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A Solution for Everyone?
The Danish Labor Movement’s Mobilization on Twitter during the Collective Bargaining in 2018

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Abstract

This thesis explores the Danish labor movement’s use of Twitter during the collective bargaining in spring 2018 from a mobilisation perspective. This is done to investigate 1) the form of contentious politics practiced by the Danish labor movement, and 2) the role of trade unions in the Danish labor movement. One specific hashtag, #ok18, is analyzed.

This investigation mainly builds on framing theory as developed by Snow & Benford (1986; 2000) and its connection to the logic of collective action, and the logic of connective action developed by Bennet & Segerberg (2013). Three methods were used to analyze the labor movement on Twitter: a social network analysis of @mentions, semantic network analyses of Twitter streams, and a quantitative content analysis. This study finds that the most important and central actors within the labor movement on Twitter are trade unions. Nothing indicates that Danish public employees used Twitter to organize independently of trade unions. Furthermore, the labor movement used Twitter to articulate collective action frames that served as shared “schemata of interpretation” for the collective bargaining. In addition, several framing processes that changed the collective action frames were identified.

These results all indicate that the labor movement’s mobilisation on Twitter during the collective bargaining of 2018 is best described by the logic of collective action. There were no indications of personalization of politics or of an increased symbolical inclusiveness. The successful mobilisation in Spring 2018 might therefore be interpreted, with the big proviso that that this study only investigates Twitter, as the first small steps towards a revitalization of conventional trade union politics in Denmark.

Keywords: collective action, connective action, TU communication, labor movement, semantic network analysis, twitter, framing, collective action frames, social network analysis.
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1. Introduction

The Danish labor market is known for its high levels of trade union (TU) membership, collective bargaining and its unique form corporatism referred to as the “Danish model” (Kaspersen & Schmidt-Hansen, 2006). It has even been called the industrial model ‘par excellence’ (Geelan, 2015). Nevertheless, the last two decades TU membership in Denmark has declined following a global trend. Especially young people are unorganized. The decline in memberships can partly be explained by the liberalizations of employment insurance membership imposed by the liberal-conservative government in 2002 (Geelan, 2015), which is yet another example of how neoliberal states undermine TUs (Ward & Lusoli, 2005). However, the decline may also be a result of a general skepticism towards social organizations (Putnam, 2000), especially among young people, and a longing for a more personal and self-satisfying engagement with politics in what will be theorized as post-industrial societies (Bennet, 2012). In such an era of personalized politics, concepts such as class seem to disappear (Levinsen, 2006).

However, in the spring of 2018 something important happened. During the collective bargaining between public employers and public employees, the mass media reported intensively and in detail about every step in the bargaining process, demonstrations and protests in favor of labor were well-attended, TU memberships grew, and personal opinions and discussions about the working conditions of public employees were everywhere on social media platforms. In general, the mobilisation of workers was very successful (FOAS, 2019). At first sight it might seem like a revitalisation of TU politics in Denmark. It could be the first signs of a revival of traditional forms of collective action centered around a strong formalized organization, in our case TUs, and rooted in a class-based collective identity. Or maybe the success was a result of TUs’ accommodation to a more self-centered, personalized and inclusive form of politics, which several sociologists have proposed is the preferred politics of our time (Bennet, 1998; Giddens, 1991). However, there is also the possibility that the mobilisation of workers to some degree happened independently of TUs. That the mobilisation online and following collective action was not ‘choreographed’ (Gerbuado, 2012) by TUs. In other words, what we saw could be a blossoming of the Danish labor movement more generally rather than a revitalization of TUs specifically. This might call for a conceptual clarification: The labor movement is a social movement (SM) which is a network of organizations and individuals (Diani, 1995), while TUs are social movement organizations within the labor movement. The labor movement is therefore more than just
TUs, and it consists of several different and maybe even heterogeneous actors. This means that there potentially can be a labor movement without any TUs. The relation between the labor movement and TUs will clarified further in chapter 3.0.

The broader aim of this thesis is to investigate the mobilisation processes that took place during the 2018 collective bargaining in Denmark. This is done to 1) investigate the form contentious politics practiced by the Danish labor movement (class-based and exclusive, or personalized and inclusive), and 2) the investigate role of TUs in the Danish labor movement. Specifically, I will analyze the mobilisation processes related to the labor movement on Twitter. Focus will be on the labor movement’s communication on Twitter, and their construction of a shared “We”, the articulation of collective action frames and possible changes in these. The exact research questions will be presented in chapter 5 where they will be theoretically developed. However, two preliminary research questions are presented below:

1) Who are the most influential and dominant actors within the labor movement on Twitter?
2) How is Twitter used by the labor movement to make public employees fight for and believe in changes in their employment conditions?

Mobilisation is in this thesis understood from a “new social movement perspective” where it is the “performative act of gathering or assembling…a temporary unity what was previously torn apart, and which in so doing creates public space as a form of collective and emplaced experience” (Gerbaudo, 2012, p. 39). This means that the unity between public employers, if existing, is performative – it is not inherent or essential as in Marxist theory where it is based on a shared position in the mode of production – it is an outcome of mobilisation processes, and it only exists as long as the mobilization is successful. The mobilization processes that will be analysed in this thesis is framing processes and the processes of constructing a collective identity: Through these processes a performative unity between public employees are constructed, thus, focus is on the becoming of the public employees as a political collective agent during the collective bargaining in 2019. It has to be mentioned that this thesis only will only analyse the symbolic assemblage of people and not the bodily assemblage on the streets, which is a limitation of this research. Therefore, whether the mobilization processes under investigation actually were successful is not possible to conclude from the results of this thesis.

Contentious politics is the form of politics practised by social movements. It is defined as politics that involves contention, and at least one party is a government, including as a
third party (McAdam, Tarrow & Tilly, 1996). Contention starts when one collectively of people make claims on other people, which if realized will affect the others’ interests. In our case, the collectivity of people is the public employees that want improvements in their working conditions and salaries, and if realized it would be costly for the public employers. It here becomes evident how mobilization is a predecessor to contentious politics: The collectively that makes claims, and what these claims are, is the outcome of mobilisation processes.

The mobilisation on social media platforms are interesting to investigate as it has been argued that digital ICTs change how organizations facilitate collective action (Bimber, Flanagan & Stohl 2012), but also that social media platforms might serve as ‘organizing agents’ (Bennet & Segerberg, 2013) and thereby overtake the function of organizations in mobilisation processes, for instance TUs (Panagiotopoulos & Barnett, 2015). They can provide “communication as organization” (Bennet & Segerbeg, 2013). Or, maybe more likely, social media platforms will complement TUs (Upchuch & Grassman, 2015). Theories of collective action and connective action will be used to investigate these matters, in which the concept of inclusive/exclusive action frames (Snow & Benford, 2000; Bennet & Segerbeg, 2013) are integral.

Analyses and predictions of the impact of digital ICTs on the labor movement and TUs have been going on for more than twenty years. Some have praised digital ICTs for their democratizing and participatory potential and believed that they can provide a much-needed revitalization of TUs (Lee, 1997; Shostack, 1999; Diamond & Freeman, 2002). Others have argued that digital ICTs will fragment the labor movement (Chaison, 2005) and TUs will be replaced by issue-oriented groups, protest networks and more individualized forms of participation (Ward and Lusoli, 2002). This thesis will contribute to this discussion by investigating the Danish labor movement, including TUs as important organizations within it, during the collective bargaining in 2018. I will deliberately avoid a normative position from where any change in traditional TU politics – from solidarity and a strong class-based collective identity to a more personalized, inclusive and digitally mediated form of engagement – is a priori conceived as catastrophic for TUs. Instead of begrudging possible changes in the labor movement by comparing it to the heydays of trade unionism and how labor used to organize back then, it will be investigated whether possible new forms of politics and mobilisation processes have followed the structural sociocultural transformation from industrial to post-industrial society. Alignment in values between a SM and a target population is key when mobilizing (Benford & Snow. 1986), thus, a transformation might
benefit both the labor movement and TUs. However, it might also show that it only benefits the labor movement, as social media platforms as organizing agents is a resource that might make TUs obsolete.

The above transformation is not unlikely to have happened since Voss & Sherman’s (2000) already have found that American trade unions has started to focus on a more diverse membership base, but also on broadening their goals to include general social justices matters such as civil rights, immigrant rights, and economic injustice for nonmembers (Voss & Sherman, 2000). There are furthermore signs that progressive American labor movements move from a one-identity movements (class) to multi-identity movements (Kurtz, 2002).

Similarly, TUs played key roles in the Global Justice Movement during “The battle of Seattle” in 1999 and in the 2011 Egyptian Revolution (Dencik & Wilkin, 2015), and both of these movements consisted of heterogenous set of organizations, groups and individuals, and, for the latter, had several different agendas. Thus, indications of an increased symbolic inclusiveness in trade unions and the labor movement are emerging.

One might propose that focusing on the Danish labor movement’s mobilisation on Twitter during the collective bargaining in 2018 does not say much about the status of the labor movement and TUs in Denmark anno 2018. I disagree. As argued by Dencin & Wilkin (2015), “media practices and the engagement with digital activism and a ‘new’ protest culture are significant for TUs and labor organisations in that they tell us something about the direction of the labor movement in the current context” (p. 83). TUs have historically been key organization within the labor movement, thus, any significant change in TU politics will change the labor movement as well. Media practices and digital activism naturally do not tell the whole story of where the labor movement is heading, but I believe this thesis still offers important insights into how it adapts, or not adapts, to an environment saturated by digital ICTs and a more personalized form of politics.

It is important to mention that I will not focus on ICTs and work relations in general, but only on ICTs’ impact on the labor movement in a mobilisation perspective. Thus, aspects of how ICTs can be used for monitoring purposes, as tools in HR management, or as devices for employees’ self-tracking of own health and performance (Upchurch & Grassmann, 2016) – which in more critical inquiries could be linked to concepts as the social factory, liquid work lives and biopower (Hardt & Negri, 2005; Bauman, 2005; Foucault, 1998) – will not be analyzed. This does not mean I am ignorant to these issues or that I deem them unimportant, it is only a consequence of the specific focus of this thesis.
2. Background

Since this is a case study of the mobilisation processes taking place on Twitter during the collective bargaining between public employers and employees in 2018, it is necessary to understand how the Danish industrial relations system is constructed, and the particular case of the collective bargaining in 2018.

2.1 The Danish Industrial Relations System.
The Danish industrial relations system is a mix between voluntarist and corporatist features. It was institutionalized after a bitter conflict between employers and workers in 1899 – and to prevent this from happen again a “main agreement” was written and signed by both parties. This “main agreement”, which can be understood as the constitution of the Danish industrial relations system, is called The Danish Model. The voluntarist features of the model entail that “employer organizations shall recognize TUs as legitimate representatives of workers, with a right to collective bargaining, while the unions shall recognize the employers’ right to manage” (Knudsen & Lind, 2012, p. 383). In addition, the TUs’ right to strike is limited as long as collective agreements are in force. The corporatist elements of the model are linked to the function of the state: It acts as a facilitator between the employers and workers through different legal institutions but also through their labor policies, often called the flexicurity model. In general, parliament and government abstain from interfering in negotiations between the two industrial relations parts, however, if a conflict seem unsolvable, the state can intervene and make changes through legislation. During conflict, TUs can legally strike, and employers can legally “lockout” employees, meaning they preclude them from going to work and thus do not need to pay them. If the state intervenes to end the conflict, it is never a popular decision because it breaks one of the key aspects of the Danish model: Free collective bargaining and voluntary agreements between employer and employees.

2.2 The collective bargaining in 2018
If one wants to understand the intensity and importance of the collective bargaining in 2018, one needs to understand the backstory. The collective bargaining of 2013 between the teachers and the public employer ended in conflict: The teachers started to strike and as a response they got “locked out”. After three weeks where the teachers had received no pay, the government intervened and changed the teachers working hours through legislation. The government claimed it was to get kids back to school again, which is in line with a societal corporatist way of thinking, but the TUs suspected that it was a planned government
intervention. Because the government had recently gotten a big school reform through parliament that relied on a change in teachers’ working hours: More time should be spent in the classroom and less time on preparation. If the teachers did not agree on a change in their working hours, the reform could not get implemented. Therefore, the TUs argument goes, the public employer – which is the finance minister and therefore also part of the government – never even considered to reach a compromise on the topic of working hours because the change was needed for political reasons. And he did not have to because there was always the possibility of a government intervention. However, according to the Danish Model, the finance minister serves as the chief negotiator for the public employers during the collective bargaining, not as a minister in the government. By conflating the roles of public employer and minister, and by the having the alleged backup plan of a government intervention, the “Danish Model” was de facto circumvented: Employment conditions were made through legislation instead of voluntary agreements.

This explains why the collective bargaining of 2018 was so important for the TUs: Another state intervention would further damage the Danish Model and thereby make TUs less important because changes in working conditions would happen through legislation rather than through collective bargainings where TUs have a monopoly on the representation of workers. As a response all TUs made a “musketeer oath” which entailed that all TUs on both municipality, regional and state level should agree with the public employer before any agreement were signed. One of their main goals was to fight for the teachers’ right to a voluntary working hours agreement, while the two other main goals were an increase in real wages and paid lunchbreaks. The negotiations broke down, and because the consequences of a grand conflict – the whole public sector going on a strike – would be huge, a “conciliation man” were assigned to mediate between the employers and employees. Two times the mediation periods were extended, and they lasted for almost two months before the negotiator for the LO-affiliated TUs, Dennis Kristensen, broke the “musketeer oath” and made an agreement independently of the other TUs. Three days after all the other TUs had followed along. The teachers did not get a new working hours agreement, all public employees got a raise in real wages, and some of the TU members got a paid lunchbreak.

What this thesis will analyze is the battle of hearts and minds that took place on Twitter before the collective bargaining broke down and during the mediation between the two parts. Getting workers to demonstrate, protest and possibly lose their income takes persuasion – the workers need to believe that it is worth it and that they can win a conflict. TUs need to frame the disagreement between employers and employees a certain way.
3. Existing research
In this section of my thesis I will present existing research on trade unions’ use of digital ICTs. I review research on how digital ICTs change dynamics internally in trade unions, how they change power dynamics between trade unions and employers, and lastly trade union members’ use of digital ICTs and perception of digital ICTs in trade union politics. Next, I will present a short review of framing literature in media and communication research. This will be done to argue why I have chosen to use framing theory developed in social movement research instead of framing theory developed in media and communication studies. It will be argued that the way social movement’s use Twitter and how they articulate frames in media texts (tweets) is similar to framing research in media and communication studies, but only framing research in social movement research can answer how people come to participate in collective action.

3.1 A definition of social movements
Before I present previous research, one conceptual clarification needs to be briefly outlined, and that is the difference between organizations and social movements (SM). It has been argued that SMs have a distinct logic which often is conflated with the logic of organizations (Della Porta & Diani, 2006). Although SM definitions differ too some degree, a synthesized definition have been formulated by Mario Diani (1992) who define a SM as “networks of informal interactions between a plurality of individuals, groups and/or organizations, engaged in political or cultural conflicts, on the basis of shared collective identities” (p. 13). This implies three characteristics (Della Porta & Diani, 2006, p. 20-21):

1. **Dense informal networks**: This differentiate SMs from organizations and collective action within organizations: All actors, both organizations and individuals, keep their autonomy and interdependence in their pursuit of a common goal. The strategies and goals are constantly negotiated by the involved actors, and no actor, no matter how powerful, can represent the whole movement.

2. **Confictual collective action**: This implies an oppositional relationship, in our case the relationship between labor and capital or employer and employee. They make demands – either by opposing or promoting social change – which would affect the opposing actor.
3. *Share a distinct collective identity*: A collective identity connect people across time and space and therefore also beyond specific events and initiatives. Boundary definition – who is and who is not part of the movement – is constantly negotiated by actors and plays a big role in collective action. In general, it can be thought of as the common “We” that participants identify with.

Strictly speaking one is thus a member of a TU but participates in the labor movement. TUs are therefore not social movements, they are social movement organizations.

