



Addressing digital diversity: Care matters in vulnerable digital relations in a Swedish library context

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Abstract

As societies become increasingly digitalized, the requirements for inclusion continuously increase. In a Swedish public, municipal, library context, it is common that individuals who face difficulties related to digital technologies come and ask for help. In this paper, we explore care in relations constituted by individuals and digital technologies and analyze how care matters for digital inclusion. It builds on field studies in a Swedish library context and includes qualitative interviews, focus groups, and observations of employees working to support individuals with digital needs. In order to analyze the material, we apply the concept of care. In the concluding discussion, we argue first for viewing individuals as sociomaterial entanglements of relations constituted by humans and non-humans, second that these sociomaterial entangled relations are vulnerable, shifting, and fluid, rather than stable, and third that these relations are in constant need of care.

Key words: digital divide; care; individuals; sociomaterial; vulnerability.

1. Introduction

In an advanced digitalized society, humans become interconnected not only with the social organization, but increasingly with digital infrastructures, technologies, and systems (Pipek and Wulf 2009; Pipek et al. 2017; Karasti and Blomberg 2018). Hence, in their daily lives, individuals are expected to maintain a complex web of relations with various private and public organizations and institutions—relations which today are most commonly upheld through the use of the digital services. However, contrary to the official image of Sweden as a highly advanced, digitalized society, there are also indications that about one million individuals in Sweden are non-users or low-frequency users of digital services and communications, thus situating them outside the digitalized society (Internetstiftelsen 2018, 2019). Those who indicate less access and lower use of internet or digital technologies in Sweden are found in all age groups, but are dominated by 65+-year olds, with more of them living in rural areas than in urban areas and having a lower educational background and a lower income (Internetstiftelsen 2019). Furthermore, while digital technologies are increasingly integrated in public services, opening up for new possibilities for previously excluded groups such as those who are visually impaired or have reading difficulties, at the same time they seem to generate a new diversity of needs for support in terms of information, services, technology, or other literacies. Hence certain groups, for instance asylum seekers with no Swedish language proficiency and certain migrant groups with no or low general education or elderly people, face new difficulties under these circumstances (Bernhard et al. 2019).

The public libraries are commonly a support arena to help those excluded from digital services (Jaeger et al. 2012; Bertot 2016; Mersand et al. 2019), often prior to the government

realizing it. In Sweden, all municipalities are obliged to provide public libraries, which are considered an important part of the rather extensive Swedish welfare system. More recently, public libraries have become an important place for immigrants and asylum seekers to access information (Pilerot and Hultgren 2017; Pilerot and Lindberg 2018) and attend Swedish language training activities and introduction to society courses. These libraries are important also for other groups in vulnerable life conditions who need support with practical questions in order to manage their daily lives, including digitalized contacts with public organizations and the use of digitalized welfare services (Richter et al. 2019). By Swedish law, public libraries are obliged to work with information support and communication to the wide public (mass education), including access to digital technologies (Swedish Statute Book 2013:801). But the volume of the questions concerning digital problems has increased and the nature of the questions has diversified to the point that these issues have become a rather large part of library employees' professional roles (Nowé Hedvall et al. 2019).

In this study, we will ground our analysis on ideas of sociomateriality coming from science and technology studies (STS) (Latour 2005; Barad 2007; Suchman 2007; de la Bellacasa 2011, 2017; Haraway 2016) and will focus on entangled webs of relations between individuals, organizations, and digital technologies, in which power and agency are contested and negotiated (Martin et al. 2015; Murphy 2015). Here, individuals are understood as agents entangled in sociomaterial webs of relations constituted by humans and non-humans, technologies, and authorities, involving different vulnerabilities based on lack of different knowledge of services, technical skills, or access to digital technologies. Individuals in a digitalized welfare state, we argue, are dependent

on upholding comparatively stable and frequent relations with public and private organizations, and the services they provide—relations which today often involve digital technologies. We have chosen to conceptualize the work required to maintain these relations in terms of ‘care’ and ‘care practices’ and focus on the libraries as providers of care in broad sense (Stensöta 2010; de la Bellacasa 2011). Upholding such digitalized relations require care in terms of for instance support, help, and maintenance, care which may come in many guises - friends, colleagues and family members who know more, IT support at work, or support from service providers, private or public organizations, or distributive traders.

