The Public Internet Monitor ¹¹⁰Project (PIM) was set up 1998 as a co-operation between AMS (the Swedish Employment Service), RSV (The National Tax Board), RFV (The National Social Insurance Bureau), and CSN, (The Swedish National Board of Student Aid) Central Student Grants Committee. As of this year, the project also includes PPM, (the new Swedish Pension Premium Authority). The public monitors are placed in official institutions such as local libraries or Citizens'

¹⁰⁸ [Accessed 02-12-09] Only in Swedish.

 $^{^{106}}$ These questions, among others, are formulated as a starting point in the PM of the inquiry. This is only available on the municipality Intranet.

¹⁰⁷ [Accessed 02-12-09]

¹⁰⁹ [Accessed 02-12-09]

¹¹⁰ The project management for the PIM-project uses the term monitor, even if the word "terminal" seems to be a more appropriate one.

offices, and elsewhere in Blekinge and Sweden at large. On the monitor's citizens, can find information about vacant, apply for study and accommodation allowances, do tax calculations and download various forms. The interface presents the different options as a homepage with four logos and one common search function. There is a system of "stand sponsors" co-operating with local hosts responsible for the terminals. The stand sponsors are also intended to act as guides, showing the individual how to use the computer and how to search. An evaluation is planned for the spring of 2001. ¹¹¹

As natural follow-up evaluation questions on the trials ought to be, "what is the significance of centralisation versus decentralisation of points of services?" "Is coordination really a gain or a loss?"

The cases described above use, or have at least started a discussion on the use of, different methods for mapping user needs. They are all situated on different levels in this process in accordance with the demand for a more comprehensive needs assessment.

7. Experiences of techniques and methods

The following section of the report is based primarily on interviews with project leaders, consultants and policymakers who have been involved in the development of websites and services on different levels, e.g. as municipal employees or as hired business consultants. One of my questions to the respondents involved describing the present situation. What kinds of techniques/methods are currently being used to identify and distinguish various needs?

"We meet our customers and conduct discussions. Some things we can do locally by ourselves but we are also part of a larger whole...and then the national organisation gather some views from different parts in the country and then there are professionals who put together the specification of requirements...there are no customers there, so it is possible to say that the information is filtered...and this makes you wonder how this affects....the needs, so to say, changes in shape from the dialogue here and through the four, five steps up in the organisation and there is certainly a danger of both losing...and offering the customer a poorer service and so on."(R1).

"We have started out in two areas, with childcare and culture/leisure impossible project, and this is the big job that has to be done to prepare the organisation." (R3.)

" First we need to find a solution, how can the idea be implemented? Then we have

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¹¹¹ The evaluation has been carried out in cooperation between researchers from Blekinge Institute of Technology in southern Sweden, CID (Centre for User Oriented IT Design) at the Royal Institute of Technology in Stockholm, and MidSweden University.

to test several thousand employees who don't need any security solutions and who can act as citizens, e. i. the ones working within the childcare department who could be acting as parents. If we are going to take in people from the street, we need to gather groups within the organisation who are in contact with the citizens so that we can instead gather views through the organisation and not by meeting citizens in person." (R3).

"We have, since four or five years ago, what could be seen as a kind of customer questionnaire which asks questions about a particular service, or what customers feel about the level of service that we are offering. The focus is on accessibility, e.g. opening hours and such things/.../ on a national level, the emphasis is on groups /.../we had meetings with a group of relatively young people to discuss what kinds of expectations they had of online self-service. "(R1)

"We meet representatives of organisations for the disabled to discuss such issues as treatment...we also meet representatives from the union and the employees and doctors. We use this form of assembly as a kind of platform, where e we use a kind of focusing method, if I can put it that way. "(R1)

"There are also examples of departments which have conducted customers' enquiries, questionnaires and the like t...they have made enquiries about streets, street paving and lighting and such things... but it was a couple of years ago, when there still were there were still enough time and resources to conduct such activities. It was in the days before professional expertise was available...I discussed this with a former boss and said that they were very ambitious and distributed an s questionnaire and I said...what was the result? Well, he answered,' we didn't get time to evaluate the results. We got quite a lot of answers and we got to know a bit about what people thought and...' Well, I asked further, did you accomplish their suggestions and did you check afterwards if it was to their satisfaction? 'No', he said, 'we hadn't got the time to do that, and couldn't afford it. /.../ This is not due to a lack of will, it is a question of a lack of policy."(R2)

7.1 Summary and comments

Questionnaires, focus groups and the setting up of internal discussion forums on the Intranet, use of internal inquiries and general meetings with chief managers on different levels in the organisation, and interest groups are some of the techniques that can be used for gathering people's opinions. Sometimes external consultants are engaged to study the municipality. Several of the respondents emphasise that there is a need for organisational changes to be able to fully accomplish a shift to a digitalised organisation. Analyses of information processes are required, as well as preparatory work on attitudes towards users. One of the respondents describes the use of "faked" focus groups, which could lead to problems when defining user representations. Another respondent talks about filtered knowledge that ultimately is not representative of the users. A third respondent expresses fear that time

constraints and lack of follow-up activities lead to lack of trust and little confidence in the services provided. A far too technical approach is taken towards citizens' influence.

The need to stimulate a discussion among citizens about so-called "close" 112 services and technical solutions is evident, according to the respondents. The starting point is instead: how to get the best basis for further development of services. Questionnaires should be used on a more regular basis, according to respondents.

8. Reasons for using a particular method

Why did the producers/providers find it necessary to conduct the above kinds of surveys, and what types of methods were chosen? Of the many methods available, the questionnaire seems to be the one most frequently used, but the respondents also emphasised the necessity of seeking new methods and combining a variety of ways to gather as wide a range of information as possible. My questions were also generally interpreted as an inventory of arguments for conducting a needs analysis:

"It is important to involve citizens, we have to focus on the citizen more and more and how people want to have their services supplied. But if we do not start out on an internal level, we will not be sensitive to r changes - if the organisation is sensitive, it's possible to take the next step together with citizens and ask them: how shall we go about improving services? This is where we are today, and we have to test our ideas on citizens." (R3)

"I feel it is extremely important to keep up a dialogue with customers and users about the services we develop, and particularly with regard to technical matters. This is how it is t in all sorts of public service activities, we are dependent on the total budget, and we can't increase our income by selling more or making something else without cutting down other costs. If we say, "yes" to the development of a certain service we have to say "no" to other things. It is therefore a tremendously delicate task, we need to be sure-footed and investigate customers' needs before considering major t investments. We need to have a broad dialogue around these matters and be very clear about what we are doing." (R1)

"How is it possible to know what people out there, what you and me think and want if we don't ask them? We can't guest, that's shighly dangerous...at best we will almost hit the target. And at worst, we will shoot past the target...the municipalities are shooting in all directions, with four-colour printed copies, for example, which cost a lot of money. But no one really knows if there is anyone who wants them ...and if they will have any effect, what the result will be and if we can achieve

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¹¹² Close services means services that is adjusted to citizens needs.

anything by our methods. Or are we doing this because everyone else does it? Are we setting up flashy homepages just because there is a widespread attitude that "if you haven't got a homepage, well, shame on you!" (R2)

8.1 Summary of and comments

Public services could be an important instrument for the future in marketing a municipality. People are expected to become even more quality-conscious, and mobile, and the municipalities must therefore fight to keep their inhabitants. One respondent points out that the emphasis in future development should be on discussions about attitudes towards the customer and not the development of new technical solutions. There is also a risk of adopting a biased focus. The right focus, according to one respondent, is on the areas that support the users both quickly and easily and at the same time relieve the internal organisation of many time-consuming questions. Involvement of users is important in order to develop what is asked for, and make sure that the services are used. Failure to "read the public will" is not justifiable either from an economical or a social point of view. Public services also have a "social conscience"; that is to say, they are responsible for providing all kinds of people with service. Saying "yes", to a certain kind of development, could mean that there must be reductions elsewhere.

9. Primary needs

A third question concerns what must be regarded as primary and/or most frequently encountered needs in public services. Whose/which needs are legitimate or predominant?

"I was discussing with some people from the banks, and asked them what the thoughts were behind their period of modernisation and development. I was interested in their discussions about services. If we strain this a bit, they have developed a concept on purpose - and there might as well be a kind of strategic thinking, by saying "no" to some customers who aren't able to manage on their own, they deliberately lose customers in order to gain profit. This is not possible in the public sector. On contrary ...you have to develop technical solutions for the large volumes of customers we have and at the same time there must be resources left to take care of the people who need yet more help due to a handicap or other difficulties which make it impossible for them to fill in a form, maybe they can't even write.... they must get their share as well. This is a challenge for the public sector which is so r much bigger than the private sector." (R1)

"In a smaller office we offer personal service once a week. For the rest of the week there is customers can phone and will be connected to someone sitting in t another place who will help them sort out their problems. Instead, customers choose to come back when the staffs is there. I think this means something. There is a need to meet our staff, but nobody knows if it is really necessary. And then you have to ask who is responsible for deciding if it is necessary or not? I think the customer should make the decision when it comes to public services. "(R1)

"We are planning a Citizen's portal – a safe entrance where it is possible to find the information you want. The ones who cannot use this service are the same groups in society as those who haven't got the possibilities to get the right services today. I'm sure there will be gaps; it will take a long time... "(R3)

"A discussion forum on the Internet is a way of showing that it is possible to do something, but it isn't worth that much, the real democracy will appear when we talk about how to handle documents and how to get the user interested in what concerns him/her locally, that's where we want to put our t foot down." (R3)

9.1 Summary of and comments

Even though communication on and between all levels is pointed out as being the most primary need, several respondents are reluctant to set up public discussion forums on the Internet for discussions about democracy-related topics. If this is to be successful, there is a need for ongoing support, feedback and relevant answers, needs that may be difficult to fulfil with limited resources within the organisation. Identifying the organisational self-image is another identifiable needs which is distinct from the public image of public services. Taking responsibility for groups with special needs such as the disabled and the disadvantaged in society is also considered to be a primary need, even though there it is feared that there will always be marginalised groups. The user's need for "closeness" to and possibility of personalised services is also a discernible need, as well as the demand for distributed knowledge and individual support. The individual's right to choose which type of service he or she wants is emphasised. If people want face-to-face meetings, they should be able to have them, even if it does not fit the plans of modernisation of services.

10. How should we define target groups?

Are the categories seen as univocal or is there room for diversity, and if so, how is this diversity dealt with? Is allowance made for different perspectives such as products that are adapted to a specific situation or an individual need?

"Finding target groups is always difficult, but the municipality is good at recognising its r target groups; it is necessary, for example, to meet several different groups of people, such as parents, teachers and other adults responsible for the welfare of a particular pupil." (R3)

"They are shooting from the hip, sometimes accurately and sometimes not, without thinking of the consequences. Officials do not always have a description of the target group...brochures are produced with high-sounding goals and by many different parties, but without any kind of co-ordination." (R2)

"I think it is difficult to find the right kind of people because the representatives from interest groups are often — and perhaps it is in the nature of things that they are — rather preoccupied with their own problems. They tend to dominate discussions more than those — who are not used to presenting their needs and other thoughts, making it easy to go wrong …that's why it is so important to work — with the right kinds of methods in these groups. …You must consider quality in such matters, not just listen in…you need to filter and reinforce some information. We have not figured out the proper way in our groups and we are not professional enough to lead this kind of dialogue either; we need to think about how to do this.

We've had help from external consultants in the past, but we can't afford to do this to the same extent any longer, and in fact we are also a little sceptical about the help we've got so far. This is a huge field and a very important one to work with during the coming years. (R1)

10.1 Summary of and comments

This task is considered difficult. Public administrators select target groups on the basis of personal experience, or simply hope that they will reach "everyone" with their services. There is a common belief that information needs to be aimed at someone otherwise there is a risk of missing the goals completely. Some interest groups tend to dominate and it is felt to be difficult to balance different kind of interests. One respondent talks about an apparent lack of co-ordination when it comes to such matters. Involving users is one way to get a clearer picture and identify relevant target groups.

