Two faces of autonomy: Learning from non-users of an e-service

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Abstract

There are many reasons why citizens do not use online eGovernment self-services. In this study I explore how citizens communicate with the Norwegian Tax Agency Call Centre about problems and issues when doing automated taxes. Automated and online tax is studied by the imprint made on the call centre. The callers are understood as non-users of the agency online services. Qualitative research methods are used with empirical data mainly from co-listening to the telephone calls. Feminist theory of relational autonomy is used to analyse and discuss how autonomy is supported buy the tax advisors. I find that many advisors differentiate their response depending on how they understand the life situation and needs of the caller, and suggest that two kinds of autonomy for the citizens are supported by the advisors: do-it-yourself autonomy and duke autonomy. Both may support autonomy in the citizen albeit in different ways. Listening to the non-users gives access to some of the citizens who will benefit from support for duke autonomy.

1 Introduction and background

The Norwegian Government has formulated its ambition of an interactive society where all citizens are offered and can make use of digital services for their communication and transactions with public agencies in the white paper "An Information Society for All" (FAD 2007). Our democratic information society will need to provide online services for all.

Web pages are to an increasing degree the face of Government as it presents itself to the citizens for public information and e-services (Thomas and Streib 2003; Reddick 2005a). There are reasons to believe that the ability to use online services is not distributed evenly among the citizens. However, a citizen perspective is only present in a few eGovernment studies (Reddick 2005b; Axelsson et al. 2010); and little is known of how the users evaluate their experience of a government web site. The relationship between measured website quality and user satisfaction is weak (Sørum et al., 2011). In addition, the digital divide may be wider when it comes to usage of eGovernmental services compared to usage of the Internet in general. US eGovern-

ment users were found to be younger, wealthier, more urban, better educated and more likely to be white than the average Internet user (Thomas and Streib 2003). Some citizens are not able to use an eGovernment website, either temporally or because they never use the Internet.

Using online self-services might present new challenges for the citizens. They will need some basic understanding of the domain area and need to apply rules and regulations on their own situation. They will as well have to interact with more or less well designed and robust IT-systems (Sørum et al. 2011). eGovernment services may stimulate a shift to more rule-based communication with digital systems that follow rules blindly, while a human case handler can use discretion in individual cases if needed (Bovens and Zouridis 2002; Reddick 2005b). Transparency of digital rules and calculations can be a challenge (Bovens and Zouridis 2002), where paper forms can provide an overview and be a source of teaching the citizens the relevant rules and conditions that apply (Axelsson et al. 2007). However, most agencies still provide alternative channels for contact with citizens, such as a counter for face to face contact and call centre services for questions from citizens to be answered on the phone. When the citizens have a problem they contact the agency by phone (Reddick 2005a). As many public offices are closed down the importance of the call centre services as a complementary service and source of information in addition to the website is increasing (Thomas and Streib 2003).

These observations are important in order to understand the specific case study I present in this paper, which is about how the Norwegian tax agency communicates with the citizens. The Norwegian tax agency encourages the citizens to use the online self services to handle their tax when necessary: to check, correct and submit the tax return form or order a tax card. The tax agency communicates increasingly with the citizens via the web pages, which to a large degree are the citizens' main source of information about tax issues (Synovate 2010). The website contains information about tax rules and regulations, along with a few transactional online services such as changing and ordering a tax card, and checking, correcting, or submitting the tax return.

Doing taxes in Norway is now fully automated, based on data that the tax agency collects from employers, banks and some other institutions. Once a year the citizens are required to submit the tax return form and this can be done by default by doing nothing. When automation is not enough and some issue needs to be handled manually, the citizens can call the Tax Information Call Centre (TICC) where tax advisors answer questions on the phone.

Knowing your taxes is a democratic issue. On a personal level, knowing one's taxes is related to citizen autonomy, a concept I will explain later. Doing taxes is a duty, and the citizens cannot unsubscribe or chose some other provider if they do not like the services for doing their taxes. Everybody has a right to understand the basis for their tax payments - at least so that they can argue and complain if they think something is wrong.

This paper reports from a study of how the communication between the citizens and the tax agency supports (or not) the citizens' autonomy in their handling of their own tax. The study addresses the questions and problems the citizens take to the tax advisor at the call centre and how the advisor helps. How does the TICC communicate with the citizens? How are the callers and their issues differentiated and handled by the advisor? How is the autonomy of the callers supported by the advisors? The

paper argues both theoretically and empirically for the necessity of differentiating the support of the caller's autonomy. The background for this study is the project "Automation and Autonomy" at the University of Oslo where we study the relationship between citizen autonomy and automation within different topic areas.

The contribution of this paper is twofold. One is the notions of *duke autonomy* and *do-it-yourself autonomy* to conceptualize the different ways the advisor supports the callers' autonomy. The other is the methodological approach of co-listening to telephone calls to the call centre as a way to study non-users of an online e-service, which is a rather new method to gain access to the citizens in private. I will present some reflections on the use of this method.