Not much research has been done on Danish TUs’ use of digital ICTs, so I will use research from different countries. This has the clear downside, from a political process-perspective (Della Porta & Diani, 2006) that national political opportunity structures (McAdam, 1996) are not taken into account. This is not ideal as opportunity structures possibly affect the utilization of digital ICTs. We for instance know from the few comparative studies conducted that union presence on, and utilization of, the internet differs a lot across nation states (Rego et al, 2016; Vidovic & Kolic, 2015). It has been argued that the neglect of political structures when researching mobilisations on digital media platforms lead to a fetishization – in the Marxist sense of the word – of technology (Fuchs, 2012).

Hence, I point the reader’s attention to chapter 2.0 which can be read as a brief and simplified description of the labor movement’s opportunity structure in Denmark, as it describes exogenous factors that influence the labor movement’s prospects of mobilizing (Meyer, 2004). On the other hand, political opportunity structures should not be understood in neo-positivistic perspective where opportunity structures are something “out there” which we objectively can prove or describe through empirical studies. Opportunity structures are always interpreted by the researcher, but certainly also by SMs and SMOs. It has even been argued that framing political opportunities is one of the main tasks for SMs (Benford & Snow, 2000). In our example with TU conflicts: TUs need to frame a conflict in way which make their members believe that there are opportunities for change. This is not to argue that political opportunities and constrains do not exist outside the minds of activists – for instance repression of workers on the workplace or state violence – but that the framing processes and political opportunities are interacting.

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1 The shared collectivity as a part of any SM will later be discussed in the theoretical section of this paper, as the logic of connective action opposes this view.
3.2 TUs and the internet

The possibility of online TUs politics and communication has been considered a positive force of change for TUs (Lee, 1997) as it would enhance union democracy and make them adopt participatory practices (Shostak, 1999), while others have argued that the internet potentially might fragment the labor movement, including TUs (Chaison, 2005). Three hypotheses of the effect of digital ICTs on TUs have been found in an early review by Ward & Lusoli (2003): 1) Digital ICTs will erode the collectivity and solidarity within TUs, 2) they will modernize TUs organization, administration and positively change the way in which especially young people conceive TUs, or 3) they will democratize TUs by contributing with more bottom-up mobilisation- and decision-making processes. To these three hypotheses a fourth should be added, and that is how ICTs will increase TUs (discursive) power relatively to employers as new opportunities of offering counter-discourses to mainstream media have emerged with the internet (Fotopoulos, 2016). However, relatively few empirical studies have been conducted on how TUs communicate and mobilize online. In the early days, discussions were mainly about the potentials of using the internet (see for instance: Diamond & Freeman, 2002). However, as such discussions of the potentials of going online often is influenced by “social imaginaries” (Fotopoulou, 2016) about the effectiveness of digitalization and the internet’s inherently emancipatory and/or autonomous nature, I believe it is necessary to focus on empirical investigations if we want to move the discussions on TUs’ use of digital ICTs further.

3.3 The impact of ICTs on TUs

Early literature focused primarily on how websites impact TUs internally. How they change organization and participation within TUs. One of the earliest descriptions of TU use of internet technologies is conducted by Eric Lee (1997). Optimistic on behalf of the internet’s influence, he finds early signs of how American unions use the internet as a network for electronic message exchange and to strengthen the structure internally through increased communication. It could even lead to a new internationalism emerging online, he proposes: Trade unionists can use the internet to communicate across borders and thus forming “labornets”. Similarly, Diamond & Freeman (2002) propose that unions can use the internet to strengthen the international labor community.

Another early analysis of TU use of web 1.0 technologies is made by Greer (2002) who investigates union democracy in 63 American unions. He finds that digital ICTs lowers the cost for members to critique their union, which might be interpreted as an increase in union
democracy. In a follow-up study (Stevens & Greer, 2005) four years later, the authors find that both members and leadership still are positive on behalf of ICTs as tools for democratic inclusion, but an analysis of their websites disclose that members’ possibilities for interacting with leadership has not increased further: The leaderships do not ask for inputs from members more often, and the number of chat-rooms has even decreased. This finding is similar to the results in Ward & Lusoli (2003) who discover that British TUs offer very few possibilities of real participation for their members on their websites, thus, TUs do not seize the participatory opportunities offered by digital ICTs. On the other hand, the members in the American TUs believe that the increased use of emails has increased their voice within the organizations; however, due to methodological choices, this claim cannot be falsified or verified (Stevens & Greer, 2005).

Moving on to research about TUs’ use of web 2.0 technologies. Geelan’s (2015) investigation of a campaign started by LO, the Danish confederation of TUs, and four of its affiliates, shows that the TUs used many different media technologies to disseminate information and engage in two-way communication with members. Exactly how much communication was dialogical is not presented. In the first evaluation of the campaign through a survey, he found that most young people who had any knowledge of it had obtained it from the union magazine while Facebook only accounted for 4%. In the second evaluation however, where he investigated the knowledge of certain campaign videos, the author claims that YouTube was successful in reaching young people since 65% of the 15-29-years-old had seen the campaign video in TV, cinemas, or on the internet. However, as Geelan has not isolated the internet as variable, I do not believe he in fact can claim the success of Youtube. Especially because flow TV is push-media, contrary to YouTube as pull-media, which I believe increase the chances that these young people have seen the video on TV. This concern about actively choosing TU content is also shared by TUs themselves (Ward & Lusoli, 2005, p. 163) and other research on the matter (Diamond & Freeman, 2002). Furthermore, one might speculate that TU videos probably are absent from most young people’s filter bubbles on YouTube and social network sites (Pariser, 2011). Thus, when Geelan (2015) claims that the internet is an important medium for reaching young Danish workers due to their habits of media consumption and analyze this by applying the theoretical construct of mass-self communication developed by Castells (2009), he neglects one aspect of that theoretical construct: The “self” also refer to the audience, as it has a higher degree of power, one can choose what one wants to be exposed to – and Geelan does not offer any evidence why young people actively might seek TU content online.
A particularly interesting study in relation to this thesis is conducted by Dahlberg-Grundberg, Lundström & Lindgren (2015). They investigate one example of online unionism on Twitter by analyzing the hybrid organization – it is both a transnational campaign platform and a TU – LaborStart. Their analysis of the dataset, which consists of both tweets sent by organizations affiliated with LaborStart and tweets that contain the name LaborStart, finds that the organization itself dominate the LaborStart-related Twitter-sphere. They very rarely retweet other users’ content, which suggests that the organization mainly is engaged in on-to-many communication. Likewise, only 18 % of all connection through @mentions are mutual, which again might indicate one-way communication rather than dialogue. Furthermore, among the different national LaborStart accounts, the vast majority of tweets are sent by five accounts while the rest almost are invisible, which indicates a centralized organizational structure. This power law distribution is not only present among tweets sent my LaborStart accounts, as fifty percent of the activity in the whole dataset is created by seven percent of the tweets. Their results show that LaborStart do not use the interactive features present on Twitter, like retweeting and @mentioning and there is no indication of a horizontal organization.

Similar to these results are the findings in Hodder & Houghton (2015) who investigate the University and College Union’s Twitter account. Firstly, they find that TUs use Twitter in ways which align with traditional mobilisation theory, thus, Twitter has not changed the ways TUs mobilize workers. Secondly, only 6,5 % of the tweets were engaging with other users, and among those retweets accounted for most. This indicates that the University and College Union, like LaborStart, uses Twitter to disseminate information rather than engaging in dialogue with other users. Furthermore, it should be mentioned that the descriptive framework which they apply in their coding process is unable to categorize 38 % of all tweets – they are assigned the code “Other” – which could indicate that the theory is unable to encompass several aspects of the union’s Twitter use. Knowing that their theoretical foundation is that of collective action where it is assumed that a strong and visible organization is at the center of the mobilisation process aiming at constructing a collective identity and collective action frames, there is a possibility that their theoretical assumptions and following deductive coding of data hides new forms of action framing and mobilisation: Individualized action frames and connective action (see the Theory chapter). This possibility could be understood in relation to the findings by Panagiotopoulos & Barnett (2015). Their results show that workers share information and organize in networks outside the traditional unionized organization by utilizing digital ICTs. This implies that the fight for better working
conditions can happen independently of TUs. This might force TUs to rethink their role as central hubs within the labor movement: The transmission of information, construction of action frames and the networking of individuals can happen without them. It might also force researchers to rethink SM theory where resourceful organization as leaders is a necessary component in any mobilisation (see for instance: Kelly, 1998; McAdam, 1988). This it at least what is investigated in this thesis.

3.4 ICTs and power

Digital ICTs not only expand the possibilities for networking, connection and participation in decision-making processes within TUs, they also allow for the construction of discourse. Internally, rank-and-file members get a voice to articulate other grievances than the ones decided by the central organization. Externally, TUs have the means to communicate with a large audience without mass media attention. ICTs can therefore shift power relations both internally in TUs and between labor and capital, as it has been argued that he most stable form of power is to control how people think (Castells, 2012), which can be done discursively through new media platforms.

Ward & Lusoli (2003) find that the unions believe their website and email are more useful to disseminate information to members and potential members compared to mass media. According to the author this is linked to the hostile opinions against TUs in British press. In other words, digital ICTs expand TUs’ otherwise limited discursive opportunity structure in England. A similar point is presented by Milner (2012) who finds YouTube more effective than Australian mass media to transmit messages about TU affairs as mass media take the employers perspective. Furthermore, ICTs as coordination and communication tools have also provided better means for organizing, and they have created tactical advantages in negotiations with employers (Greer, 2002).

One interesting case study that investigates how exactly social media is used in TU action is conducted by Upchuch & Grassman (2015). They investigate TUs, employers and employees use of digital ICTs during the 2010/2011 cabin crew dispute in British Airways. They find evidence that social media were used to organize geographically dispersed employees and allowed for the creation of social bonds and the distribution of necessary mobilisation frames. Basically, which is similar to a comparative study by Rego et al. (2016), digital ICTs are used in all phases of TUs’ action. Upchuch & Grassman (2015) find that the cabin crew used social media networks to rearticulate the frame of managerial practices as the source of grievance, for example by posting YouTube videos with cabin crew staff arguing
their case, creating a Facebook page, and by making a website highlighting the employer’s harassment and bullying of TU activists. Thus, social media proved to be a powerful tool for consolidating the collective identity of the workers. However, the authors also present analysis of how British Airways use social media as well in their counter-mobilisation efforts: TU activists who have been vocal online in their critique of British Airways and strike-breakers are penalized, either by being fired or loosing opportunities for promotions. This shows how their use of social networks in workplace affairs is complex as it also increases the exposure of TU activists. Furthermore, there are few signs that the decision-making process has been less vertical due to digital ICTs, which the authors believe is linked to how TUs are organized and function as organizations. In other words, ICTs does not break Iron Law of Oligarchy within TUs (Voss & Sherman, 2000). Thus, they conclude social media should not be seen to replace but rather complement face-to-face and mass media communication, as well as more formalized decision-making processes.

3.5 Audience

Another important perspective is how TU members perceive the opportunities of online engagement with their TU as optimism among TU leadership on behalf of digital ICTs not necessarily is shared by their members. Panagiotopoulos (2012) investigates the audience through a survey design and finds that support of increased online engagement with TUs is linked to internet skills among Greek unionists. Thus, it is mainly young tech-savvy members who are in favor of increased online engagement. This finding correspondx to an earlier analysis which found that younger TU members are more likely to use the internet (Diamond & Freeman, 2002). This might create a dilemma for TUs that is similar to the one present in feminist movements where the older generations of feminists feel as abandoned old “dinosaurs” in an era of online networked feminism (Fotopoulou, 2016). Especially since earlier research has shown that TUs mainly reach small and specialized audiences online, and mainly people who already are members (Ward & Lusoli, 2003). However, some research has showed that this dilemma was not a concern for British TUs (Ward & Lusoli, 2005, p. 163).

The positive spin on Panagiotopoulos (2012) findings, which also is formulated elsewhere (Rego, et al., 2016), is that TU communication through social media has potential of reaching young unorganized workers. This potential seems unfulfilled in another study though, as Hodder & Houghton’s (2015) finds that only 0,25 percent of the tweets sent by the TU under investigation had the purpose of recruiting new members, which is similar to the
results by Ward & Lusoli (2003). Furthermore, Panagiotopoulos (2012) also finds that TU loyalty and union instrumentality are negatively correlated with Facebook use. This indicates that this pool of potential members floating around in cyberspace might have preconceived negative attitudes towards TUs in general and are therefore less inclined to join and engage in collective action, internet or not.

3.6 Sub-conclusion

In conclusion, it is apparent from this literature review that TUs have a big presence online, however, most unions fail to utilize the participatory features of many online platforms. This lack of adaptation to the features of web 2.0 and its participatory culture (Jenkins, 2006) show a general failure to move forward, as the general presence online already was obtained in the end of last century: In 1997, 70 percent of TUs in the USA for example had a website (Greer, 2002). Therefore, the hopes of breaking the Iron law of Oligarchy within TUs, which were asked for in the beginning of this century (Voss & Sherman, 2000) does not seem to have happened through the utilization of internet technologies, even though digital ICTs were believed to be potential revitalizing factor by many in academia and within TUs (Greer, 2005). Thus, not much have changed since Ward & Lusoli (2003) concluded that “for the most part the hype about the potential of the Internet [in relation to TUs] certainly far exceeds the current reality” (p.171).

Another knowledge gap detected, which will be elaborated in the theory chapter, is how all papers except Upchuch & Grassman (2015) take the collective actor of the employees for granted. These authors make the same mistake often attributed to Marxism, where the class identity is reduced to the proletariat’s position in the mode of production, which lead to a form of “class reductionism” (Laclau & Mouffe, 1985). To understand mobilisation of workers online, we should not take, if existing, the collective identity for granted – a big part of most mobilisations is creating a shared “We”(Gerbuado, 2012). In a similar vein, it is only Upchurch & Grassman (2015) who analyze how digital ICTs can be used for the construction of shared collective action frames, meaning schemas of interpretation that define grievances and solutions. In general, as it has argued by Kelly (1998), research on TUs should use insights from mobilisation theory. This paper will do exactly that.

3.7 Previous research in MCS about framing and frames

In this section I will present previous research on framing and frame in media and communication studies. A particular focus will be put on news framing and political communication. I will include both theoretical and empirical contributions to the field. This
presentation of previous research will disclose what questions framing research in media and communication studies are able to answer, and more importantly what its limits are. This will serve as the foundation for the argument that the absence of what in SM research are called motivational frames – the “call to arms” rationale (Benford & Snow, 2000) – makes a sociological perspective towards framing more suitable for the purposes of this thesis.

3.7.1 Theoretical contributions

Framing research has been useful in especially communication studies where different politicians and news media compete over framings of particular topics or events (Entman, 1993). Thus, frame analyses of political communication contribute to the study of the exertion of (discursive) political power, and “the frame in a news text is really the imprint of power” since “it registers the identity of actors or interests that competed to dominate the text” (Entman, 1993).

The basic starting points in news framing theory is that issues can be viewed from several perspectives and defined differently by different news media outlets through a process of emphasizing aspects and omitting others (de Vreese & Lecheler, 2015). News frames suggest how audiences can interpret an issue or event (Tewksbury & Scheufele, 2009). A formal definition of a news frame is “a central organizing idea or story line that provides meaning to an unfolding strip of events, weaving a connection among them. The frame suggests what the controversy is about, the essence of the issue” (Gamson & Modigliani, 1989, p. 143 as quoted in de Vreese & Lecheler, 2015). Lecheler & de Vreese (2012) states that two different forms of frames have been found in research on news frames: Issue-specific frames and generic frames. While the former frames specific issues, for instance health care or specific labor disputes, the latter can be used to frame different topics. Examples of generic frames are for example “conflict,” “human interest,” “attribution of responsibility,” “morality,” and “economic consequences” (de Vreese & Lecheler, 2015).

