The Role of Discretion in the Age of Automation

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Abstract. This paper examines the nature of discretion in social work in order to debunk myths dominating prevalent debates on digitisation and automation in the public sector. Social workers have traditionally used their discretion widely and with great autonomy, but discretion has increasingly come under pressure for its apparent subjectivity and randomness. In Denmark, our case in point, the government recently planned to standardise laws to limit or remove discretion where possible in order for automation of case management to gain a foothold. Recent studies have focused on discretion in the public sector, but few have examined it explicitly and as part of real cases. As a consequence, they often leave the myths about discretion unchallenged. Inspired by the literature on discretion and CSCW research on rules in action, this study reports on an empirical investigation of discretion in child protection services in Denmark. The results of our analysis provide a new understanding of discretion as a cooperative endeavour, based on consultation and skill, rather than an arbitrary or idiosyncratic choice. In this manner, our study contradicts the myth of discretion inherent in the automation agenda. Correspondingly, we ask for attention to be given to systems that integrate discretion with technology rather than seek to undermine it directly or get around it surreptitiously. In this age of automation, this is not only an important but also an urgent task for CSCW researchers to fulfil.

Keywords: Social work; decision-making; discretion; administrative work; casework; rules in action; automation; digitisation; digital-ready legislation.

1. Introduction

Decision-making is considered to be at the heart of social work, involved in everything social workers do throughout assessment, planning, execution and evaluation, in relation to the development and well-being of children (e.g. O'Sullivan, 1999; Ebsen, 2018; Nyathi, 2018). As Lipsky (1980) demonstrated, these decisions are made with room for discretion to interpret and modify formal rules concerning which activities to inspect, which evidence to examine, which inferences to draw and which actions to take (Black, 2001). In Denmark, for example, social workers have traditionally been given a great deal of autonomy to use discretion, but their decisions have increasingly been accused of being subjective and random. Discretion is considered pivotal in this sense (Høybye-Mortensen, 2013) and lack of trust in social workers' competence and ability to exercise discretion well has led municipalities to increasingly rely on manuals in an attempt to regulate their discretionary freedom (Høybye-Mortensen, 2014, p. 73; Ponnert and Svensson, 2016). A belief has risen that increased scrutiny will help improve the practice of social work, and recently discretion has become the prime target for automation in the public sector.

In the summer of 2018, the Danish government reached an agreement to simplify new legislation in order to promote automated case management. This is seen as part of the government's overall strategy of developing a more digital public sector. In this respect, great emphasis is placed on digital-ready legislation, because current laws are seen as an obstacle for change (Digitaliseringsstyrelsen, 2018). As a prerequisite for automated case management, digital-ready legislation is designed to replace 'subjective criteria' with 'objective criteria' (Justesen and Plesner, 2018). As part of this strategy, every possibility to phrase criteria in a manner that minimizes the use of discretion is to be used (Digitaliseringsstyrelsen, 2018). This strategy explicitly considers discretion inferior to automation, but it also contains a number of more implicit claims about the nature of discretion. For example, it assumes the existence of a noise-free relationship between human reasoning and formal decision-making procedures and that casework can be reduced to an entirely objective and decontextualized operation (Webb, 2001, p. 69). Furthermore, it is based on a dubious attitude towards discretion, defined as an arbitrary and capricious exercise of individual authority that may be inconsistent with a successful implementation of service delivery.

Many studies have discussed the significance of discretion in the public sector and reported on its impact on rules. The majority of these studies are interested in the space left for frontline employees, such as social workers, to use their discretion. However, most of them study discretion in silos and extracted from real-life application. Hence, they seem to pass on the myth of discretion without examining it further. We believe this is an issue that may be caused by a lack of exploration and understanding of the implicit and often 'taken-for-granted' details of decision-making and its distribution in social work practices. Research in CSCW has drawn attention from a number of academic groups interested in technology development particularly due to its focus on the practices of cooperative work and the need to study the work domain closely. Although CSCW research has generally paid little attention to discretion, its long-standing focus on rule-based practices has been found useful for this study because it helps to recognise the actual use of discretion from the standpoint of the social workers who are the ones making the decisions about what to do. Based on our findings, we argue that the widely held idea of discretion as inferior to automation is based on a misconception about discretion itself. By foregrounding the backstage elements of discretion, we examine its nature as part of decisions made in casework. This unpacking of discretion is important, because it strengthens its position against the idea of eliminating it. We also hope it will provide sceptics with sufficient reason to doubt the current assumptions made about discretion and give them greater confidence in the judgement of the operatives to whom decisions are delegated.

The remainder of this paper is structured as follows: Section two will describe related research on discretion and rules in action and introduce the main analytical outlook of the study. Section three will describe the research setting and methods used to conduct the study. Section four will describe the myth of discretion as encountered in this study and provide some amplifications. Section five will present the findings derived from the empirical analysis. Finally, section six will present a discussion of the findings and implications for CSCW which we hope will be acknowledged when developing technologies with automation at centre stage.

What might be the consequences, for example, of attempting to remove social workers' discretion and leave their decision-making to an algorithm? Assuming that discretion can be reduced or removed in some areas, what will be lost and what will be left? We will also consider not only the possibilities but also the desirability of bringing discretion under control. Upon providing our perspectives, we will conclude this paper by presenting our final remarks and suggesting a future research agenda for CSCW researchers.

2. Related research

In this section we present an overview of related work in order to evaluate the findings across studies and to identify the open issues that motivate our work. We will start with an account of the literature on discretion as it relates to administrative work, before we go on to consider CSCW research on rule-based actions. The three areas covered below include 1) perspectives on the relationship between rules and discretion, including 2) the influence of growing digitisation and 3) how we conceive formal constructs such as the law versus how they are carried out in practice and according to the current casework situation. We conclude the related work section by showing how the seemingly diverging research streams dealing with these topics can be used in combination as a resource for our analysis.

2.1 Rules and discretion in social work

The discretionary power of front-line workers has been recognised since the 1940s (Kosar and Schachter, 2011). It was later formalised by Lipsky in his working paper on 'street-level bureaucrats' from 1969 (Lipsky, 1969) and explicated more comprehensively in his book from 1980 on the same topic (Lipsky, 1980). Prior to this work, the interest in lower-level employees was often ignored or dismissed by the bureaucracy (Zang, 2016) and it was assumed that rules were easy and clear to operationalize and that they were decided from the top and simply implemented by practitioners (Gilson, 2015). Lipsky contradicted this view and argued that the true power lay in the individuals who exercise wide discretion as they carry out the actions required by the rules. Lipsky's bottom-up approach to policy implementation became a classic and laid the foundation for a shift in the literature on discretion. It has been useful in exploring how front-line employees may have more discretion than would be apparent. It gives meaning to rules as being abstractions until they are realised when applied in practice (Zang, 2016) and highlights the significance of discretion by positioning it as an unavoidable aspect of the application of general knowledge (Wallander and Molader, 2014). Subsequent research followed in the footsteps of Lipsky, such a Wagenaar (2004) who places discretion at the core of administrative work and calls the end-goals of processes 'effectuations' and 'enactments' of the 'hidden' and often 'taken-for-granted' practices that discretion is a part of.