This paper is structured as follows: In the next section I present related research about non-users, call centres and rational thought. Then I define and discuss the notion of autonomy and present theory about relational autonomy. Next the research setting and method is described. In section six the analysis is presented, illustrated by two telephone calls from citizens. And finally I discuss the results and the different conceptualizations of autonomy. The last section concludes the paper.

2 Related research

2.1 Studying non-users of an online service

There are several reasons for citizen's non-use of a public web site. Some do not have access to the Internet, cannot use the Internet or do not even attempt to use it for tax purposes. Some try to use the web site but experience some kind of problems and pick up the phone instead. Some have used the website but do not receive their tax card as expected later on. These experiences are important for understanding how citizens experience and handle the automated tax.

The callers to the TICC are seen here as non-users of the online e-service at least at the time of the call. The notion "non-user" includes the users who experienced irregularities and problems as well, and decided to follow up by using the phone. When they tell the phone advisor why they did not use the online service, or why they did not succeed in using it, these citizens may give valuable reports about the "flip side" of the web pages.

Paying taxes is mandatory; and the citizens have little choice about how to handle their taxes online. The whole population is prospective users and it is only one service provider. This makes doing taxes online different from most commercial online services, and is an incitement to take non-use seriously as a source of insight for improving the experience and feasibility of doing taxes.

There are few empirical studies of those who make little or no use of ICT (Selwyn 2006). Problems and solutions perceived by the non-users might be important for technology design (Herstad et al. 2002; Verkasalo et al. 2010). Taking non-use seriously may provide new understandings of how "technology and practice mesh and fail to mesh" (Satchell and Dourish 2009). However, it is important to keep in mind that non-use of computers and online e-services need not be a problem for the non-user, who might choose to spend their time and engagement otherwise (Selwyn 2006). However, non-use can be a problem for the agency who wants to direct the citizens towards self-service.

Use and non-use are not dichotomies, and Selwyn (ibid.) sees the user/non-user dichotomy as a fallacy. Non-use is not an absence or a gap, but "often, active, meaningful, motivated, considered, structured, specific, nuanced, directed, and productive" (Satchell and Dourish 2009). We have to take non-use seriously and admit that it would be too restrictive to see it as merely a step towards adoption and use (ibid).

Satchell and Dourish (2009) discuss six forms of non-use that will be consequential for HCI research and practice. I see use in a wider context than HCI but find these forms still to be useful. I will briefly explain these forms here and return to them in the discussion in Section 7. The six forms of non-use are:

Lagging adoption: This group is non-users on their way to become users, "laggards" in the theory of diffusion by Rogers (2003).

Active Resistance: This group are those who steadfastly refuse to adopt a technology, in active and considered ways.

Disenchantment: This is a variant of active resistance associated with nostalgic scepticism towards technology use, with a "wistfulness of a world passing out of existence".

Disenfranchisement: Particular social groups can be deprived of rights by particular kinds of technological arrangements, for example related to physical or cognitive impairments. Disenfranchisement means "deprivation of a right or privilege" (Concise Oxford Dictionary, 1999). Sources for disenfranchisement may also be economic, social, geographic or infrastructural.

Displacement: A person does not use the technology directly but with the help of a friend or service provider.

Disinterest: The broader population is not interested in the same technology as the research community (Satchell and Dourish 2009, page 13).

The non-users of the agency website can belong to any of these groups. In this paper I am interested in how an analysis of non-use can enrich our understanding of citizen autonomy

2.2   Rational thought and individual choice

Autonomy is about being able to make own choices, and is traditionally equated with voluntary, rational choice. I will define and discuss autonomy more in the next section, in this section I will present rational thought as a background and a prerequisite for autonomy.

Being able to make good choices for oneself will depend on knowledge and competence within the relevant area. If this knowledge is absent or weak, or the area is complex, having to make own choices may give bad results. For instance, US insurance plans are so complicated to understand that even professional economists cannot decide on the best plan for themselves (Thaler and Sunstein 2008). It can be no easier for ordinary people to make good, informed choices in such cases. People often choose poorly when it comes to difficult choices where most people do not have the competence to evaluate the choices and put one choice up against another. Thaler and Sunstein (ibid.) suggest improving the *choice architecture* to help people choose better for themselves. Good defaults that can be sufficient in many cases, and if possible are better than not choosing, together with historical data from earlier experiences for comparison and learning purposes, are the practical contents of the choice ar-

chitecture. Their argument is based on empirical work supplemented with critique of rational choice (Kahnemann 2011).

The need for choice architecture is based on that rational thought has its limitations (Thaler and Sunstein 2008; Kahnemann 2011). Rationalistic models about thoughts and decision making are challenged by Kahnemann (ibid.) who argues that our cognitive abilities come in two forms: the fast, emotional and intuitive reasoning and the slow, rational and logical reasoning. We use the fast and emotional way of reasoning more often, in most daily situations, and the slow, logical reasoning when rational thought is needed, e.g. when deciding on which electricity provider to choose and how to change a tax card. The slow, logical reasoning can be exhausting, and we save mental resources by using the fast, intuitive way of reasoning more often.