Robert Entman (1993) proposes a definition of framing in communication studies that is synthesized from other fields disparate use of said concept. Across all fields, the concept of framing stresses the power of communicating text. More specifically, how the influence over human consciousness is exercised by the transfer of information from one form of media text to that consciousness. According to Entman, framing in his synthesized definition involves selection and salience: “To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the
item described (Entman, 1993, p. 52). Therefore, 1) frames define a problem, 2) attribute the blame to some actor(s), 3) make moral judgement of the effects of the problem, and 4) suggest remedies. The selection of what is included call attention to some aspect of reality and neglects others, therefore, it is also of interest to analyze what is omitted: In a news article about government surveillance, the decision to either include information about constitutional rights to privacy or the dangers of terrorism might change how people perceive government surveillance. The salience of a frame is what is more noticeable, meaningful or memorable. It can be created through repetition of certain keywords or by using culturally already-known symbols. This means that some aspects of a frame might be very salient among some group of people and not at all salient for other groups because the symbols might mean different things in different cultures. Thus, salience is fundamentally something that is an outcome of the interaction between text and receiver. In general, framing is a process that evolves several actors (de Vreese & Lecheler, 2015). This leads us to the important insight that framing theory does not adhere to an effect research paradigm in communication studies like the “hypodermic needle theory” where the audience is perceived as passive. Instead, Entman underlines that frames exists in four locations in the communication process: The communicator, the text, the receiver and the culture. The communicator makes framing judgments when articulating the frame; the produced text contains frames; the frame that come to steer the receiver’s thinking and meaning-making of social reality which may or may not be in line with the communicator’s intention and the encoded frames in the text; and culture which is the “stock of commonly invoked frames”, meaning the most used frames in a certain social grouping which the receiver might draw from (Entman, 1993, p. 1993). However, at the same time Entman argues that framings do have an effect on how individuals perceive reality, so the active audience is still most likely to perceive the “glass half empty” if it framed as such. Especially when it comes to political issues, since the audience often have to little knowledge about the topic to draw their own conclusions that opposites the text’s framing. Arguing otherwise must be solidly grounded in an empirical reception analysis.

3.7.2. Empirical contributions

Some studies only analyze the frames in news items and do not focus on the audience. In a study of the New York Times and Time Magazine’s framing of the nuclear freeze movement, Entman & Rejecki (1993) for example find that the two media outlets supported the political elite and framed the movement in a way which inhibited movement success. The dramatic
and eccentric elements of the movement was highlighted, and the movement constituency and purpose were downplayed. The media outlets questioned the underpinnings of mass mobilization and they delegitimized public participation because “the nuclear weapons policies of the nation should not be dictated by the anxieties of an amorphous movement” (Entman & Rejecki, 1993, p. 170). In an investigation of U.S media outlets’ framing of the conflict between Iraq and Kuwait leading up to the first Gulf war (Entman, 1993), the news framing of the possible remedies of the conflict defined what was thinkable solutions within the acceptable discourse: Either a war now or economic sanctions followed by war. A solution like negotiations therefore transcended the boundaries of acceptable discourse and were thus unlikely to influence policy, and because such a solution was unlikely to affect policy it was not newsworthy either. Therefore, the news frame of the conflict ended up in a closed loop reinforcing itself.

Kim & Anne Willis (2007) investigate the way American media frame who is responsible for obesity and for fixing the problem. They find that from 1995 to 2004 personal causes and social solutions outnumbered social attributions of responsibility. Television news are furthermore more likely to present personal solutions rather than attribute the responsibility to society. However, social causes for obesity increased and personal reasons decreased during the whole period.

Other empirical research both analyse the frames in media texts but also how these frames are interpreted by an audience. In a study by Shah et al. (2002) for example, they answer how President Clinton’s approval ratings increased during the Monica Lewinski scandal contrary to what many pundits believed it would. They found that mass approval of Clinton was sustained by news that framed the incident in one of two ways: 1) As a conflict where conservatives accused Clinton and liberals were critical towards such accusations, and 2) a downright anti-conservative and pro-Clinton frame. It is hypothesized that the second media frame was used by a big part of the public to interpret the first frame as well, which shows how frames not only are used to make sense of political events, but they are also used to reinterpreted other media discourses. This case shows empirically how the audience is active and the frame in a text might be different from how particular groups (in this case Democrats) make sense of it. The audience might decode a message differently than how it is encoded (Hall, 2001). In another similar study Simon & Jerit (2006) show how even individual words can change the view on an issue. They conclude that the opinion on abortion procedures described in news articles change according to whether the word “fetus” or “baby” is used. Thus, specific words can alter a public’s framing of an issue.
3.8 The benefits of the sociological approach

This very short account of previous framing research in media and communication studies is of course not in any way exhaustive, however, it serves its purpose as it discloses why the media and communication perspective towards framing is not suitable for the aim of this thesis. Referring back to the definition of mobilization, it is the “the performative act of gathering or assembling…a temporary unity” which needs to happen prior to collective action. In media and communication studies, the frames embedded in media texts, and in some instances the ways an audience decode these frames, is the end goal of the analysis. The frames in themselves are what is of interest and how they can affect how individuals perceive occurrences or events in the world, which includes everything from obesity to the Clinton sex scandal. On the other hand, the sociological approach in social movement studies analyses the articulation of frames and how that affect how individuals perceive reality as a way to analyse something else – and that is the mobilization that leads to some form of collective action. Therefore, what the media and communication studies approach to framing lack for the purposes of this thesis is what Benford & Snow (2000) call motivational frames: The “call to arms” rational that explains why individuals should engage in collective action in a performative unity with other individuals instead of “freeriding”.

This does not mean that there are no similarities between the two fields’ approaches to framing. Most fundamentally, their epistemological and ontological positions are similar as frames can change how actors perceive occurrences in the world, thus both fields of research deal with reality construction. In addition, Entman (1993) writes that frames define a problem, attribute the blame to some actor(s), make moral judgement of the effects of the problem, and suggest remedies. As will be clear in the theory chapter, these framing tasks are what Benford & Snow in social movement research call diagnosis frames and prognosis frames. Furthermore, Entman (1993) writes that frames entail a selection of what is included and salience of what is meaningful or noticeable, which correspond to what social movement researchers call the boundary and the grammar of a frame. Lastly, de Vreese & Lecheler (2015) differed between issue-specific frames and generic frames, where the latter in social movement research are called master frames. All these concepts from social movement research will be elaborated in the theory chapter. The many similarities between framing theory in media and communication studies and social movement research show why this thesis also is of relevance to media and communication studies since the methods that will be used to analyze frames and many of the results also contribute to framing research in media.

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and communication studies. The only difference is, as already mentioned, that I in addition to what is of interest in media and communication research also am interested in the construction of a common “We” through framing processes and collective action – but to analyze collective action I need to analyze the media use of the labor movement and the frames in their media texts.

The purpose of this very short comparative analysis between framing research in media and communication studies and social movement research was to disclose why a sociological approach towards framing is chosen: Framing theory can in its sociological tradition answer how a collective becomes a collective with a shared cause, in other words the mobilization of public employees during the collective bargaining 2018. This is something framing research in media and communication studies cannot as it has a different purpose. Thus, in the theory chapter below, I will only refer to social movement theory on framing as that is best suited to investigate the aim of this thesis.
4. Theoretical framework

In this section of the thesis, I will describe my theoretical framework which broadly consists of two logics of action: Collective action and connective action. I will account for Mancur Olson’s classical analysis of collective action, and through a critique of his rational-choice conceptualization of wo(man) propose why the concepts of action frames and collective identities are useful constructs to nuance the explanation of why individuals engage in collective action. A particular focus will be put on collective action frames and framing processes. It will be argued that what characterize the logic of collective action are the concepts collective action frames, a collective identity and strong formal organizations. Then I will present the theory of connective action developed by Bennet & Segerberg (2013), which question the general assumptions about the necessity of a collective identity and collective action frames in mobilisation processes. Instead, connective action is characterized by inclusive action frames and social technologies as organizing agents. The main parts of this chapter will be used to elaborate on the characteristics of these two different logics of action.

However, before these two logics of action will be presented, I will account for the theoretical foundation for the proposal that a personalization of labor politics might explain the successful mobilization during the collective bargaining. This will be done by presenting the Grand Theory (Mills, 2000) of a post-industrial society. This idea of a personalization of politics will later be connected to the logic of connective action.

4.1 A personalization of politics

The literature review focused on TUs’ utilization of digital media. One of the knowledge gaps identified was how TUs use digital ICTs as tools for mobilisation. Furthermore, in the introduction of this thesis the idea by Bennet & Segerberg was presented that digital ICT’s might serve as organizing agents and thus make trade unions obsolete as the “choreographers” (Gerbuado, 2012) of collective action. However, to avoid technological determinism, we need to describe the macro-sociological context in which these new forms of mobilization might take place. Inspired by Bennet & Segerberg (2013), I believe the personalization of politics in post-industrial societies is key.

First of all, it has to be mentioned that I use post-industrial society as a catch-all concept covering several Grand Theories (Mills, 2000) each describing what came after modern industrial societies, I do not refer to Daniel Bell’s specifically. Instead I will be
drawing on concepts as *Late-modern society* by Anthony Giddens and the *second modernity* developed by Ulrich Beck.

The concept of individualization in post-industrial societies is often a cornerstone in pessimistic narratives about the disintegration of western societies and especially young people’s alleged hedonism, narcissism (Lasch, 1991) and egoism (Levinsen, 2006). In relation to politics, it is argued that individuals’ personal lifestyle values come to decide their engagement with politics (Giddens, 1991), and ideology and group identifications loose popularity and importance in civic life, for instance TUs (Putnam, 2000). Ulrick Beck presents a structurally determined theory of individualization in “the second modernity” where one of the consequences is a *disintegration* of social communities linked to both traditional and industrial societies. The working class works as an example of this development, as it is argued that it no longer provides safety, comfort and integration in society for its members (Levinsen, 2006, p. 44). A process closely linked to disintegration is *pluralization*: New, loosely-structured and more niche subcultures and lifestyles emerge instead of the larger social communities which create a cultural differentiation and heterogenization. This pluralization results in the dissolving of stable cultural affiliations which forces individuals to choose their own identity and existence (Bennet, 2012), which lead to an increased existential reflexivity; one’s self-identity has become reflexive (Giddens, 1991). The individualization has among other things affected the whole concept of classes – it has become a “zombie-category” – as social inequality has become individualized (Bennet, 2012): Destitution and exploitation still exists but they have become individual problems (Levinsen, 2006). The whole concept of classes is for instance almost completely absent in Danish public discourse (Lykkeberg, 2008).

In relation to the increased individualization, I believe it is necessary to distinguish between two forms of individualism: A utilitarian individualism – which is the position Olson takes in his theory of collective action (1961), which will be presented later in this thesis – and expressive individualism. It is the expressive individualism which is of particular interest as it stresses the individual’s need for personal development, creativity and authenticity (Levinsen, 2006). This change can to some degree be seen as the transformation from material to postmaterial values (Inglehart, 1990). In the words of Charles Taylor (2007), we live in the age of authenticity. Interestingly, it has been argued that capitalism has absorbed exactly these values in what Boltanski & Chiapello (2005) call *The New Spirit of Capitalism*. Their argument goes that capitalism assimilate its critique, and the 1960’s and 1970’s people
started to long for personal development, creative outlets and authenticity, thus this was what companies started to offer its employees.

Having these theories in mind, one explanation of the decline of TU memberships seems clear: TUs are based on a shared class identity and their power lie in their members’ solidarity and collective mindset. The individualization in post-industrial society thus works against the most fundamental aspect of unionism (Hyman, 2004). Furthermore, if TUs embody the opposite of postmaterial values, which the Iron Law of Oligarchy, collectivist thinking, and conformism are, but companies offer an environment for individual self-expression, authenticity, self-determination and creativity, it might offer another reason why especially young people hesitate to join TUs. Therefore, if the Grand Theory of the postindustrial society is true, it seems extremely difficult for TUs to regain the strength of their heydays, especially if the cooperation between capital and neoliberal state, and their use of propaganda, coercion and law to inhibit unionism, remains (Ward & Lusoli, 2005; Decin & Wilkin, 2015). That is if TUs stand their ground on their old ways. However, one could speculate that the labor movement, and especially TUs, would try to accommodate to the personalization of politics in post-industrial societies as way to attract new members and mobilize people in times of protest. Or at least be more flexible and inclusive rather than just rely on a class-based collective identity. Techniques that traditionally might have worked to develop common identities like class are still costly, but they might prove to be much less effective (Bimber, Flanagin & Stohl, 2012). One way such a transformation could be facilitated is through the use of social technologies, as it has been argued that they channel participation and allow individuals to share personal and stories and concerns (Bennet, 2012). This align with the empirical evidence that young people are more in favor of increased engagement with their TUs online (Panagiotopoulos, 2012). So, instead of fearing the pluralization of the labor movement if it moves online (Chaison, 2005), the labor movement could embrace the pluralization and personalization and use it strategically.

I believe that one could read Hardt & Negri’s idea of the multitude (2005) as a vision of such a new and inclusive emancipatory subject replacing the working class. However, “the struggles of the multitude are the struggle for realizing a political not-yet” (Fuchs, 2017), thus, the multitude as a concept is not suited for empirical investigations such as this thesis. Instead, I believe logic of connective action (Bennet & Segerberg, 2013) is a much more useful theoretical construct for the following reasons: We know that western societies have become more individualized, and that many SMs and organizations has undergone the same transformation. We also know that the collective bargaining of 2018 was a great success for
the Danish TUs in terms of getting mass media exposure and engaging with people (FOAS, 2019). Public employees were likewise very active on social media platforms sharing stories about their work lives. Furthermore, and interest in industrial relations seemed to increase as well as TU memberships. Thus, there is a possibility that the Danish labor movement in fact has embraced the personalized politics of our time in their mobilisation processes.

Connective action both focusses on the means for communication, which entail a distribution of power within TUs from a more vertical to horizontal communication and organizational structure, and the semantics of the communication itself: The fact people can participate for several different personal reasons. Connective action is linked to the personalization of politics as defined by Lance Bennet: It includes an “ethos of diversity and inclusiveness defined by tolerance for different viewpoints and even different issues linked across loosely bounded political networks” (Bennet, 2012, p. 22). The barriers to identification are low – it is not built around a strong collective identity – and participation is facilitated through digitally mediated social networks through which individuals can share their own stories and concerns.

In the reaming part of this chapter, I will present the logic of collective action and the logic of connective action. As it will show, the personalization of politics that has been presented above is the sociocultural context in which connective action takes place.

4.2 The logic of collective action

Mancur Olson’s thesis of the irrationality of collective action is rooted in rational choice theory. The argument is about collective action concerned with the production of collective goods (Della Porta & Diani, 2006). A collective good is a good that once obtained, it can be used or enjoyed by all members of a group, nevertheless that all members might not have fought for it. It could for instance be street lighting or clean air in a city, as these goods can be enjoyed by all inhabitants, but it could also be a minimum salary or safety regulations implemented through TU politics (Kelly, 1998, p. 68). The problem is how to get people to participate when they instead could free-ride and still obtain the good. This problem especially occurs in big groups since individual contributions are less noticeable (Bennet & Segerbeg, 2012). This creates the fundamental irrationality of collective action, “if valued on the basis of criteria of instrumental, individualistic rationality” (Della Porta & Diani, 2006, p. 101). This is what before was referred to as utilitarian individualism. Therefore, according to Olson, organizations either have to coerce people to participate or to distribute selective incentives, meaning make it more beneficial for people to participate than not to participate.
Early resource mobilisation theory was built on this understanding of collective action, which explains the focus on organizations’ available resources since both coercion and selective incentives necessitates that. In terms of TU politics, the most important factor in national union success according to this logic is therefore compulsory membership. (Kelly, 1998).

Unsurprisingly, this rational choice understanding of collective action has later been criticized from many sides: For its neglect of culture, identity, emotions, social networks and political opportunities as other variables influencing an individual’s decision to engage collective action (Bennet & Segerberg, 2013). Most of these relates to the concept of embeddedness. Individuals are embedded in a cultures, social networks and institutional frameworks (Grannovetter, 1985; Diani, 2003a). The atomistic conceptualization of (wo)man, which we also know from neoclassical economic theory and the idea of homo economicus, does only describe an impoverished version of individuals (Kelly, 1998).

To nuance the reasons why individuals engage in collective action, we now turn our attention towards framing theory.

4.3 Framing theory

A frame and the term framing mean different things across disciplines and it is therefore, firstly, important to stress that this paper conceptualizes framing as developed within SM theory, mainly by Snow & Benford. I will first present an in-depth presentation of frames and framing processes and afterward how framing is linked to SMs’ construction of a shared “We”.