The concept of discretion has since been developed further and building on the tradition of street-level bureaucracy, the concern in the literature shifted to the increased demands for standardization and efficiency in social work practice (Ponnert and Svensson, 2016) and its impact on discretion. In Denmark, for example, social workers have traditionally been given a

great deal of autonomy to use their discretion, but their decisions have increasingly been accused of being subjective and random and their use of discretion is considered pivotal in this sense (Høybye-Mortensen, 2013). Lack of trust in social workers' competence and their ability to exercise discretion well has led to increased reliance on manuals in an attempt to regulate their discretionary freedom (Høybye-Mortensen, 2014, p. 73; Ponnert and Svensson, 2016). An often-debated theme in this context has been the question of whether the discretionary power of social workers have been reduced or eliminated. To avoid an all-or-nothing approach, a few researchers have analysed different aspects of discretion to explain its extent and variation. In their investigation of discretion and the causes that permit it, Vega et al. (2013) distinguish between 'formal' and 'informal' discretion where formal discretion is allowed within rules and informal discretion exists outside the body of rules. They argue that formal discretion occurs when policies and procedures are broad and vague and among other things can generate misinterpretations. Informal discretion, on the other hand, is the result of inadequate evaluation mechanisms of rules (Vega, Chiasson, and Brown, 2013, pp. 105-106). Building on this, they find that while the context that permits informal discretion cannot be changed, more concrete and focused policies and procedures could minimise formal discretion (Vega et al., 2013, p. 113). Other studies have found that discretion is not necessarily lost when more rules are applied, because the space for discretion is not static but constantly changing depending on each situation (Evans and Harris, 2004). As a case in point, Svendsen (2016) found that legal criteria are not always prioritized in social workers' decision-making in Denmark. To help explain the various ways in which discretion can be carried out, Høybye-Mortensen (2014, p. 75) further divides discretion into three levels, ranging from 1) low degrees of freedom where there is freedom to make a judgement in relation to the use of rules, across 2) slightly greater degrees of freedom where ultimate freedom is given to make decisions within applicable rules, to 3) high degrees of freedom where both decision and the criteria for decision-making are left in the hands of the social worker.

Analysing discretionary space may help us to understand social workers' experience of the rules regulating the processing of cases and what there is freedom to do (Høybye-Mortensen, 2014, p. 75) as well as where this freedom exists. However, it says nothing about what it means to use discretion and how that freedom is used. To answer these questions, Wallander and Molander (2014, p. 2) suggest extending the focus beyond the structural dimensions of discretion towards "discretionary reasoning". Discretionary reasoning may also be referred to as the epistemic aspects of discretion (Larsson and Jacobsson, 2013) and can be described as "the cognitive activity carried out by an agent when he or she is making judgements and decisions under conditions of indeterminacy" (Wallander and Molader, 2014, p. 2). In this sense, discretionary space is concerned with the type of decisions social workers are given to handle during casework, whereas discretionary reasoning is about the justifications of these decisions (Berrick et al., 2015). A few studies have examined the reasoning of caseworkers and come up with conclusions that extend beyond the traditional idea of discretion as a space within which to exercise judgements. Based on empirical cases of debt handling in Sweden, Larsson and Jacobsson (2013) find that while the structural and procedural aspects of discretion

to some extent have been brought down by an increase in standards, it has not changed the epistemic aspects of discretion. As an example, they describe how the discretion for caseworkers to decide and plan their work process has been reduced, but that they still use discretion in the way they interpret and select what is important and not, such as in the way they reason and argue during decision-making (Larsson and Jacobsson, 2013, p. 14). Another examination of decision-making within child protection services in Spain found similarities in the criteria based on which decisions are made, but differences in the weight they should be given and how they are interpreted by the social workers (Taylor and Whittaker, 2018). The point here is that discretion is possible, and what is important is how it is used. However, this has not prevented legislators from trying to increase the regulation of discretion and more recently, it has become the prime target for digitalisation and automation of administrative work.

2.2 Digitisation of social work

According to Plesner et al. (2018), the digital transition of public services must be seen in relation to a constant reform pressure in various political areas, as the reforms also include changes that have implications for digitisation projects, such as when the Danish government reached an agreement in 2018 to simplify new legislation in order to promote automated case management wherever possible (Digitaliseringsstyrelsen, 2018). Digitisation is often presented as an opportunity to further reduce or remove the discretionary freedom of social workers (e.g. Zeleznikow, 2000; Keymolen and Broeders, 2011; Cheraghi-Sohi and Calnan, 2013) by replacing 'subjective criteria' with 'objective criteria' (Justesen and Plesner, 2018). Here, computers are explicitly viewed as 'objective' and thus more reliable in contrast to discretion which is often accused of being subjective and random (Høybye-Mortensen, 2013). Furthermore, a number of implicit claims are made about the nature of social work, such as assuming the existence of an objective and decontextualized case processing and a noise-free relationship between subjective reasoning and formal decision-making procedures (Webb, 2001, p. 69). In this world, the social worker has little to do with making decisions, as the aim of rules is precisely to reduce discretion. Others argue that discretion cannot be removed, but only transferred to new actors. For example, Bovens and Zouridis (2002) find that while many decisions may no longer be made at 'street-level', they have been taken over by technology and programming developers who now hold the discretionary power as 'system-level bureaucrats'. In a more recent paper, Alkatib and Bernstein (2019) draw on the theory of street-level bureaucrats to phrase the tension between human reasoning and algorithmic decision-making. They introduce the theory of 'street-level algorithms' as the algorithmic systems that make decisions on behalf of people and in a critique of the same, they point out that, unlike street-level bureaucrats who reflexively refine their decision criteria as they reason through a novel situation, algorithms at best refines their criteria only after a decision is made. In this view, discretion has been transferred into something that is no longer discretion.

Most hold that the increasing technological advances hinder the ability to exercise discretion, but some argue for a different point of view. In his case study on discretion, Evans

(2010) find that while management attempts to control and direct practice, the effectiveness of the systems is very limited in its capacity. He points out the mistake of believing that software claiming to be emblematic of management control will inevitably result in this control (Evans, 2010, p. 381). Another study shows that technology is not simply a constraint to frontline discretion, but rather extends discretion, as it is unable to capture the informal dimensions of the decisions made by operators and thereby obscures their use of discretion (Jorna and Wagenaar, 2007). Moreover, it has been argued that rooting decision-making in a technology-driven practice completely ignores the complexity of actual decision-making in social work (Webb, 2001). For example, automation can elide or exclude important human values and necessary improvisations that depend on a narratively intelligible communication between people that is not reducible to software (Pasquale, 2019). Besides, it may not always achieve good governance as the use of discretion could optimise the individualised services based on specific citizen needs and unique situations (Varavithya and Esichaikul, 2005).

Despite a great deal of attention given to discretion and the rules and standards that influence it, there seems to be a lack of research empirically investigating its practice as it naturally occurs. The concept of discretion is central to many of the previous studies in administrative work, but few have examined it explicitly and as part of real cases. Since the early days of Lipsky's study of public bureaucracies and the individuals who work within them, discretion has mainly been considered an action at the level of the individual as permitted by law, regulations and established practice. This view has largely been left unquestioned in both public, academic and political discussions (see, for example, Wallander (2014) and Møller (2016) who use vignettes of fictive cases on individual respondents to identify discretionary reasoning). We believe this is an issue that may be caused by lack of exploration and understanding of the implicit and often 'taken-for-granted' details of decision-making and its distribution in social work practice. To understand this better, we will now proceed with a brief summary of existing work addressing this concern.

2.3 CSCW perspectives on rule-governed action

While the CSCW community has paid little attention to discretion, it has been dedicated to improve our understanding of the practices of cooperative work and to the exploration and design of technology with explicit concern for their intended users (Suchman, 1989). The need to know more about cooperative work dates back to the office automation movement in the 1970s and a recognition of the lack of knowledge about how groups work and about how technology and standards affect them (Redaelli, 2015, p. 38). At this time, researchers in cognitive science perceived action as simply being routine activities and repeated execution of planned procedures (Randal et al., 2007, p. 216). The research at this time was largely influenced by assumptions like those of Zisman (1977), who wrote:

'Once a clerk is told about a situation, s/he can consult a predefined procedure (formally or informally) to determine what action should be taken by the organisation. The organisation

does not rely on the clerk to decide what to do; instead the organisation provides a procedure which instructs the clerk how to react to the situation.'