11. Self images

How do the service producers/providers define and describe themselves and their relationship to the users? How do they define significant such concepts as "needs", "citizenship", "service", "technical products", "user-orientation", and "interaction and dialogue"?

"I've mentioned the concept of "customer" several times, and it was just a year ago that we managed to convince the last one in the organisation that we have to talk about customers and their needs. /.../I've tried to force this question, because if we are talking about customers we also find another attitude. /.../another attitude during the dialogue /.../the other concept [authority oriented attitude] gives signals about exercises of authority. In order to break this you need to find another word, so we took "customer" because it was something new and describes how we want to look upon those people who have a reason for contacting us. I realise that those who haven't got a picture of our history, could wonder why we use this word. It is not that common and we are not in a competitive situation and other such criteria's for a customer relation, which is possible to tick off and say "these are not our values, this is not us. "(R1)

"...There must be a change of attitude within the municipality if the new technology is to make the profit that many are promising. Without the co-operation of our personnel it's impossible. " (R3)

"I believe this has to do with attitudes. We've got the competence and technology, and there is nothing wrong with the employees, they are highly skilled, there are people with competence, which not is utilised. What it's all about is changing people's attitudes towards work. /---/We don't always work for the right reasons."(R2)

11.1 Summary of and comments

Bureaucracy, fear of giving signals of exercise of authority instead of what is considered as correct by the government, i. e. a more customer-oriented attitude towards citizens, are some examples of an organisation's self-image. Working for the wrong reasons is another fear. They also describe themselves as advocators for the new technology, striving for the goal that everyone will be "happy" in the end, when the necessary technological and organisational changes have been fulfilled.

12. Thoughts regarding future services

What will come next? Important issues for the future include: the development of technical support that gives simultaneous support on many levels (the user, receptionists and experts) bringing knowledge and information close to the citizen and reorganising both within and outside the organisation; increased decentralisation of services to several service points such as libraries, petrol stations or other gathering points; decentralisation of organisations in a way that the only thing that keeps everything together is a supportive structure; guidance and personal support needed in connection with services; development towards more self-governed

services; the importance of developing strategies for maintaining "ownership" of information, extended co-operation between different actors, not necessarily in the same areas; extensive "linking over boundaries" and development of electronic signing.

In the discussions with my respondents, several more interesting things were mentioned, including the following: in the future electronic services should not only be performed on computers with a terminal, there is a need for direct channels to give feedback or complain about bad service; standardised and simple errands will all be distributed over the net in the future. The respondents also reflected on the fact that daily routines can be disturbed as technology enters everyday life more and more. I In the light of this knowledge, the respondents also considered what could be viewed as useful versus useless technology. Some respondents also expressed a fear of too hasty decisions being made, which will lead to fewer or more specialised services in society.

A common thread through these discussions is the issue of "closeness", how technological development of public services will affect us personally; this attitude contrasts with the massive exposure of a technology determinism and hype of technology, by different actors such as politicians, policymakers on different levels, mass media and proponents of the market. The reluctant ones will inevitably be pushed aside.

The driving forces behind the transformation into self-service is rationalisation based on values that are created by market logic.

Yet there are contradictory forces that state that it is essential to pay attention to the opinions of customers or citizens.

13. Low-cost solutions at the expense of quality and content?

Is it possible to balance a demand for quality and content against the need for low costs when developing technical solutions? And where is the money spent when it comes to organisational development? Shouldn't needs analyse and needs assessments be seen as an integrated part of long-term organisational development and learning?

"There is no time for reflection and strategic planning, the organisation is so tightly structured that we have no well-planned and structured organisation. We have an organisation that has to handle crises all the time/.../this affects how we work and the speed at which we work, this way of working is not especially customer-friendly /---/ we have not got the resources or time to do such things, to find out what people really need and want from us.

We have no time to make plans in advance or reorganise the work in order to meet the needs that we see will come within a year or two "(R2)

'The way in which information is delivered could be much improved for those who are unable to visit our authority between 8 a.m. and 4 p.m. Those who can handle the technology are in a much better position, but this is not everybody, of course'. (R3)

"We want information out on the net as quickly as possible but the discussions about where to put the squares on the form are endless." (R3)

13.1 Summary of and comments

The time constraints are difficult to handle. The resources and time are insufficient to find out what people really need and want. There is no time to plan in advance or to reorganise to meet the needs that will occur within a year or two. Several respondents emphasise that there is a connection between needs and quality.

There are no guarantees that digitalisation will be inexpensive or lead to greater efficiency, but it will result in better quality service. Misuse of expertise and double organisation are, it seems, inevitable.

14. Citizens' experience

At national level, a third of the Swedish people are ready to accept government information by Internet. Almost as many, 31 %, do not agree that on-line facilities are enough and emphasise that there must be several channels for information. At present the service is mostly distributed by phone. Information is also disseminated through media in the form of campaigns. According to the inquiry, 42% of Internet users search for information on the Internet.

The result of a questionnaire that was distributed in the main towns in Blekinge this autumn indicates that most people see public services on Internet as a complement to other ways of using public services. 16% state that they want to use the telephone, citizen offices, information centres, local and central government as well as Internet as means of accessing public services. 57% want to use Internet. 49% prefer the

¹¹³ Summary at http://nyheter.idg.se/display.pl?ID=001016-CS23 [Accessed 02-12-09] Only in Swedish.

telephone, 45 % choose the citizen office / information central and 27% prefer a personal visit at the authorities offices.¹¹⁴

In discussions with a reference group consisting of a group of women around 40-65 years of age, emphasised that "services to citizens, that is what we want". They highlighted the need for co-operation between authorities and municipalities as well as co-ordination of public services and information.

15. Analysis and conclusions

Where else should one begin this analysis but out in the periphery, as Susan Leigh Star suggests. In other words, I will start my analysis by posing the question: is it possible for a person with an allergy to visit McDonalds? I would say that it could be if the company's business idea includes activities such as listening to the special needs of people with allergies and efforts to adjust services to the customer's' demands. But this requires that different needs be identified, discussed and prioritised on all levels, in co-operation between all the actors involved. Delivering on-line services in public services is analogous to delivering food. A proper needs assessment involving conducting a more comprehensive process which includes evaluating needs and making priorities is necessary to be able to anchor these new services among citizens as well as gain acceptance and interest for changes.

I am not asserting that it is possible to create a special needs assessment that makes it feasible to find solutions for every kind of special case, but at least it should be possible to begin the analysis from the reverse perspective: what kind of service do customers/citizens/users want?

According to my respondents, a need assessment was conducted, with a few exceptions, at levels two and three, which means that the analysis did not directly focus on the service receivers, who have direct knowledge about their own needs and a potential to discover new ones. Instead, it was the need for organisational changes that was emphasised, ones that ultimately lead t to improvements for the citizens. The need for developed technical support could be seen as a third level, corresponding to the need for resources and solutions; developments in technical support will benefit users in the future. Related to the need for personalised services expressed by the citizens, this could be defensible but only if it is primarily focused from a service receiver's perspective, and not solely seen from the perspective of official claims on increased rationalisation and effectiveness of local government.

Available on http://www.ronneby.se/learning-lab/risi/doc/PubservEN.doc [Accessed 02-12-11]

¹¹⁴ Read more about this in the paper "Public services on the Internet", conducted within the RISI+ Project,

There is, however, a clear will to bring users more actively into the discussion of needs and the construction of new needs and services in the future, and some attempts in this direction have already been made.

Questionnaires, focus groups and setting up of internal discussion forums on the Intranet, use of internal inquiries and general meetings with chief managers on different levels in the organisation, as well as interest groups, are some examples of useful methods for gathering opinions. However, the need for further development of methods more explicitly related to the context of public services is obvious if one is to study the community on a regular basis. A failure in "reading the public will" is not justifiable either from an economical or social point of view, public services also need to take into consideration their "social conscience" and provide service to all social groups.

There is a common understanding that information needs to be aimed at someone, otherwise there is a risk of missing one's goals completely. It is difficult, however, to steer adaptation to certain situations either as a citizen or an individual. The respondents point to difficulties in balancing all interests; this task could be made easier, however, with the help of a needs assessment.

Important issues for the future are: Developing methods and strategies for conducting regular needs assessments; creating channels for ongoing communication and involvement of citizens; developing technical support that simultaneously gives support on many levels (the user, receptionists and experts); bringing knowledge and information close to the citizen; reorganising both within and outside the organisation; increased decentralisation of services to several service points such as libraries or other meeting points; decentralisation of organisation; further development of guidance and personal support in using services; more self-governed services, but not at the expense of catering to the need for closeness; developing strategies for keeping the "ownership" of information, extended cooperation between different parties, not necessarily in the same areas; extensive "linking over boundaries"; development of electronic signing.

Communication on and between all levels is identified as the most primary need, as well as the need for closeness in the sense of quality. When discussing the website Infoskogen (The Information Wood), which is aimed at a specific target group with specific needs (the disabled), with the women in the citizen evaluation group, these women stated: "this website has got it all". This was surprising since not one in the group was handicapped, but when pressed it was made clear that it was the clearly pronounced citizen perspective which caused this feeling of identification, i.e. the feeling of "This service is close to me, this service is mine".

If a municipality web site is designed according to the "general store" concept, which means supplying everyone with general information, there is a danger that no one will perceive him-/herself as a target or that the information will be interpreted as impersonal.

Following are the central issues from the citizens' evaluation: Opportunity to make transactions and communicate with authorities and other citizens; extended co-operation over boundaries and co-ordination of systems; opportunities to choose how to get hold of a given service (face-to-face, by phone, via Internet etc.); increased differentiation between user groups and a need for information that is targeted towards the individual user. Additional values are not to be defined exclusively in terms of quantity (the number of offered services), it is also

essential to mediate a sense of quality, in the sense of what is experienced as close, engaging, genuinely well worked-out. Accessibility is not solely a question of physical accessibility; it is also a matter of providing the necessary means and support to develop skills and knowledge. There is a danger in focusing too rigidly on accessibility and putting all efforts into the dissemination of information. The complexity of the question is increased by the fact that all information made available for the citizen, is also going to be interpreted by and adapted to an individual's needs and specific situation. In this sense it is possible to argue that service has not yet made accessible, only static information, and that the expressed needs seem to target other things.

Perhaps there is a need for change in the commission? Shifting focus to the relation between citizen's' practical *experiences of everyday life* and *construction of* needs is one way. This move is based on the conviction that it is important to be present in the situations where developments and changes are taking place in order to be able to understand the reasons why these changes occur. This seems to be an advantageous way of developing public services online.

Group-related exercises, such as making communities around common interests and needs and then connecting them by a network model, could be one way to stimulate personal knowledge and power. Seen from the perspective of public welfare, this could also be a way to create social cohesion within communities, as well as deepen knowledge and competence and support further development of skills and influence, and further development of in-depth democracy. If technology were also defined as a social construction that is formed in a network of various actors with different interpretations of technology, it would be clear that the development of future online public services would be an important part of the ongoing reshaping and forming of technology.

Fear of demands on shifting behaviour from exercising authority towards a more customer-oriented attitude, are examples of organisational self-images that might be a hindrance to development. Traditionally, however, there has also been a tradition

of keeping a short and informal distance between the citizen and authorities in Sweden; this informal approach between citizen and authorities is worth preserving. One strategy is to constantly enhance and support communicative processes and create new channels for ongoing citizen involvement.

This evaluation has been discussed in the light of the following terms: the need for a reverse perspective, citizen involvement when shaping technology and services and the role of needs assessment as a starting-point for these activities. Mapping and constructing user needs involves creating needs in context, communicative processes and convergence of communities and design. This could lead to a more cohesive development of all-embracing public services, where no one is excluded, not even those with allergies.