How individual choice is understood has its limitations as well. Mol (2008) argues that individual choice is nowadays seen as an ideal, and "celebrated" in wider contexts of society, such as organising schools, raising children, cooking food and in health care. However, individual choice alone does not guarantee that good choices are made. If the individual choice is not met with a concerned and caring perspective honouring individual choice might lead to low quality on the services provided. Mol's empiric material is from the health care sector, where good care for the patient is central. Her analysis is valid for other areas where a perspective of others' welfare and well-being is present.

Mol (2008) writes about two logics for how a patient's choice is understood by health workers. One is the *logic of choice* and the other is the *logic of care*. The logic of choice is connected with individualistic understandings of personal choice, independent of the basis and background for making good choices. She gives an example of a psychiatric patient who does not want to get out of bed one day. It is his choice to stay in bed as long as he does not harm others. If a patient at a diabetes clinic does not show up at his appointment he is exercising his choice not to do so. Within market thinking, the clinic will acknowledge his individual choice to freely choose some other service.

The logic of care is based on a concern from the health workers in what are the needs of the patient. If the patient does not want to get out of bed, a caring doctor would send a nurse to his bed to talk with him, and perhaps get an understanding of if something is troubling him. The patient who does not show up at the appointed time at the clinic has perhaps some problems in relation to his treatment. Within the logic of care the clinic will try again to get in contact with the patient, make a new appointment and see if the treatment needs some justifications. Within the logic of care, the patients are taken care of more according to their health related needs than to their individual choices (ibid).

3 On relational autonomy

The Concise Oxford Dictionary (Oxford Concise Dictionary 1999) defines autonomy as "the possession or right of self-government" or "freedom of action". The etymology is from the Greek *autonomous* which means "having its own law", first applied to the Greek city-state. Being able to act according to own law implies making own choices and being self-determined. The decisions and actions of an autonomous human are her or his own, he or she is able to act freely (Dworkin 1988).

The traditional picture of an autonomous human is the rational man making his own decisions influenced by no one (Mol 2008). However, this individualized notion of autonomy has been criticised for being based on contested assumptions about self-hood and agency. The conception of autonomy needs to reflect our social embeddedness where relations of interconnections and dependency are recognized.

Clear voices criticizing the traditional, individualistic notions of autonomy are found among feminist scholars. Mackenzie and Stoljar (2000) argue that "the charge is that the concept of autonomy is ... inextricably bound up with masculine character ideals, with assumptions about selfhood and agency that are metaphysically, epistemologically, and ethically problematic from a feminist perspective ... The notion of individual autonomy is fundamentally individualistic and rationalistic" (ibid, p 3).

Feminist researchers have argued that the problem is not "autonomy" as such but that it is so strongly connected with individualism. Code (2000) argues that autonomy has become mixed up with individualism. Instead of renouncing the notion altogether feminist theory opens up for disentangling autonomy from individualism and reconfiguring the concept to a relational understanding (Mackenzie and Stoljar 2000). Social contexts can have effects on individuals' capacity for autonomy (ibid., p 25). Feminist theory explains autonomy as something gradual, which can be achieved to a larger or lesser degree and in different ways (Code 2000; Mackenzie and Stoljar 2000; Ells et al. 2011).

A relational understanding opens up for a more nuanced view of autonomy. Of particular interest in the following analysis is the focus on advocacy relations as a prerequisite for autonomy (Code 2000). "Advocacy" means "support" or "defence", and stems from the Latin word *advocare,* which means "call to one's aid" (Oxford Concise Dictionary 1999). Code argues that personal autonomy will always be dependent on some kind of advocacy relations with other individuals or groups. Within the individualistic understanding of autonomy, dependency on advocacy from others will be the antithesis of autonomy. However, privileged groups have always expected and experienced advocacy from others, in the form of services or benefits from other, often less privileged groups.

The individualistic understanding of autonomy is criticized for taking support from others for granted, that it "glosses over the extent to which autonomous man himself is dependent on patterns of invisible advocacy" (Code 2000, p 196). Relational autonomy opens up for seeing autonomy in a wider context. Humans can experience different degrees of autonomy in different situations and when intra-acting in different networks.

4 Research setting

The field work was done at the Tax Information Call Centre (TICC), which is a unit within the Norwegian Tax Agency where advisors answer tax questions on the phone. The TICC is there for those who need help, or cannot use the online self services. A citizen can also meet up at the counter at a local tax office to talk with a tax advisor in person, however their numbers are reduced the last years as the local tax offices are closed down. The TICC is answering all calls from the whole country, and is first line support about tax questions together with the counter.

The advisors sit in an open office landscape, each with a small desk. Some advisors have posted notices on the walls of their desk with detailed tax rules and regulations. Some have a pile of books and leaflets at their side; others have posted a note on how to use some of their IT systems. Many advisors have a blank sheet of paper at their desk to make notes and small calculations during the calls. If needed, they use a small handheld calculator. A large screen at one wall displays information about average waiting times and other statistics for the incoming lines. This screen is located in the management's part of the office landscape and is not visible for most advisors in the landscape. They can instead look up information about the incoming lines and waiting times on the telephony management software on their PCs.