Framing as used in SM theory have roots in Erving Goffman’s monography *Frame Analysis: An Essay on the Organization of Experience* who understood frames as “schemata of interpretation”: Frames make occurrences in the world meaningful and thus organize experiences and guide action (Benford & Snow, 2000). Framing theory offers an explanatory framework which operate at two levels: “Between individuals who operate actively in the construction of meaning and socio-cultural processes offer meanings that are frequently contested” (Gamson, 1991, p. 67). By bridging the individual level with a socio-cultural level, we avoid a solely structuralist cultural explanation, which would claim that our political world come to us in preorganized frames and individuals just absorb it. The Gramscian concept of ideological hegemony, which often has been used when analyzing the labor movement or worker’s lack of enthusiasm for socialism, is an example of such a cultural structuralist theory, which often end up explaining everything in the sphere of culture and thereby de facto ends up
explaining nothing (Gamson, 1991). Instead, framing theory acknowledges, similar to cultural theorist Stuart Halls’ Encoding/Decoding model (2001), that individuals are active when receiving messages: They might decode an encoded message (a particular framing) differently or even resist it. There is no such thing as “a tabalu rasa or empty glass into which new and alien ideas can be poured” (Benford, 1997, p. 422).

In SM theory, the concept of framing was made popular by Benford & Snow through their concept of collective action frames. Discussing under the rubric of ‘social constructionism’ in SM research (Benford, 1997), the authors understand movement actors as signifying agents. In that sense, SM actors have agency at the level of reality construction (Snow & Benford, 1992). Developed as a complement to resource mobilisation theory and political process theory, framing theory focusses on “the struggle over the production of mobilizing and countermobilizing ideas and meaning” (Benford & Snow, 2000, p. 613). Therefore, collective action frames answer how movement actors come to understood something in society as unjust. Framing is thus an active process in which movement actors construct certain frames through which occurrences in the world become meaningful. This means that frames are “both fixed cognitive structures and emergent cognitive processes” (Johnston, 2002, p. 66). However, it is important not to reduce the concept of frames to be a matter of cognition only, as that would neglect that frames are socially/culturally constructed (Benford, 1997). Frames are not just “merely aggregations of individual attitudes and perceptions but also the outcome of negotiating shared meaning” (Gamson, 1992, p. 111, as quoted in Benford & Snow, 2000).

Frames conveys two meanings: Frames as a grammar and frames as an index. As a grammar, a frame is “structure in which meaning is contained in and conveyed by the relationships among the elements”, and as an index it “acts as a boundary that keeps some elements in view and others out of view” (Benford, 1997, p. 413). By grouping some symbolic elements together and leaving other out, a frame always conveys what is and what is not important. The grammar of a frame often consists of symbols already present and known in a culture but put together in a new way (Johnston & Noakes, 2005). In online culture, an example would be how the left appropriate narratives and symbols from popular culture as resources for civic imagination (Jenkins et al., 2016). One might further speculate that the remix culture online in general stimulate the construction of new frames.

Collective action frames are often negotiated within the movement and across movements, and naturally some show to be more effective than others (Snow et. al, 1986). They create a shared understanding of some problem or situation which the movement wants
to change, who or what are to blame, call out what should be done instead, and they urge others to act. Benford & Snow (2000) has recognized three core framing tasks for any SM: *Diagnostic frames, prognostic frames and motivational frames.*

Diagnostic frames both entails what the problem is, which elsewhere been coined as *injustice frames* (Gamson, Fireman & Rytina, 1982), and the attribution of blame. Everyone does not have to agree on both aspects of the diagnostic frame, two people can recognize something as unjust without necessarily share who is to blame. Often SMOs within SMs discuss internally who should take responsibility or who are to blame for the injustice (Benford & Snow, 2000). In this diagnostic framing, boundaries between “good” and “evil”, and “protagonists” and “antagonists” are created as well, a process often called boundary framing.

Prognostic frames articulate the solutions to the problem formulated in the diagnostic frames and the ways in which the solution should be reached. The possible prognostic frames are limited by the articulation of the diagnostic frames as some solutions to a problem would seem more reasonable than others. Since framing processes basically are fights over meaning, SMOs can adopt refutations of adversaries’ frames or expected counter-frames in their own framing, for instance address that it is not out of greediness or laziness TU members strike (a possible counter-frame from employers). This means that actors – both SMs, SMOs, companies, states etc. – influence other actors’ framing activities.

The final core framing task is motivational framing, which is a “call to arms”, a rationale for engaging in collective action, for example striking or demonstrating. Different vocabularies of motive can be formulated, and Benford (1993) for instance found four generic types in his investigation of the anti-nuclear movement: Vocabularies of severity, urgency, efficacy, and propriety.

### 4.4 The emergence and development of frames

By now I have reviewed what collective frames are and described three core framings tasks. Another question is through what processes frames emerge and develop. These processes can be divided into discursive and strategic processes (Benford & Snow, 2000).

The two discursive processes are *frame articulation* and *frame amplification*. The former “involves the connection and alignment of events and experiences so that they hang together in a relatively unified and compelling fashion “(Benford & Snow, 2000, p. 623). New collective action frames often emerge when actors splice events and experiences together in novel ways which highlight some and hide other aspects of social reality: A new
interpretational schema. Frame amplification as a discursive process is when particular events or values within the already articulated collective action frame are highlighted as extra important. Such events or values can serve as anchor points for other values and events within the action frame. Symbols, slogans or the like are often the product of such discursive frame amplification, which easily can be distributed, the classical example being bumper stickers (Johnston & Noakes, 2005). I believe we could understand popular hashtags as the result of discursive frame amplifications in a digital age, for instance #metoo or #WeAretThe99%, or as this thesis will show #enløsningforalle.

Another set of processes, which reveal Benford & Snow’s background in resource mobilisation theory, are strategic. Such processes were initially conceptualized as frame alignment processes, which are defined as “the linkage of individual and SMO interpretative orientations, such that some set of individual interests, values and beliefs and SMO activities, goals, and ideology are congruent and complementary” (Benford & Snow, 1986, p. 464). Basically, frame alignment is how SMOs as rational and strategic actors try to increase popularity and number of participants by changing their frame in some way or another. In their seminal article from 1986 they identified four different processes. Frame bridging is when a SMO tries to link two more ideologically congruent but structurally unconnected frames, and by doing that tapping in to “unmobilized sentiment pools” within the public. SMOs can through different media technologies reach out to these unmobilized but ideologically similar individuals and thereby make a bridge between the SMO’s and unmobilized individual’s collective action frames. It is specifically mentioned how new media technologies can increase the possibilities for frame bridging (Benford & Snow, 1986, p. 468).

Another important type of frame alignment is frame amplification2 as a strategic process. In this process, a SMO amplifies values or beliefs in their collective action frame, they believe will correspond to important values and beliefs in society as such or a particular part of the public, but which have not been used in other SMOs collective action frames before (Benford & Snow, 1986). The last frame alignment process of interest to this thesis is frame extension. This maneuver happens when a SMO finds that the values and beliefs in their collective action frame do not resonate in the public or a desired sub-population.

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2 It seems like a conceptual confusion has spawned in Benford & Snow’s vocabulary over the years, as frame amplification both is a discursive practice and a strategic practice (a frame alignment process), but they do not denote the same process, which also should be clear from the text. Thus, I will throughout the paper refer to frame amplification as either a discursive or a strategic process.
Basically, if the proposed framing has no bearing on the life situations of potential participants and members – there is no frame resonance (Benford & Snow, 2000) – the SMO can extend their frame and include beliefs and values that have. Recently, in an effort to diversify and increase their membership base, some American TUs have for instance included grievances experienced by racial minorities outside the work place (Kurtz, 2002). Other times extensions can be much more basic when SMs for instance invite punk and rock bands to their rallies (Benford & Snow, 1986).

As already mentioned, SMOs are understood as signifying agents. However, they are not the only one who engage in what Stuart Hall (2005) would call the ‘politics of signification’. Framing is a contested process in which different actors fight over the power to construct reality, and it has been proved how especially mass media, the state and movement opponents offer counterframes (Benford & Snow, 2000; Noakes, 2005). While collective action frames “inspire and legitimate SM activities and campaigns” (Benford, 1993, p. 199), counterframes can delegitimize SMs’ diagnoses, prognoses and motivations for engaging in collective action. When reporting on SMs, mass media usually do not encompass SMs structural analyses but rather on personal conflicts or singular events (Johnston & Noakes, 2005), which is a result of certain media logics (Altheide, 2014). We saw this in the literature review how several TUs used digital ICTs to mobilize for exactly that reason: Mass media presented the issues in frames which countered the TU frames. Similarly, opposing SMOs can offer counterframes and thus start ‘framing contests’ (Ryan, 1991). Such counterframes often force the first SMO to offer a reframe (Benford & Snow, 2000), which makes the relation between frame and counterframe dialectical.

4.5 Critique of the framing perspective

The understanding of SMs’ framing practices as being inherently strategic has later been criticized, even from within the community of researcher’s who developed the theory (Benford, 1997). One of the main criticisms has been that emotions are forgotten (Della Porta & Diani, 2006). By conceptualizing framing practices as inherently strategic, which is the case with frame alignment processes (Benford & Snow, 1986), researchers neglect how emotions spark SMs (Benford, 1997). It is argued from the critics that collective action not only emerges as result of effective strategic framing cleverly managed by SM entrepreneurs, but also from strong emotions. It is feelings of anger and moral shocks over broken deeply held rules as well as experiences of collective solidarity that inspire to collective action (Della Port & Diani, 2006). This debate can be seen as a part of an ongoing discussion between
rationalistic approaches to SMs and emotional approaches. The inventors of the framing perspective came from resource mobilisation theory, which emerged as response to “classical” SM theories where SMs were believed to be results of structural strain in society (Noakes & Johnson, 2005). SM participants were for instance believed to suffer from loneliness and anxiety created by modern society which caused such irrational and extreme behavior as collective action as a way to escape these feelings. Correctly, the resource mobilisation perspective criticized this approach and began instead to analyze SMs as conscious actors making rational choices (Della Port & Diani, 2006). This idea moved from resource mobilisation theory to this new framing perspective, however, in the process of arguing for the rational behavior of SMs, they went too far and came to forget emotions all together (Benford, 1997).

Despite this critique, framing is a powerful theory to explain what happens prior to collective action. Political opportunities do not cause collective action in itself (Della Port & Diani, 2006). The framing perspective argues that the symbolic construction of collective action frames is necessary. Collective action frames “inspire and legitimate SM activities and campaigns” (Benford, 1993, p. 199), not only in the eyes of participants, but also in the eyes of the general public. I will argue that the last aspect is particularly important in relation to this thesis: A major strike by public employees would mean that many parents had to skip work and instead stay home with their children because school teachers would be on the barricades. In such instances, it is important that the general public conceives the strike as legitimate. Therefore, the power struggle between public employers and employees during collective bargains in 2018 is fought not only in meetings behind closed doors, but also through what has been called frame disputes (Snow & Benford, 2000). Such frame disputes often happen in the media, which thus can be understood as an arena where societal groups and ideologies compete over the construction of social reality (Walgrave & Manssens, 2005).

4.6 Collective identities

In the above section I have argued why collective action frames are necessary in mobilisation processes. They provide an explanatory framework for understanding how individuals come to perceive something as unjust, what should be done to provide justice, and a “call to arms” for engaging in collective action. Collective action frames can motivate people to participate even when they could have freeridden (Bennet & Segerberg, 2013). However, initially framing theory did not address the point often stressed by new SM scholars that the symbolic construction of a collective identity, or a shared “We” (Della Porta & Diani, 2006), is a
necessity for any mobilization (Gerbaudo, 2012). This shared “We” furthermore points to another way Olson is wrong in his atomistic concept of (wo)man – he neglects group identification as a factor: In Commons dilemma game, the activation of social identity for example significantly reduces the incidences of free-riding (Kelly, 1998). Social definitions of identity impact “individual preference structures”: A collective identity blurs the lines between individual and group interest, and thereby undermines the utilitarian perspective Olson writes from (Gamson, 1991). To understand the concept of collective identity, we need to clarify how identify is understood in social constructionist SM theory.

Before the emergence of “new social movements” in the 1970s, a shared identity among participants was the starting point of many analyses, something taken for granted (Della Porta & Diani, 2006). That was the case in resource mobilisation theory (Polletta & Jasper, 2001), and when studying labor especially Marxists had an essentialized idea of a homogenous working class existing outside the political (Laclau & Mouffe, 1985). Such class reductionism does not encompass the contingency and heterogeneous of identity. Instead identities, from a sociological perspective, should be understood as socially constructed (Berger & Luckman, 1979) and multiple (Della Porta & Diani, 2016). Identity not only precede collective action, it is formed through ongoing collective action, thus, it is argued that it should not be understood as a “thing” but instead a process (Melluci, 1995). This ongoing process of creating a common “We” is often done by an effective leadership (Melluci, 1989; Kelly, 1998). Della Porta & Diani (2006) present three important processes in the construction of a collective identity:

1)”Through the definitions of boundaries between actors engaged in conflict” (Della Porta & Diani, p. 93). When collective action takes place there is always a shared “We” and an “Other” defined as being responsible for the actor’s grievances and feelings of injustice. Thus, identity is both positively and negatively constituted, in the sense what you are and what you are not (the constitutive outside).

2)The production of new identities entails the development of informal communication networks and social interactions between individuals (Della Porta & Diani, 2006). Such networks can increase solidarity and the keenness to help one another in times of crisis or repression. With the advent of digital ICTs these communication networks of solidarity are less build on spatial proximity, for instance linked to the local factory, and face-to-face communication. As national identities were built through print media (Anderson, 2006), so can both new and old identities and collectives be built through new forms of media (Couldry & Hepp, 2018).
3) “Collective identity connects and assigns some common meaning to experiences of collective action dislocated over time and space” (Della Porta & Diani, 2006, p. 95). This continuity over time is important because present conflicts can be connected to past conflicts, which creates the condition for a revival of collective action and tuning back into old solidarities and meaning attributions or remix them in new ways.

Even though one important aspect of collective identity is the shared “We”, one should not fall for the temptations and conceptualizing it as a monolith and reify it (Melluci, 1995). Collective identities are constantly negotiated, in flux, and as we can see it is defined not only by movement actors, but also by contenders and through what happens during events. The social construction of the collective is constantly at work. Furthermore, it differs in levels of inclusiveness and exclusiveness, some allow only a shared ideological congruent and narrow “We”, but several movements encompass a variety of identities (Della Porta & Diani, 2006).

However, a simple definition of collective identity can sometimes be useful as a heuristic, and it has been proposed that it can be understood as a movement’s “collective sense of self, who they are and what they stand for” (Gerbaudo & Treré, 2015, p. 865).

4.7 The relation between action frames and identities

It should be clear that there are many similarities and certain overlaps between the concepts of action frames and collective identities. Surprisingly, there has only been few efforts to synthesize the two approaches. As both concepts are important when defining collective action and connective action, I believe it is important to present how they are connected. Especially because both concepts are processes (Melluci, 1995; Benford & Snow, 2000) that happen simultaneously.

The overall claim is that identity constructions always are inherent in SM framing processes. As we know, framing activities link individuals and groups ideologically, but they also create, change or reinforce identities through core framing activities: The actor roles are assigned through framing – who are the protagonists, antagonists and the audience in the conflict. This is what earlier in this thesis has been called boundary framing. Hunt, Benford & Snow (1994) describe the construction of these three actor groups through framing processes as different identity fields, because identities between the different groups overlap and hang together, and because they both contract and expand.

Framing processes make statements about these different actor groups’ consciousness and character. Statements about character is for instance done by framing strikers as lazy, employers as greedy etc. Such statements create boundaries between actors in conflict, which
was mentioned above as one of the main aspects of creating collective identities. In all conflicts there are protagonists, antagonists and an audience, however, Hunt, Benford & Snow (1994) claim that analyses of collective identities mainly have focused on the protagonist field, which is the positive constitution of identity. This is problematic as identity is both negatively and positively constituted, and there should therefore be more focus on the audience and the antagonist fields.