For individuals to be included in a digital society, it is necessary for them to have digital literacy, competence, and digital skills (Robinson et al. 2015; Macevičiūtė and Wilson 2018). To be digitally included involves managing several issues, such as having access to digital devices (computer, smart phone, printer, etc.), to (reasonably fast) internet connection, and to programs and applications (internet browser, e-mail, bank application, e-ID, etc.) and the knowledge and competence to use these devices, programs, and applications (Robinson et al. 2015; van Deursen et al. 2017; van Deursen and van Dijk 2019). van Dijk (2012) suggested a hierarchical model (Fig. 1) describing what is required for a diversified and skilled usage of digital services. It included motivation; physical and material access to digital technologies, systems, and infrastructures; and finally digital skills, competence, and know-how.

The model, however, does not show how issues of motivation, physical and material access, digital skills, and usage are entangled with the interrelated public organizations and private companies which constitute an important part of the sociomaterial fabric. Drawing models such as in Fig. 1 is always tricky, since they necessarily involve simplifications in terms of including some issues while excluding others (Bowker and Star 1999), and our purpose here is not to criticize the

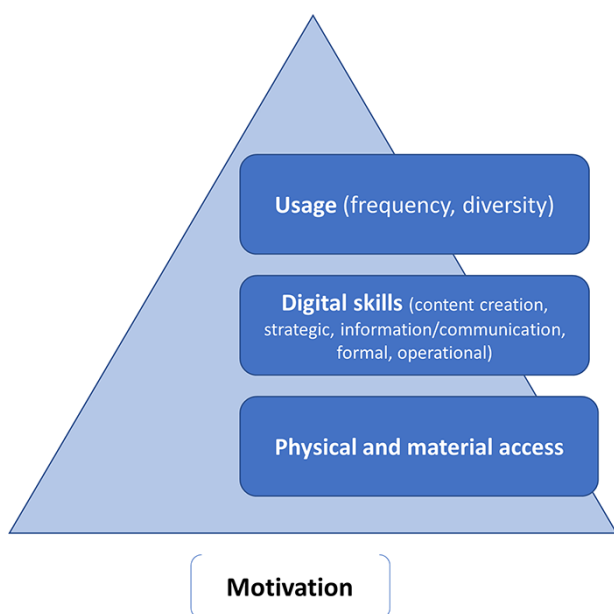


Figure 1. The levels of digital divide (based on van Dijk 2012, in Macevičiūtė and Wilson 2018: 272).

model, but merely to point out some of that which is not included. The use of public services, apart from digital access and competence, often requires detailed knowledge of how these organizations and services are organized and interrelated, or the so-called ‘governmental literacy’ (Bernhard et al. 2019). In order for individuals to be able to use digitalized public and private services, there are needs for support that address every level of the model in different ways, individually and structurally, socially and technologically; the individual user’s motivation, her physical and material access to various digital services, and her digital skills, in the hope that this will result in frequent, skilled and diversified usage for the benefit of the user (van Dijk 2012 in Macevičiūtė and Wilson 2018). Technical artifacts, programs and applications, and the interfaces between these break down and grow old. In order to stay on top with the ever-changing technological development users must change themselves, and stay motivated, in order to make sure that the physical and material artifacts that they use to are not too old, that the artifacts - software and hardware - are compatible with each other and with the services that the users need to use (for instance that a smart phone is not too old for a specific version of a mobile e-identification application which is required in order to log in to a digitalized public service), and they must learn and develop their digital skills. This is not easily done for everybody but requires support structures which can provide help and care when digital artifacts and services do not work as expected (Hunsaker and Hargittai 2018; Butler 2019). The individuals also need to learn about the mentioned relations of public organizations that they need to cooperate with and which organizations to turn to for a specific situation, such as illness, unemployment, age, need for childcare, residence permit, parental leave, or sick leave (Bernhard et al. 2019).