Each tax advisor answers incoming calls on different lines, divided along tax related topics. The advisors are on duty according to a schedule which gives little room for deviations but ample time for reading up on new tax regulations or the use of new IT at their workplace. Their adherence to the schedule is measured, as well as how many calls they answer, but not how long time each call takes. It is considered better to spend time with a caller so that he or she understands the issue properly and does not call again.

The tax advisors know the tax rules and regulations within their competence area mostly by heart. They answer the calls in various ways, depending on the type of question and the needs of the caller. If needed they look up the internal databases for information about the caller's individual tax data. Many questions can be answered by providing information about tax rules and regulations; others will require that the advisor looks up personal information about the caller in the agency databases. The advisor can reroute calls to case handlers in other units of the organisation if needed. The phone calls can vary a lot, and what is easy for one caller can be problematic for another one. Many calls are about the web site and the online e-services.

The advisor performs different actions depending on how the conversation unfolds and the material content of the databases, and answers the citizens' questions based on how they interpret the citizen's needs. Some questions are answered by the advisor telling the callers how to navigate the web pages and find the answer there. For instance, TICC's statistics for 2011 say that 8% of the calls to the line for employees and pensioners are about when they can expect their excess tax money back. This is information which is published on the web page. The web pages also contain e-services where the citizens can order an exemption card, change a tax card, or fill in the tax return form.

It happens that the caller has the e-service available when she calls, and is happy to receive guidance from the advisor on how to navigate it. Some claim to usually use the e-service but right now they are without access to the Internet. Some have not even tried to access the e-service because they do not expect to be able to find out what to do. For many navigating the Internet is not the issue, but they need help with the tax rules and regulations.

The TICC received 2,7 mill calls in 2011. 1,4 mill of these calls were about personal tax. The average call to the TICC took 3:49 minutes in 2011, a figure with large variations. Many calls are shorter, for instance if the advisor only looks up an address or opening hours of a tax office requested by the caller.

5   Research methods

The study was initiated as an open, exploratory study to get an understanding of the issues that citizens calling to the TICC experienced as problematic. The main method has been co-listening to the telephone calls from the citizens, which will be described in more detail than the other methods. When co-listening I have been sitting beside the advisor at his or her desk with a headset of the same kind as the advisor use. Both headsets may be wired or wireless, depending on the preferences of the advisor. The co-listener's headset is equipped with a microphone which I took care not to use. I could hear what the advisor and the caller were saying, and I could see what the advisor was doing. I could see which computer programs and databases the advisor used, what kind of data he or she looked up, and read the information on the screen. Sometimes I was able to ask the advisor questions about the calls in between calls. During peak periods I did not disturb the advisor by asking questions, but as I got more familiar to the advisors they sometimes provided comments or explanations voluntarily. These explanations helped me to a better understanding of what the calls were about and how they interpreted them. From April 2010 to February 2012 I co-listened to 474 telephone conversations sitting together with 14 different advisors.

The tax agency is concerned about privacy issues. Co-listening is a routine activity for purposes of quality assurance and training of new advisors. All personnel doing co-listening have signed the Tax Agency's standard non-disclosure agreement, including the researcher. Because of ethical concerns the calls are not taped. The Tax Agency does not tape record calls, and I wanted to interfere as little as possible. During co-listening I made notes on paper. This provided me with few verbatim quotes, and my notes from most calls are shortened and simplified on the fly. Because many calls have sequences which are relatively similar, this is not necessarily a problem, but for long calls I was concerned about taking notes of what caught my interest at the time. Field notes with a transcription of the calls were written after each session at the call centre for the 350 most recent calls. I tried to write up the field notes shortly after the co-listening sessions; even though my notes could be brief I was able to add a lot from memory.

Making notes without recording is quite similar to doing observation while taking notes, or observations with note-taking afterwards. You take notes from what catch your attention then and there, usually guided from your analytical starting point which will be iterated upon during field work. In this way field work and analysis goes to some degree hand in hand and mutually influence each other (Klein and Myers 1999; Crang and Cook 2007).

Co-listening has been mixed with participant observation, which took place as a running activity while at the premises. I have observed the activity of the other advisors, posters on the wall, status information on a screen in the office locale and notes on a whiteboard in the corridor. I have taken part in discussions between the advisors during breaks.

Other methods have been interviews and document studies. These methods fill out and make a background for understanding the advisors' considerations and the topics and issues of the calls. *Interviews* with eight call advisors and their managers have given background information about which kinds of calls they find difficult to answer, and to understand some aspects of their work practices: how they use the PC and the databases, and how a phone call is logged in their systems. The interviews

have been tape recorded and transcribed. Initially the observations and interviews were concerned about what kind of computer support was employed, and how the advisors used it during the phone calls. As I learned more, I was able to see how they used the computer support differently for some calls. Later observations and conversations focused on how the advisors adapted their replies and directed the conversation with the caller according to their interpretation of the caller's needs and what made this particular issue difficult for the citizen. *Document studies* of strategy documents and annual reports of the TICC and the Tax Agency have given a background for understanding the agency and the relation between the larger Tax Agency and the TICC. I have mostly read steering documents, internal statistics and annual reports. These documents told me about the goals and dilemmas for the activity, and indicated a tension between the strategic goals and the practical experiences of the advisors, which needed to be negotiated. I will come back to this in the next section.