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Paper V

[This article is the result of an interdisciplinary co-operation between researchers from the Department of Software Engineering and Computer Science and Department of Human Work Science and Media Technology, at Blekinge Institute of Technology. We have all been working together in the DitA Project. Paper for 36 HICSS Conference on Hawaii (theme Emerging Technologies, mini-track e-government and e-services), January 2003. To be published in Conference Proceedings (only CD)]

Making eGovernment happen: Everyday Co-Development of Services, Citizenship and Technology

by Yvonne Dittrich, Annelie Ekelin, Pirjo Elovaara, Sara Eriksén, Christina Hansson

Abstract

In a joint research project concerning the use and design of IT in public services, we are using a simple figure of on-going design-oriented interactions to highlight shifting foci on relationships of co-development of services, citizenship and technology. We bring together a number of concrete examples of this on-going everyday co-development, presented from the different perspectives that we, as researchers from different disciplines and traditions, represent in the project. The article explores and discusses working relations of technology production and use that we see as central to what is actually making egovernment happen - or not happen. The main challenge in this area, as we see it, concerns making visible, and developing supportive infrastructures for, the continuing local adaptation, development and design in use of integrated IT and public services.

1. Introduction

According to the new eEurope 2005 Action Plan 115 adopted by the Commission in May 2002, the goal for Europe is to provide its citizens with 'modern online public services' by the year of 2005. Proposed actions in order to reach this goal are development or extension of broadband connections, launching of an interoperability framework, continuing development of interactive public services and establishment of public Internet access points. Other important areas are e-services within culture and tourism and public procurement. These are the 'far-reaching commitments' that the Member States in the European Union have agreed upon. In Sweden, the Swedish Agency for Public Management 116 is working on issues relating to democracy and public administration. Among other things, they provide support for the local and regional authorities in their development of e-government. The ambition and goal for e-government in Sweden is to stay in the front line of the development, to achieve increased networking and a 'seamless' organization and one-stop procedure of handling an errand, and to facilitate citizens' participation in processes of decision-making within public administration. The slogan is 'one errand - one authority', which is supposed to be realized by 2005.

This, then, can be seen as the prevailing rhetorical, discursive context of the recent and on-going development within the egovernment area in Europe, which also forms part of the coulisse for the practices described in our case studies. These examples take us from meta-level rhetoric to the shop-floor level, where 'the action' is supposed to take place. At the same time as the rhetoric moulds the concrete practices, the practices also may be seen as functioning as a mould for future development.

In everyday practices of e-government, services, citizenship/democracy and technology are designed, developed, configured, implemented and re-developed, by different actors, concurrently, continuously, and in interaction with each other. In everyday life, 'the web' is rather a boundary than a common object between these practices of design and development. Each group of actors – software developers, local designers, service providers, service-seeking citizens, politicians – seems to refer to 'the web' without much further reflection about their own versus other, alternative, perspectives held by other actors involved in the development of e government. This tends to generate friction, frustration and feelings of helplessness rather than efficient IT support for public service provision, better services, and an expanded understanding of citizenship/democracy issues.

 $http://europa.eu.int/information_society/eeurope/index_en.htm \ [Accessed \ 02-09-16]$

¹¹⁵EuropeanCommission,e-EuropeActionPlan,

¹¹⁶ SAPM (the Swedish Agency for Public Management), 2000.

What started out as a way of making public service provision more efficient and effective ¹¹⁷ implies in practice profoundly reconstructing public service provision. Internet-based 'One-Stop Shops', on-line forms, or the publication of information via the Internet, do not leave the character of the services provided, or the organizations that provide them, unchanged. With the implementation of new technologies, the relationship between governmental agents and citizens, and, consequently, the meaning of citizenship, changes as well. What starts – viewed from a meta-level – as the rationalization of government, at closer examination turns into co-operative design and development of technological infrastructure, service provision, public service, and, along with this, the re-construction of the very concept of citizenship itself.

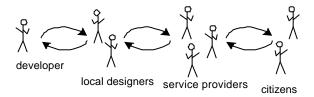


Figure 1

Figure 1 shows the simple picture we use to visualize complex, parallel, on-going, design-oriented interactions between some of the different actors involved. Design does not only take place in designated organizational spaces, but is also part of everyday implementation and use of technical infrastructures. As we will show with our field material, with different participants the focus and perspective on what is designed changes. The hypothesis we put forth in this article is that including the many different perspectives involved could improve both the quality of the process of developing e-government, and the successive outcome of this process.

In section 3, we turn to our research studies of how different interlaced discourses and practices of design take place and make e-government happen. We also show the frictions that occur and that call for tools and concepts to facilitate the interlacing of diverse design practices. Section 4 develops starting points in this direction.

In the following section, we introduce the perspective on design we all relate to, despite different disciplinary and theoretical backgrounds.

2. Interlaced practices of design

Design is normally related with certain professional roles. In the context of information and communication technology, design is a practice mainly ascribed to

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¹¹⁷ Lenk & Traunmüller, 2002.

computer scientists or information system professionals. The object of design is the technical infrastructure that should support the users in their everyday work. If work practice is subject to design, and if users should participate, it is often the role of a participatory designer 118to take responsibility for the project versus the users, and mediate the use context for the software designers. The software designers themselves thus have little or no contact with the work practices for which they are expected to design supportive technology.

Lucy Suchman describes this way of relating to and practicing design as 'design from nowhere'. 'This stance (...) is closely tied to the goal of construing technical systems as commodities that can be stabilized and cut loose from the sites of their production long enough to be exported en masse to the sites of their use.' ¹¹⁹

Our fieldwork supports Suchman's claim that computer systems to a large extent resist co modification in this sense. 120If they are socially embedded, they not only support work and business practices that can be regarded as constant, they also change them. Design of business practices, organization, the development of different ways of working and the implementation of technology are dependent on each other. In regard to municipal information systems, the technical infrastructure, its adaptation to a specific organization, the further development of services and service provision with the help of the new technology, and, in consequence, the relation between citizens and public administration – and that means the concept of citizenship – changes. Different design practices with different foci and actors that are interrelated are taking place in parallel. How can we make sense of, and facilitate, the interlacing of different and diverse design practices?

Suchman proposes an alternative concept of design. Understanding design as artful integration of different social as well as technical contexts allows for taking working relations of technology production and use into consideration, rather than negating them. ¹²¹

Powerful technical systems on this view comprise not hegemonies but artful integrations. Design success rests on the extent and efficacy of our analysis of specific ecologies of devices and working practices, finding a place for our own technology within them.' 122

The figure we introduced above (Figure 1) shows part of the network of working relations that interact in what is called eGovernment. The different vignettes in the next section give concrete examples and explore parts of such networks. And they show examples of where things do not work out, where frictions and conflicts indicate lack of integration.

¹¹⁸ Kensing & Blomberg, 1998.

¹¹⁹ Suchman, 1994, p.27

¹²⁰ ibid. p 27

¹²¹ ibid. p. 22

¹²² ibid. p. 34

Suchman's change of perspective is rather a program than a conclusion. Today's methods and practices of design often do not take the different interdependencies into account. In the discussion section we bring together concepts and methodological approaches from different directions that we see as useful for facilitating the interlacing of the diversity of different design practices that comprise e-government.

3. Making eGovernment happen

Our fieldwork took place in different municipalities and with different underlying theoretical frameworks. Therefore, we have chosen to present and discuss our examples in the form of vignettes, that is, as episodes based on, as well as containing field material from, our case studies of IT use and design in public service administration. In the diversity of the described practices of development of bits and pieces that are part of e-government, a common problem of co-operation in design becomes visible. There are no established, sustainable structures that facilitate and integrate the co-operative design of citizenship, services, service provision, and technical infrastructure when municipal services are moved on-line.

The first vignette, 'Reconfiguration of citizenship and relations', is written by Annelie Ekelin, who works with the research group 'Informatics and Work'.

The second vignette is written by Pirjo Elovaara, 'Who develops the municipal website?' highlights the on-going negotiation of stability to make the web happen. Pirjo is doing her research within the discipline of Technoscience Studies.

The third vignette, 'Cultivating organizational infrastructures', is by Sara Eriksén, who has a background in Informatics and Work Science. Sara takes a close look at on-going local design of IT in a one-stop shop

The last vignette, 'Co-developing technical infrastructures' is written by Yvonne Dittrich and Christina Hansson, who are doing their research within Computer Science, with a main focus on use oriented design and development of software. Despite our diverse disciplinary and project backgrounds, we use similar field study and analysis methods. We work with qualitative methods. We observe concrete work practices, sometimes documenting them on video or audiotape to allow for detailed interaction analysis. Open-ended interviews are taped and analyzed. Participatory design is both a goal we share in studying and working with the development of e-government, and a means to interact with our research partners around design, as it provides additional input for our analysis of both current situation and possible design.

3.1. Reconfiguring citizenship and relations

The process of reconfiguration ¹²³ of relations by access to technologies and public services online is of importance for the ongoing renewal and modernization of the public sector. Reconfiguration of the communication between citizens, local employees and official authorities means, i.e. activities on defining, representing, restricting and controlling the dialogue as well as facilitating use. These changing conditions of communication, work and use of technologies¹²⁴, have implications for the future enactment of citizenship. Access is important, but an equally important question to put is; access to *what* and *by whom*? Provision of public access also changes relations, due to shifting competencies, evolvement of new intermediary roles and also increased possibility for autonomy among citizens, ¹²⁵which the practical examples in this vignette will show.

The discourse regarding e-democracy and e-government prerequisites active citizenship and that access to new technology is a fundamental right for everyone. A view of citizens as service recipients – rather than active participants – has hitherto been predominant within the European context. ¹²⁶In the figure below (Figure 2), the 'normal' communication channels are highlighted, indicating the dialogue between service providers and citizens', 'furthest away in the food-chain' (or at least in the periphery of what traditionally is regarded as the core-business in software development). ¹²⁷Both citizens and employees within public administration acknowledge the need for changes in communication and relations, which is illustrated by the practical examples in this vignette.

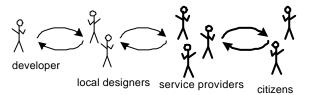


Figure 2

Two Canadian researchers, ¹²⁸working within community informatics, emphasise access as an intrinsically complex issue. They suggest a workable definition and method of defining a holistic view of the concept of 'universal access', a sociotechnical model called 'the access rainbow'. This model expands the understanding of 'access' as being merely a question of creating physical connectivity to Internet-based information and services, acknowledging the complexity of the notion, by

125 Grönlund, 2001

¹²³ Woolgar, 1991 and Mackay, 2000.

¹²⁴ SAPM, 2000.

 $^{^{\}rm 126}$ Grönlund, 2001 and Anttiroiko, 2001.

¹²⁷ Kensing & Blomberg, 1998 and Dittrich et.al, 2002

¹²⁸ Clement & Shade in Gurstein [ed.], 2000

describing a multi-layered model [129comprising seven layers, including carriage and facilitates, devices, software tools, content and services, service and access provision, literacy and social facilitation, and finally governance. ¹³⁰

Without denying the importance of everyone's 'right to have access', I would like to focus upon another phenomenon, which sometimes occurs as an additional attribute of a rainbow, namely the appearance of a 'fogbow'. This could be used as a metaphor for expanding the 'access rainbow model', and for discussing exclusion within the practice of inclusiveness.

A possible way to make this almost opaque, sometimes-visible phenomenon perceptible is by discussing access both in terms of exclusion and inclusion, addressing citizens as well as employees within the local authorities. By showing ways of exclusion in practice, experienced in ongoing service development in Sweden, the issue of access is further explored, in relation to everyday work practice as well as everyday use practice, in the following sections.