Furthermore, digital services are in themselves assemblages of interrelated digital artifacts, software, and infrastructures, immersed in organizational logics, aims, regulations, hierarchies, and practices (Orlikowski and Barley 2001; Pipek and Wulf 2009; Pipek et al. 2017; Lips 2019), and are dependent on attention, support structures, development, and maintenance—which we conceptualize as care in this paper. Digital services are not set up once and for all and then just keep working without support. They are part of an ongoing, changing world, organizationally, technologically, socially, and culturally, and require maintenance and development—care—in order to keep working in a specific, historically situated reality (Pipek and Wulf 2009; Pipek et al. 2017). They require skilled expertise, educational systems, regular supply of required technological artifacts, logistics, design and manufacturing structures, technological standards, and standardization structures, not to mention electricity. Viewed in this way, the list can easily be expanded to include almost anything, all of which are interrelated and interdependent in complex assemblages, or webs of relations, made up by both social and material constituents (Orlikowski and Iacono 2001; Suchman 2007; Bijker 2009). In this sense, the model above (Fig. 1) in itself becomes an assemblage made up of entangled relations, demanding a more intricate analysis of how motivation can be encouraged and supported through care practices in order to lead to the actual use and thereby inclusion in a digitalized society.

For many of the library visitors, the care provided by the library employees becomes a precondition for living a daily

life (Taylor et al. 2014; Bertot 2016), and this is the point of departure in our analysis. The concept of care builds on a reality in which somebody in a specific situation is in a vulnerable position and in need of care, something which challenges the liberal notion of the autonomous individual (Tronto 2001; Stensöta 2010; de la Bellacasa 2011; Henry 2016).

Based on the above, the aim of the paper was to explore care in relations constituted by individuals and digital technologies and to analyze how care mattered for digital inclusion. The empirical setting and the nexus of these relations is a Swedish municipal public library where the library employees who responded to visitors asking for help with digital issues and the public program on society introduction for asylum seekers.

2. Analytical framework: the concept of care

In this paper, we approach the concept of care from the perspective of STS, but we situate this in a broader context of how the concept has been understood and applied. We are primarily interested in how care was practiced and how it mattered in the entangled relations that the library visitors seemed to be placed in. In their overview of care in STS, Martin et al. (2015) brings to attention Gilligan's (1982) work on ethics of care and point out that those who have taken up her work often underscore 'the ways in which care was feminized, devalued, overlooked, or rendered invisible by materially and morally privileging mind over body, public over private, reason over emotion, and waged labor over unpaid care work' (Martin et al. 2015: 628). The concept of 'ethics of care' was developed by Gilligan (1982) as a reply to Kohlberg's (1981) work on the more general concept of justice. Glenn (2000) has reflected upon a 'crisis of care' that devalued practices of care because it is being framed as a 'privatised and feminised' matter. Relating to feminist critical studies, she contributed to a re-definition of the concept of care and its centrality to society. She referred to findings such as the dominance of efficiency rationale in administrative implementation of care regulations such as getting physical care tasks done, meeting time deadlines, and documentation. Glenn (2000) also highlighted practices of cooperation between care workers to provide care that was not recognized by the bureaucratic structures. In her manifesto for creating a caring society, primarily addressing the US context, she called for a rethinking of social citizenship where care is central to the rights and entitlements of the citizens (Glenn 2000).