6   Into the telephone calls

A starting point for the analysis was the observation that surprisingly many easy questions, from a tax point of view, were asked. Really complicated questions regarding tax issues were rarely asked. After some time I understood more of the questions and could see that different advisors responded differently to the requests from the callers. Sometimes the advisors went at length to help a caller or for seeing a call as an exception where they could deviate from the routines. I was looking for a principle to understand and describe these differences. Relational autonomy with a focus on advocacy relations provides the analytical lens for categorizing the telephone calls into two broad groups: those where the advisor helped the caller to self-service and those where the advisor decided to provide more individually adapted help to the caller. As a basis for the discussion in this paper I have chosen one illustrating example from each group.

A good response from the tax advisor will often involve a conversation with the caller to understand the problem, as well as looking up personal information in the agency's databases when needed. First the advisor will seek to understand the request of the citizen. This is not always as straightforward as the citizen cannot be expected to describe the situation correctly regarding the relevant tax rules and regulations. The advisor extracts and interprets from what the caller says to which tax rules and data registers are involved, for instance to understand if a question concerns the tax card, the tax return form, the tax assessment or tax payments. This is collaborative diagnostic work between the caller and the advisor (Büscher et al. 2009). Often register data can describe the situation better than the caller does. An experienced advisor can for example see from the Advance Tax Register if the tax card looks wrong, with the consequence that the tax payments withheld from the caller's salary may be too high or too low.

Many questions can be answered by information already present on the web pages of the agency. One advisor explained that many citizens call in such cases because they want to double check their understanding of the rules and regulations with a human advisor, to avoid excess tax or penalty tax if they have misunderstood the rules. Some citizens explain on the phone that they do not have access to the Internet, or are not comfortable using it. Other citizens, in particular young people, are often

experienced users of the Internet, but have little knowledge of tax rules and regulations. One advisor explained that "*the winners in this system are those who have used the old paper form*", referring to that middle aged or older citizens who have experience from using the previous paper based tax return form express a better understanding of tax rules and have a better basis for using the current day e-service.

 According to their steering letter for 2011 the TICC advisors shall "to a larger degree navigate and advise [the callers] in the use of the online self services" (my translation from Norwegian). This often creates a dilemma for the advisors, who experience that many callers find the agency web pages and e-services to be difficult to navigate and use. One advisor said: "*one facilitates a little so that they shall be able to use our systems. Unfortunately [the web pages] are quite difficult to use for ordinary people, at skatteetaten.no it is not, ... what we want the public to use there is not optimal*". Another advisor said that it is not the average citizen who calls, indicating that those who do not call can to a higher degree solve their tax issue themselves.

It is considered to be better for the advisor to spend some time on the phone to teach the callers how to find the e-service in question so that they can help themselves. This is expected to reduce the number of calls in the future. However, the advisors have many sources to consider that a particular caller may need more help than others. In addition to what the caller explicitly says, the advisor listens to how the caller describes the issue, in particular how he or she use tax terminology, and gets an understanding of the caller's tax knowledge and possibly also life situation. From the advance tax register she can get an indication of the caller's economic situation, and if a caller receives unemployment or welfare benefits. Some citizens need more help than others, and many advisors acknowledge this and accommodate.

A correct tax card will be important for a realistic personal economy during the year. By giving the callers differentiated help, depending on their needs as the advisor understands them, he or she can better adapt the help and advice. Both helping the callers help themselves, and helping the caller directly will support the callers' autonomy in economic affairs, although in different ways.

In the following, two ways of supporting the caller's autonomy will be presented. For illustrative purposes, each kind is described by an actual phone call about a need for a change in the tax card. I have chosen two very different calls that illustrate the range between two poles. The first example is chosen to illustrate a phone call where the advisor helps the caller to help herself, supporting a *do-it-yourself autonomy*. The second example is longer, and illustrates a case where the advisor chose to help the caller directly, supporting a *duke autonomy*. The conversations are shortened and simplified because of privacy reasons, and because the handwritten notes cannot keep track of all details of the conversations.