The office automation literature embedded models of work in systems as if they were 'computer-executable versions of what actually happened' (Pycock, 1999 in Randall et al., 2007, p. 216) and reduced work practices to routinised workflows. Not surprisingly, the idea that formal constructs (such as plans, rules and procedures) adequately or fully describe action quickly ran into problems, and they did not have the impact or acceptance that was initially expected. By paying attention to the handling of 'exceptions', study after study demonstrated how it was often necessary to deviate from plans in light of the unfolding situation to get work done (Rouncefield and Tolmie, 2016, p. 76). In direct contrast to the view of cognitivism, Suchman (1987, p. 178) proposed that: 'actions are always situated in particular social and physical circumstances so that the situation is crucial to the action interpretation'. Her situated approach suggests that formal constructs can never determine action. In her view, they function as 'resources for situated action but do not in any strong sense determine its course' (Suchman, 1987, p. 52). In that sense, they are formulated in the perspective of the end result to be achieved (for example the well-being of a child), but with little focus on how to reach that end. This complaint also attacks the individualistic bias in office automation and other methods at that time by acknowledging that action is essentially a collaborative achievement (Suchman, 1987, p. 47). Suchman's work and shift in perspective was an eye-opener in CSCW. It strongly impacted the community and several researchers have built on her insights. It led many to the generalised interpretation that systems should simply function as 'maps' that orient actors' behaviour, but in no way specify the steps towards an accomplishment of their tasks (Cabitza and Simone, 2013, p. 501). It also led to a reluctance towards designing systems which regulate coordinative activities (Schmidt, 2011).

In a detailed discussion of Suchman's work, Schmidt (2011, pp. 144-145) argues that formal constructs may play a weak role as a 'map', but depending on the situation they may also play a strong role as a 'script' where they serve as instructions to actors of possible or required next steps. By analysing situations where formal constructs are defined and used, he shows that in some settings they are routinely applied as unproblematic guidelines or instructions and, in these cases, they play the role of a script that determines actions in a far stronger sense than that of a map. In other words, formal constructs in themselves are not fixed, but situated just like Suchman demonstrates for action (Christensen, 2013). According to Schmidt (2011), the problem with Suchman's viewpoint is to be found in the way she adopts the cognitivists' reading of formal constructs as abstract generalisations and therefore leaves this view unchallenged. Instead, he argues that formal constructs are to be understood as 'normative devices', meaning that 'they provide criteria for whether or not a particular action is correctly executed' (Schmidt, 2011, p. 366). They do not necessarily require interpretative work as argued by Suchman, as this only takes place when doubt arises concerning the sense of a formal construct or its application of use (Schmidt, 2011, p. 145). Through a conceptualisation of formal constructs as normative devices, it was, as noted by Redaelli and Carassa (2018, p. 139),

in Schmidt's interest to shift the focus from the how the significance of a formal construct is worked out in its situated use (Suchman, 1987) to the study of how the activities that surround a formal construct depend on what it entails.

In Schmidt's opinion (2011, p. 145), the understanding of whether formal constructs serve as a map or a script depends on the extent to which it is possible to identify, analyse and model interdependencies in advance. It is furthermore not something that can be taken to be immediately obvious to the researcher as it is always internal to the particular practice and 'left to the persons whose task it is to decide such matters' (Schmidt, 2011, p. 383). It is, therefore, a matter of empirical determination and something that can only be measured through direct association and first-hand participation in operational practice. According to Schmidt (Schmidt, 2011, p. 142), a key issue with Suchman's perspective on situated action and the empirical studies that followed, is that none of them investigated the use of formal constructs in the everyday routines for which they are designed and therefore the findings do not warrant the general conclusions that have so far been drawn. Consequently, he claims that CSCW researchers need to investigate further 'what the rules of a particular practice actually are' by considering 'how the stated rule is observably used in the setting' (Schmidt, 2011, p. 366 and 383). This task has later been picked up by Redaelli and Carassa (2018) who studied the practices of rule formulation in a ground control tower by demonstrating how circumstances not anticipated or provided for by plans are resolved.

Based on an acknowledgement of the contributions and limitations of the literature on discretion and cooperative rule-based actions, this study combines the two streams of research to inform the study of discretion in social work. We investigate both what constitutes the formal guidelines for making decisions about child protection services and the actual practices of how decisions are made as well as who is involved in making them. The primary benefit of this approach is that it allows us to show the relationship between rules and decision-making, while recognising the influence of the social context and the broader community surrounding discretion. In doing this, we hope to provide a better understanding of the nature of discretion and the implications it might have for automation of case management in the public sector and perhaps more generally.

3. Method and setting

To analyse discretion, we performed a four-week explorative field study in a Danish municipality between autumn 2017 and spring 2018. The empirical material for the study was generated through observations, in-depth interviews and document collection. Observational notes served as a record of the thoughts, actions and feelings that arose during the time of the fieldwork. A double-entry style notebook was used for this purpose, meaning that each specific observation was followed up by an interpretation. Observations were performed on a day-to-day basis and used as a method in interviews and at meetings to keep track of the relationship between events (what participants do) and accounts of events (what participants say they did) (Jordan, 1996, p. 33). We performed full day observations of the activities of five different

social workers and participated in ten meetings, including internal team meetings and meetings between the social workers and other professional as well as citizens. Around 50 public and internal documents were collected during the research process and they served as an important source in developing an understanding of the municipality's local work practices and the framework within which the social workers operate. These documents covered e.g. law texts, internal reports, policy documents and process maps.

Interviews were used as a personal, in-depth method that allowed us to interpret the findings collected from other data sources better and to dig deeper into the decision-making processes, including the factors and indications that influence them. Interviews were carried out in situ where possible and after doing the observations, typically in the afternoon or the day after. Interview guides were used to balance thematic structure with room for participants to express their perspective and subjective understanding. The interview guides left an open space for questions to become constructed in the interplay between our evolving understanding as researchers and the set of activities we participated in. Furthermore, they were structured so that the majority of the questions required participants to answer by showing how a given aspect of work was performed in practice. Several employees from different departments agreed to participate in an interview, which led to a total of 21 interviews with 13 different participants. These included the five social workers whose activities were also observed, two lawyers, one administrative officer, one secretary and four employees from the digital and IT department. Most interviews lasted for about an hour and all interviews were audio-recorded and transcribed for analysis. While the complete empirical material functions as background knowledge, this paper mainly reports on the observations and interviews with the social workers, all of which hold a bachelor degree in social work and, at the time of fieldwork, had between six to ten years of professional work experience, except one who had only recently graduated.

The analysis was based on an iterative process of gathering together, listening, categorising, comparing and contrasting common themes and major issues found in the data. The coding of data involved the creation of labels and tags which, based on how frequently the issues were mentioned or observed and the level of importance they were given, led to the discovery and development of categories. In the process of collecting and analysing data, we focused our main attention on the reasoning process used by social workers at different stages of the cases. In doing so, we follow the recommendation by Harper et al. (2016, p. 211) suggesting that 'these reasons provide the bedrock of how choices are seen, accounted for and ignored'.

3.1 Setting

This study took place in the administration building of a Danish municipality, responsible for helping vulnerable children and families with general and special needs for support. The administration building consists of four departments, including 1) a family department with social workers, psychologists, language therapist, physiotherapist and occupational therapist, health care assistants and a family administration, 2) digitalisation and IT, 3) an administration

for school and day care facilities, and 4) an economic secretariat. By the end of September 2017, when the field work for this study was initiated, 35 social workers were employed in the family department of which 22 worked under the 'classic' model in accordance with the Danish Consolidation Act on Social Services and 13 were involved in three-year test period of a programme called 'Styrket Indsats' (in English: 'Strengthened Effort'). Styrket Indsats is based on the belief that earlier intervention as well as proper support and broad cooperation with and around vulnerable families will help provide the correct solution to their problems and initiate action before their problems grow bigger. Furthermore, with increased policies beyond the minimum requirements of the law, the programme is believed to give social workers the opportunity to solve tasks and handle complex cases in a more secure manner. To make this happen, the number of cases dropped during the test period so that each social worker was handling around 15 to 20 cases instead of 35.

3.2 Ethical considerations

Personal privacy and other confidentiality issues are, of course, an important practical and legal consideration for all municipalities. All data we have collected, used and disclosed have therefore been handled in accordance with the rules of the municipality. Since we could come into possession of information of confidential nature, we also signed a non-disclosure agreement before doing the fieldwork. It was furthermore agreed that any personal information regarding citizens would be anonymised. By its nature, discretion is a complex and highly sensitive topic. It can evoke thoughts and feelings on a personal level and result in the expression of opinions, interests and judgements which may not be shared by others. This led to an increased awareness in terms of protecting the names of participants and hence their risk of recognition. Every interviewee was invited to participate on the basis of informed consent, and a high level of cooperation was accomplished.