Care or care practices can be understood most basically as 'everything we do to maintain, continue, and repair our world so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment, all that we seek to interweave in a complex, life sustaining web' (Tronto 1993: 103). This definition focuses on the practices and doings of care aimed at taking care of human and non-human bodies, and the preconditions for life, and indicates its embeddedness in everyday life. In the field of STS, care has been discussed for instance by Mol (2008), Mol et al. (2015), then in a health-care setting, and more generally by de la Bellacasa (2011, 2012). de la Bellacasa's interpretation of care (de la Bellacasa 2011) builds on a long tradition in STS to focus on the intimate, fragile, and entangled relations between humans and non-humans (Haraway 1997, 2016; Barad 2003, 2007; Latour 2005; Suchman 2007), feminist studies with its concern for gendered hierarchies and excluded

actors, positions, and identities (Wajcman 2009; Åsberg and Lykke 2010; Butler 2011) and for issues concerning accountability (Haraway 1991, 1997; Barad 2007). In STS, the notion of care has a wide reach and concerns the complex entanglements of humans with non-humans, the infrastructural and biological, natural-cultural webs of relations that make it possible for humans to co-habitate this world with non-humans or other-than-humans, all of those which make up 'the fabric of biological and social existence' (Martin et al. 2015). Hence, in an STS, context care does not necessarily concern traditional care practices, such as in health care or in social work, but might as well have to do with the care of other-than-human species and bodies who contribute to making human life possible, such as insects (Schrader 2015), soil (de la Bellacasa 2015), or, we argue, the technologies and infrastructures that enable everyday life in a digitalized world (Star and Ruhleder 1996; Karasti and Blomberg 2018). There are inherent ethical dimensions in how these entangled relations are often unequal and involve actors who are differently visible, gendered, acknowledged, and recognized—something which adds an ethico-political dimension (de la Bellacasa 2011). The underlying assumption is that while some things are expected to just work, some bodies must be involved in situated practices in order make sure that these things do work.

3. Methodological approach

The study was conducted as a qualitative, interpretive case study with included elements of ethnography (Myers 2013). The analytical framing of care practices developed during our field work. The models on digital inclusion was already guiding our research (Bernhard et al. 2019) and motivated these field studies and interviews, but our use of care as an analytical concept developed during the study. Our empirical studies were conducted for about one and a half years, following library employees' daily encounters with the visitors. There were two complementary cases; first the city library in a medium-sized municipality in Sweden and second a program—organized by the county library—for introducing asylum seekers to the Swedish society (the government, services, IT, rights, and responsibilities). We worked with observations, deep interviews with some of the professionals, a series of focus groups with professional groups, participant observations in combinations with additional interviews at the library information desk, and the 'IT guidance' sessions that library visitors could book. We also conducted participant observations at regular meetings in the introduction program for asylum seekers. Additionally, we participated in meetings with library employees on regional and national levels and collected relevant documents in order to substantiate our findings. Library visitors who asked for help with digital issues were not representative of the Swedish population in any way, but rather individuals who visited the library since they did not find help elsewhere. We present the empirical material in the analytical section given below primarily in the form of stories told by the library employees and the society communicators working with the introduction program for asylum seekers. The stories were told during deep interviews, selected based on their relevance to our aim, and then analyzed with the help of the concept of care drawing on STS research.

4. Analysis—library care practices

The empirical nexus of these explorations was a Swedish municipal public library and the county library collaboration for introduction to society of asylum seekers. The analysis has, based on the above analytical framework, been organized into three overall themes: sociomaterial entanglements, vulnerabilities in such entanglements, and the need for care.

4.1 Stories about sociomaterial entanglements

The first analytical theme concerns the entanglements constituted by both social and material, including digital, constituents, which emerged in the observations made and through the stories told by the respondents. The interviewed library staff and society communicators showed us how digital questions and problems occurred regularly on an everyday basis and that digital technologies and services were dependent on many other relations. It might start with a simple question about help to print a document and then unfold as a complex entanglement of issues, concerns, and technical devices:

‘It is usually people who should... print different documents and then they come with some form of... smart device, often it is a mobile phone and so they say “I want to print this” and then you shall figure out how to make it [ed. help the visitor] most smoothly. One has different ways to handle this. You can ask: “Can you send that document to your mail?” And, “Can you open your mail from one of our public computers”, as it’s the easiest way to print something on. If not, then you have to find out “Okay ... can you download apps?” Because then you can download an app that makes it possible to print. If you cannot do this for various reasons then there is a web interface that you can use, but the document must be in a downloadable format, it must be like a file that you can upload as well’ (Librarian 4).