6.1 Do-it-yourself autonomy

A woman calls, and opens by saying that she needs to make some changes in her tax card. The advisor replies by asking her if she knows that she can do it online herself. She immediately replies "*Oh is that possible*". The advisor tells her that she will need her PIN-codes for logging in. The caller replies that she has her PIN-codes, but sounds a bit hesitant. The advisor encourages her by telling that it will be much faster for her to log in and change the tax card online, and she will receive the new card faster than filling in and returning a

paper form with the same information. That seems to settle the matter for her, she sounds content and closes the call by saying "*Thank you, I will do that!*"

The advisor tried to direct the caller to the e-service. The caller was a bit reluctant but after a little enticing from the advisor about it being the fastest way; she said she would do it online herself. I consider this an example of do-it-yourself autonomy. For a citizen who understands and can apply the tax rules relevant for her own situation, knows her PIN-codes, is able to log in, use the online self service and gather which figures should be filled in where in the online form, the self-service can give increased autonomy. She learns how to do it herself for future needs. A prerequisite for do-it-yourself autonomy is that the citizen can learn and understand the relevant tax rules and regulations, diagnose her own situation according to the tax rules and employ them in the personal case, perhaps with a few explanations from the advisor over the phone.

"Do-it-yourself" is an established concept and covers many phenomena like home improvements, gourmet cooking, handicrafts, rock music etc. Special tools and instructions are developed to facilitate do-it-yourself. The recent years work has been delegated to citizens at home, for example Internet banks and airline booking (Cavanagh 2008). Do-it-yourself is attractive when it is chosen voluntarily, but not necessarily beneficial when it is thrown upon oneself.

6.2 Duke autonomy

A man calls the TICC. He speaks a Nordic language other than Norwegian, but the advisor can see on the phone display that he calls from a Norwegian number. He opens the conversation by saying that he is a single father and that "Everyone I talk to say that I pay very much tax". He states that he does not understand advance tax and percentage tax. The advisor asks for his national identity number and looks him up in the Advance Tax Register of tax cards. There he finds that the caller's tax card specifies 30% tax to be withheld from his monthly payments. The caller explains further that he became a single father recently because the mother died in childbirth, and he is now receiving unemployment benefits from the welfare agency. The advisor looks him up in the Population Register and can confirm that the caller is a single father. The advisor says "I will help you here and now" and proceeds with checking every figure in the Advance Tax Register with the caller. The advisor asks:
 "Do you have child's pension as well?"
"Yes"
"Do they withhold tax from this too?"
 "Yes, 30 %"
Then the caller gets in doubt and cannot tell how tax is withheld from the child's pension. The advisor enters new figures directly into the Advance Tax Register, calculates a new advance tax percentage and tells the caller that 17% will be the new percentage. The caller sounds content when he replies that this is what the other single parents claim they pay. The advisor says "For safety's sake we go for 20%" and the caller agrees, and adds that he wants to avoid having to pay outstanding tax when the tax assessment is done next year.

The new tax card will be sent to the welfare agency electronically and automatically. The advisor proceeds to print out a tax card that will be mailed to the caller so that he can give it to the issuer of his child's pension. The caller ends the call by thanking the advisor, who replies:
"You should preferably use the Internet for such things"
"Yes, but I do not understand it".
The advisor then prints out a paper form for changing the tax card to send the caller, and tells him to use it if he some time in the future gets paid work. He explains that in such a case he will only need to change the figure for gross monthly income and return the form to the tax agency.

It is not clear from the start of the call that the caller understood that his question concerned the tax card, and the advisor did not even suggest that the caller should try to fix it himself online. Because the caller said that he did not understand percentage tax, and his situation sounded both sad and grave, the advisor decided to help him directly himself. When looking up the information in the database, he could see that the tax card was not beneficial for the caller. He did not even ask if the caller had the PIN-codes present. The caller did not only need help with filling in the form for generating a new tax card, he also needed help with understanding the tax system and how percentage tax is functioning as well as relating the tax rules (which he did not understand) to his own life situation as a single father who received benefits and pensions.

Information about how benefits and pensions will be taxed is available from various sources, among them the web pages of the tax agency. However, a search for "child's pension" in Norwegian gave only the front page of the agency as a result, with no particular information about child's pension (April 2012). However, to search for this information one will have to know there is something called "child's pension". The citizen who cannot within a reasonable effort figure out which tax rules applies to his situation, how they apply, or how to log in to the online self service, risks being left alone. His autonomy may be challenged as there is a risk that he cannot change his unfavourable situation, even if it will be detrimental for his economy.

This is an example of what I call duke autonomy. It is supported when the call advisor helps the citizen by diagnosing the situation, applies the relevant rules and regulations to the personal case in a way that benefits the caller, and executes the necessary changes in the database on behalf of the caller. The notion is intentionally chosen with a nice flavour ("duke") to create an opposite impression of being helpless or dependent, which is how people in need of help is often seen.

I can illustrate duke autonomy with the metaphor of a medieval duke who is getting a lot of services done for him by others. The duke receives help and support from others for personal needs, without it threatening his autonomy, or reducing it in the eyes of his surroundings. The duke does not need to do his own laundry, tailor his own clothes, and prepare his own food or fish, unless he does it for sports. Still we have no problems with seeing him with a high degree of autonomy. It is the duke who decides which areas or tasks he will attend to himself, what kind of help and support he needs, and trusts that others who know these areas will serve him.