My first example, then, is about *the cleaner and the Public Internet Monitor (PIM)*. During my fieldwork in connection with the evaluation of the PIM project, ¹³¹ I by chance heard of a middle-aged immigrant woman, who worked at a library where a public Internet monitor had been installed. She had learned to use the terminal on her own, during lunch-breaks and whenever she felt she had the time to explore the new device that had been placed in her working environment. She even introduced her children, relatives and friends to it. When management found out that she was using the terminal, she was stopped from doing so. She had to work her scheduled hours, and not conduct personal tasks during working hours. In this case, her work position as a cleaner was a hindrance for her to develop her autonomy. She had a job, and a work role, that traditionally does not support personal initiatives towards enhancing skills and personal development. When I interviewed the woman, she turned out to have valuable insights concerning the location of the terminal and the interface of the portal. Her insights and suggestions could have been of importance for future placement of the terminal, if there had been formal ways to gather such feedback.

The discourse on accessibility emphasizes that the services are provided 'all the clock around', at all times of the day and night. The example with the cleaner shows that there are invisible borders surrounding the 'access for all' vision, and makes visible the 'fogbow of access', the layer of 'exclusion within inclusiveness' as well as the mechanisms of reconfiguration of relations and access.

What happens, then, with the desirable increasing of autonomy for citizens, and stimulation of an active citizenship, if the right to have access turns out to be limited in reality due to restrictions in work practice, stating 'not during working hours'? Yet my first example ends on a hopeful note. The cleaner was not prepared to give up her recently acquired autonomy. She continued searching for public information and official services during lunch-breaks and after she had completed her work.

¹³⁰ ibid. p. 36

¹²⁹ ibid. p. 40

¹³¹ Ekelin, 2001

My second example could be titled How to create better interactivity—while ignoring actual user feedback. The national authorities had the intention of stimulating the local actors in establishing chains of anchoring activities concerning the PIM terminals, involving local authorities and 'local hosts' (basically, employees at libraries, one-stop shops, and local authority offices. This was unsuccessful in many places, due to lack of resources. Several hosts pointed out the need for extended possibilities to deliver feedback to the authorities, and the authorities pointed out the need of involving these actors in further development of the project, but in reality there were no plans on developing processes for active incorporation of users' feedback.

The local hosts and facilitators for the PIM projects' terminals were dealing directly with the phases of social facilitation and reconfiguration according to the access rainbow model. 132 In actual practice, this means, for instance, giving extra support to marginalized groups, acting as mediators and assistant authorities, restricting the use by technical configurations, controlling the access by putting up hindrances for certain kind of groups (i.e. youngsters using the terminals for playing games, or individuals such as the cleaner). But they were not allowed to take active part in processes and activities of local tailoring and service design, 133where they could have put forward opinions on functionality, gathered during the numerous sessions with the citizens:

'It would be marvelous if we could talk to some people in management on these issues. It is possible to develop further, because we gather opinions and information on possible improvements, but now no one knows who is responsible, and it takes such a long time before it reaches the right person, if it ever gets there". 134

3.2. Who develops the municipal web site?

The purpose of this second vignette is to explore everyday working relations ¹³⁵when developing and providing on-line e-government services on the Internet. The empirical material is based on a pilot study from a medium sized Swedish municipality. The focus is the backstage work of the municipal web site as a precondition for providing and making municipal information and services accessible on the Internet.

The official political guidelines stratified by the Swedish government form an overall theme for all public information technology activities, both on a national and local (municipal) level. The latest government bill of information technology, titled 'Information Society for All', was launched in March 2000. 136One of the main themes of the bill is the emphasis on efficient public governance. The national political documents, such as the actual government bill, play a dual role, forming a politi-

¹³² Clement & Shade in Gurstein, [ed.], 2000

¹³³ Dittrich et. al, 2002

¹³⁴ Excerpt from an interview with Host number 2, 01-05-30

¹³⁵ Suchman, 1994

¹³⁶ Regeringens proposition [Government Bill]2000

cal landscape for the public sector IT development in Sweden. Besides pointing out the obligatory character of information technology, the political documents also show in what fields and in what direction the IT based services should be developed. A political information technology strategy document, equivalent to the national political goal document described above, was accepted by a local city council during year 2000 in a medium sized Swedish municipality. If we compare the political goals articulated in the government bill, we can see that the local politicians formulate goals to a high degree identical to the national goals: emphasis of the importance of information technology for the competitiveness of the municipality as such, strengthening of the idea of the municipality as a deliverer of the public services of the welfare state (regional development, democracy, quality of life, gender equity, efficient public governance) and offering possibilities for/demanding an active participation of the citizens. Once again, we meet a manifestation of the importance of information technology as an arena for efficient public governance and a re-configuration of citizenship.

Everyday work is needed to translate the overall political visions of governance into concrete e-government services. The most common IT platform for this translation work is the Internet and its web based applications. In order to see what this translation work is about, I interviewed a web developer employed in the same municipality as where the strategy document was published. During the interview, I was especially interested in the following issues; 1) to see how the co-operation between him and the persons employed at the municipal IT department works 2) to see in what way the political goals get translated into concrete IT services, and 3) to see what other actors are involved in everyday IT work.

In the following, I will present a thematic analysis of the interview material in order to connect the empirical analysis to my original questions of concern.

The most central issue in John's (the web developer) talk is *people*, and the existing and non-existing co-operation between them. He presents different categories of people involved in one or another way in the web production, but his categorization is not based on the idea of who is a technical expert, a system developer, and who is not. He talks about to what degree people around him, who in one or another way are involved in the web site development, are engaged in and committed to their work.

John's categories include enthusiasts, the critical ones, the uninterested or the slower-downers, and, finally, the 'fixers' or the 'cleaners'.

John characterizes the real enthusiast in this specific case as follows:

'He had competency of both IT and organizational development. He had sketched how to tear down the borders. How to pee into the administrative borders. A tool to tear down the borders.' [Here John is talking about the municipal IT strategy manager.]

In this actual case it is often the politicians who are the critical ones. John says:

'Yes they [the politicians] do care. But they care afterwards. When they are not satisfied they care. But they do not care before hand.'

To the same group belong the persons inside the organization who are, for one reason or another, uninterested, and who therefore might become the slower-

downers, or, as John puts it: "There is a push inside the organization at the same time as there is resistance in other parts of the organization" [Here he refers to persons having a role as web site publishers in different municipal departments, individuals who often get this assignment on top of all the other responsibilities they already have.] The 'fixers' or the 'cleaners' are the ones who try to pick up the pieces when there is lack of money, delays of software deliveries, and uncommitted fellow workers:

'John has been talking about the passed deadlines and complicated situations both considering persons and software, when he starts to talk about one particular person] who had to jump in and take responsibilities towards politicians...so he had to jump in and take care of keeping the project alive and seeing that it's functioning and that it develops and goes on... I was given four weeks to find a new publishing system and to be responsible for the installation. It was impossible, actually....She [now he talks about a woman employed at the municipality] worked like a dog, night and day.'

John does not only mention people as actors, but refers to various non-human actors, such as **organizational issues:**

'For example, what kind of menus we should have and who is allowed to be there and to be visible...there was a fundamental shortcoming in the structure from the beginning. Namely, that we had used the administrative structure of the municipality as the starting point [on the website]...There were many roundabouts. The structure was re-designed. There was internal dissatisfaction: 'People can't find me...'. and so on and so on.... Never-ending discussions.'

...politics:

'We don't have any money to develop the 24 hour authority [= the official Swedish term for providing electronic public services for citizens], to provide interactive services, such as queuing for a childcare place. ... The Place for Democracy...we don't have any money to do anything...'

...software, co-operation with software companies:

'We had to find a tool that supported our ideas [of a decentralized version of updating the web site]. There wasn't anything that was ready-made.... And then we found a local company who had an embryo. It was far from the final version and it was not designed for the public sector. It was a dialogue. We took part and developed. We had requirements regarding the interface and the functions...Later on Nick [the visionary] started to consider the possibility of joining the Internet and the intranet with a publishing system. To build up one single platform. There were no tools that supported these kinds of ideas. Then we again found a company that had an embryo. They [=the company] presented pictures, but it wasn't ready. But it supported our idea of functionality and the way of working. ... It was cool. It was what we were looking for.... But they couldn't deliver. There was no functionality.'

...and finally, the issue of time:

'instead of being years ahead of others, we are actually many years behind.' [Here John is skeptically referring to the IT political document and its goals.]

The fragments from John's everyday life show that in this specific case the main concern between different categories of skilled persons was much broader than just the relations between developers and users. Actually, the categories of developers and users were not that explicit in John's talk. There was actually no person with formal system development training involved in the web site development. And what about the users? At one level, the users were the persons updating the departmental web sites, but at another level the users are the citizens, totally absent today in the web site development.

John did not talk a lot about political goals. However, these are present, because they steer the content development of the web site. What was a politically hot topic during the time I interviewed John was how to use the Internet as a democratic arena where the local politicians and the citizens can interact and communicate. As John's talk shows, he was concerned about this, but what was politically an important issue was difficult to accomplish in everyday work. And of course the whole web site investment from the municipality is in itself a clear indication of it' political importance.

John's story is a story of a network where both humans and non-humans interact and intertwine. In John's talk, there might be specific reasons for this. The period during which I met John was characterized by turbulence. The municipality was looking for new software for the Internet activities, the actual web site was being criticized both by the local politicians and the mass media, the division of labor was under constant discussion, there were no clear decisions about the content of the web site, and many of the key persons had left the municipality. It was, clearly, a period of uncertainty and instability.

One way to understand why there are so many problems is to consider the web site as a boundary object. ¹³⁷As long as the negotiations are not finished and the boundary object is not agreed, the web site work will continue to be a scene of disagreement and shadow activities. The core question is: How different can the visions of the web site be, and still allow the construction of a functional municipal web site?

3.3. Cultivating organizational infrastructures

One-stop shops, one of a variety of on-going forms of integrative organizing of public services, are a relatively new form of collocation and coordination of services in Swedish municipalities. Basically, they consist of an office where citizens are offered several different kinds of public services in one and the same location, often handled by one and the same person in a team of so-called generalists or public

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¹³⁷ Bowker & Star, 1999.

service guides. Although the reception desk is central meetings place between the municipal administration and citizens/ other visitors in this environment, a large part of the service provision is actually carried out by telephone. The computer support for front-office work in one-stop shops has in recent years become more and more Internet-based and integrated with public services on-line as well as with intranet solutions within the local municipal administration.

The one-stop shop in central Sölvesborg, inaugurated in the spring of 1992, is one of the oldest municipal one-stop shops in Sweden. Here, in sequential case studies, we have been following the development of computer support for front-office work since 1995. A team of public service guides staff the one-stop shop, answering questions and helping out, either face-to-face, by phone, via e-mail or, in some cases, by internal or regular mail. The front-office team is responsible for keeping much of the municipal information on the Internet and the municipal intranet updated, and for the further development of public information and services on the municipal website. They are well acquainted with what kinds of information people ask for and need, and, as they use the Internet/intranet themselves all the time on the job, they are aware of design and accessibility issues.

Ten years ago, when the one-stop shop first opened, most of the applications accessible via the municipal network were mainframe systems, supplied by the main national dealer in software for municipal administration at that time. Today, the front office team uses the Internet/intranet, regularly accessing and using more than 20 different applications from almost as many different software providers. (This is not including all the more or less invisible middleware that keeps the network going. To get an approximate idea of the number of different programs they consciously work with on a day-to-day basis, we simply counted the program icons on their digital desktop, and checked that these were what they themselves perceive as the applications they use most regularly.)

When, during our field studies, we asked the team-leader and manager of the one-stop shop if we could talk to the people in the municipality who were responsible for the computer support – technicians and systems designers in some central IT department, we imagined – she answered spontaneously and almost indignantly *'The designers? That's us!*

Sensing our consternation and doubt, she explained by offering concrete examples. The first example concerned the decision process in the purchasing of a new computer system.