The example shows how the individual was entangled in relations which involved digital technologies and how these relations were constituted by hardware, software, information, and knowledge of technology. Language literacy presents another important issue for those who were rather new in Sweden and needed help with digital problems:

‘It is also the language that is difficult for them. Before they can use any digital services - as many of them require a lot of reporting and reading of information in Swedish, it is extremely difficult for them. They can say to me “yes I understand” when they are here [during the course], but then they go home and still can’t do it and ask others for help’ (Focus Group 1 A, Society Communicator).

These stories underscore how those who are new in Sweden and who try to live in and be a part of the Swedish society, are dependent on digital technologies, and how problems with these are sometimes related to language. The stories also indicate that these individuals sometimes do not dare or want to ask for help and rather pretend to understand, even though they still need more help in order to be able to use digitalized services. Here, the society communicators highlighted how dependency in relations extended from the private sphere—where family and relatives were helping—to the e-services

provided by various organizations. In the library context, visitors often came for help with e-services and digital contacts with other public authorities. Most often, as illustrated in the following citation, they did not find the help from the other involved authorities or did not know how to seek for it online or did not understand how to proceed in the e-service and thus could not solve their problem on their own. Faced with situations like this, they turned to the library, where they would use a computer with an internet connection or get help from a librarian at the help desk.

‘Yes, well it’s different... it’s, it’s various contacts with authorities, like the National Insurance Office, The Swedish Employment Service, this way you should fill in, unemployment fund, you shall fill in time reports, like “how should I do? what should I do?”, like ... I had a man who ... he had just received a payment from the unemployment fund, several months after he had applied and he did not understand how it worked at all and he had not seen that he had a message in his inbox in the system’ (interview Librarian 2).

This was an example of how a library visitor did not understand the digital communication and the digital service provided by an authority for reporting on job applications in order to be eligible for unemployment benefits, upon which he was dependent for his income. All of these stories illustrate how digital issues were entrenched in larger entanglements of sociomaterial relations, including digital equipment; programs and services; digital competence or lack thereof; public and private organizations; expectations to manage digitalized relations with both individuals and organizations; lack of help from some organizations; and help from family, friends, society communicators, and librarians.

4.2 Stories about vulnerabilities in sociomaterial entanglements

The second theme concerns the vulnerability of the sociomaterial entanglements that the asylum seekers attending the introduction to society and the library visitors were situated in. The complexities of these problems made visible how these visitors while they were entangled with digital technologies, Swedish authorities and other institutions, these relations were shifting and unstable. One of the society communicators in the introduction course pointed to how digital technologies were central for living in a digitalized society like Sweden, something which indicates the expectations to manage these, and the problems that might occur when these do not work:

‘The problem I see with my participants is that [they] are dependent on young relatives that they have. They usually do not learn to use [digital technologies], they have someone who can help... Even if it is an easy website, they cannot do it or they do not want to learn as there is help at home. Their young relatives often take care of everything, that is, digital or digital services’ (Focus Group Society Communicator).

Here, the professional employees in the role of ‘society communicator’ explicitly underscored how dependent on others someone becomes when he or she does not know how

to deal with digital technologies—something which also indicates the importance of care practices. Another vulnerability which was often brought up concerned the visitors' personal integrity:

'[thus] they often depend on the help I can give them... and most often there is no kind of integrity thought [from the visitor's side]. I often try when people enter passwords to turn my eyes away, not for their sake, as they most often don't care about me knowing their password, but rather for my own sake. Because I do not want to end up in a situation where I know these things, as I do not think that is good. So that when it comes to such things or if they log in, then I actively look away because I should not know it' (Librarian 4).

This story illustrates the vulnerabilities in terms of how the visitor was dependent on digital technologies, and help from the librarian, but also the vulnerability which was involved in the relation between the librarian and the visitor, when the latter opened personal information such as bank transactions, passwords, pictures, etc. in order to get their issue solved. Several of the librarians talked about how this required sensitivity and respect from their part, in relation to the visitors. Also, they discussed how they had to balance the visitors' needs against the library rules for how to handle such situations.