7 Discussion

Self-services can be a challenge that reaches far beyond merely technically mastering them. In addition will the citizens need to understand the relevant tax rules and regulations, be able to interpret them in relation to their own life situation, and decide on a route of action if necessary.

A competent citizen handling his or her tax affairs alone can easily be seen as the quintessence of autonomy. On the other side, a person in need of help will not easily be seen as autonomous - both views according to the traditional, individualized understanding of autonomy (Code 2000; Mol 2008). However, there are many reasons why citizens at times cannot handle their economic affairs in their own best interest. All citizens will not always be able to handle their tax online without help. What makes a tax issue problematic for the callers has much to do with the life situation of the caller and the context of the call. The callers need the tax advisors to disentangle the knot of tax rules and own personal life situation (Bratteteig and Verne 2012). Problems and errors must be expected with complicated, rule-based systems, and the agencies and their routines must be tailored to handle them (Thaler and Sunstein 2008).

From a relational perspective on autonomy, needing and receiving help does not remove autonomy from a person. Relational autonomy is not a dichotome entity, autonomy can also be gradual. To be able to act autonomously everyone will need support and advocacy from others (Code 2000; Mackenzie and Stoljar 2000; Ells et al. 2011). The notions of duke- and do-it-yourself autonomy are suggested to illustrate different kinds of support for increased autonomy for a citizen calling the TICC. Duke autonomy and do-it-yourself autonomy transgress a possible dichotomy between traditional, individualistic understandings of autonomy and the relational one, as both allow for autonomy although in different ways.

The *do-it-yourself autonomy* is close to traditional, rationalistic understandings of autonomy (Dworkin 1988; Mol 2008). It focuses on the citizen handling his or her own affairs for instance with online self-services. Research in behavioural economics indicates that people do not always make rational choices in complex, formal affairs (Thaler and Sunstein 2008). Even though they do not use this terminology, Thaler and Sunstein (ibid) argue that making own choices in complex affairs might even threaten autonomy by deteriorating the life conditions of people. An example is a man who made choices about his pension, which led him to poverty as retired because of one company going bankrupt. Thaler and Sunstein (ibid) advocate *libertarian paternalism*, defined as a help "to nudge people to make better choices (as judged by themselves) without forcing certain outcomes upon anyone".

The notion of *duke autonomy* makes explicit that being autonomous does not exclude receiving help and support from others. The reference to "duke" is deliberately chosen, as we accept the duke way as autonomy, not dependency. The help a citizen receives is to support autonomy in other affairs, so that tax problems do not stand in the way of autonomy in other life areas.

A prerequisite for it supporting autonomy, and not merely a pampering of citizens too lazy to do their tax work themselves, is what Code describes as good advocacy, which depends on "epistemically responsible and sensitive negotiations" ((Code 2000), p 202). This is what I see the call advisors do when he or she negotiates the internal routines and differentiates between those citizens who can help themselves

when encouraged to do so and those who will benefit more from being helped directly. The citizens successfully using the e-service are probably content with do-it-yourself autonomy support from the online services. The non-users of the e-service will be more in need of support for duke autonomy from the advisors.

Thaler and Sunstein (2008) argue for a well-designed choice architecture, where the most beneficial choices for a person are set as the default. If the person so chooses, other choices may be done. The Norwegian Tax agency has in effect done this, many years before the notion of "choice architecture" was introduced, by providing the citizens with a pre-completed tax return form and automated tax processes. These can be changed if the citizen so chooses. However, good defaults are not sufficient for making good choices.

The tax advisors balance between the general instructions to navigate the caller through the web site and the needs of the actual caller on the line. They disentangle the tax issues and with responsibility and sensitivity support the duke autonomy of a citizen when appropriate. This support shows some similarities to good patient care. Patient autonomy is a goal in modern patient care, and will require helpful advice from health personnel based on a deep respect and best interest of the patient's needs, circumstances, family needs etc, set together with the possibilities and resources of the health care institution. "Particularized services" is the mantra, not "one-size-fits-all" (Ells et al. 2011).

There is some similarity in how the tax advisors support duke autonomy of some callers with Mol's (2008) logic of care. Both are about helping another person to a better life situation. The notions do-it-yourself autonomy and the logic of choice also show some similarity in that both imply that the citizen or patient need to be able to handle own needs individualistically.

It is one important difference between the two faces of autonomy and the two logics. The two faces of autonomy are not dichotomies. They are both understood as autonomy, albeit of different kinds, and the citizen's need for one or the other may vary from time to time and case to case. One citizen may be competent with online services and inexperienced with tax rules. Another may be competent in both but in a very problematic personal situation. I prefer to see that there are many shades in between the two kinds of autonomy. The two logics of Mol (2008) are conceptualised as separate and mutually exclusive, and they clash in the meetings with the patients and the health care sector. Only the logic of choice is seen as giving autonomy to the patient (ibid).

I think the notion of autonomy is useful, however it will need to be widened and reconceptualised to reflect that more than the privileged can receive help and support without loosing their autonomy. Individual choice is an important value and ambition. However, no single individual lives in a vacuum. Not the least in our increasingly complex, interacting society can one citizen master it all without support from others, more knowledgeable. We do not loose our autonomy even if we need help in some areas.