Figure 3

A few years ago, the municipality decided to invest in new computer support for the telephone exchange. In the purchasing process, the front office work team set up the main functional requirements and, in the end, made the final choice between different available systems. The municipal technicians gave them advice about technical aspects of the various systems offered, based on the overall IT strategy in the municipality, network capacity etc. The front office team has gained considerable experience during the past few years in specifying their needs and not only participating in, but also initiating and carrying through, the purchasing processes for necessary applications to further develop their computer support. At the level of analysing needs, exploring options and deciding on what new pieces to add to the puzzle of different applications in use, their claim of being 'the designers' seems indeed to have substance. In a broader sense, the fact that they are actively and continually involved in designing and developing the computer support for service provision, means that the front office work team is also deeply and daily involved in designing and developing public services.

The second example offered by the manager concerned software design, in this case the continual design in use of an Internet-based system for booking locales (tennis courts, conference rooms etc.). A small software consultancy firm in the region has developed this application. When asked what parts of the current computer support they find most useful, functional and well designed, this is the application the front office team uses as the best example. The consultancy firm keeps in contact with their customers, municipalities and associations all over Scandinavia, and provides support both via telephone, via their website on the Internet, and via visits. They have customer support meetings between 8 and 10 times a year, during which problems and new ideas are discussed, and suggested changes and further developments listed and prioritised. The processes of continual support, take-up on customer feedback and further design and development, which this firm cultivates, may well be a large part of the reason for their successful product. They produce approximately 15 – 20 new versions of their basic application per year. These are continually being provided to all customers via the firm's website, with descriptions of 'what's new'. This allows their customers to choose for themselves whether the newest version is one they need to download or not, depending on what new functionalities have been added.

Through the customer feedback processes, there is apparently some substance to the Sölvesborg front office team's claim of being their own designers, even here. Admittedly, they represent only one of some 250 customers giving continual feedback about the product. However, it is clear that they themselves feel that they have been able to act as co-designers in the case of their most appreciated application, and that they still have a co-constructive role in its continued development. Recent development in Sölvesborg has lead to the front office team earning a more official status in the organization as local designers of the municipality's intranet. They are now acting as consultants for other departments in how to use the existing possibilities, discussing and coordinating improvements.

However, the openly acknowledged role of local experts concerning the municipal Internet/intranet development and design, which the front-office team at the one-stop shop in Sölvesborg has earned in recent years, is still something of an exception, in our experience.

3.4. Co-developing technical infrastructures

In the spring of 1995, Ronneby, as one of the first municipalities in Sweden, launched its website on Internet. Since January 1999, the municipality has run its own intranet, with links to information on the public web. Routines are currently being introduced to allow all departments within the municipality to be responsible for publishing their own content and services. The idea is that the latest information will always be available on Internet for the citizens. This is a way to realize the Swedish Agency for Public Management vision of '24/7 agencies'. To make it possible for all departments to publish their own information and services, a publishing tool is needed which makes it easy for the departments to administrate their own part of the web-site. During our study, the municipality had chosen to successively implement *Intrainfo*, a platform for among other things an administrative application for Internet/intranet publishing.

The study focused on the development of a part of the platform called *Intradok*, a document-management system which contains templates, that is, sets of rules for writing, displaying and storing various types of digital documents within the municipal intranet and the public website. It became visible, how much the publishing tool and the organization of work practices around the provision of services condition each other. One can hardly be designed without knowing about the other. Preferably, technical infrastructure and the practices of service provision should actually take place hand in hand.¹³⁸

As Ronneby municipality agreed on acting as a pilot customer for Intradok, Anna, a representative from the municipal information department, co-operated closely with Johan, a system developer from the software consultancy firm, around the design of the application. Most of the cooperation was carried out by phone, supplemented by the use of $pcAnywhere^{TM}$, an application for accessing and temporarily taking over control of a local network-based PC application from afar.

We interviewed Anna and Johan and observed and video taped parts of their cooperative design sessions during 4 months. The following dialog is a translation of a part of such a development session. The purpose was to show Anna how to set up a new template for a specific set of documents, together with the related rules for access and editorial rights. At the same time as Anna is taught, she tests the tool and suggests changes and improvements. At one point, Anna recognizes that she cannot choose more than one responsible role for each template:

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¹³⁸ Suchman, 1994.

'OK', Anna says, 'has the role..., am I able to choose just one role?'

'Yes, you can'

Anna continues: 'I mean, am I able to choose several roles?'

'Hmm...no!!' (A pause of five seconds)

'Hmm,... why has nobody thought of that?' Johan answers.

'Make a note, Johan!' Anna says in a teasingly commanding tone, with a serious undertone.

Johan answers: 'You actually ought to be able to choose several departments as well.'

Anna follows this up by giving some concrete examples of when this might be necessary. Johan makes a note of it and promises to incorporate this feature in the next version of Intradok.

The session turned out to be a teaching and feed back session at the same time, where expertise shifted back and forth between them during this mutual learning process. Since Anna took an active part in the design of Intradok, she will be able to adapt the tool and templates on the basis of the municipal present and forthcoming needs. One of the main tasks of the information department is the customization and implementation of the tool into the organization. Anna designs the space for tailoring and customization that the tool will provide. The cited exchange shows how necessary the co-operative design was in order to develop an information system that supports organizational practices. This way of developing Intradok differs from the traditional way of developing software; it is not a 'design from nowhere' where 'anonymous and unlocatable designers (...) problematize the world in such a way as to make themselves indispensable to it and then discuss their obligation to intervene, in order to deliver technological solutions to equally decontextualized and consequently inlocatable 'users'.' 139It rather relies on and responds to a working relationship with at least a few pilot users In parallel to our study of the co-operation between the consultant and the local developer, we studied the current practice around publishing vacant job advertisements. This part was carried out as workplace-studies and as a workshop focusing on the design of a common template and the related re-organization of work practices. Today, three secretaries construct and write their own job advertisements. They are responsible for different areas within the municipality. When the advertisement is completed, it is sent by e-mail to Anna, who edits it and then publishes it on the Internet and/or the intranet. According to the declared policy, the secretaries in future will edit and publish the advertisements themselves with the help of Intradok. This also implies that their work practice will change and new routines have to be introduced.

We arranged a half-day workshop around the current work practices and the anticipated change of technological support. All three secretaries have similar tasks and are located in the same corridor. Nonetheless, it turned out that they had almost never discussed their work among themselves. At the workshop, they got the possibility to do so, and to share their expectations concerning the new tool. When the differences in their work practices became visible in the discussion, they took a

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¹³⁹ Suchman, p. 27

step back and reflected on their different ways of working. Towards the end of the workshop, the secretaries designed a proposal for a common template for job advertisements. Ideas and suggestions that were discussed at the workshop were summarized at the end of the day and passed on to the local developer, in order to feed back into the design process. Instead of establishing an enclosed site for developing the templates without participation and suggestions from end users, we brought out the development to the environment of the intended use of the templates. When development takes place in the intended environment, it can feed back into the design of the adaptation features and help to make them more adequate for local work practices. Also here, relations and interaction between development, local design, and use 140 make things work out.

Both these examples of co-operative design show how the design of technical infrastructure and the development of work practices around municipal service provision influence each other.

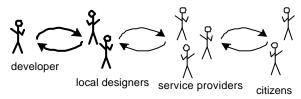


Figure 4

4. Towards sustainable structures for continual co-operation in design

The development of egovernment in all reported cases does include the joint development of technical infrastructure, service provision, services and even what it means to be a citizen. There is no single or main developer or designer. Agency shifts over time, and depending on what aspect is in focus. Different actors in these interdependent design practices have different perspectives and different foci in their activity. No wonder, then, that the co-development of services, their provision and the technical infrastructure is not a smooth and simple process.

In the participatory design discourse, methods and tools have been developed to mediate co-operation between professionals that use software and developers.

¹⁴¹Can these methods be adapted and complemented to mediate complex cooperative processes as they became visible in all four cases that we reported above?

¹⁴⁰ ibid.

¹⁴¹ Kensing & Blomberg, 1998, Clement and van den Besselaar, 1993 and Schuler & Namioka, 1993.

What does it require to expand participatory design beyond software or other development projects?

4.1 Including the public

Looking back to Annelie's case, the question arises: Could the cleaner, using the PIM terminal, bring up valuable aspects on further development of the artefact – if she only had the possibility?

If a continual activity of joint co-development of services is included as a central part of co-development of services, citizenship and technology, this also blurs the boundaries between governmental and municipal authorities, private sector employees and other actors within, for example, the voluntary sector but most of all – the boundary between citizens and the local authorities. The citizens become key figures in the 'web of connections' ¹⁴²that make up design, content as well as use of new technologies. This on-going intertwining and co-development of content, services and citizenship could be described as an essential part of creating an active citizenship, acknowledging the citizens and their experiences as a vital part in a continuous reconfiguration of relations and dialogue-models as well as articulation of citizenship.

In the discourse on participation in e-government, few reflections are made concerning the basic issue of the democratic values that could be gained by early involvement of local employees and citizens in developmental work or technology-based activities in the shape of local tailoring of technologies in settings of direct, and concrete importance for citizens, such as for instance the use of local public services in work places. Making more deliberate use of participatory design methods for incorporating multi-perspectives in service design as well as technology production and use could be an inclusive way to stimulate a broader, sustainable participation in local development of e-government.

4.2. Mapping out networks

Actor-Network Theory¹⁴³might provide a theoretical and functional framework for drawing a process map where as many actors as possible, even those not explicitly recognized in official plans and documents, could initially be identified. Parallel with this identification work, it would be necessary to follow how the process and the decisions during the process are made, and how the direction of the web site development is under ongoing reformulations. By drawing this map of the process network, insights could be gained as to where the critical points are, where the actual decisions are made, who is making these decisions, and where more resources and efforts should be put in. The surprising finding of the cartographical work might be

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¹⁴² Suchman, 1994

¹⁴³ Callon, 1986, Law & Mol, 2000, Elovaara, 2001

that, besides the web site, other things (such as society and the municipal organization) are also being designed. ¹⁴⁴

Certainly, in vignettes 3 and 4, we can see how the design of technology is an integrated part of the design and development of service provision, and of work practices around these.

4.3. Tailorable software

To support the continuous participatory development of public services and their provision by citizens and municipalities, the technical infrastructure has to be flexible enough to accommodate the developing requirements. It does not matter how well the system fits when introduced. The usage, the organization and the users undergo continual changes. The complexity of the contexts makes it difficult to predict all needs that might be important in the future. Computer systems have to be adapted to be able to meet the changed circumstances.

The tailorable design of computer applications is therefore of special importance. Tailoring can be seen as a continual development of a tool, a process that successively leads to a better tool for the users. ¹⁴⁵This continual process of adjusting, tuning and improving should take place in the users' work environment and context.

Mørch and Mehandjiev ¹⁴⁶talk about tailoring as co-operation between developers and users; co-operation that takes place over a long period of time. Users tailor the tool when work practices change. Tailoring starts during or directly after installation of the tool, or later, during use of the tool. The long-term aspects are important, because organizations undergo continual changes. The adaptations to the system mirror the developing needs of the organization organization. The way the system is adapted over time helps to better understand the needs when developing a new version. Also for this 'slow motion' co-operation in design, the understanding of the situation where the software is used deepens with the ongoing design of the application.

Such practices, on the other hand, require a long term and stable relationship between developers, local tailors and users. Continuity in co-operation has to be maintained; new developments of applications intertwine with use, maintenance, tailoring, adaptation and further development. Understanding software design as networks of decisions in relation to use, technical and development contexts¹⁴⁷can provide a starting point. Development tasks, design in use and use can be understood as parallel activities with shifting intensity and shifting main actors. Ways to coordinate and manage such patchworks of design activities, as we were able to observe in our case studies, are still to be developed.

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 $^{^{144}\,}$ Gärtner & Wagner, 1996, pp. 187-214

¹⁴⁵ Mörch & Mehandijev, 2000

¹⁴⁶ ibid.