4. Preamble: The Myth of Discretion as 'Subjective' and 'Random'

Before moving on to the core of the article, it seems appropriate to start with a brief account of 'the myth of discretion' as we encounter it in the agenda on automation of case management in the Danish public sector.

Denmark is currently considered to be among the most digitalized countries in the EU (European Commission, 2019) and the public sector is leading by example. Many administrative tasks and working procedures have already been digitised and recently, the strategies adopted by the public sector increasingly involve the use of automation. The Danish government's introduction of 'digital-ready legislation' in July 2018 is seen as one of the major steps towards this realization. It got full support from all parties in the Danish parliament who, in the beginning of the same year, agreed on making it mandatory for all future laws to be digitally compatible so that case processing can be automated as much as possible (Finansministeriet, 2018). Seven principles have been developed to help meet this goal and

among these is a reduction of discretion, while decisions in the future must be based more on objective criteria (i.e. *'objective criteria over discretion'*).

The freedom to exercise discretion is under pressure, because it is considered inferior to automation in this context. Discretion has been framed as a subjective and random activity which often creates a 'general problem' and 'stands in the way' of digitisation (Jensen, 2017). However, we argue that this view of discretion and its 'inconsistency with successful service delivery', is truly a myth. During our observations and interviews, the decision-making activities of social workers were much richer than implied by AI proponents in the public sector. Still, the myth of discretion has characterised several debates within public digitisation in recent years. The removal of discretion in favour of automation have, among other things, been discussed at conferences[1], taught as part of courses on 'digitising discretion'[2] and referred to by the media as 'necessary for success' (Pedersen, 2018). Remarkably, the question has been raised whether an algorithm should be able to replace the human decision of removing a child from home and comments have been made as to whether it would be better than having a 'random social worker' making up her mind, just because she somehow 'feels like it' (Frederiksen, 2018). As these examples show, there exists a strong opinion in favour of automation and against discretion. However, digitising processes for the sake of it is hugely problematic. There needs to be good reasons for making changes of this sort, based on a solid understanding of the existing practices in any given work setting. To amplify, the myth of discretion as an arbitrary and capricious exercise of individual authority does not reflect what we have seen as part of casework and what we have learned from the social workers who use it as part of their work. Rather, as we shall go on to explore, it represents an image with no reality to support it.

Exploring the real nature of discretion is critical as the public sector is increasingly digitised. Therefore, the definitions we make when referring to discretion can have major consequences for the technologies we build and the way we think about digitisation and automation in the future. We believe it has become more important than ever to revisit discretion and understand what it means and how it is used, through those who know it best because they utilize it as part of their decision-making on a daily basis. In current public debates and public policies, an understanding of discretion is often taken for granted and left out of the picture. Having the removal of discretion as a precondition when talking about digitising the public sector, is therefore something we want to challenge as we argue that it is often based on a misconception of what discretion it and how it works. In the analysis below, we will attempt to change these behaviours by presenting an alternative view of discretion.

5. Discretion in Social Work

In the following, we will analyse and describe general principles and concrete, practical examples of decision-making tasks in social work and social workers use of discretion as part

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[1] Danish conference on 'Digital-ready Legislation' held on September 19th, 2018

[2] Course on 'Digitising Professional's Competences' offered by Copenhagen Business School in 2018/2019

of making these decisions. We will point to a conceptualisation of discretion as a collective activity that problematises both the desirability and possibility of separating it from the decision-making process. Hence, we are interested in shifting the focus from the individual to the community of practice and the relationships within which social work decisions are made and realised. We will begin by discussing which decisions can be formally involved in casework. Then, we will examine the rules available and how they are "approached" in practice. Particular attention will therefore be given to the reasoning justifying decisions and how they were made, with emphasis on the role of discretion in this context.

In working to protect children, social workers are presented with a variety of rules that play an integral part in carrying out their responsibilities. In accordance with the Danish Consolidation Act on Social services, the rules provide a framework of decisions required during casework (Ebsen, 2018). Based on the law and the findings from our studies, some of the common decisions social workers have to make are related to the following:

(1) Examination of a child
(2) Documenting a child's needs
(3) Decision on precautions or dismissal
(4) Making suggestions to an action plan
(5) Decision on action plan
(6) Implementation of action plan
(7) Following up on action plan

This order of decisions reflects the procedural nature of the law; regulating the forms under which different types of information can and should be collected and recorded, when and how to pass on information and to whom (Svendsen, 2016). However, reading the instructions tells us very little about how they are being followed in practice (Redaelli and Carassa, 2018, p. 121). As one of the social workers puts it:

'We operate a bit with like: "blue", "green" and "red". Blue are the hugely structured, those who just prefer when things are in structure and in boxes and "I know I have to do this and do that and" […] Then there's the green […] Those that just throw, I don't know how many, ideas in and are really good at thinking creatively and differently and breaking those very linear ways of thinking in relation to visitations, recommendations, precautions and so on. Then there's the red who are very much like, socially minded, right… and I'm not blue.'

This means that in to understand the decisions made by social workers, we need to determine the meaning of the rules locally (Schmidt, 2011), i.e. through the actual work of following them. The inherent complexity and uncertainty involved in social work means that each phase can reoccur anytime and that many other decisions can occur at the same time, while the social workers move back and forth between them. Therefore, the order of decisions may not reflect an order of how they are made, as it depends on the circumstances of the individual case (Ebsen,

2018). In practice, of course, things might not work out as neatly as the previous paragraphs imply. In social work, decisions are highly interlinked and dispersed among multiple actors and the distinction we made here is for analytical purposes only. In what follows, we will use the order of decisions to structure our findings of discretion and draw up our results towards the end of each section. Building on this, we will note potential design implications.

5.1 Examination of a child

Municipalities in Denmark are legally responsible for treating all referrals of possible abuse and neglect of children and provide support and help to vulnerable families. Their first task is to decide whether or not to carry out a further assessment of a child. The municipalities, however, are free to adapt their administration to local circumstances and decide what kind of organisational structure is preferred, and which decisions should be allocated to the social workers. In the municipality where this study took place, the first responsibility of the social workers is to perform an examination to evaluate the needs of the child. In the words of one of the social workers:

'A case starts in the reception where they make a preliminary target group assessment […] that is then sent to our leader". When they [the reception] have made a target group assessment, it's because one assumes that [the child] needs support according to the Danish Consolidation Act on Social Services. So, a decision has been made to perform a paragraph 50 examination, a child protection examination. And then we'll get the case distributed based on factors such as available space, district of residence, special interest etc. This is something we do at our team meetings. And then it starts from there.'

The child protection examination is carried out by the social workers to look for signs that a child has been abused or neglected. Furthermore, he results derived from a child protection examination help the social workers give appropriate advice and support to citizens. However, while they may be required to perform this examination, the law provides little instruction on how to go about it in practical terms. To illustrate this, we will use examples from the law text of the child protection examination (Hørby, 2015, p. 13) according to which the examination 'shall to the widest possible extent be conducted in cooperation with the custodial parent and the young person aged 15 or over.' The examination is among other things required to be conducted 'as gently as possible in the given situation' and it 'shall not be any more comprehensive than required by its purpose'. In the course of the examination, the social worker 'shall make an overall evaluation which [...] shall relate to the child's or young person's (i) development and behaviour, (ii) family, (iii) school, (iv) health, (v) leisure time activities and friendships and (vi) any other matters of relevance.' To do this, the social worker 'shall involve any professionals who already have some knowledge of the conditions of the child or young person and his/her family.' There are thus many inputs for the same examination. Furthermore, in connection with the examination, the social worker 'must assess whether to

conduct an examination of any other children in the family.' An examination of a child therefore does not only involve the child, but just as much its surroundings and cooperation with the family is crucial to the quality of the examination (Høybye-Mortensen, 2014, p. 76). Finally, the examination 'shall lead to a reasoned decision as to whether there are grounds for implementing measures and, if so, the nature of such measures' and it 'must be completed within four (4) months after the municipal council has become aware that a child may need special support.'