The protagonist field are “constellations of identity attributions about individuals and collectivities taken to be advocates of movement causes” (Hunt, Benford & Snow, 1994, p. 193). They tell about the movement, but also about individuals, it can be heroines like Rosa Park in the civil rights movement, or specific groups, for instance ranke-and-file members of TUs, or more abstract notions like “future generations” and “the little man”. This field is often created during prognostic framing and motivational framing.

The antagonist field “are constellations of identity attributions about individuals and collectivities imputed to be opponents of movement causes (Hunt, Benford & Snow, 1994, p. 193). Like the protagonist field, it can be both individuals, specific groups and abstract notions like “the system” or “the one percent”. This field is often constituted through processes of diagnostic framing, which means that diagnostic frames not only attribute blame, but they also construct identity fields.

Audience identity fields “are constellations of identity attributions about individuals and collectivities imputed to be neutral or uncommitted observers who may react to or report on movement activities” (Hunt, Benford & Snow, 1994, p. 199). They capable of evaluating the messages from the protagonist field in a positive way for instance non-public employees or the mass media during the collective bargaining of 2018 – or that is at least the goal for SMs. The movement frame some groups as the audience to the conflict in such a way that they should be supportive of the movement’s cause: “Because I know that you [the audience] care about X or have experienced X, you must understand why we demand Y, because Y and X are similar”.

It is hopefully very clear how framing processes and the construction of collective identities are interlinked and therefore why it would be beneficial to analyze them together. Therefore, I claim that the framing perspective can be used to analyze the two first aspects in Della Porta’s and Diani’s (2006) description outlined above of the construction of collective identities. Of course, the framing perspective cannot help us analyze the physical constitution of informal networks, which is the third aspect of their understanding, so there is not a
complete overlap between the concept of framing processes and collective identity. Therefore, framing and collective identities are still two distinct yet overlapping processes.

By now I have argued that the Olson’s understanding of collective action is inadequate since it understands individuals as atomized utilitarianist actors. Through the concepts of framing and collective identities, I have sought to show why “meaning work” (Benford & Snow, 2000) is a necessary component in any mobilisation, which is a factor Olson’s theory does not account for. This “meaning work” plays its part in the transition from being individuals to becoming a collective and has thus become a key aspect when explaining the logic of collective action since the 1980’s and the “cultural turn” hit SM research. However, Bennet & Segerberg’s (2012; 2013) development of the theory connective action has questioned the assumptions behind the necessity of a shared collective identity and collective action frames due to the advent of digital ICTs and the personalization of politics.

4.8 Frames and networks

I have argued for the importance of meaning when explaining collective action by applying the concepts of action frames and collective identities. Individuals are more than atomized utilitarianist actors (Diani, 2012). One way to understand how social actors construct these identities and action frames is through the concept of networks. The importance of networks has been an issue in SM research for decades (Krinsky & Crossley, 2014). Much SM research draws on ideas from network analysis or uses networks as a metaphor – for instance Castell’s networked SMs (2012) and Juris’ cultural logic of networks (2004) – but less apply actual network analyses (Krinsky & Crossley, 2014). It has thus been argued that it is time to go from metaphor to substance (Diani, 2003).

Overall, it is argued that networks intervene in participation through two processes: “a cognitive construction process and a connecting one” (Passy & Monsch, 2014). The latter process explains how prior social ties operate as the basis for recruitment (Diani, 2013) and how resources is transmitted through them (Della Porta & Diani, 2006), however, what is of interest for the purposes of this thesis is the latter, since both framing and the creation of collective identities are the results cognitive construction processes: They explain how people come to experience some occurrence in the world as unjust and their own position in it; they sensitize and motivate people to participate. This way of thinking of networks is also present in McAdam (2003) where he highlights networks as identity-movement linkage and in Passy (2003) under the name of the socialization function of networks. This way of understanding networks differs from traditional structuralist analyses where network causes a phenomenon
of interest, for instance finding a job (Grannovetter, 1973) or resist repression (Diani, 2012), or relational approaches where the network structure is the outcome, for instance of a strong collective identity (Diani, 1995 Marin; Marin & Wellman, 2011). What these structuralist analyses often neglect is what social interactions between actors consist of; they reduce relationships to numbers (Bernhard, 2018). And when these structuralist approaches have investigated meaning in networks, they have analyzed it as cultural forms – for instance a certain frame or an identity – which are transmitted through networks (Mische, 2002). This is of course misconceptions of both frames and identities as they are not stable entities existing “out there”, but constantly negotiated and possibly transformed in ongoing interaction between movement actors. Thus, they are not transmitted unchanged.

This touch another one of the main criticisms against framing theory, that frames often are analyzed as stable cultural forms or as fixed cognitive structures (Mische, 2002: Johnston, 2002; Benford, 1997). Much empirical research has simply neglected the active and processual aspect of the phenomenon. The conceptualization of frames as stable cultural forms or fixed cognitive structures is a result of methodological choices: Firstly, by conceptualizing frames as stable structures, it becomes possible to correlate movement frames with movement behavior (Lindekilde, 2012). Secondly, it is much less resource intensive to analyze the development of frames over time by comparing two stable cultural forms with each other and conclude a change has happened, instead of intensive field work over time (Johnston, 2002; Benford & Snow, 2000). Thirdly, if stable, the transmission of frames can be analyzed in solely structuralist network analyses (Mische, 2002). However, what happened in between, who influenced whom, and what frame alignment processes (Benford & Snow, 1986) can explain this change remain a mystery.

Harrison White, and colleagues inspired by his writings, have engaged with this reductionist view of ties applied by structuralist by conceptualizing networks as discourse and “Islands of meaning” (Passy & Monsch, 2014): Social networks are “culturally constituted processes of communicative interaction” (Mische, 2002, p. 259). Here the network perspective become linked to how individuals perceive the world, as individuals “cognitive toolkits” in part is created and transformed by communicative interaction. Only partly, as actors have prior experiences, and they experience things every day in the material world – the relation between frames and events are dialectical (Della Porta & Diani, 2006). The main contribution to this interpretative understanding
of social networks is that it engages with the “meaning problem” often absent from quantitative research by understanding social networks as generating cultural material (Tilly, 1998). This is the reason why Snow & Benford has proposed that one should focus on framing processes (Snow & Benford, 2000), and that this also is what is under investigation in this thesis.

However, endorsing an interpretative understanding of social networks is not the same as to say that all relations between actors count the same. When communicative interactions constantly engage and negotiate with individuals’ cognitive toolkits – for instance by creating and transforming action frames and collective identities – it seems logical that frequent interaction has much greater chance at providing cultural material that actually will transform the individual’s cognitive toolkit (Passy & Monsch, 2004). Furthermore, it is impossible to distinguish an actor’s contribution to the movement’s construction of action frames from the actor’s position in the social structure constituting the movement (Lindgren & Lundström, 2011). It therefore needs to be stressed that some actors in the social network that constitute the social movement contribute more to the articulation of action frames and collective identities than others.

With above descriptions of framing processes, frames and identities in social movements, we now have the theoretical constructs defined to present two logics of action:

4.9 Two different logics of action

According to Bennet & Segerberg (2013), different logics of action underpin different collective action networks. While earlier collective action networks have been characterized by the logic of collective action, for instance TUs during strikes (Kelly, 1998), the two authors claim that many new digital SMs and protest networks are powered by the logic of connective action. Occupy in the US and Indignados in Spain are examples of movements where this new logic of action is present. Overall, their theory describes how “Personal action frames combine with social technologies in the organization of digitally networked action” (Bennet & Segerberg, 2013, p. 27). The two main factors behind this development has already been described in this thesis: The personalization of politics in post-industrial society, and the impact of personal communication devices networked through shared media platforms on SM mobilisation processes.

The key aspect of the latter is to understand digital media as organizing agents. We have known for several decades that technological platforms can enable the creation of
interpersonal networks. One example is the economic logic of peer production where participation arise from self-motivation rather than external incentives, like Wikipedia. This necessitates sharing as a form of labor division and as a means of production. The reward system consists of personal recognition and the outcome of the project. In these projects there is no formal centralized organization that coordinates the division of labor and there is no shared social identity between co-contributors:

“In place of content that is distributed and relationships that are brokered by hierarchical organizations, connective action networks involve co-production and co-distribution, revealing a different economic and psychological logic: peer production and sharing based on personalized expression (Bennet & Segerberg, 2013, p. 35).

These people engaged in connective action networks does not need to be spatially close, and what connects them is not a shared ideology or membership in the same organization. They are self-motivated participants in this sharing of personal ideas and resources. The sharing happens on online social platforms, for example Twitter. Thus, this form of organization requires technological openness as it can happen on several platforms and through different communication technologies.

Digital platforms do therefore not only provide access to a discursive arena where the construction of social reality happens, for example through frames, which in the literature review was identified as one of the main assets with digital ICTs as access to such arenas always have been a problem for SMs (Walgrave & Manssens, 2005). They also bring people together by functioning as organizing agents. According to Bennet & Segerberg (2013, pp 42-43), the interplay between individuals and technology is best analyzed by Actor-Network-Theory where there is no distinction between human and non-human agents. Individuals not only act on platforms, platforms also act on humans.

Twitter is a tecno-cultural construct (Van Dijck, 2013), which has certain consequences for the networking, organization and mobilisation taking place on it. The algorithms behind the interface-level structure, filter and reroute content, so what become popular or trending topics are not only a result of human actors’ agency, but also non-human actors (Van Dijck, 2013). Platforms can for instance push or structure protest events through calendar functions and recommendations, serve as organizational connectors through web links (Bennet & Segerberg, 2013) or downright delete content. The idea of platforms as mere neutral conduits for information and communication is highly ideological and it does not in
any way describe how platforms function: Moderation is what defines platforms (Gillespie, 2018). In the language of ANT, social media platforms are not *intermediaries* but *mediators*: They do just facilitate, they “transform, translate, distort, and modify the meaning or the elements they are supposed to carry” (Latour, 2005, p. 39). The logics that govern social media has been described by Van Dijck & Poell (2013) where especially *connectivity* and *popularity* are of interest. It is argued that for instance hashtags promote connecting and networking, which means social networks on Twitter – including the one I am going to investigate – is affected by the platform itself: Thus, networks of people on Twitter is a result of both user agency and platform agency. The same goes for popularity, since platforms privilege already popular content algorithmically and through functions like “trending topics” (Van Dijck, 2013). This forces one to ask the question whether one is investigating networking and mobilisation on Twitter or the effects of media technology on networking and mobilisation (Marres, 2015)? Following the logic of connective action, I would say the answer is both. Twitter is a socio-cultural construct and so is the logic of connective action: The cultural part is the personalization of politics, and the technical part is the technology as an organizing agent and together they constitute the logic of connective action.

The aspect of connective action that express the personalization of politics is theorized as *personal action frames*. In mobilisations characterized by connective action there is a high degree of symbolic inclusiveness: Shared political content is easily personalized ideas like “We Are the 99 %”. Such inclusive frames can easily encompass many different reasons, ideas and reframings which means they can bridge a plurality of different demographic groups and grievances. This means “these personal action frames are inclusive of different personal reasons for contesting a situation that has to be changed” (Bennet & Segerberg, 2013, p. 37). These action frames are contrary to collective action frames as outlined by Benford & Snow inclusive and non-polarizing. Where a SMO for instance could try to bridge their collective action frames to reach unmobilized sentiment pools in the public by sending them leaflets or airing commercials, or they would extend their frame to try to encompass new social groups, inclusive action frames are not pointed at a specific social group to begin with; they are pointed at individuals and invite them to share their personal grievances and participate for their own personal reasons. Furthermore, there are very little boundary framing involved in inclusive actions frames and thus no development of collective identities. People involved in connective action may have very little in common, and they do not act as a collective but as an aggregate of individuals who participate in protests for hundreds of different personal reasons on their own terms.
What logic or logics are present in SMs and protest networks is an empirical question – digital media enable this new form of communication, but it does not determine it – and it is not an either/or. Collective action and a connective action can co-exist within a protest network. Furthermore, Bennet & Segerberg (2013) refine the concept of connective action and develop a three-part typology that describes three logics of action: Collective action, organizationally brokered connective action, and crowd-enabled connective action. These three logics are Weberian ideal types, but in in reality they are not mutually exclusive categories (Bennet & Segerberg, 2013).

Organizationally brokered collective action, as described above, require a shared social identity, ideology and narrative, which can be understood through the concepts of collective action frames and collective identity. The construction and spreading of these shared social identities among potential participants require some form of central organization. The creation of a shared “We” is often done by an effective leadership (Melluci, 1989), we see that in the concept of frame alignment processes where a SMO act as a rational agent and adapt the frames in a way which hopefully will persuade potential participants to identify with the organization. The spread of this shared social identity can furthermore be done through education, pressure, socialization (Bennet & Segerberg, 2013) and media, which all are resource-costly. These necessary central organizations are often hierarchical and less participatory due to the Iron Law of Oligarchy. Social technologies “are used by organizations to manage participation and coordinate goals” (Bennet & Segerberg, 2013 p. 47), therefore, the use does not differ from how mass media are used.

Crowd-based connective action is the logic of action we have seen in Occupy, Indignados and during the Arab Spring. These protest networks are organized by the crowd without any leading central organization. Instead social technologies serve as organizing agents in different ways, and personal action frames are the transmission units in these digital networks. These networks consist of interactions between actors that become connected across time and space by via ever-changing and layered digital networks.

Organizationally enabled connective action is the hybrid between connective action and collective action. Here, resourceful organization in the protest network adapt to the personalization of politics and personalize the engagement with the public. This is done by deploying social media that invite to interaction and participation, and instead of offering collective action frames, SMOs construct symbolically inclusive personal action frames. Thus, what distinguish this form of action with traditional collective action is the use of
personal action frames and media platforms for interactive purposes, but organizations still play a big role in the protest network.

5. Theoretically developed research questions

In the last chapter, I introduced three logics of action: Organizational brokered collective action, organizational enabled connective action, and crowd-based connective action. They are useful constructs to investigate the mobilisation processes taking place during the 2018 collective bargaining. Such an investigation can offer insights into 1) the role of TUs in the Danish labor movement, and 2) the form of contentious politics practiced by the Danish labor movement (class-based and exclusive, or personalized and inclusive). By analyzing this we can increase our understanding of what direction both the Danish labor movement and Danish TUs are heading: How do they deploy digital ICTs in times of protest? Are they adapting to the social context of post-industrial society which is characterized by a personalization of politics? And what role does TUs have when digital ICTs lessens the need for a central resourceful organization to orchestrate collective action?

To answer such questions, we need to analyze how the labor movement utilized social media during the collective bargaining. Both how and what they communicated. Since Twitter has been used for both connective and collective action (Bennet & Segerberg, Gerbuado, 2012), I believe it is useful to analysis how Twitter was used by the labor since the platforms can mediate both logics. Therefore, I have chosen to analyze the tweets within the hashtag #ok18, which was the “official” hashtag during the collective bargaining.

One distinctive difference between collective action and connective action is the use of media platforms. Both in crowd-based connective action and organizationally enabled connective action media platforms are used by participants to share personal stories, reasons, values etc. Media platforms are enabling participants to be active by sharing, they are not just communication conduits for SMOs. This means that by investigating how all the actors that constitute the labor movement deployed Twitter, we can analyze the logic of action. What is of interest is who communicated the most, but also who communicated with who, and whether such communication was one-way communication or dialogical. The underlying assumption here is furthermore that the communication structure can be used as a proxy for analyzing the hierarchy within the labor movement. Thus, the focus is here not on semantics but on the structure of communication. This way of analyzing the presence of connective
action in Twitter networks is also used by Dahlberg-Grundberg, Lundström & Lindgren (2016).

RQ1: What is the structure of communication within the labor movement?

The second aspect of connective action is symbolic inclusiveness. Symbolic inclusiveness cannot be investigated through quantitative measures alone, we need to investigate framing processes, in other words focus on the semantics in the Twitter stream. By analyzing framing processes in #ok18, we can explore whether the labor movement’s action frames are collective or inclusive: Are distinct boundaries between identity fields constituted? Are diagnosis, prognosis and motivational frames constructed by the TUs and are they shared by all participants of the labor movement?

RQ2: What framing processes were taking place and what frames were present in the #ok18 Twitter stream during the collective bargaining of spring 2018?