7.1 Listening to the non-users

By co-listening the researcher has given voice to the experiences of citizens that do not use the e-service, or do not succeed in using it. The access is limited in that it only allows a dialogue between the call advisor and the citizen, and not between the citizen

and the researcher. However this limitation is somewhat compensated for by the citizen being in a natural setting, doing something he or she would do independently of the researcher, and not in a constructed setting like a workshop, usability test or an interview. In this respect co-listening can be understood as an ethnographic method directed towards understanding the citizens' practices as they unfold (Crang and Cook 2007).

Many citizens who call the TICC report that they find the agency e-service and web site difficult to use. These reports can be helpful for a better understanding from the tax agency towards a better design of the agency websites and e-services. How this can be done will be a topic for future research. The callers are more in need of duke support than those who manage their tax without calling the TICC. Or perhaps they receive their duke support from other, private service providers? Differentiating between duke and do-it-yourself autonomy indicate that a variety of channels for interacting with the government must be available, an argument in line with Thomas and Streib (2003). If a citizen is directed to use a website which the citizen cannot use, this might hamper the autonomy of the citizen.

Direct citizen participation in development of eGovernmental services rarely occurs, but is an ambition within user-centred and participatory design (Axelsson et al. 2010; Borchorst and Bødker 2011). Co-listening can to some degree give a voice to citizens who would otherwise not sign up for participation in a research project. It does not presuppose that the stakeholders for the design of an e-service are known in advance (Lindgren 2012). It is also a way to get some access to private spaces and activities of the citizens as personal tax is a private affair and is often done in the home (Bratteteig et al. 2012).

A variety of research and evaluation methods enable researchers to listen to those who actually use a website or an e-service. This will not let us see the flip side of use. Of the six forms of non-use that Satchell and Dourish (2009) discuss, I found only displacement and disenfranchisement as reasons for non-use in my empirical material. In many calls the mother or father was calling on behalf of their displaced teenage son or daughter, or the caller is physically displaced from his computer at the time of the call because he is working on a ship at sea. In many calls the PIN-codes were displaced so they were not available to be used by the caller.

Of special interest in a discussion of civic obligations is disenfranchisement. I suspect disenfranchisement in the second example in Section 6 (the single father). There, and in some other cases, the online self service seemed to be a challenge in itself in addition to the tax rules and regulations that must be addressed. If the tax advisors cannot differentiate and provide duke autonomy support for some callers, those citizens risk being disenfranchised from more than merely tax matters. It might apply to their economic situation as well, with consequences for their life situation at large.

Satchell and Dourish (2009) argue for taking non-use on its own terms, not only as a step towards use. However, they discuss the implications of non-use for HCI research. I am more interested in reasons behind non-use, and how non-users are treated in the information society. In line with Satchell and Dourish (ibid) I will argue that technology use is not a moral obligation, and that researchers and practitioners take citizens and their concerns seriously on their own terms.

8 Conclusions

There is a lack of knowledge within the eGovernment literature about how online public self-services functions in use for the citizens. In this paper the citizens' problems and non-use of a public online service is studied by the imprint made on the agency phone service. Empirical data from the Tax Information Call Centre (TICC) is used to discuss how the call advisors differentiate their responses to the callers. My analysis shows that by differentiating their help, the tax advisors support different kinds of autonomy of the citizens, and I suggest the notions of do-it-yourself autonomy and duke autonomy. If the citizen sounds confident about using the Internet and logging in on the online e-service, the advisor argues for the fastness and flexibility of the citizen doing it herself, supporting the do-it-yourself autonomy. If the caller sounds bewildered or unable to try the online service, or does not have the Internet available, the advisor helps the caller directly, supporting the duke autonomy.

I have discussed do-it-yourself autonomy and duke autonomy against other related notions. Table 1 below sums up how these notions differ in their orientation towards concern for the benefit of others versus an indifferent stance towards benefits for another person.

Table 1: Summing up how these notions relate to concern for another persons' benefit.

Concern for others' benefit	Indifferent concern
Duke autonomy	Do-it-yourself autonomy
Logic of care	Logic of choice
Libertarian paternalism	Liberalism

In the left hand column, a concern for other's benefit is present to the degree that some responsibility is taken to achieve it. In the right hand column this concern for the outcome for the individual is not visibly present. These two columns are not dichotomies. Do-it-yourself and making own choices may well give appropriate and successful outcomes for the individual. Both presuppose that the individual is capable. However, this is not understood as the responsibility of anyone else.

I have argued that there are many reasons why citizens at times cannot handle their tax affairs online. The callers to the TICC are seen as non-users of the e-services provided by the agency at the time of the call. I present and discuss co-listening as an ethnographic method for getting experiences from non-users of the e-service. Listening to the non-users gives access to some of the citizens who will benefit from support for duke autonomy. Further research will be needed to see if the two notions of autonomy can serve as a background for design of eGovernment services.

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