As the examples make clear, the examination is in some ways guided by rules that seem clear and easy to operationalize (e.g. conduct the examination, involve children aged 15 or above and complete the examination within four months). They apply to standards and routines and leave little room for discretion, as it would be safe to assume that the social workers would rely on the rules unless they have a good reason not to (Schmidt, 2011, p. 144). Other rules, however, are broad and vaguely defined and require interpretation and demands judgment by the social workers (e.g. the examination should not be more comprehensive than required, the social workers shall involve any professional with knowledge of the condition of the child and include any other matters of relevance). While defining *what* the social workers have to do, these rules do not explain *how* to do it. For example, they do not specify the methods used for collecting the information, what kind of information should be collected and when and from whom. Both the criteria for decisions, the weight that they should be given and how they should be interpreted are left in the hands of the social workers, giving them a large freedom to use discretion. This is emphasized by a social worker who explains the steps taken in the execution of the examination:

'[Once the cases have been] distributed in our group […] we go visit them [the family] […] We have a background for visiting them. It can be, for example, that it's a single mother with two children, who's got problems with one of her children. Then we'll visit them and try to uncover what it's really about and talk to the mother and the children and, usually, we also have a conversation with the child. Maybe not the first time, but then we'll definitely do it the second time. And then you start to become a bit more curious about what this case looks like. And then you check your system, of course, if there has been something before and you get consent from the parents after going there and talking to them. And then you collect statements from the school, status from the school and what else you have. Also, if you have a statement from the school, there will usually be things that show up from there indicating that there's something that may need to be looked deeper into.'

In the quote above, the social worker demonstrates the unfolding nature of an investigation practice. It shows that while the rules provide a structure of the examination and suggest what is possible and feasible, the social workers are guided by an evolving understanding of the case. Work always takes place in a context that influences how it is understood and carried out (Wagenaar, 2004) and the many unknowns make it impossible to know what may occur in the process to alter the outcome of a decision. The uncertainty requires a high level of flexibility

and discretion in order to fit the changing circumstances. In this manner, the rules may frame discretionary practice by both explicitly and implicitly calling for its performance. The rules provide a guideline in terms of the type of information that can and should be collected, but they leave it to the social workers to decide what activities to inspect and what evidence to examine. The social workers described how these decisions are often made individually. However, sometimes, if they feel 'stuck', they may engage in discussions with team members or hand over the case to a colleague who can provide a different point of view. Furthermore, their decision on what to inspect and examine is influenced by conversations with other stakeholders rather than relying exclusively on the judgement of the individual social worker. This type of assessment, then, is clearly of a collaborative nature.

5.2 Documenting a child's needs

By requiring social workers to work closely with different stakeholders during the examination of a child, the law helps to make sure that the information on the child is robust and that the social workers have a solid basis for convincing arguments in their casefile. The dynamic process of collecting information naturally affects the basis on which they are able to do this. As described, information on the child is being constructed in the dialogue between the social worker and the other parties involved. Furthermore, the documentation depends on the social worker's interpretation of the information (Høybye-Mortensen and Ejbye-Ernst, 2018, p. 27). In practice, the regulation thus raises the question of how to understand the requirement of documenting a child's need. For example, when and how should information be registered and what type of information should be considered?

'It's still us who make the evaluations and the discretionary assessments, you can say, and we evaluate which documentation we back it up with, so I think discretion, well I think it's a lot of our decisions […] it's what you put emphasis on […] or evaluations you can say, because it also plays a part in supporting the verdict you then reach. Because it's us who make the evaluations, this is where we sort of judge based on the documentation we have.'

What elements the social workers choose to focus on, is thus crucial for how they later evaluate the information and, as emphasized in the quote above, they have a great freedom to define the criteria based on which their evaluations are made and the documentation is produced. The practice of writing up case notes and producing documentation is a legal requirement and is seen as a safety measure for both the citizens and the municipality. First of all, it forms an integral part of the provisions of care of the citizen and secondly, it can protect the social worker and municipality in instances where legal defence of their actions is required. For the same reason, the documentation must include anything that might impact the case (Caspersen and Laustsen, 2009, p. 26). This, however, is often difficult or impossible to predict and since people and their social conditions are constantly changing, it depends on the social workers' interpretation. Social workers thus need an open mind to be able to make these

decisions. This is related to being able to cope with the uncertainty about future actions related to the individual case, which requires a high level of discretion (Ponnert and Svensson, 2016). As we learned from our field studies, this results in significant differences in regard to documentation practices and especially in terms of record keeping, including case notes, minutes of meetings, report writing etc. When asked about standards for record keeping, the social workers revealed a lack of rules and shared preferences with respect to how information is ordered or kept.

'I remember this was one of the very very very first things I asked for when I started here, because I came from a place where every record was kept so it was easy to get a hold on and easy to get an overview of. Then I asked them if they didn't have any guidelines for how to keep records. They had talked about making something. Interviewer: So it wasn't there? Social worker: It wasn't here. So everyone has their own, what can you call it, solution or method or [...] way of doing things. And I can also see, when I go in and look in our case notes, that many of us copy, for instance, a mail correspondence, they can also copy that into the case notes where I think, that's just immediately what I think, no, that should probably not be there. That should probably be kept, I would keep a mail like that within "mail correspondences", and then whoever it is that you have had a correspondence with, so that you have all the documentation and with dates, and all that, instead of adding it to a case note.'

The individual approach to the ordering of information is made possible by the lack of rules, which in turn opens op for the social workers' freedom to use discretion. It gives them space to make their own judgments and choose their personal preferences in regard to structure (Larsson and Jacobsson, 2013). It does not come without its complications, though. The documentation produced by the social workers also contributes to the circulation of information amongst the other teams involved in the treatment of a child. As illustrated below, this can create challenges during the parts of the process that are interdependent, such as when cases are handed over to a colleague. As another social worker explained:

'It's a huge task sometimes, if you have to find a special document, because you know it's there, you need it for something. It takes a long time [...] So no, there's not a system and I'm not really good at keeping a system either. Some are really good at making, like, folders [...] then they do like: what is this about, everything about access [with children] is placed in this folder, and then there's things like salaries, which is the foster family, and there's funding [...] I'm not so good at it [laughing] [...] I have more like the long list of documents.'

The above examples show that, in the absence of rules, the social workers make their own, more or less, idiosyncratic structures. They fill in the gap by creating their own rules and demonstrate how to handle circumstances that are not anticipated or provided for by the rules (Redaelli and Carassa, 2018). While more concrete and focused policies may help standardise record keeping and thereby minimise discretion (Vega et al., 2013, p. 113), the current ways

of working largely depend on the individual's routines, professional experience and personal preferences. Discretion thus seems to play a big role, whenever there are no rules available, and while the documentation practices contribute to the collaborative work between different people, it does not currently have an articulated structure that would otherwise contribute to the cooperation and coordination of work (Redaelli and Carassa, 2018).

5.3 Decision on precautions or dismissal

The law requires social workers to make a decision based on the information obtained (2) and documented by them in their casefile (3) as part of a child examination. This is described in the law text where it says that the examination 'shall lead to a reasoned decision as to whether there are grounds for implementing measures.' (Hørby, 2015). The social workers are responsible for making the evaluation of whether or not to take any further action and the citizens as such have no legal right to influence the final decision. However, as previously mentioned, their participation in performing the examination is crucial. Has the citizen not been involved in this process, the social worker may be forced to make a 'bad' examination leading to a situation where they have to make a decision based on slender grounds (Høybye-Mortensen, 2014, p. 82). When making a decision, the social workers must first analyse the information they have got access to. This work usually involves their colleagues and managers, for example at weekly team meetings where cases are discussed:

'Sometimes [...] we can be a lot in doubt, as you can argue for both. That can be for example, if they [a family] should get some kind of funding [...] should they get it or shouldn't they get it? [...] We discuss where to place the emphasis, and then we make the decision [...] but very often we talk about them at the team meetings [...] and in that way make it standardised, so it doesn't become different. Really, you shouldn't get something just because you have one caseworker instead of another. So, if it is brought up at team meetings for example, it's also to standardise it. But if I think, they apply for this and I believe I have the arguments for them not to get it, then it's not required that I ask my manager if it's okay that they don't get it.' Interviewer: 'So it's not every time you bring it up at the team meeting? Social worker: 'No I don't, I don't. Sometimes I think it's very clear they [the family] shouldn't get it [the funding] at all.'