Together, RQ1 and RQ2 will enable us to answer what logic(s) of action were taking place during the collective bargaining of 2018, and thus whether the personalization of politics is affecting the labor movement and TUs in Denmark:

RQ3: What logic(s) of action were deployed by the labor movement during the collective bargaining of 2018.

In the next chapter, I will present the methodology of this piece of research.
6. Methodology

This thesis is social constructionist. Following Ian Hacking (1999), it is important to specify exactly what is socially constructed. Framing theory engages with how movement actors understand occurrences in the world, and it is argued that frames are socially constructed schemata of interpretation, thus, the theory deals with the social construction of reality (Benford & Snow, 2000). Firstly, framing theory does not claim that nothing exists outside human meaning-making. As framing theory is a form for discourse analysis (Lindkilde, 2006) – at least in the sociological tradition outlined by Benford & Snow – we can learn from Laclau & Mouffe (1987) when they claim that discourses make social configurations meaningful:

“If I kick a spherical object in the street or if I kick a ball in a football match, the physical fact is the same, but its meaning is different.” (Laclau & Mouffe. 1987, p. 82)

This point to the fact that objects exists independently of their discursive articulation. I believe, we can make this distinction clear through a reworked version of the Kantian concepts of Das Ding an Sich and Das Ding für Uns. Discourse theory and framing theory only work with Das Ding für Uns since it is impossible to investigate Das Ding an Sich – we cannot think objects independent of any discursive/frame structure. Contrary to Kant though, how we perceive Das Ding für Uns is not constant – through reason – but instead contingent, so what is of interest is to analyze how Das Ding Für Uns is discursively configurated. Thus, it is important to state that objects exist independently from human meaning-making, not because it is of interest when analyzing SMs, but as a way to guard ourselves from accusations of ontological constructivism of the physical reality, when our view on the physical reality instead is epistemological constructivist (Stage, 2015).

Social reality, on the other hand, is socially constructed, which means the view on societies are ontological constructivist. Norms and institutions, but also group collectivities are all socially constructed (Berger & Luckman, 1979), for instance collective identities within SMs. This social construction of reality both happen through face-to-face communication, which is what Berger & Luckman analyzed, but nowadays these processes also happen through media (Couldry & Hepp, 2018). In the theoretical section, I have presented two concepts, action frames and collective identities, which can be used to
investigate social actors’ construction of social reality by focusing on social and communicative processes. Therefore, we need both data and methods that can encompass these processual and diachronic aspects of the (re)construction of action frames and identities.

6.1 Research design
In chapter 4.8 above, it was argued that a common misconception in framing research is to perceive frames as stable cultural forms or cognitive structures. However, my argument is that contrary to Mische’s (2012) critique of the framing perspective – that frames are cultural forms and thus do not explain the processual aspect of meaning-attribution – the problem is not linked to the theory itself, but the methods which has been applied to investigate it. That is why a mixed-method approach is recommended when analyzing networks (Diani, 2002).

Therefore, instead of abandoning a structuralist social network approach altogether because it fails to grasp meaning-making in ties, it can still prove useful. The communicative interaction between actors within the network in the form of @mentions generate cultural material and clarify meanings (Passy & Monsch, 2004), which is exactly what can be visualized in structural networks. A structuralist analysis of the @mention network will provide measures that might not explain how action frames and collective identities are created or what they consist of, which admittedly is reductionist (Bernard, 2018), but they can answer who contribute to these creations and the relation between these creators. And in order to “give an account of discourse; we need to know the conditions governing the constitutions of the group within which it functions” (Bourdieu, 1997, p. 650, as quoted in Lindgren & Lundström, 2011, p. 1008). A social network analysis can tell whether this cultural material is created by a dissemination of information by TUs or whether they emerge out of dialogue and participation from the bottom and up. This structuralist analysis can afterwards be complemented with both a quantitative and qualitative analysis of the meaning flowing through these conversational networks on Twitter.

I will therefore analyze the cultural material which the network ties consist of through a mixed method research design where qualitative and quantitative methods focusing on meaning complement the quantitative network analysis (Krinsky & Crossley, 2014). By mapping the structure of communication that forms, negotiate and reformulate action frames, I can ask how network structures and cultural material interact, instead of either focusing on either network structures or cultural forms. The sections of the analysis that focus on meaning will apply two methods: A semantic network analysis of the labor movement on Twitter and
and quantitative content analysis of important samples identified through the semantic network analysis. However, I do find it necessary to present the thoughts behind it. Especially the mix of data intensive methods with in-depth close readings deserves scrutiny before I move on to explaining the three different methods, I have used.

6.2 A mixed-method approach with digital data

Mixed methods literature has not yet worked in detail with ways in which qualitative data can be used together with large-scale digital data. This is important though as this new form of method-triangulation, which has been proposed to be called a “complementary social science” (Blok & Pedersen, 2014), breaks down an apparent polarization when it comes to the so-called “computational turn” within the social sciences. In one camp we have critical big data studies that fight for the legitimacy of “thick” qualitative data and its critical possibilities (Crawford & boyd, 2012) and attack this new “digital positivism” (Fuchs, 2017).

And in the other camp scholars who claim that a computational social science can analyze in an “unprecedented breadth and depth and scale” (Lazer et al., 2009, p. 722, as quoted in Blok & Pedersen, 2014). Chris Anderson (2008) even polemically claimed the “end of theory”: It is not important to understand why individuals do what they did, but just that they do it, which big data can predict. Of course, such visions of science need to be challenged. The mythology of big data which states that large data sets “offer a higher form of intelligence and knowledge” with the aura of truth, objectivity and accuracy surrounding it (Crawford & boyd, 2012, p. 633) ought to be criticized and deconstructed.

I believe the mythology of big data similar is to Daston & Galison’s (1992) account of how atlas makers in the end of 1900-century gave the x-ray machine a certain epistemic status as they were seduced by what the authors call the ideology of the machinery: Machines provide objective results and thus avoid the “dangerous subjectivity”. The mythology of big data research can therefore be seen as the second coming of the ideology of the machinery. Likewise, its critique echoes the criticism of positivism formulated by the Frankfurt School: In its quest for a science that transcends myth, ideology and interpretation, it becomes blind to its own myth and ideology (Agger, 1991, p.111), in this case the ideology of the machinery and the mythology of big data. My point is that I believe critical big data studies are important when big data methodologies are attributed a superior epistemic status. But instead of conflating all data intensive method with the mythology of big data and through that maneuver easily criticize and neglect it, one should use these new huge data sets of human interaction to rethink social science instead of reproducing the apparent dichotomy between
“the hard-quantitative evidence and the soft qualitative data imbued with meaning” (Blok & Pedersen, 2014, p. 3). One should use the methodological uncanny of many of these tools as opportunities to question or rethink social scientific methods (Marres, N., & Gerlitz, C., 2016).

This paper is inspired by the idea of a complementary social science. The Twitter data I for instance worked with was analyzed both qualitatively and quantitatively, thus Twitter data is both “soft” and “hard”. Neither is quantitative analyses always completely incapable of focusing on meaning, as I in this thesis for instance visualized the text through quantitative tools but analyzed the networked representation of meaning interpretatively. Therefore, referring back the critique of analyzing action frames as stable cultural forms, I believe the advent of large quantities of accessible social data through the web and digital methods (Venturini & Latour, 2009) offer a solution to this problem: Scraping the web is an easy way to gather enough data to analyze action framing processes. By quantifying words and collocation of words in these large datasets and visualize the results in a semantic network, we can analyze how meaning is dispersed in the whole network. This way we let the networked perspective and the cultural perspective complement each other in a way which move beyond the “strong tensions between mathematical mapping techniques and ethnographic or textural analysis” (Mische, 2003, p. 266). The advent of new forms of data and computational methods has therefore offered an opportunity to rethink the ways in which we investigate action frames. I am not the only one who have researched action frames through semantic networks (Kwon et. al, 2013; Schultz et al, 2012), but to my knowledge, no one has focused on the processual aspects and thus gardened themselves against critics like Mische (2002).

6.3 Social network analysis
One of the biggest challenges when studying SMs is to identify the boundaries of the network that constitute the SM (Marin & Wellman, 2011). In general, there are two approaches: 1) A nominalist approach where the researcher decides a set of criteria which defines membership and selects the nodes of the network according to these criteria. 2) A realist approach adopts the subjective perceptions of the actors within the network and thus let their experience decide the boundaries (Diani, 2002). This can be done by asking members who they think are a part of the network, but also just by focusing on actual interactions between actors and let that be the deciding factor, the latter being a more relaxed criterion. Both these approaches seem problematic in the specific case of this thesis. In general, hashtag analyses are
“especially useful for the analysis of key communicative activities in the context of identified events or topics” (Bruns, Burgess & Highfield, 2014, p. 114). However, if the hashtag under investigation had been movement-specific, a realist approach could have been taken where everyone who used a specific hashtag belonged to this SM, an approach which for example is implicitly used in Tremayne’s study of Occupy (2014) and Dahlberg-Grundberg, Lundström & Lindgren’s study of LaborStart (2016). However, as #ok18 is event-specific – it is used by mass media and politicians as well, all debating the collective bargaining – it cannot be assumed that all tweeters participate in labor movement. Interaction between users cannot be used as a criterion either, as leaders of TUs and employers use social media as a public arena for gathering public support and therefore most likely interact with each other in spite. Nominalist approaches would on the other hand be difficult due to the quantity of users in the dataset – I do not have the resources to evaluate every actor based on some criteria.

As I have not been able to find any literature on the issue of boundaries and online data, I have developed by own strategy grounded in a mix between a realist and nominalist approach, which align with scientific precedents (Diani, 2002): I chose the boundaries for the labor movement through an event-based approach (Marin, & Wellman, 2011) where indirect linkages between actors sat the boundaries. Specifically, I included all actors who used labor movement-specific hashtags during the collective bargaining. These movement-specific hashtags, contrary to the event-specific hashtag #ok18, were chosen on the basis of an explorative analysis of the most used hashtags, who used them, and semantics of the tweets. I made a list with all hashtags used by at least fifty actors. This created a list with 45 hashtags. Out of these 45 popular hashtags I needed to find what hashtags were specifically used by the labor movement. In total, I ended up with a list of 26 hashtags (appendix 1). I then included all actors who used one of these hashtags to a new dataset that represented the labor movement on Twitter. This new network consisted of 799 actors while there in the whole dataset were 2617 actors. The labor movement on Twitter therefore represented a bit less than 1/3 of the actors in the Twitter network related to #ok18. Interestingly, the number of tweets only fell from 16550 to 11396, which means that a bit more than 2/3 of the tweets in the #ok18 Twitter stream were written by participants in the labor movement, even though they only comprised of less than 1/3 of the actors.

6.3.1 Analyzing the structure of communication
Mathematically speaking a network is a graph and belongs to graph theory, however, as this thesis is social scientific I will refer to the graph as a network and the nodes/vertices in the
Specifically, I focused on the structure of communication between participants in the Danish labor movement on Twitter by analyzing the @mentioning network. Ties between actors within any Twitter network is always directional: Y can follow X, while X does not have to follow Y. The strength of these ties is measured on the number of mentions. It has to be said that from an ANT-perspective, one important actor is absent in the network visualization: Twitter itself. Twitter as an organizing agent (Bennet & Segerbeg, 2013) is not visualized in the network, which is something we should have in mind when analyzing the network.

When analyzing network positions in this thesis, it is done under the assumption that they affect actors’ influence within SM (Diani, 2002). Influence in terms of negotiating frames and identities. This is important to analyze as one of the main differences between collective action and connective action is that the former is choregraphed by central organizations (Gerbaudo, 2012). It can furthermore give insights into the degrees of participation in movements, indicate the strength of community or disclose internal fractions (Diani, 2003). One way of analyzing network positions is through centrality measures. Three different centrality measures were used in the analysis: In-degree centrality, out-degree centrality, and eigenvector centrality. In-degree centrality represents the number of @mentions one actor has received while out-degree centrality is the number of @mentions sent. Degree is overall a measure which is positively related to an actor’s social capital (Borgatti, Jones & Everett, 1998). In-degree centrality is often interpreted as popularity within a network and leadership within a SM (Tremayne, 2014; Diani, 2002). Degree measures correlate with measures of centrality, which makes it useful as proxy for analyzing involvement (Butts, 2008). However, these two measures suffer from being “local”, meaning that they fail to focus on the quality of the linkages and the structural positions of the actors they are linked to. They for instance do not tell if an actor is linked to other prominent actors in the network. Therefore, the more complicated measure of eigenvector centrality was also included, as it measures whether an actor has many short paths to other actors in the network: Eigenvector centrality is the sum of the centrality values of the nodes that it is connected to. It can be interpreted as a measure of popularity and it is thus positively related to an actor’s social capital (Borgatti, Everett & Johnson, 2018; Borgatti, Jones & Everett).

Sometimes it can also be fruitful to investigate the whole network through graph level indices (Diani, 1995; Butts, 2008). Here three measures were used to describe the network: Centralisation, reciprocity and modularity. The former describes “the extent to which centrality is concentrated within a small number of vertices [actors]” measured on a scale
from 0-1, 0 being a completely empty graph (Butts, 2008). It describes how central the most central actor is in relation to all other actors in the network (Freeman, 1978), which for instance can be used to evaluate grassroot democracy in SMs (Diani, 2002). Reciprocity describes the tendency of ties to be reciprocal rather than unidirectional, in our case whether the communication network consist of dialogical communication or whether Twitter mainly is used to disseminate information. Lastly, a modularity score describes the degree to which the network has a sophisticated internal structure or in other words communities. “Networks with high modularity have dense connections between the nodes within modules [communities] but sparse connections between nodes in different modules” (Ji et al., 2015). Thus, a community is a sub-network within the overall network. Communities within the network constituting the social movements can indicate different fractions. The specific algorithm used to calculate the modularity is developed by Blondel et al. (2008). The modularity score needs to be over 0.6 before a network is characterized as having communities. This algorithm has before been used to detect communities in Twitter networks with success (Pujol, Erramilli & Rodriguez, 2009)

Based on the @mentions, I created an edgelist and a nodelist, which were used to construct the network in Python. All measures were calculated with the package NetworkX or by network visualization software Gephi where I also visualized the network. I used the layout algorithm Force Atlas 2, which is a force-directed algorithm, meaning connected actors are positioned close to each other in the network.

6.4 Semantic network analysis

Instead of drawing one medium-sized or small samples of tweets from the dataset and qualitatively analyze the different framing processes present in the #ok18, I conducted a semantic network analysis which described the development and negotiation of SM frames over time.

Semantic networks “allow to model semantic relationships that are represented in a graph with labeled nodes and edges” (Drieger, 2013) where “a link…represents the extent to which two nodes, i and j, share meaning as measured by their overlapping use of language (Doerfel, 1998, p. 23). The meaning of a text is thus presented by spatially visualizing word frequencies and associations in a network, but also through different quantitative measures. These quantitative measures are from network theory. The only difference from the social network analysis is that in a semantic network words are nodes and links between nodes are word collocations. A dyadic tie between two words “represents how frequently a pair of
words co-occurs within a textual unit of analysis (Kwon et al. 2016, p. 209). A semantic network is therefore a data visualization made for the purposes of interpretation.

It has been argued that Social network analysis is a form of content analysis (van Atteveldt, 2008) and it indeed provides quantitative measurements that describe the network of words (Drieger, 2013). It offers a measures of meaning (Johnston, 2002). Traditional content analyses have often been applied to analyze SM frames in medium- and large-n studies. The strength of such an approach is the quantity of the sample which allow for generalization and for treating action frames as independent variables when researching movement success (Lindkilde, 2012). This approach has on the other hand been criticized for being ignorant to a text’s particular micro- and macro-context, which is problematic as a correct interpretation requires an understanding of both culture and individual biographies (Johnston, 2002). Especially analyses which rely on word-frequencies are vulnerable to this critique. Social network analyses do not have the same problem as they both quantitative and qualitative elements (Drieger, 2013). They do not solely rely on a measure of meaning or on word frequencies, but also on the relation between words.