'Then there are, as in some cases, often with older people with whom I have had IT guidance, then they can say so "Yes, but write this password for me now" or something like that and in some cases the person asked me "You can choose a password for me". And that is very difficult, after all, of course, that is clear that we should not do that, but if the person himself gives his approval to it and it is a situation where I feel that "Yes, this person ... needs help so much, to the point that I myself can go in and do it," then it may well be so. [Then] there will always be a boundary drawing, what should you put first, the principles for the service you perform or that you help this person in a good way to reach his goal' (Librarian 4).

The librarian's reflection on this form of dilemma illustrates the ethics involved in the library employees' work, and he expressed awareness of the vulnerable situation in which the visitor was placed, the confidence on behalf of the visitor, and the responsibility which he had in this situation. All of these stories illustrate the fragility of these sociomaterial relations—how easily they fall apart when something, such as a password needed in order to access an e-service, an e-ID, a computer, or a digital bank account, does not work and help is required. These individuals were dependent on these entangled relations to work, and they were dependent on the public organizations providing digitalized welfare services such as parental insurance, unemployment fund, health insurance, or income support. These stories are placed in two specific contexts—a Swedish public library and an introduction to Swedish society for asylum seekers—and here we have underscored how digitalization contributed to increased complexity and new forms of fragility in already vulnerable and unstable sociomaterial relations, but the stories can also be understood as illustrations of life's fragility in a more general sense. The vulnerability of these relations indicates the need for attention, support, and help, which we conceptualize here as care.

4.3 Stories about care in vulnerable entanglements

The third theme concerns the need to care for the vulnerable sociomaterial entanglements that the asylum seekers attending the introduction to society and the library visitors were situated in. One of the interviewees, a librarian, touched upon the responsibility concerning digital technologies that the public library had:

'This [the work with digital issues] is something else that we have taken upon us, which we think is a part of our democratic mission, that's how we have seen it, it is a part of mass education, [our] democratic mission, it's important. Information shall be available to everyone and one shall know how to find it and how to handle the technologies behind it, so there's where we've found our entrance' (interview Librarian 1).

Another librarian described a visitor who came with an errand and had to book a private session for IT guidance, because it would take too long to solve the problem at the desk. The story illustrated how an apparently simple problem might turn out to be rather complex and require quite some time, concern, knowledge, and work to disentangle. It also illustrated how the library visitors' contacts with a number of public organizations were required to work, and when they did not, they required care, in order for the visitors' daily lives to work. When these relations were digitalized, the complexity of the relations increased, as did the need for care. Our observations of library practices and the library employees' stories show how the library employees provided care for their visitors and the visitors' digital issues on a daily basis. These care practices related to concerns about contributing to the visitors' abilities to live their lives and to fulfill their duties to various authorities in order to benefit from critical social services and support themselves.

The presented stories express entangled sociomaterial relations in which digital technologies and services were central, and it seems as though these entanglements were fragile, vulnerable, and unstable. The stories illustrate how care was called for and provided, how asylum seekers and library visitors asked for care and thus engaged others—friends, family, and library employees—in order to restore these unstable relations, make them somewhat more stable, and keep working for yet some time. The relations that the library visitors and the asylum seekers were situated in did not work all by themselves, but required care from someone, for instance library employees, in order to keep working. In the library context, care frequently involved and required that the library employees balance the visitor's dependency, the confidence s/he was entrusted with, the ethical dilemma that s/he was placed in, and the risk of stepping over boundaries, while assuming responsibility for the integrity of the visitor. The library visitors seemed to be motivated to use digital technologies; however, in relation to models similar to [van Dijk's \(2012\)](#), they did not always have the physical or material access or the digital skills to use the technology in order to fulfill their needs. This situation made them vulnerable, especially as dependency on one or more public organizations was involved. Questions which might seem simple from the perspective of those familiar with the service and skilled in technology turned out to be difficult for the individual with

lack of access to internet, Swedish language proficiency, or ability to use an e-service. Such micro-situations of seemingly simple questions showed how relations of dependency were at play, not only between visitors and public organizations, but also between those who needed care in order to stabilize the fragile sociomaterial relations they were situated in, and those who provided care.