Even though this example relates specifically to decisions concerning financial assistance for families, it has wider relevance, because it highlights both; 1) the opportunity to collaborate on decision-making at this stage and 2) the social worker's need to turn to colleagues for consultation and teamwork in difficult cases and when in doubt. It shows that collective negotiations may be part of judging, as an activity to align everyone's discretion to the wider organizational goals (Cheraghi-Sohi and Calnan, 2013, p. 57) and, as the social worker mentioned, to avoid unequal treatment. During our time as researchers in the municipality, we participated in several meetings where cases were brought up for discussion and making

individual judgment calls was generally seen as the exception rather than the norm. This supports the notion that social work practice is not an individual achievement or the sum of individual social workers' judgements. In the team meetings, the standards are available for others as grounds for assessing the reasonableness of one social worker's opinions or actions, made possible through the transparency of judgments that the team meetings bring about (Wagenaar, 2004, p. 651). As such, the freedom to use discretion when making decisions on precautions or dismissal is high and to a certain extent, the discretionary practice is a collective activity. It may be based on the individual's need for sparring and alignment in making the final decision on whether or not any further action should be taken. However, the social participation in the community amounts to the social worker coming to behave in ways that are recognised by the group (Hammersley, 2005).

5.4 Making suggestions to an action plan

If the social worker believes a child is in need of care and support, he or she will decide on precautions and draw up an action plan. The precautions are based on what is found to be challenging the child's development and well-being and it is legally required for an action plan to specify the purpose of the action as well as the action needed to achieve the purpose. Precautions can be everything from providing a contact person to intensive family care. However, if the social worker believes the child is facing an apparent risk, he or she must decide on the necessity of further investigation and consider if any immediate protective action is required, such as an out-of-home placement. In making this decision, social workers are guided by and act on the information they have access to. As illustrated by one of the social workers named Anna, this signifies a space for discretion within which they use their judgment to specify the conditions that should be taken into consideration.

'You have to be able to describe that there's an apparent risk for the children's development and well-being, and you can say it's very broad to a certain extent, but you have to document that it's so threatened […] it's very much from case to case, if it's present. And it can also be the case that you come in possession of information, suddenly, where there's been abuse or violence, then it also changes things, where you can then look at the case differently.'

Anna goes on to describe a case where a child protection examination resulted in her recommendation of removing a child with force. Her story concerned a mother with eight children, with two of them already placed in foster care. Anna's first task, when she took over the case, was to examine three of the mother's other children. Based on these examinations, Anna presented the parents with her recommendation of also removing these children from home. However, the parents would not agree to voluntarily give up their children and from this, an agreement was made to conduct intensive family therapy for a short and intensive period to evaluate the parents' skills and ultimately decide whether or not the children should remain at home. Anna described the process as follows:

'We started, after the family therapy had ended, to make a recommendation about placement to the committee for children and young persons, because they [the parents] wouldn't agree to placement in foster care […] Once this had been recommended, it didn't go through in the committee for children and young persons, so it came back to us [...] So they [the committee for children and young persons] had not identified the criteria for coercion as being fulfilled. What we then decided, in collaboration with the management, was that we contacted the Social Appeals Board for them to go and look at the case. They are like above us you can say, they can impose us to do some things. Because we did that, we had to send a lot of documents of the case to the Social Appeals Board as they had to shed light on whether the children thrive well enough, and whether everything that has to be done has been done [...] They were very concerned. They then called in the parents for a conversation [...] to hear what the parents would agree to here. And they [the Social Appeals Board] didn't believe that the criteria for out-of-home placement without consent was fulfilled right now, but they were extremely worried, so they evaluated that there was a need for what is called an investigation of the parents' competencies […] They [the parents] said yes to this, they would like to do it. And this was then developed, and based on this, it was assessed that the children couldn't live at home […] But just because it [the assessment] is there, it's not enough to place the children in care. It then has to once again be recommended to the committee for children and young persons, so we did this [...] and this time it went through, and they were then placed in care.'

This rich narrative exemplifies a number of areas that are crucial to discretion. First, there is the many steps Anna is required to follow and in a specific order. As she describes, this limits her opportunity to influence the procedural nature of her work and thereby reduces her ability to exercise discretion (Larsson and Jacobsson, 2013). Secondly, there is the way Anna describes the rules in action. In line with the findings by Wagenaar (2004, p. 646), she shows how 'the two work together to literally create the situation'. The rules work as a checklist of what is feasible (it works), acceptable (the reasoning behind her decisions will hold up when challenged) and rational (it complies with the legal requirements). In other words, Anna relies on the stipulations provided by the rules to do her job (Schmidt, 2011, p. 144). Even though the rules do not and cannot describe her actions exhaustively, she makes it clear that they do not serve in 'as weak a role as a traveller's map', since they require her to do her tasks correctly, within a time limit and in a specific order. Nonetheless, her overall task of 'describing an apparent risk' is very broadly defined and in order to do this, she must select from, interpret and translate the information she has into legally binding decisions. How she applies the rules and performs such translations is situated and rooted in her use of discretion. This can also be seen in the way other people interpreted the same information differently and initially disagreed with Anna's recommendation of placing the children in foster care. Ultimately, as Anna's case description brings to light, the suggestion to remove the children is a process based on judgements not made by her alone but a whole team, including colleagues and managers (hence Anna's use of the word 'we' when describing the process), psychologists and lawyers, and

eventually the committee for children and young persons. What is important here, are the various impacts on discretion and influences far beyond the level of the individual. These impacts and influences make discretion a cooperative activity by means of which various stakeholders contribute to its unfolding practice to different degrees and with different effect.

5.5 Decision on action plan

In addition to the influence of rules and discretion in practice, the example provided by Anna also helps to unveil the complexity and uncertainty involved in social work and when making suggestions to an action plan. It shows that an assertive, but also adoptive approach to interactions and negotiations with other stakeholders can be crucial in reaching a judgemental decision. This is described well by Laura, another social worker, who shared her experience of the process of making a decision on an action plan and the reasoning behind the decision. She told us about one of her cases, involving a 16-year old girl who had been living with and moved between different foster families her whole life. According to Laura, the girl was happy to live with her current foster family and had no interest in moving. However, as the municipality went through the terms of the contract as part of their standard procedure, they were unable to reach an agreement that would allow the girl to legally stay with them for another year. The rules determined she had to move and the decision was made to move her to a new foster family. This resulted in the child making a formal complaint to the Appeals Council and at that point, Laura got involved in the case with an important decision to make: finding a new home for the child, even though the child was not interested in moving.

'I got informed by the Appeals Council that they have received this complaint from this child and in the meantime, I went to talk to the child to see if maybe there was another solution, as she didn't want to be moved to a new foster family. I said, but there might be another solution. You could be moved to your own room [her own place, such as a dorm], but with financial support. She considered that and then got back to me and told to me that she wanted to do it. And then she pulled back her complaint.'

The focus on meeting the needs of the individual child is explicitly stated in the law which says that help is organised 'according to the individual needs and circumstances and in collaboration with the individual.' Although in Anna's case foster placement was initially seen as the preferred option for the child, it is not the only option. In order to meet the heterogeneity of children's needs, the law provides a list of several placement types to choose from.

'It's mentioned in the law that you can get your own place. It's something I can go and read in the law text, what opportunities you have. It could be an opportunity as she was 16 years old at that time. If she had been younger, if she had been 14 […] or 15, then I probably wouldn't have thought of a room of her own. I probably wouldn't have thought that. But I think that 16 years […], actually, she was 16.5 and she was on her way towards 17, then I think; own room

and then with support, yeah, you can do that'. Interviewer: "Does the law say anything about how old you have to be?" Laura: "No, I don't think it does. I'm thinking this is about making an informed guess and finding out; is this child even suitable […] because you can also be 16 and you can also be 17 years old and not be suitable at all for living in your own room. You can also be 14 or 15 and actually be really good at maybe living in your own room. Well, not that I think that's a good idea, it's really not [laughing], I think they are too young. But if there's no other opportunities, or other solutions […] We have a lot that have been placed outside the home at 16 years old."'