A useful aspect of the networked representation of a text is how it visualizes how words are linked to each other. The relation between words is important from a semiotic perspective because the meaning of any sign derives from how it is related to and differs from other signs (Drieger, 2012; Schultz et al., 2012). Thus, the problem with traditional text analyses build on word frequencies that words have different signifieds (Johnson, 2002) is solved by visualizing the words in relation to each other (Doerfel, 1998). By visualizing the structure of signs, we can understand the meaning of the individual signs. We might also see how certain important signs – floating signifiers (Laclau & Mouffe, 1985) – are sought to be defined differently by several actors. One such important signifier could for instance be (workplace) justice or fairness. Such a fight over signification would be an example of the aforementioned politics of signification or “meaning work” as Benford & Snow (2000) prefer to call it. The semiotic perspective is close to a discourse analysis (Lindkilde, 2012) and SNAs have also been used in mixed-method discourse analyses before (Lindgren & Lundström, 2011). However, as this thesis focusses on framing processes in the labor movement, the relation between words will only be analysed as a necessary step for understanding the meaning of words in certain action frames. Or to be more precise: The different action frames are visible in the semantic network as relations between signs, because these relations between signs constitute the action frames which function as schemata of interpretation. This reasoning is based on: 1) We can interpret semantics as a “system of signs” (Drieger, 2013). 2) Semantics is the study of meaning. 3)
Frames make occurrences in the world meaningful (Benford & Snow, 2000). Therefore, we can analyse frames during the collective bargaining in 2018 by investigating different “systems of signs” in the #ok18. These “systems of signs” will show themselves in the network, and they can include actors, issues, evaluations, consequences and solutions (Schultz et al., 2012).

As described above, frames are not stable cultural forms or just cognitive structures, but constantly negotiated, they have only been treated as such for methodological reasons. Because Twitter data is chronological, meaning it has attached meta-data with a time-stamps (Kwon et al. 2013), it allows us to explore framing processes in #ok18 over time. By interpreting the changes in the relation between words, we might among other things for instance see how certain “networks of signs” come to include words from other “networks of signs” which would indicate a frame extension.

6.4.1 The semantic network of #ok18

The unit of analysis in semantic network of the labor movement on Twitter was chosen to be one tweet, meaning if two words were in the same tweet, they were adjacent in the semantic network. For each time two words occurred in the same tweet, the weight of the tie linking them increased by one. The weight of a tie was interpreted as tie strength. In semantic networks, co-occurrences of words do not suggest any directionality, which means the semantic networks, contrary to the @mentioning network, are undirected (Kwon et al, 2016). This makes measures as indegree and outdegree centrality impossible to calculate, instead, degree centrality was used as the measure describing the importance of a word in the semantic network: It entails how many links a word has to other words in the network. Furthermore, the global measures density and modularity were calculated as well. A network’s density score is a useful measure since it can be interpreted as semantic coherency (Drieger, 2013), as it measures the proportion of potential ties that have been actualized (Borgatti, Everett & Johnson, 2018). A dense network indicates a high degree of semantic coherency. It was therefore useful to investigate whether this measure changes over time, since it would indicate whether the #ok18 Twitter stream move in the direction of semantic coherency, for example shared collective action frames. The number of unique words in a text is also of interest since it describes the variety in language expressions (Drieger, 2013). As framings of occurrences in the world and the construction of collective identities happens through language, the number of unique words is together with the density score useful indicators of possible developments of multiple framings, frame extensions or frame amplifications (Benford & Snow, 2000) over time in the semantic networks on Twitter.
It is important to stress that a semantic network is not constructed on unmodified text. Including all words would make the semantic network too complicated and impossible to interpret. Therefore, not all words in the dataset were included. Furthermore, the text corpus was also cleaned for “noise”, so it could be mechanically read by the algorithm constructing the semantic network. I cleaned and transformed the dataset in the following way:

- First, I tokenized the text corpus by using an NLTK tokenizer. Before tokenization each tweet consisted of one long string, but the tokenizer divided each tweet into a list of strings which each consisted of one word. This made it possible to use each word as a node in the network.
- Secondly, I lemmatized all words in the text corpus. Lemmatization is the process of transforming all words to their base form, their lemma. For instance, “love”, “loves”, and “loving” will all be transformed to “love”.
- Some words may not convey any important meaning, for example articles, filler-words and pronouns (Kwon et al, 2016). These words are “weeded out” by using a list of Danish stopwords. Stopwords are the most common words in the language. I have used the most comprehensive one in Danish, it is a part of the spaCy module and it consists of 219 words.

From the above, it becomes clear that creating a semantic network is not a neutral intervention, it encodes an implicit value system (collocation, frequencies and distances among words equal meaning) that influence how the data is used and the results that can be drawn. The scraped data needed to be transformed so it could be mechanically processed by the algorithm creating the semantic networks. Therefore, data should not be understood as the unquestioned and unquestionable basis of argument, but itself an outcome (Bode & Murphy, 2014). These processes of data manipulation and the underlying value system is important to be transparent about, since it underlines that the analysis does not describes the text objectively and neutrally: I, the researcher, have made certain choices which affect the results, and by being transparent about this process I am deconstructing the ideology of the machinery which claims neutrality and objectivity (Bode & Murphy, 2014; Daston & Galison, 1992).

6.5 Quantitative content analysis

Because a semantic network analysis in itself is an abstraction, it cannot completely replace traditional linear reading of text (Drieger, 2012). The abstraction of the text makes it possible to investigate the processual aspects of framing qualitatively, which would demand an immense amount of resources if done through a textual analysis. However, as described above, in this process of transforming the data in a way which allow for a networked representation, a lot of words were deleted. Furthermore, the logic behind the abstraction – that collocation, frequencies and distances among words model disclose the semantics of a text (Doerfel, 1998) – is of course reductionist. For this reason, I also made quantitative content analysis of different samples of tweets.

I applied a purposeful sampling strategy which means that the selection of data was “based on their anticipated richness and relevance of information in relation to the study’s research questions” (Gentles et al., 2015, p. 1778). In our case, the tweets that were relevant for the exploration of action frames and logics of action.

The quantitative content analysis was conducted with the use of predefined categories. Thus, the coding was done deductively and guided by the theories described in the theory chapter and their concepts. Specifically, these categories consisted of the three core framing tasks and the three identity fields: Diagnosis frames, prognosis frames, motivational frames, protagonist field, antagonist field and audience field. This way of categorizing has similarities to the methodology proposed by Matthes & Kohring (2008) in media and communication studies where the different frame elements in Entman’s (1993) definition of a frame is used to categorize media content. While they use the categories “problem definition”, “causal interpretation”, “moral evaluation” and “treatment recommendation”, I use the elements from social movement theories on framing and identity building. The technique was simultaneous coding where several codes can be attributed to the same textual unit (tweet) (Saldana, 2009). This was done because one tweet can belong to different categories as it can fulfill several framing tasks. Through this coding it became visible if the action frames in the #ok18 were symbolically inclusive and personalized, since the diagnosis, prognosis and motivational frames would be related to personal issues. And the character traits of the different identify fields were identified as well.

According to Touri & Koteyko, 2015, in media and communication studies there is a history of both conducting deductive and inductive frame analyses where the latter form, like the coding in this thesis, is quantitative. The deductive approach demands a clear idea of what
one expect to encounter in text, thus it is limiting the possibility of the study in terms of identifying whole news forms of frames (Matthes & Kohring, 2008). However, this approach was chosen anyways as I only am interested in frames and framing processes related to mobilizations, thus, frames irrelevant for this purpose might not be encompassed within the six theoretically developed categories, but these frames are most likely not of interest as they would not be action frames, neither connective or collective. However, as I also conduct a semantic network analysis, which in media and communication studies has been defined as the computer-assisted approach to framing and is inductive (Matthes & Kohring, 2008), this study uses two different approaches towards framing. The computer-assisted approach complements the quantitative content analysis in a useful way, since the latter approach identify the single elements of a frame, for instance words that reoccur together (Entman, 1993).

It has been argued that framing analyses in social movement research often lack a clear and rigorous methodology (Benford, 1997). As a response I will present the insights from my textural analysis of action frames by following some of the procedures outlined by Hank Johnson (1995), as it is developed in a way which should increase the reliability and transparency of framing research. He argues that the researcher should refer to specific lines in text where each concept in the collective action frame is created from. In our case, I will refer to specific tweets in appendices. In cases where action frames are collective, I will represent them as an “ideal-typical schema” (Johnston, 1995, p. 238).

6.6 Data
I gathered the data by using a slightly modified version of the Python module TweetScraper. The module uses Twitter’s search function and continues to scroll down and scrape tweets until all content in the search inquiry is scraped and parsed. The reason why this module was used is that Twitter’s own search API does not give access to more than one-week old tweets and it selects tweets after a non-public algorithmically determined relevance-criteria, which is a form of black-boxing (Bechmann & Vahlstrup, 2015). The downside with the TweetScraper module compared to Twitter’s own API’s is that retweets are not scraped. This forced me to only include @mentioning as ties in my network. This opens for interesting questions in terms of agency – as it has been argued that the structuring of the scraped data decides what kinds of analyses are possible, thus, data itself has agency in the research process (Marres, 2015). In total, 14,043 tweets were scraped that used the hashtag #ok18 and were posted in the period 01/02-2018 – 31/05-2018. Through my search criteria, I made sure all tweets were in Danish.
6.7 Weaknesses

One of the main weaknesses with this thesis is the consequences of what one could call single platform bias: I investigate the labor movement’s mobilisation on Twitter, which means I only analyze one platform, nevertheless mobilisation online happens across multiple platforms (Bennet & Segerberg, 2013). This is a weakness for several reasons. First, since platforms implement social media logics differently (van Dijck, 2013), and the way platforms function affects the mobilisation (Marres, 2015), my analysis of Twitter cannot be generalized and used to answer how the labor movement utilized social media in general – it has no external validity. Secondly, this leads to a communicative reductionism where I focus on single technological platforms and thus reduce the broad “repertoires of communication” applied by the labor movement (Treré & Mattoni, 2016). It is argued by Treré & Mattoni (2016) that analyses of SMs such as this thesis fetishizes new technologies and web-centric approaches. They claim a preferable approach is the holistic and non-platform specific media ecology perspective. This perspective avoids the temptation of focusing on singular media platforms in investigations of SM mobilisations and thus evades notions such as Twitter revolutions. Furthermore, the media ecologies perspective’s eye for the dialectic relationships between different forms of media technologies, social structures and media practices, raises false dichotomies such as offline vs. online and new vs. old media. I agree these pitfalls should be avoided, and the media ecologies perspective does offer insight not archivable through single platforms investigations such as this thesis. However, I do not believe the validity, as understood in qualitative research, of this research is damaged because of this, because I do not claim to describe the overall use of digital media during the collective bargaining. So, admittedly, this thesis does not describe the communicative complexity of the labor movement’s overall mobilisation during the collective bargaining of 2018, hence, no such conclusions will be made.

6.8 Ethical considerations

Two ethical concerns are necessary to discuss. Firstly, by using a webscraper that uses the Twitter search function I send a lot of enquires to the website which can have a crippling effect on the performance of the site. There are no direct benefits to Twitter of the conducted crawl, however, there are indirect social benefits (Thelwall, & Stuart, 2006). Therefore, in a utilitarian perspective, the consequences of doing a web scrape vis-à-vis not doing it should be accounted for. This research would have been impossible to conduct without using a webscraper. Copy/pasting 14,000 tweets would have been an impossible task, and for reasons
already accounted for, Twitter’s own Search API was not useful either. The result of the scrape is this thesis, which both contribute to the understanding of TUs utilization of digital ICTs and introduce a new method for investigating framing processes. The negative consequences are the crippling effect on the site, however, as it only concerns 14.000 tweets it would not impact the performance of the site in any significant way. Furthermore, the scraper followed the standards outlined in Twitter’s own robots.txt-file.

The more critical ethical consideration is towards the users, because “new ethical problems arise when new scientific questions are asked, when new methods are used and when new materials are analysed” (Vetenskapsrådet, 2017, p. 7). In our case, the “newness” is the vast amount of social science data in the form of digital traces of communication online. When doing social science research, the privacy and wellbeing of subjects should be protected, and the researcher should take the consequences of what their research might be used for (Holdsworth, 1995). In general, “the knowledge value of the research must be assessed as outweighing the risks” (Vetenskapsrådet, 2017, p. 30), which indicate a utilitarianist ethical perspective. Especially when dealing with vulnerable communities (AoIR, 2012). According to CODEX (2018a), the individual's integrity and personal information must be protected, and the risks to the research subjects must be minimized. I believe, this research lives up to these conditions since the labor movement might gain insights about their own mobilization processes, and the research subjects who are not public figures are never mentioned by name. Thus, the potential risk in the form of discrimination by employers which protesters could meet at their work place is minimal. Particularly because the community under investigation is not vulnerable: As mentioned in chapter 2, according to the “Danish model” the employers shall recognize TUs as legitimate representatives of workers.

Nevertheless, the dangers of digital methods for data gathering is that researchers think that just because something is accessible it also ethical (boyd & Crawford, 2012). There is a difference between being in public and being public (boyd & Marwick 2011). This leads us to the question of informed consent. According CODEX (2018b), research that entails sensitive personal information requires informed consent from the human subjects. Sensitive personal information does among other things include political views (Vetenskapsrådet, 2017), and it might be argued that some of the tweets contain the Twitter user’s political views. However, there is an exception to this rule: It is not necessary to inform research subjects if it is impossible, or if it would mean an unreasonably great work effort (Vetenskapsrådet, 2017, p. 30). In this thesis, I believe this exception excuses the lack of informed consent.
Furthermore, Twitter data is more ethical to analyze than for example Facebook without consent as it is a micro-blog and posted content are thus seldomly private. Publishing insights from these tweets is therefore not an invasion of users’ privacy. In a Goffmanian vocabulary, Twitter belongs to the front stage. Nevertheless, to be on the safe side, I will not include non-public Twitter users’ real names.

In conclusion, I therefore find this research ethical from a utilitarianist perspective (Ess, 2013), and it is in accordance with the ethical guidelines formulated by CODEX and Vetenskapsrådet.
7.0 Social network analysis

Before we conduct the social network analysis of what I have defined as the labor movement on Twitter, it is advantageous to get an overview of the data. As a reminder, the labor movement on Twitter consists of all actors, and their tweets, who used one of the movement-specific hashtags in the #ok18 Twitter stream. The labor movement sent 9806 tweets in the period from 01.02.2018 – 15.05.2018. Figure 1 below shows the activity over time. The red vertical lines each describe a key event that happened in the conflict. These key events are described in table 1 below the graph.

Figure 1. Number of tweets sent per day by the labor movement on Twitter.

![tweets per day](image)

Table 1. Key events during the collective bargaining.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2018-02-23</td>
<td>Negotiations between the state and state employees broke down.</td>
</tr>
<tr>
<td>2</td>
<td>2018-02-26</td>
<td>Negotiations between the municipalities and municipal employees broke down.</td>
</tr>
<tr>
<td>3</td>
<td>2018-03-07</td>
<td>The day TUs announced they would go on a strike.</td>
</tr>
</tbody>
</table>
It is thus clear from the graph that activity on Twitter is related to what happens in the bargaining process. Whether it was used for mobilisation purposes is what is investigated later on in the semantic analysis of the Twitter stream. However, since the optimum of the graph is the date TUs announced a forthcoming strike, it seems likely that Twitter in fact was used that way, at least to a degree so it deserves to be analyzed in-depth. This does not mean however, that that all tweets are a part of mobilisation processes, regular workers might even criticise TUs for the forthcoming strike or define the conflict as hopeless. All this will be investigated empirically through the semantic network analysis.

7.1 The distribution of tweets sent per user

Another simple but useful general analysis is how much each participant tweets. As mentioned in the chapter outlining the methodology of this thesis, there are 799 different actors present in subsample of the dataset. Figure 2 below is a graph that plots all participants listed by the numbers of tweets they have sent.
The above graph, which includes 9806 tweets and 799 actors, clearly illustrates that the number of tweets sent per user is best described as a power law distribution with a long tail. This means that few actors are very active while most of them only have sent one or two tweets. Thus, it is clear that some actors are way more involved in the construction of and negotiation over action frames than others. In addition, it is interesting to analyze who the most active actors in the network are. In appendix 2, the fifteen most active actors are listed. Five of those actors (*) hold according to their profile different leadership positions within a Danish TU. It is therefore clear that both TUs and regular participants are active on Twitter during the mobilisation, and that the activity on Twitter is related to what happens in that process. However, as described in the methodology chapter, it is impossible to distinguish an actor’s contribution to the movement’s construction of action frames from the actor’s position in the social structure constituting the movement (Lindgren & Lundström, 2011). Therefore, next step is to conduct a social network analysis of the labor movement on Twitter as such analysis can provide measures that describe the social structure.