¹⁴⁷ Floyd et.al, 1992

4.4. Shop floor IT management

Continual and sustainable relations of co-operation are not just an issue of the co-operation between software developers and local designers. Including the different actors in suitable forms into the ongoing development requires sustainable structures of participation. For achieving good quality public service provision, it seems important that good practices of continual design should be deliberately nurtured and cultivated. ¹⁴⁸An organizationally defined function and structure for 'shop floor IT management' ¹⁴⁹might be a way of making these design and development activities, and the multiple and shifting foci of design they represent, more visible and organizationally legitimate. Shop floor IT management we see as the everyday work of making IT work, that is, the mundane, on-going problem-solving, tuning, tailoring, further development and design in use of the existing computer support, and the integration of new applications into this existing environment.

5. Conclusions

Despite originating from four different cases, the four vignettes presented above reveal similar difficulties and problems concerning the everyday work of making e-government happen. Introducing e-government changes service provision, services and citizenship. To make it work requires the coordination of these developments along with the design and development of supporting technical and organizational infrastructures. Not only the co-operation between different actors within a municipality and with software providers has to be taken care for. Also the co-operation among different municipal actors and with the general public has to be supported. Different design processes with different foci have to be related to each other.

In the discussion part, we brought up issues raised by the examples presented in the vignettes, and discussed starting points for solutions: *Participatory design* provides a frame to relate different practices of design and use, and facilitate their coordination. We brought up the extension of design, and therefore participation, beyond the project. We brought up the continuous inclusion of citizens, using *actor network theory* to map out complex design constellations.

Already the *simple abstraction of on-going design interactions* (Figures 1-5) we found helped people to understand the complexity of the development they were involved in, and opened up for new, constructive design discussions between different groups of prospective users, service providers and software developers.

¹⁴⁸ Dittrich et.al, 2002

¹⁴⁹ Eriksén, 1998

We discussed *tailorable software* and practices of tailoring, running parallel to and interrelated with the design, development and implementation of new applications. We discussed, finally, the concept of *shop floor IT management*, which, somehow, brings all the other issues together in a culture of cultivating what you have, while moving ahead towards future technology developments. Shop floor IT management implies developing a space where methods and tools such as those we have discussed can become effective. Shop floor IT management means supporting and respecting the working relations of technology production and use, and building sustainable organizational infrastructures to support them.

Suchman's concept of design as 'artful integration' ¹⁵⁰of different contexts became for us researchers a 'boundary concept', allowing us to relate our different cases and our diverse disciplinary backgrounds. They match the scientific discourses in which e-government is discussed. To understand its complexity and handle the transition, these different discourses and the conceptual and methodological instruments they develop have to be related as well. We see our article as a step in this direction.

¹⁵⁰ Suchman, 1994

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Appendix Paper VI

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Discourses and Cracks – A Case Study of Information Technology and Writing Women in a Regional Context

by Annelie Ekelin & Pirjo Elovaara

1. Introduction

In the Finnish story known as "Granen" - The Christmas Tree - by Tove Jansson we meet the Moomins as they wake up from hibernation. "Mummy, wake up", the Moomintroll says in a frightened voice. "Something terrible has happened. It's called Christmas". "What do you mean?" says the mother, as she pokes out her small nose. "I don't really know", says her son. "But everything's upside down, somebody's lost, and they're all running round like mad men". The family looks on Christmas as an evil monster. It's all a question of being properly prepared. "It seems that you need a Christmas tree", says the father in a contemplative voice. "I don't understand anything". Everybody else seems to know about Christmas except the Moomins. "What do you do with a Christmas tree"? The Moomin father, who is normally quick to act, is cautious. "Here is the tree. If we only knew what it should be used for. Gafsan says that it has to be decorated. Do you know how to decorate a tree"? After receiving advice from friends and neighbours, they begin to understand that there are rules about how to decorate a tree. "If you are supposed to make a tree look as beautiful as possible you're surely not supposed to hide yourself in it to protect yourself from danger; it must be a way of warding off danger". They start to decorate the tree in their own special way using shells and pearl necklaces. At the top, they place a red silk bow instead of a star. "Goodness gracious me", says the hemule's aunt. "But you've always been a bit strange". 'I think there ought to be a large star at the top", says the little mite's uncle. "Do you think so"? says the little mite. Is there such a big difference between the mere idea, and reality"?

In the above story we meet a family in a transitional world, which is about to be invaded by something new and strange. What was so natural for others seems to threaten their secure existence. There also seems to be some kind of official view of how Christmas should be celebrated. The family tries to work out what the right thing to do is, but soon finds that there is room for personal interpretation and application. By finding out what is expected, they can produce their own picture of Christmas, master danger and gradually decide for them how to celebrate occasion.

What on earth does the Christmas tree in the Moomin valley have to do with a discussion about information technology one might ask? Tove Jansson's story can be read on another level if it is seen as a metaphor for the introduction of information technology into society. If we regard the helpful friends' interpretation of how the tree should be decorated as the official version, or representative of the prevailing discussion of how Christmas should be celebrated, we see that the text contains a number of questions, which are central to the present essay. Who decides that it is necessary to have a tree, and who dictates how it should be decorated? What is the consequence of not having a tree, or of decorating it as one pleases? What happens if we regard information technology discursively, just as the Moomin family views Christmas celebrations and the Christmas tree?

Let's start by explaining the concept of discourse. The latter may be defined as "regulated, methodically organised discussion, which dictates what may be said or done, and what may not be said or done". \(^{151}\) A discourse defines both values and the world. "The dominating, prevailing and predominant [discourses] are created by what is taken for granted and regarded as normal".\(^{152}\) Discourses are born and brought to life in public texts and speeches. In other words, language and words are both the source and channel of a discourse which describes our way of relating to a phenomena or event. Discourse also shapes, and is shaped by, different practices, which presuppose actors and action. "Wittgenstein sees a concept as a collection of activities which follows certain rules: it is how the concept is used which determines its meaning. It is our actions or our praxis which shows most deeply how we have understood something".\(^{153}\) The dominant discourse as Mörtberg defines it is not hermetically sealed, however. There are always "cracks, or inadequacies".\(^{154}\) Wherever there is power, there is counter power.\(^{155}\) Alongside the dominant discourse grow alternative discourses and counter discourses.

1.1 The predominant IT discourse

If discourses are born and live in public texts and speech we can define such discourses on two levels: by analysing customary terms and concepts, and official policy documents.

A basic question is, "does it make any difference if we speak about information technology or use the term IT"? The neutral reading of the combination of letters comprising IT can be understood as an abbreviation of the words Information Technology. This is no longer a satisfactory reading, however, since IT has been

¹⁵¹ Johansson & Nissen & Sturesson, 1998, p. 39

¹⁵² Mörtberg a, 1997, p. 38

¹⁵³ Göranzon, 1990, p. 134

¹⁵⁴ Fahlgren, 1998, p. 25

¹⁵⁵ Järvinen, 1998, p. 52

transformed into a contemporary icon and represents many more values than the linguistic become a symbol of ellipsis suggests. IT suggests, for example, abstract attributes, and it has certain life style connotations. The abbreviation has expectations and norms for living. IT, in other words, belongs to also modernity, and is suggestive of numerous positive values, everyone, and the term successfully disguises the strong technical aspects. IT raises hopes and expectations for the future. Who doesn't want to move to a city flat with IT facilities? What is the future of children who are not able to share in the benefits of modern IT teaching methods? Who is willing to give up top quality IT-based health care? IT gives its users, owners, and exploiters a bonus, a right to become part of its world, and to make use of its facilities.

IT may also be seen as a political and practical discourse, which is in part shaped by the repetition of an exalted rhetoric. This repetitive discursive model can be distinguished in global, regional and local contexts.

"Internet is for everyone" was the theme of an international conference organised by worldwide organisation **ISOC** (Internet Society Organisation; http://www.isoc.org). This same phrase was also used by Vinton Cerf. a member of the ISOC board, in a speech made on 7 April 1999 at an international conference on "Computers, Freedom and Privacy". But to achieve this goal, Vinton Cerf argues, the equipment and connection to the Internet must be cheaper, the technology must be more accessible, and governments must agree to regulate its use by levying restrictions and prohibitions. Let us all give us up to the task of simplifying the Internet interface and training all those interested in using it. This was Vinton Cerf's challenge to the conference delegates. Internet can be used to further the development of democracy as well as commerce. The "technological evolution" must continue if we are all to move towards a future without boundaries. 156

In the preface to "How should people in Blekinge use IT" Svante Ingemarsson, who at the time of publication was responsible for the programme of the IT Blekinge association, wrote, "we are entering a new society. Information technology will be used more and more. Even now the very basis of everyday life is undergoing change [. . .] We know what we want to achieve: a higher quality of life, more jobs, democratic power for everyone, equality between men and women, the same preconditions for town and country, and more opportunities for the disabled". ¹⁵⁷ In another text which presents IT Blekinge's view of the development of IT, Svante Ingemarsson describes the future of Blekinge in terms of the central role of technology in society, "for our own sakes perhaps the major driving force for all of us in Blekinge should be to welcome the new society with open arms - both technically and on a human level, with our eyes wide open and without fear. IT (whatever we mean by that) is not a solution to all our questions and problems, but it

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¹⁵⁶ Cerf, 1999

 $^{^{\}rm 157}\,$ Hur ska vi i Blekinge använda IT? (How shall $\,$ we use IT in Blekinge?, 1996

is a major force which affects us all - to a greater or lesser extent - both at work and in our everyday lives. It's just as well if we accept this, learn, and let technology be one of our active tools as we shape the future together. It's better than letting it jump on us from behind!" This text conjures up a picture of a world which is undergoing revolutionary change. IT is both a catalyst and a tool in this process. It is the entire population, "all of us together", who are invited to join a new society. This invitation does not allow a negative response, however, and does not allow us to keep the process at a distance. The transformation is inescapable, and affects all our lives. The future is positive: "better quality of life, more jobs, democratic power, equality . . ." in all respects. So who'd want to miss the trip? It should be noted that there's no opportunity to take part in the planning and decision-making processes. Citizens are given their portion of ready-made services and products, all of which have been developed and produced somewhere else, and at someone else's initiative.

Of all the municipal councils in Blekinge, Ronneby was one of the first to invest in IT: "Ronneby in the year 2003, an IT society", is the name of an umbrella project started by the council in 1993. The aim of the project is to co-ordinate, initiate and stimulate IT applications. "The project will give the inhabitants of Ronneby ample access to information technology. IT will be a democratic right. Dialogue and participation are key words. Renewal, initiative and variety are furthered. Small local spear head projects are being developed alongside major investments. Ronneby is a test bench for full-scale IT investments. The goal of the 2003 project is, among other things, to make IT a democratic right, to bring to life the information society, and to entice new companies to the area.

"The 2003 project aimed from the start to give the general public the opportunity when visiting the library of encountering the new technology. User-friendly software was developed, and the personnel as well as the general public attended courses [. . .] everybody will be given the practical opportunity of finding out what the information society means without having to make any financial commitment. During the last year, channels have been opened up on the web and e-mail introduced, thereby increasing communication between citizens and politicians/civil servants". 160

A common thread in the above-quoted texts is the view that "IT is for everyone". This is the self-evident official device for our information society, where the Internet embodies accessibility, and is regarded as a democratic right. "The information society changes business and commerce, and democracy. Knowledge, which was once the privilege of the few, is open to everyone. Regional imbalances can be counteracted, productivity increased and new companies built. Information Technology must be a means of increasing freedom, participation and justice", in the

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¹⁵⁸ Ingemarsson

¹⁵⁹ Ronneby kommun (Ronneby Municipality), (b), (c)

¹⁶⁰ Ronneby kommun (Ronneby Municipality, (b), (c)

words of the Prime Minister of Sweden, Göran Persson, used at the opening of the parliamentary session in September 1999. 161 The development of the hard- and software, and the building of the technological infrastructure presuppose speed, and the ability to act and make decisions. "And even if different investments are made here and there, daring and determination are missing. There are more contributions than fast data connections, unfortunately" 162 says Carl Bildt, ex-chairman of the Swedish conservatives. A central feature is also the provision of instrumental training in the form of IT projects. These often resemble a literacy campaign for the general public. "But it is at least as important that everybody has the knowledge and selfconfidence to make use of the technology. It is our belief that a digital right of access like that which applies to the Swedish countryside is needed", 163 was the comment of Centre Party politicians Lennart Daléus and Elving Andersson at the party congress in 1999. The question is, does one really become more involved as a citizen by taking part in projects and courses the main aim of which, despite the prefix IT, is to teach basic computer skills? Can one really change the world by teaching people how to use Microsoft Word?