While the law distinguishes between different placement types, it raises questions of how to understand the different provisions in a practical context (Svendsen, 2016). For instance, does age matter and how? Laura explains how this is not the only factor she takes into account, and in her opinion, it is not the only thing that determines maturity. Nevertheless, her decision is influenced by a strong opinion of 14-15-year old's being too young to live in their own room. If the girl had been younger, it may have led Laura to suggest a different solution. This is not something we would have been able to reflect upon had we only analysed discretion as a space for making decisions left open by rules and standards, but through access to Laura's account of reasoning, the epistemic aspects of discretion become visible. When she brings to light the different factors and indications she weighs and considers when assessing what is reasonable, she furthermore uses the many out-of-home placements of 16-year old's to justify her decision. As such, her discretion can be said to be contained within the 'community of practice' (Lave and Wenger, 1991) as it is influenced by previous precautions made by other members in the community of practice and thereby what is known to be acceptable amongst her and colleagues. Furthermore, the social workers told us that they have no competency to grant financial assistance without the approval of a manager. While this can create some bottlenecks in the case management process, many of them also find it acceptable as it helps avoiding differential treatment and, as previously one social worker put it: 'you shouldn't get something just because you have one caseworker instead of another.' Since almost every decision on action plans involves financial assistance of some kind, they simply cannot be made based on the judgement of one person alone. They have to involve the combined judgements of members of the group and, as we have seen in this example, what is known to be 'good' judgements made in previous cases, helps the problem solver make judgements that agree with the views of others and have been known to work previously.

5.6 Implementation of action plan

The implementation of an action plan is often described by the social workers as a dynamic process. It is expected that the activities will change as the implementation progresses and as new challenges arise and others change character. Expressed in social workers' own words, the many unforeseeable circumstances mean that 'sometimes, you try your way forward with many different types of initiatives, until you find the right one.' As previously mentioned, every precaution must achieve a purpose based on what is found to be challenging a child's

development and well-being. For example, during one of the meetings we observed between a social worker and another professional, discussions revolved around the goal of bringing a child and his mother closer together. This meeting was voluntary and set up by the social worker herself to gain new perspectives on how to approach the problem at hand. One thing that was brought up during the meeting, was the task of finding someone to bring and pick up the child to and from therapy. Various solutions to this problem had been brought up by the social worker and discussed with colleagues prior to this meeting, such as providing the family with a contact person or giving the responsibility to the father, while compensating him for any loss of work. However, as the conversation went on and they got to the core of the problem, their focus shifted towards seeking the opportunity of having the mother's sister drive the child. The reasoning behind this, as they explained, was to pave the way for the mother and child to reconnect and thereby meeting the goal of getting them closer together.

As the above example makes clear, there is no single way of approaching these types of problems. They come with a host of solutions. In finding a solution, the social workers often involve other professionals and the judgement made as part of the implementation of an action plan is therefore considered a collective achievement rather than an individual activity, as it requires different groups working together towards the same goal. Often, the social workers explicitly recognized the influence of others in altering their own behaviour and the way they made sense of a situation and the possible implementation choices. In the discussion of how to bring a mother closer to her child, the meeting with the other professional resulted in the social worker approaching the problem in ways not previously considered and new, shared perspectives were formed as a result of engaging in this meaningful partnership.

5.7 Following up on action plan

In addition to having the freedom to make and re-fine judgements surrounding the implementation process, as well as involving others as part of this process, the social workers are also required to follow certain rules and standards to secure an effective and optimal implementation of an action. Those who follow the 'Styrket Indsats' structure are, as previously mentioned, obligated to work closer with and around a family and child during the implementation process. Among other things, this means that they must evaluate the efforts no later than three weeks after the action plan has been put into practice and hereafter every third month. This is unless it involves an out-of-home placement, which must be followed up after three weeks and hereafter every third week. The following year, follow up has to happen every sixth week. Those who are not a part of 'Styrket Indsats' have to follow up after three months and from that moment every sixth month, regardless of the conditions of the case. Increased guidelines have previously been found to reduce discretion (Cheraghi-Sohi and Calnan, 2013) and even though the social workers in 'Styrket Indsats' have fewer cases, they told us that they were just as busy as before. Many of their tasks have doubled up and all the new things they 'have to do' gives them less space to choose their own work process. However, as also found by Larsson and Jacobsson (2013), the space for reasoning when making decisions has not

changed with the new policies. There is always the opportunity that new information and events will occur, which effectively may change the evaluations, goals and actions made in the first place – whatever the original plan proposes (Caspersen and Laustsen, 2009, p. 58). No rules can predict the future. One of the social workers described this experience as she reflected on one of her previous cases concerning a young boy whom she decided to move from one placing to another. The boy had been placed in a network foster family (i.e. when a child is placed with relatives) for the past six years and lived with his grandparents. She explained the process of moving the child as follows:

'We could see that the boy didn't thrive as he should [...] I talked a lot to the grandparents about how it was too big a task for them, and we tried to support them with respite services, we tried to support them with family therapy and supervision, but it wasn't enough for them and therefore, I made the decision, primarily me really, and went in and said; "well, now enough is enough, now it can't work out any longer." And they were then agreeing with me, and then we moved him (the child) to an actual foster family.'

When asked about the extent to which discretion played a role in making her decision, the social worker told us that it was grounded in her use of discretion. At the moment the decision was made, the child was already living with his grandparents and as the contract with them had not ended, there was no rule influencing her decision. As she explained; 'it's me who decides that what we're doing around the child isn't good enough if we want to make sure he'll have a good youth'. Instead of following the guidelines provided by the law and letting the boy stay with his grandparents, the social worker chose to act proactively by using her discretion as a guideline for what she felt the situation required (Wagenaar, 2004, p. 646). In this case, both the decision and the criteria for decision-making was left in the hands of the social worker, giving her large degrees of freedom (Høybye-Mortensen, 2014, p. 75). Moreover, her accounts of reasoning reveal the criteria based on which her decision was made, as she explains her focus was on the well-being of the child. In that way, she can be said to be using her discretion to protect and promote the interest of the child whatever that may require. Her efforts are directed to do everything necessary to reach her objective and, as we can see from her story, her efforts begin with this objective, rather than her relying on the terms of the rules – in this case, the ongoing contract with the grandparents. As we mentioned throughout this paper, these decisions are made with the involvement of colleagues, managers, other professionals and, certainly, the grandparents. As emphasised by the social worker, the decision was taken with the agreement of the grandparents and although the process was initiated by the social worker, she could not have made it alone. The social worker's use of discretion is thereby determined not only by the incident but also those involved. In this case, as well as in the others discussed, it allows her to act according to the situation and take individual needs into account, while at the same time being influenced by the broader community morally and ideologically when making judgements, which is the nature of discretion.

6. Discussion and concluding remarks

Based on the analysis, we will now move on to a discussion of our results on discretion and provide our perspective on what might be its role in the future of automation in the public sector and more specifically within social work. Finally, we will present our conclusions and indicate future research directions in this area.

Our main goal in this study was to examine the nature of discretion in social work to debunk myths about discretion that are currently governing and enacting automation of case management in the Danish public sector. We explored social workers' accounts of what constitutes the formal procedures and discretionary practices of decision-making. Based on our findings, we come to the conclusion that discretion is practiced in a variety of ways and for different purposes. First of all, we found discretion to be deeply rooted in the law and internal policies used by the social workers. In some instances, they directly encourage the use of discretion, whereas in other situations they are vague and broadly defined and require interpretation work. Depending on the level of instructions provided by the rules, the discretionary space is either increased with more freedom to skip or simplify elements of casework or decreased with requirements inscribed into the decision-making process. These findings are in accordance with those reported by Vega, Chiasson and Brown (2013). In opposition to these findings, however, when discretion is perceived as stemming from misinterpretations or inadequate evaluations of rules, we found that rules rarely provide any right or wrong answers. Regardless of how rules are defined, it is only by putting them into a context that the social workers can make sense of them and translate them into concrete decisions (Wagenaar, 2004). In situations where there are no rules to rely on, we found the space for discretion was made bigger as both the decision and the criteria for decision-making are left in the hands of the social workers, making forcing og freeing them to create their own methods and ways of doing things. This result ties in well with previous findings by Redaelli and Carassa (2018). We found that the process of making decisions cannot be reduced to the operation of rules as otherwise claimed by traditional research on discretion, but brought to an end by research in CSCW (e.g. Suchman, 1987). By looking at discretion not only in terms of space but also in terms of reasoning, we equally found a correlation between the decision made and those involved in making it as well as who is responsible for using their discretion. Interestingly, this has not been covered in the literature on discretion where it is mainly considered an individual activity and/or investigated as such (e.g. Wallander and Molader, 2014; Møller, 2016). We argue that this might be due to a lack of exploration of the implicit details of decision-making and its distribution. Deeper analysis reveals the interdependency and teamwork involved in decision-making and based on our findings; discretion is better defined as a collaborative effort. To our knowledge, no research has focused on the collaborative aspects of discretion. As such, we make a conceptual contribution by introducing the notion of collaborative discretion into the discussion.