5. Concluding discussion

The aim of this paper was to explore care in relations constituted by individuals and digital technologies and to analyze how care matters for digital inclusion. The analysis drawing on library practices and stories showed how library visitors and newcomers in Swedish society were situated in dependency relations and vulnerabilities which included digitalized relations to public organizations, and that they tried to manage these relations by coming to the library for help. The individuals were dependent on digital technologies and different literacies in terms of knowledge of services, the government, and language—among others—and their abilities to access and manage technologies. In their care practices, the library employees took the responsibility for sustaining and nurturing the vulnerable relations that the visitors were situated in—relations which involved and depended on digital technologies. The library staff can be understood as becoming enrolled in the unstable, entangled relations that the visitors were situated in, and they contributed to improving digital access and competence in these relations, so that the visitors could live better in the current, digitalized, society.

Inspired by STS, our argument here is first that this analysis opens up for viewing individuals as sociomaterial entanglements of relations constituted by humans and non-humans (Barad 2007; Suchman 2007; Orlikowski and Scott 2008; de la Bellacasa 2011), including various public (and private) organizations and the legislation, rules, and practices that regulate these, and increasingly, digital technologies, systems, and services. This study shows how the increasing reliance on technologies, and the growing complexity of mundane technologies (Woolgar and Neyland 2013), are adding new demands to the professionals in public organizations such as the library. The response to develop and embed a care approach into their daily practice is formed bottom-up through the library employees' daily practices, but not enhanced by supportive institutional arrangements facilitating the coordination of digital services and empowering digital literacy. We see a risk that the lack of arrangements for care practices might involve deeper and increasing exclusions of individuals in society, something which might erode trust in institutions, technology, and humans. Thus, it is important for policies to address the delimitations of responsibility between private and public services and actors and between individuals in different dependency relations. It is also important to highlight the limits of the library employees' care practices, their accountability, and to support them in order for them to be able to feel secure and trustworthy in their work to support digital services, which seem to go far beyond the main scope of their ordinary library practices.

Second, the analysis opens up for understanding these sociomaterial entangled relations as vulnerable, shifting, and fluid, rather than stable. As indicated by the empirical material, it does not take much for these relations to rupture; it

is enough with a lost password, lack of language proficiency, problems with borrowing a smart phone from a friend and there is no Google account, the need for a specific app, and so forth. This indicates that the relations are far from stable, but rather unstable, vulnerable, and easily fall apart. Inspired by van Dijk's model (van Dijk 2012, in Macevičiūtė and Wilson 2018, presented above), a diverse set of preconditions are required in order for frequent and diverse digital use to occur; even though the library visitors seemed to be motivated to use digital technologies, they had problems with physical and material access to digital devices, programs, and applications, and to digital services, systems, and infrastructures, and they needed sufficient knowledge of these, and of the public organizational structures they were part (Bernard et al. 2019), and this resulted in the inability to use digital services with enough frequency and diversity.

Third, we view the vulnerability of these sociomaterial relations as unavoidable, as an inevitable dimension of human existence and its immersion in modern, complex, and digitalized societies. Consequently, these relations are in need of continuous care in the form of attention, work, support, and maintenance, in order for these to not fall apart (de la Bellacasa 2011, 2012); in which case, the individuals would not be able to go on with their lives. In the stories that are brought forward in this study, the individuals tried to manage these vulnerabilities through coming to the library for help, but this was because they had nowhere else to turn to for this help. For other individuals, the needed help might come from other actors, such as colleagues, helpdesk at work, family, friends, and experts or resellers of digital devices and applications. Not only do humans require food and shelter, warm clothes, clean water, electricity, as safe place to stay, sleep and eat, education, health care, a family and a social context but, as many human relations with each other as well as with various organizations in a modern welfare state involve digital technologies, these digitalized relations also require care.

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