These visionary words (IT for everyone, accessibility, democracy, development and change) can be compared to mystical formulas which are constantly repeated in different official contexts where strategies and discourses involving the Internet and information technology are formulated and applied; words which guarantee the free entry of every citizen to the magical spheres of technology, and confirm the importance of technology in stimulating democratic and social processes and the renewal of society alongside economic development and growth. "Acceptable statements include: IT has developed fast, and will continue to do so; IT is the basis of the information society which has succeeded industrial society; IT creates new jobs; we must keep up and learn how to use IT; IT will lead to decentralisation and increased democracy; IT leads to globalisation, and a reduction in the power of nation-states". 164

The above-quoted official texts constitute the dominant discourse, and fall within the limits of what is permissible. Technology is regarded as a self-evident driving force, and is both the end as well as the means. This view of the independent power of technology may also be found in "other discussions about society in the future, discussions which reflect a technological optimism; technology is seen as a tool and a driving force to create growth, job opportunities and strengthen the country's competitiveness". 165 Characteristic of the belief in autonomous technological development is that it automatically furthers democratic development. IT is thus often presented in a well-camouflaged "social suit". In the same way, modern society

¹⁶¹ Persson, 1999

¹⁶² Bildt, 1998

¹⁶³ Andersson & Daléus

¹⁶⁴ Johansson & Nissen & Sturesson, 1998, pp.43-44

¹⁶⁵ Mörtberg, b, 1997, p. 25

demands a properly tailored "technology suit". The most suitable terms for the predominant IT discourse are thus "democratic/technological" contra "technological/democratic discourse".

1.2 Democracy and Citizenship

Is it really this simple? Does IT development automatically lead to "us" becoming more actively involved in social developments. Does increased accessibility and the use of IT increase people's interest and involvement in democratic questions? We must start by asking the basic question, "what is democracy"? By tradition, democracy implies participation, and certain rights. These rights consist in turn of different types of citizenship: individual citizenship (the right to freedom of expression); political citizenship (the right to vote); and social citizenship (various social benefits such as child allowance). 166 This is what is normally dubbed "universal citizenship". Everyone is assumed to have the same rights and responsibilities. It is perhaps important to remind ourselves that when democracy was born, it was based on the exclusion of women and other peripheral social groups. Politics was reserved for the ruling class in ancient Greece. Women, children and slaves were excluded. 167 Ruth Lister writes as follows about universal democracy: " a concept, originally predicated on the very exclusion of women". ¹⁶⁸ If power is explained in terms of domination, the dominant group is able to exclude both "outsiders" and subordinate groups from the system, and in this way successfully thwart full-blown citizenship. ¹⁶⁹ The definition and application of democracy is based on a dichotomy or dualism between the public and the private. ¹⁷⁰ The arena of citizenship is the public; in practice this has meant the political arena. The majority of those acting in this arena are, as in the past, men. The private arenas include health care and care of the young and elderly, where it is women who have always been, (and indeed still are), the most active. 171 Power is exercised on both sides of the division between the public and the private. In an IT context, for example, it can regulate access to IT tools, and assume the right of interpretation in the process of defining knowledge and expertise.

As we have already pointed out, IT is seen as an important part of the future development of democracy. It is thus important to establish the official relationship between IT and democracy. We can take a look at an official investigation about electronic and digital democracy (SOU 1999:12, Electronic Democracy). Anders R.

¹⁶⁶ Marshall, in Voet, 1993, pp. 15-16

¹⁶⁷ Kahlert, 1997, p. 26

¹⁶⁸ Lister, 1997, p. 195

¹⁶⁹ ibid. p. 204

¹⁷⁰ ibid. p. 198

¹⁷¹ ibid.

Olsson, author of the report, presents three hypothetical models, which have been applied in the establishment of electronic democracy:

Model 1: classic parliamentary government with IT support 172 Model 2: grass roots power, "democratisation starts at local level. Inhabitants of a small authority or region can use IT to organise the spread of information, discussions and decisions, and in this way become more active" 173

Model 3: well thought-out reform: "a reform from above i.e. high-level political decisions" 174

As Olsson himself points out, however, "to start a discussion on electronic democracy with technical models is clearly putting the cart before the horse. It's important to know what you are trying to achieve with democracy before trying to make it electronic". The real issue becomes instead, "how do we get those citizens who are not interested in politics to become active and participate"?¹⁷⁶ Olsson's ideas are based on the fundamental principle that many citizens are neither interested nor involved. This assumption is never questioned in the investigation. This lack of involvement, which is axiomatic, can, according to Olsson, be rectified by improving the spread of information. "The starting point for ideas about electronic democracy is that the democratic process can be described as a course of information treatment. Participators in the process gather knowledge and opinions, exchange these with one another, and ultimately make their views known by voting". 177

The view expressed in the investigation suggests that information comes from somewhere (above), and is waiting to be collected. Can we read between the lines that the author is referring to official information? Shouldn't a more basic question be asked: "why is there such a lack of interest and involvement"? One possibility is that it is a kind of protest, or a lack of subjective room for action (the ability to act and strength of initiative). The investigation should have addressed the obvious question, "is silence necessarily a sign of lack of interest"?

¹⁷² Olsson, 199, pp. 55-56

¹⁷³ ibid., pp. 62-63

¹⁷⁴ ibid., p 65

¹⁷⁵ ibid., p. 103

¹⁷⁶ ibid., p. 39

¹⁷⁷ ibid., p. 26

1.3 All Citizens - Except Women?

In official texts the category "all" appears to be unambiguous. It is time, however, to investigate who is actually included in this category. Despite the strategy declared by the main actors of involving "everyone" in the regional development of IT, it has been demonstrated by an investigation by two Lund University researchers carried out in 1998 on behalf of the county's municipal authorities, the County Government Board, the County Labour Board, County Council and the University of Karlskrona/Ronneby, that women feel that they are excluded from local IT activities in Blekinge. The authors of the report write in their summary that "the dominance of the armed forces and major manufacturing companies has created a cultural tradition in which women are to a large extent invisible. It is almost exclusively men who dominate commerce and politics. And only men are appointed as directors in the public and private sectors". 178 The report continues, "most of these women [the approximately 800 women taking part in the study] are pessimistic about their ability to exercise any influence in the following areas; housing, social services, leisure, communications, work and training. This feeling of lack of influence is, we believe, due to the fact that women do not feel themselves part of, or an asset in, regional development".179

In western culture we often speak about democratic principles, which means, among other things, that we elect municipal councillors, municipal politicians and committees every third or fourth year. Can't we find any women in these bodies? The answer is both "yes" and "no". In Ronneby Municipal Council, approximately 40 % are females. In the local government administration, 27 % are women. Not one of the committee chair people is female. 180 This picture is by no means unique for Blekinge, or indeed for Sweden as a whole. It is a general phenomenon affecting present and future global IT development. Our belief is that the women taking part in the investigation regard themselves - and are seen by others to be - outsiders, strangers to political life. Olsson sees this estrangement as a reflection of lack of interest and involvement. He explains the silence of citizens in the following way: "in personal meetings people can feel inhibited for all sorts of reasons - common shyness, emotional disturbance or stammering, to name but a few - and they would therefore think and express themselves better in a purely virtual, text-based environment". 181 The question should instead be, "why do citizens choose to be silent in public affairs"? Who is silent? What happens in a private context - is this a possible place for democracy? Is there any connection between the subjective and the objective space for action, i.e. our ability and willingness to take part in investments in social information and transform these to personal interpretations and actions? How and where is our "own voice" to be heard? Is it permitted to be

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¹⁷⁸ Andersson & Rosenqvist, 1998, p. 40

¹⁷⁹ ibid., p. 42

¹⁸⁰ Ronneby kommun (a)

¹⁸¹ Olsson, 199, p. 127

silent, or must we be forced to become part of the public arena in order to activate our citizenship?

2. Alternative Discourses and Cracks

Despite the fact that earlier in the present paper we concentrated on the crystallisation of the predominant IT discourse, and found that the definition is closed and definitive at grass roots level, it is essential to remind ourselves that IT is a process, and a social construction. By regarding IT as a process and a construction one is challenged, and it becomes possible to search for cracks in the prevailing view. There is nothing deterministic about IT, since a social construction requires constructors. The predominant discourse also enables resistance, and the creation of alternative discourses. What happens when the IT mystical formula is translated into concrete action and practice? What will be the result of slowing down, and putting reflection before the fast absorption of knowledge, or technological development?

We will now leave the outside perspective (discourse analysis) with which we have been able to draw an IT map based on theoretical, political and real preconditions. Instead, we shall place ourselves in the position of the subject of the IT discourse. A concrete opportunity to stimulate an alternative understanding of IT appeared when we were given the opportunity to work within the framework of an international IT project, the basic principles of which were identical to those already identified by us as the predominant values of the IT discourse. We chose, however, to analyse and take advantage of these values from feminist perspectives, the aim being to allow the discourse to be interpreted openly and pragmatically. This interpretation prepared the ground for a project based on a complex understanding of the following formulated discursive values: democracy, accessibility, change and development.

2.1 The DIALOGUE Project

The EU DIALOGUE project started in 1998 and ran to spring 1999. It involved Bologne, Ronneby and Lewisham (London). 182 The project was characterised by a clearly pronounced democratic profile, and aimed at developing the use of IT as a means of furthering democracy and methodological development. This is where the "crack" showed itself, in the opportunity to re-interpret both the IT and democratic discourse. The target group comprised individuals and groups otherwise in danger of falling outside developments e.g. women with little training and education, unemployed people, immigrants and the elderly. The latter description of the target group can lead to the assumption that the project constituted an aid programme for

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¹⁸² Dialogue http://www.ronneby.se/dialogue [Accessed 02-12-17]

the underpriviliged, with the aim of levelling out differences in technological expertise among different groups of citizens. It also provided us with a justification, however, to work with an all-female group, thereby successfully avoiding the trap of false universality. Our project was supported by a text by Linda Alcoff, who writes, "[understand the concept of woman as] a subjectivity that is constructed through a continuous process, an ongoing constant renewal based on an interaction with the world, which she defines as experience, and this subjectivity is not produced by the external ideas, values or material causes, but by one's personal subjective engagement in the practices, discourses and institutions that lend own context of time and space". Women as a group share experiences in a specific historical place and time, and these experiences in turn shape a common framework and basis for activity and practice. It also leaves space, however, for women as subjects, situated and positioned in a wide variety of realities.

2.2 The WWN Project

The Women Writing on the Net (WWN) project began as a sub-project within the framework of DIALOGUE. The overall aims of the project were to further grass roots democracy by working with "empowerment", a term based on the popular '70s movement which aimed to introduce conscience-raising activities, to conquer and redefine the public arena, to stop the drawing up of boundaries or dualism between public/private or expert/non-expert and to build virtual communities.

The goal in working with "empowerment" was to encourage women to re-define themselves: to become and act as insiders in IT contexts, as well as in society as a whole. By using their own experience as a source of knowledge, women were able to renew the value and strength of these experiences. Our vision was to weave together the overall goals with the practical working method and the individual elements of the project. The latter thus assumed an overall view and a focusing on the exchange between aims, working method and individual project elements.

Two groups, consisting of women with greater or lesser experience of using computers, met every Tuesday for a year to discuss, write and learn how to use the new technology. Basic introductions to word processing, creation of home pages, picture editing in the web environment and searching for information were included in the project. Communication using e-mail, chatting and electronic discussions took place between project participants in Bologne and Lewisham.