According to our study, the examination of children (1) is often made individually but the decisions are influenced by different stakeholders. The documentation of their needs (2) are

largely dependent on everyone's own routine, experience and preference due to lack of structure and shared experience. Decisions on precautions or dismissal (3) was found to be a collective activity based on group behaviour and discussions as part of meetings, such as weekly team meetings. Depending on the nature and invasiveness of the precautions, suggestions and decisions in relation to the action plan (4-5) may involve various stakeholders and take into consideration previous decisions made within the community of practice. The process of implementing an action plan (6) is best described as a collective achievement as it requires different groups working together towards the same goal. Finally, the evaluations (7) are rooted in the social workers' use of discretion, which is influenced by the cooperation and negotiations made with various stakeholders.

In addition to viewing discretion as individual choice or judgements, previous literature on discretion tends to view rules as fixed points and as mechanisms used to control discretion (e.g. Bovens and Zouridis, 2002; Larsson and Jacobsson, 2013; Vega et al., 2013). However, we find that rules are often ill-equipped to deal with the complexities involved in social workers' decision-making since they mainly tell what needs to be addressed and rarely how. As Lipsky (1980) demonstrated, social workers make decisions with room for discretion to interpret and modify formal rules concerning which activities to inspect, which evidence to examine, which inferences to draw and which actions to take (Black, 2001). In doing this, they consult and negotiate with various stakeholders in reaching decisions that best serve the circumstances of the individual case and the interests of those involved. Even though the rules may seem clear on the surface, we find that a closer look is necessary to see the complexities. Based on description of some of the inherent complexities involved in decision-making, our findings point to the mistake of over-relying on rules when seeking to understand or intervene the process. Discretion is an indispensable component to the way social workers operate and regardless of how they are defined, the process of making decisions cannot be reduced to the operation of rules. While CSCW literature on collaborative practices and rules in action helps us to make sense of their diversity, multiplicity and (sometimes) vagueness in practice, they do not provide insights on how this relates to discretion. As a consequence, the theoretical approaches tend to become somewhat rigid. For example, Suchman (1987, 2007) denies the specificatory role of formal constructs all together while Schmidt (2011) suggests that we have a rather binary way of consulting them, as either 'maps' or 'scripts'. This has implications for how we view the role of both current and future definitions and automation of laws. To us, it is not a question of determining beforehand, whether or not a legal criterion for decision-making functions best as for example a map or a script, to use the terminology of the CSCW literature. Rather, it is probably more pertinent to allow the users of the system to use it flexibly as a 'map', 'script', or even something in between, depending on the situation.

The understanding we have achieved of discretion throughout this study has not been influential in public debates. Instead, one has embarked upon impractical pursuits for 'automating as much as possible' or 'replacing subjective criteria with objective'. As alluded to earlier in this paper, the trust in discretion is reduced and by removing it the decision-making

process is supposed to become more 'evidence-based' and thus more certain for both the social worker and citizens. We believe this myth may potentially distract us from developing technology that provides real value rather than punitive damages. In order to reverse the situation, the role of discretion must be recognised both by politicians, the public and researchers. While automation might appear to reduce uncertainty, nothing implies that it will solve the complexity of situations. Neither does it mean that decisions are improved or that citizens will get better service (Ponnert and Svensson, 2016, p. 595). An example taken from our own fieldwork illustrates this point and highlights the risk of standardised approaches. As part of the child protection examination performed by the social workers, the law is currently asking for their use of discretion in terms of deciding what other matters of relevance must be examined. Should the criteria of this obligation be rephrased with the purpose of enabling automated case management and eliminate discretion? According to Ponnert and Svensson (2016, p. 592) this might result in a somewhat 'digitalised interaction' between social workers and citizens where the social workers get used to manuals and administrative ways of thinking rather than people's stories and experiences. This, in turn, could potentially create uncertainties about what information is needed to provide good care and prevent adverse events. The point here is that, in order for automation to work, uniformity is necessary – meaning that neither assessments nor interventions are adjusted to the individual case. By focusing on relatively static factors, digital-ready legislation ignores case-specific factors. As a consequence, the social workers may risk losing the picture of the actual person and they might find it difficult to match every individual with the information required by the rules (Barfoed and Jacobsson, 2012). Social problems are often complex and not easy to define. By simplifying the complexity, it could also give the impression that the causal relationship is clearer than what might be justifiable (Høybye-Mortensen, 2014, p. 73). Further, we speculate that it might also hurt the collaborative process.

    In their research on 'street-level algorithms', Alkatib and Bernstein (2019) call attention to the fact that machine learning algorithms may only be able to refine their criteria after a decision is made. They operate on the basis of given data and use existing circumstances to learn (Hagendorff and Wezel, 2019) but these do not necessarily reflect current concerns. To us it is obvious that no general rule can apply to every new situation and for good reason, since there is no way to fairly extrapolate the reasoning behind past decisions to all new scenarios (Pasquale, 2019, p. 53). As we have seen from the stories we were told by the social workers in the municipality, their work requires discretion in order to be able to adapt to the myriad of individual circumstances. It allows flexibility and sensitivity in dealing with the particular case and the information that might show up during the course of casework. Recall the case where the social worker decided to interrupt the ongoing contract made with the grandparents in order to move the child to a different foster family. Per definition, discretion cannot be automated since then it is no longer discretion. As explicitly or implicitly suggested by previous research, it may be transferred to other people (Bovens and Zouridis, 2002) or replaced by something else (Alkatib and Bernstein, 2019). However, if replaced by something else, it goes against the logic of the situation as discretion serves a specific purpose (Molander, 2016, p. 12). As our

findings show, each case is as unique as the persons involved and may therefore require a different response. Discretion allows for this to happen. It does not mean that tasks cannot be automated, but the consequences of doing so would, in some cases, be immense. Social workers need to be able to interpret and modify rules in order to, for example, treat children as human beings with personal differences (Biestek, 1957), otherwise the risk of creating harm might grow bigger than the opportunity to improve their well-being. This is not difficult to see if we recall the cases in this study and the different responses they required. Further, the current (over)emphasis on rules and automation often leaves the informal aspects of social work under-emphasised (Nyathi, 2018, p. 192). While some rule-defined tasks could bring aspects of discretion under control, in other situations it might simply obscure its use (Jorna and Wagenaar, 2007).

We are currently living in an age where automation will accelerate and continue to develop for the foreseeable future, but we are far from convinced that it will outshine discretion or make social work easier. It appears that the promises made about automation in the 1970s were in many ways a myth back then as it is now. We find that there are limits both to the ability and the desirability of removing discretion at the expense of automation. Social workers require a model which is much more nuanced and able to respond to situational factors, just like any human beings will. This is something designers of new technologies need to recognize in order to turn their attention from systems that attempt to replace discretion to those that integrate it with technology. We hope that our initial findings will inspire researchers to conduct further empirical studies on the uses of discretion in existing work practices to inspire the design of new technology and to gain more knowledge about its scope and limitations. The CSCW discipline has an important and time-sensitive task to accomplish to ensure an appropriate balance between discretion and digitisation – both for the social workers and certainly also for the citizens whose life are affected by the decisions that are made.

Acknowledgements

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