The project was also responsible for bringing about a physical meeting between Swedish women and immigrant women. This was also a golden opportunity for immigrant women to practise their Swedish, and to learn about Swedish customs and traditions, cultural phenomena and politics. They mastered codes and invisible

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¹⁸³ Alcoff, 1988, p. 424

passwords. The Swedish women were given an insight into the experiences and culture of the immigrant women.

An essential part of the project was also the methodological development, which focused on the learning process in a specific social context. The aim was to give time and space to writing, discussions and reflection and to combine this with IT training as a means of integrating action and reflection. This was achieved using a method which stimulated personal development in, and throughout the group. We consciously worked to break down the fixed barriers between expert/non-expert, participant/project manager. Everyday personal experience and reflection were used as the main sources of knowledge. Writing functioned as a means of articulating the individual's voice as well as comprehending the process. Individual elements such as developing skills in using IT aids, and reinforcing the powers of personal expression by means of written exercises - both group and individual - were also important elements in the greater whole.

Seymour Papert, professor of mathematics, maintains that one should see "knowledge as something which grows as part of a process of curiosity, dialogue and involvement". 184 Learning which is linked to experience and previous knowledge is the most fruitful, says Papert. He also wishes to raise the status of concrete thinking. which society regards as inferior to abstract thinking. He believes that an abstract principle should instead be seen as an aid to concrete thinking, and not as a solution in its own right. As an example, Papert cites how one learns mathematics in the kitchen, and botany by first learning to distinguish between different kinds of plants and then studying Latin. 185 Seymour Papert and Sherry Turkle advocate the use of bricolage as a fruitful method of producing computer training closely linked to reality. The term originates from the anthropologist Claude Levi-Strauss's theories about western analytical, abstract thinking as opposed to the concrete sciences and their many associations practised in many non-western countries. The theory was originally presented in The Savage Mind. It seems to have undergone a new renaissance in the computer age. Bricolage can be described as a learning situation in which the learner is allowed to improvise and take advantage of whatever is easily accessible. Bricolage can also be seen as a method for producing, repairing and improving mental constructions. 186 Sherry Turkle describes the method as follows: "the tribal herbalist, for example, does not proceed by abstraction, but by thinking through problems using the materials at hand. [. . .] problem-solvers who do not proceed from top-down design but by arranging and rearranging a set of wellknown materials can be said to be practicing bricolage. They tend to try one thing, step back, reconsider, and try another".187

184 Papert, 1994, p. 78

¹⁸⁵ ibid., p. 124

¹⁸⁶ ibid.

¹⁸⁷ Turkle,1997, p. 51

The starting point of the project was that we would all learn together, by cooperating with and meeting one another, by sharing our knowledge and experience, and by interpreting and formulating - on a mutual as well as an individual basis - our understanding in words and thoughts as well as in writing. Those women who had more training in using the Internet and different computer programmes helped the beginners. This reinforced the group identity as well as the self-confidence of each individual. In teaching others you also learn yourself. Above all, you learn by doing.

3. Writing as Aim, Tool and Method

Writing during the project played an important role on several different levels simultaneously. One of the central goals was to further grass roots democracy, to conquer and re-define the public arena. If one sees speaking as a political act and political tool, communication between people and the development of the individual voice is fundamental to the development of democracy. Since today we cannot talk about talking in IT contexts, it is still writing and the ability to express oneself verbally which is the basis of all communication and interaction on the Internet. These are IT's main arenas. As one of our goals was to further electronic grass roots democracy as defined in Olsson's second model, we considered it essential that the individual be able to rely on his or her own voice, and we stressed the importance of the written word as well as the potential of IT as a voice amplifier and megaphone.

The aim of writing was thus not solely to provide material for home pages. It was also used as a means of creating a unified whole, of providing a context as well as a tool for different elements of the project. Writing was also a way of creating a dialogue and stimulating reflection as well as personal development in, and throughout the group. It also worked as an aid to explaining abstract structures and complicated computer terminology e.g. when the group illustrated a link and how it works on a home page by using a written exercise. The participants wrote down their spontaneous associations to a particular word or a sentence on small pieces of paper. Once these had been collected in and put on a noticeboard, the connections between the texts were drawn in with the aid of lines. A number of possible crossroads were gradually identified, and the result was the creation of a network in concrete form. We could then follow up the exercise with a discussion about how links work on a home page.

¹⁸⁹ Olsson, 1999, pp. 62-63

¹⁸⁸ Kahlert, 1997, p. 19

¹⁹⁰ See, for example, MeKay, 1998, p. 187

3.1 The Home

A vitally important part of making the results of the women's work visible was to initiate the creation of virtual fellowships and communities. The first stage in this process was to start creating the project's web pages, where the participants were given the opportunity to publish their work and http://www.ronneby.se/dialogue/Ksn/wwn.htm. The web site took the form of a four-roomed house. This graphical design was inspired by Virginia Woolf's thoughts in the classic essay "A Room of One's Own". In this essay, Woolf describes the early twentieth century female author's right to a physical and social space in which to produce her work.¹⁹¹ Times may well have changed but the woman's need of a space of her own, where she can think and feel at leisure, and where personal expression is permitted to grow and develop, is every bit as important today. Internet can be seen as a modern public arena. This can be put to private use, and on one's own conditions, by creating a symbolical and real room on the Internet. The latter can be furnished with one's own thoughts, visions and dreams. It can also be seen as a way of re-conquering the symbol of "the home", which throughout history has closed in the woman in the private sphere, and shut her out of the public one. This re-conquering and re-definition of the home is particularly significant given that the latter is closely associated with the place and task of woman in western society. It is always present, accessible but invisible. 192 Our "home" on the Internet opens up new, exciting worlds, in the private as well as the public sectors.

3.2 Individual, Collective and Public Writing

The rooms represent different aspects of writing which have always run parallel at different levels: individual writing, collective and public. The four rooms consist of the Portrait Gallery, the Individual's Own Room (containing poems and stories), our Pantry (with recipes and gastronomic memories) and the Discussion room (a forum for discussions). The categories are neither clear-cut nor separate, however. Everything is woven together and intermingled. In the Discussion room, for example, a wide range of topics is discussed, from the existence or otherwise of rhyme forms, funny stories about the wisdom of children, to the problem of unemployment, and anger at the bombing of Kosovo. In the Individual's Own Room, where it is possible among other things to read personal childhood memories, there is a description of a family party described through the eyes of a child, and an authentic description of class differences in modern Sweden.

¹⁹¹ Woolf, 1958, p. 11

¹⁹² Star, 1996, pp. 31-34

Everything is presented in the public sphere, i.e. on the Internet. In this way, the division or dichotomy between private/public is dissolved in a very obvious way.

These living examples of events experienced, feelings and thoughts can be regarded as an embodiment of history and the present, and are as such a clear reminder of the fact that a dichotomy between the public and the private is both artificial and irrelevant.

3.3 Making Yourself Visible in Writing

The texts of the participants, which were by and large autobiographical, literary or simple, were based on experience, a form of writing often associated with women. The autobiographical contributions of our groups cover a wide range of subjects e.g. childhood memories to thoughts about working as an assistant to a handicapped boy. Some women described their personal relations to computers. One wrote about her fear of getting old and not having anyone to care for her. One diabetic described in poetic form her mixed feelings about food and cooking. Describing yourself with the aid of metaphors is also a way of reflecting on the creation of individual identity, which consists of many different parts. One of the women wrote in her subevaluation, "writing assignments such as 'Describe yourself as a house' or 'Home homeless' has given me a new insight into myself, who I am, what my life is like and why my life is as it is". On another level, such writing tasks can expose the traditional, historical and cultural expectations and demands which influence the creation of female identity.

3.4 Writing Together

Our Pantry, or the virtual cookery book on the home page of the project, is an example of writing together, the aim of which is to draw out invisible knowledge and experience. To present the experience of many years of cooking e.g. how potato dumpling mixture should be squeezed to give it the right consistency, is an example of invisible knowledge which deserves attention. Another example of joint writing within the group is the latter's collective effort to formulate questions for local politicians. These questions were to be included in a debate on the local municipal authority home page. A third example is where the participants wrote an informal letter to Swedish members of the EU Parliament to inform them about our project, and to investigate the possibility of a financial contribution to a study trip to Brussels.

Judging by the evaluations, the experience of being able to write - both as an individual as a member of a group -, of ultimately being able to transform material

for a home page, discuss writing in general and produce personal texts to be read out loud to the group, has been the most important result of the project as far as the participants are concerned. Being able to share with others one's thoughts and reflections about different texts created new perspectives, and encouraged the writer to think again and revise her text. In some cases, it might even have led to a reinterpretation of the personal experiences at the heart of the text.

4. Concluding discussion

As a way of rounding off, let us just join together the two main actors, the Discourse and the WWN project, in an unusual final discussion and summary.

4.1 The WWN Project Meets the Discourse

Scene: a typical, somewhat run-down conference room with the usual conference room furnishings (a large oval table, 16 chairs with metal legs, white board and overhead projector).

The roles: the Discourse and Women writing on the network, the (WWN) project.

Discourse says:

- IT is important for democracy.

The WWN project says:

- What democracy? Do you mean grass roots democracy or just the good old parliamentary sort that's going to be given a new lease of life with the aid of IT? Discourse answers:
- Hmmmm All citizens will be able to participate and get involved. [Discourse stresses official texts with dignity, like a declaration of independence based on genuine human values. When scrutinised, however, the rhetoric is ambiguous, and the WWN discovers that the same old expressions are simply repeated in the new discussion document].
- The WWN asks:
- What do you mean by "all"? Do you really mean everyone except women? Discourse:
- No one wants to stop women using IT. Let me contribute some money and a project. Here you are! WWN:
- (Oh, what shall we do now?) We must thank him.

WWN goes home and starts to plan:

- Now we've found the crack, girls. Why don't we do an IT project with a feminist profile, in which we can combine IT training based on grass roots democracy and the concept of empowerment as a basis for the development of democracy. Writing will be a way of discovering our individual and collective voice, and making it heard in public.

WWN goes back to Discourse and asks:

- At what level are all citizens invited to join? Do you also want discussion partners, and joint agreement at the planning and decision stages?
- Discourse:
- Hmmm \dots you women aren't interested in politics. Look at the figures! WWN:
- That all depends on how you define the word politics, doesn't it. Who says that politics only belongs to the public spheres reserved for political questions? Who says that the present structures and forms are the only right ones? Political elements are found in the private sphere too, and vice versa, you know.

Discourse:

- Of course it's grass roots democracy we're after! WNN:
- If you really want grass roots democracy you'll have to work according to a totally different model. It's a different kind of involvement, with different temporal considerations, forms, questioning of existing structures.

Discourse:

- You girls should keep to the political sphere and make your voices heard. It's much better and easier to get out on the Internet.

WWN starts to wonder what this 'voice' consists of:

- You can't talk on the Internet. The only way of communicating is by writing. Then we'd better get on with developing our writing skills on the individual, collective and public levels.

Discourse:

- [indulgently] Yes, yes.

WWN:

- How can we connect back to the creation of the predominant discourse? How do we make experience two-way? How do we conquer and re-define the public arena - without a project?

Discourse:

- [silent]

WWN [final lines]:

- Cracks make possible small projects with a definite time limitation, as well as a number of other activities -- but is it basically permissible to re-create the predominant IT discourse so that the regulated order of discussion is given a new nuance, and becomes deeper? Place, time and money are fixed factors, but the effects are restricted by these preconditions just as the project form itself has fixed time limits. A project often lives independently of existing structures. Why does no one ask for an overall view which guarantees continuity and a firm base? Is the

demand for involvement genuine? [hesitant] We mustn't forget the new experiences of the participants, and we shouldn't belittle the value of their experiment. The project is currently being continued in a writing drcle. Some of the women have started new IT courses, or decided to carry on studying. Some have become members of a large regional network. And we all continue to re-create the discourse.

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CURTAIN

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