7.2 Individual measures
In this section, the social network’s weighted in-degree centrality scores, weighted out-degree centrality scores and its eigenvector centrality scores are presented.
Within the network that constituted the labor movement in the Twitter stream related to the hashtag #ok18, 4082 @mentions were sent, which created 1359 links between actors of various tie strength. The 20 highest scoring actors for each measure are ranked in table 3. The actual measures can be found in appendix 4. To recap, in-degree centrality is the number of @mentions received, and that it is weighted just means that if X @mentions Y three times, Y’s weighted in-degree centrality score increases by three because the weight of the tie between them is three. From the table it is clear that TUs are the dominant actors within the network since in-degree centrality can be interpreted as both popularity and leadership. All these twenty important users are either TUs’ official twitter accounts or they belong to chairmen or vice chairmen of TUs. Looking at the distribution of the weighted in-degree centrality scores, it follows a power law distribution (appendix 3), which means that few actors, in this situation TUs, dominate in terms of social capital.

Moving on to the eigenvector centrality scores, which take the whole network into account. Eigenvector centrality scores can be between 0-1. An eigenvector score of 1 means that an actor is connected to all other actors in the network. The eigenvector centrality scores show the same pattern as the weighted in-degree centrality scores. Few actors are very well-connected with other well-connected actors – especially FdVinther, who was the chief negotiator for the worker’s employed by the state, and ANDERSBONDO, who was the chairman for the teacher’s TU – and the distribution is again a power law distribution. TUs and TU representatives are therefore with no doubt the most popular actors in the network.

If we turn our attention towards the weighted out-degree centrality scores, new actors appear. Out-degree centrality scores describe how many @mentions an actor has sent. Among the actors with the highest out-degree centrality scores, there is one account belonging to a newspaper affiliated with TUs (Ugebrevet A4), one social democratic politician, and five individuals who do not hold positions within TUs. Common for these active participants, however, is that they are relatively unconnected to the TUs, i.e., the dominating actors in the network. This is shown by the very low eigenvector centrality scores of these active participants (from 0 – 0,0045). And as this network is directed, it means none of the TUs or chairmen have communicated with them. This indicates that there are some very active participants in the network who want to start a dialogue with TU leadership, but often in vain, which can be interpreted as they possess a low amount of social capital. The

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4 Unless the network is disconnected. In that case, an eigenvector centrality score of 1 would mean that an actor is connected to all other actors within the biggest components. And all actors in the smaller component will get an eigenvector centrality score of 0 (Borgatti, Everett & Johnson (2018)).
actors with most social capital, on the other hand, do not all have high out-degree centrality scores, meaning they do not communicate a lot with the other actors in the network. Thus, leadership, popularity and social capital within the online labor movement in the #ok18 Twitter stream do not appear to be results of general activity on Twitter and neither results of participants’ direct communication with other actors in the network.

Table 2. Centrality measures describing the most important actors within the labor movement on Twitter.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Weighted in-degree</th>
<th>Weighted out-degree</th>
<th>Eigenvector centrality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ANDERSBONDO</td>
<td>MariaBBjoern</td>
<td>FdVinther</td>
</tr>
<tr>
<td>2</td>
<td>DennisFOA</td>
<td>FOA.dk</td>
<td>ANDERSBONDO</td>
</tr>
<tr>
<td>3</td>
<td>FdVinther</td>
<td>Hennychr</td>
<td>DennisFOA</td>
</tr>
<tr>
<td>4</td>
<td>GreteGc</td>
<td>gmitchew</td>
<td>LarsQ</td>
</tr>
<tr>
<td>5</td>
<td>dlforg</td>
<td>DMCamilla</td>
<td>GreteGc</td>
</tr>
<tr>
<td>6</td>
<td>FOA.dk</td>
<td>hkstat</td>
<td>dlforg</td>
</tr>
<tr>
<td>7</td>
<td>djoefer</td>
<td>harundemirtasdk</td>
<td>JKH_CS</td>
</tr>
<tr>
<td>8</td>
<td>bupldk</td>
<td>PiaPiontek</td>
<td>BennyAndersen</td>
</tr>
<tr>
<td>9</td>
<td>LarsQ</td>
<td>UgebrevetA4</td>
<td>FOA.dk</td>
</tr>
<tr>
<td>10</td>
<td>BennyAndersen</td>
<td>lynghoeft</td>
<td>Camilla_Rathcke</td>
</tr>
<tr>
<td>11</td>
<td>socialpaed</td>
<td>Bs68Sohn</td>
<td>ClausOxfeldt</td>
</tr>
<tr>
<td>12</td>
<td>Sygeplejeraadet</td>
<td>ThomasHeie</td>
<td>ritabundgaard</td>
</tr>
<tr>
<td>13</td>
<td>ACakademikerne</td>
<td>Noralpsen</td>
<td>DMCamilla</td>
</tr>
<tr>
<td>14</td>
<td>bentesorgenfrey</td>
<td>JanHoby</td>
<td>ACakademikerne</td>
</tr>
<tr>
<td>15</td>
<td>SaraVergo</td>
<td>AndersKronborg</td>
<td>bupldk</td>
</tr>
<tr>
<td>16</td>
<td>ritabundgaard</td>
<td>Brockdorff_H</td>
<td>socialpaed</td>
</tr>
<tr>
<td>17</td>
<td>hkstat</td>
<td>BUPLFormand</td>
<td>specialarbejder</td>
</tr>
<tr>
<td>18</td>
<td>ClausOxfeldt</td>
<td>bupldk</td>
<td>bentesorgenfrey</td>
</tr>
<tr>
<td>19</td>
<td>Uddannelsesforb</td>
<td>socialpaed</td>
<td>eva_secher</td>
</tr>
<tr>
<td>20</td>
<td>ftf.dk</td>
<td>Sygeplejeraadet</td>
<td>Sygeplejeraadet</td>
</tr>
</tbody>
</table>

These first results indicate that leadership, as understood through in-degree and eigenvector centrality (Diani, 2003), within the labor movement on Twitter is affected by formalized leadership outside Twitter, specifically leadership of TUs. Furthermore, it is not created through engagement and conversation on Twitter as out-degree scores and in-degree
are not correlated\(^5\). Since online attention usually follows a power law distribution (Hendricks & Vestergaard, 2018) it is as such no big surprise that it does in this network as well. However, it shows that the hope that social media platforms such as Twitter will equalize power relations between participants and leadership in TUs and counteract the Iron Law of Oligarchy might not take the social media logic *popularity* (Van Dijck & Poell, 2013) into account. Twitter might increase participants and rank-and-file members possibilities for interaction with leadership, but it does not seem to increase participation in the labor movement understood as the equalization of power relations in the network (Carpentier, 2016) where power in networks is understood through in-degree and eigenvector centrality measures. All this point in the direction of collective action or organizationally brokered connective action.

7.3 Network measures

Moving from individual level measures to measures describing the whole network, new aspects of the network emerge. The social network’s centralisation score, community structure and reciprocity score will be presented in this section.

The network is not very centralized, meaning it is not organized around a particular focal point, in our situation around certain actors. This can be interpreted from the rather low Freeman centralisation score calculated from the actors’ in-degree centrality scores (0,158). This low centralisation score for the network might seem surprising since we saw the power law distribution of the weighted in-degree scores. However, since the centralisation measure also takes actors with zero ties into account – meaning actors who do not @mention or are @mentioned by anyone – the results are understandable: 365 of the actors constituting the labor movement on Twitter have no ties, except the indirect through hashtags.

If we compare these results to the centralisation score of all actors with one tie or more, the results come to reflect the popularity of TUs in the network. Because this network of all connected actors is rather centralized (0,444) – and through the in-degree centrality scores we know it is around the TUs. This is confirmed through the fact that no communities are found in the network. The modularity score is only 0.430, and it needs to be over 0,6 before a network is characterized as having communities (Blondel et. al, 2008). An overview of the visualized network gives the same result, as it is clear how all connected actors are centered around the TUs, and the unconnected are located in the periphery of the network.

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\(^5\) Pearson correlation between weighted in-degree and weighted out-degree: 0,094  
Pearson correlation between in-degree and out-degree: 0,200
This therefore aligns with the network’s centralisation scores. From these global measures we can interpret that the labor movement on Twitter is not fragmented in different communities. Instead there seems to be only one central group in the network, which the TUs dominate, and beside that lot of unconnected actors.

Moving on to the network’s reciprocity score, it shows that the network is characterized by a lot of one-way communication. The reciprocity score measures the number of ties that are reciprocal. The reciprocity score is only 0.075, which means only 7.5% of all the ties in the network are reciprocal. As reciprocal ties can be understood as dialogical conversations between actors, the network thereby mainly consist of one-way communication. This is visualized in figure 3 below.

**Figure 3. Visualizations of uni-directional and reciprocal ties.**

The figure clearly shows that most ties are unidirectional. This can be interpreted as Twitter mainly is used the same way as traditional mass media: to disseminate information rather than engage in dialogue. Therefore, it does not seem like a web 2.0 technology like Twitter increase the amount of dialogue between leadership and rank-and-file members in TUs, which was one of the hopes in earlier literature on TUs and the web (see chapter 3).

To get an overview of the strength of all ties in the network, we can take a look at figure 4 below. Strength is here understood as the weight of a tie. It becomes clear that most ties between actors in the network are rather weak. The nodes in the graph are randomly located as they are of no importance in this visualization, it is the ties which are of interest: The threshold in terms of tie strength increases for each network, which allow us to see how strong the ties between actors are. That most ties in the network are rather weak can mean two things: 1) Twitter is not used for ongoing conversation between actors, and 2) based on Granovetter’s writings (1973) on weak ties, this might indicate a heterogenous network in
terms of ideas and ideologies. This view is supported by both Diani (2003) and McPherson, Smith-Lovin, & Cook (2001) who claim that strong ties indicate homophily in a network and a shared collective identity. This is the reason why Bennet & Segerberg (2013) theorize that weak ties rather than strong ties characterize the networks deploying the logic of connective action.

Figure 4. Tie strength in the network.

All the above results and the interpretation of them are made under the assumption that actors on Twitter create ties with each other through @mentions, and that the only actors of importance in the network are human. Under these assumptions, the results of this network analysis are clear: TUs and their chairmen are by far the most popular actors in the network, and according to Diani (2003) this can be interpreted as leadership of a movement. Furthermore, the network consists mainly of one-way communication, and as one of the
distinctive features between collective action and connective action is whether centralized organizations disseminate information in a top-down fashion, this indicates that the logic of collective action is more dominant in the protest network than connective action. The same can be said about the centrality and popularity of TUs in the network. However, most of the ties are rather weak, which has been argued is both a sign of connective action and grass root democracy in SMs (Diani, 2002; Bennet & Segerberg, 2013), and some of the most active tweeters are regular participants – and their tweets could entail personal reasons for participating. Furthermore, the labor movement network’s overall centralisation score is low. This means a lot of actors in the network are not structured around the TUs. This indicate two things which properly are interlinked: 1) The use of @mentions might not be the most important way actors communicate with each other and thus not the most important ways ties are created, ties understood as communicative interaction (Mische, 2003). 2) It is not human actors or TUs that are the most important organizing agents in network, but instead Twitter itself. Thus, if we recognize Twitter as an actor in the network the results might change. This is an important avenue of investigation since a key aspect of connective action is media platforms as organizing agents (Bennet & Segerberg, 2013). This view on media platforms as organizing agents draw on Actor-Network-Theory, a line of theorizing that does not distinguish between human and non-human actors as described in chapter 4.7. Specifically, hashtags are interesting, since they are emblems of the connectivity aspect of Twitter (van Dijck, 2013; van Dijck & Poell, 2012). They connect human actors and allow them to organize. Therefore, inspired by Treymayne’s analysis of the Occupy movement (2014), I will include hashtags in the network as actors.

7.4 The importance of non-human actors

If we look at table 2 below, it is clear that hashtags do play a huge role in the organization of the labor movement on Twitter. The five most popular actors in the network are hashtags. #en løsning for alle is even used in 22 % of all the tweets, and its eigenvector centrality score is 1, which means that it is connected to all connected human actors in the network. If we compare this to the other hashtags, their eigenvector centrality scores are much lower, and it is the only hashtag which has a higher eigenvector score than the two most connected human actors, anders bondo and fdvinther. This might indicate that #en løsning for alle is the only hashtag that represents the whole labor movement in the #ok18 Twitter stream, or that it is the only hashtag that were used in the whole period.
Table 2. The most popular actors, including both human and non-human actors.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Weighted in-degree</th>
<th>Eigenvector</th>
</tr>
</thead>
<tbody>
<tr>
<td>#enløsningforalle (en: A solution for everyone)</td>
<td>2554</td>
<td>1</td>
</tr>
<tr>
<td>#nokernok18 (en: Enough is enough)</td>
<td>950</td>
<td>0,41</td>
</tr>
<tr>
<td>#viermereværd (en: We are worth more)</td>
<td>645</td>
<td>0,22</td>
</tr>
<tr>
<td>#nokernok</td>
<td>587</td>
<td>0,54</td>
</tr>
<tr>
<td>#skuldervedskulder (en: Shoulder by shoulder)</td>
<td>448</td>
<td>0,24</td>
</tr>
<tr>
<td>andersbondon</td>
<td>437</td>
<td>0,64</td>
</tr>
<tr>
<td>dennisfoa</td>
<td>358</td>
<td>0,65</td>
</tr>
<tr>
<td>fdvinther</td>
<td>341</td>
<td>0,34</td>
</tr>
<tr>
<td>gretegc</td>
<td>218</td>
<td>0,42</td>
</tr>
<tr>
<td>#sammenervistærkest (en: Together are we strongest)</td>
<td>207</td>
<td>0,03</td>
</tr>
<tr>
<td>dlforg</td>
<td>200</td>
<td>0,40</td>
</tr>
<tr>
<td>#deterikkenok (en: It is not enough)</td>
<td>171</td>
<td>0,34</td>
</tr>
<tr>
<td>#samletstyrke (en: Collective strength)</td>
<td>162</td>
<td>0,24</td>
</tr>
<tr>
<td>foa_dk</td>
<td>121</td>
<td>0,15</td>
</tr>
<tr>
<td>djoef</td>
<td>113</td>
<td>0,01</td>
</tr>
</tbody>
</table>

To investigate the first possibility, I calculated the modularity score (0.35) of this new network to investigate whether communities were present, which was not the case. A visual interpretation of the network, figure 5 below, gives the same result: All popular hashtags and human actors are grouped together in the middle of the network, except #nokernok and, to
some degree, #nokernok18. However, both hashtags are adjacent to the most important human actors at the center of the network. It does therefore not seem like one of these hashtags are used as “transmission belts” (Bennet & Segerberg, 2013) for conversations opposing the core of the network. This aligns with the analysis of human actors where no communities were detected through the @mentioning network either. #enløsningforalle does therefore not have its high eigenvector centrality score because it is the only hashtags representing the whole movement.

**Figure 5.** Twitter network of the labor movement including both human and non-human actors. Node size based on weighted in-degree centrality.

To investigate the second possibility, that #enløsningforalle was the only hashtag used during the whole process, I constructed four graphs that illustrate the use of the most important hashtags over time. In figure 7, I conflated the hashtags #nokernok and #nokernok18 since they semantically are the same. Contrary to the expectation, we see that the hashtag #enløsningforalle were introduced later in the process than the hashtags #viermereværd and #nokernok. The latter two hashtags were deployed before the collective
bargaining broke down and TUs announced they would strike, while #enløsningforalle first appears after – it is a direct response to the upcoming strike.

Therefore, the eigenvector centrality of 1 by the #enløsningforalle – which means it is linked to all connected actors in the network – is not higher than the other popular hashtags because it is the only hashtag used during the whole process. It simply means that it is the hashtag that best represent, and is the most important non-human organizing agent in, the movement.

7.5 Sub-conclusion
The structure of communication within the labor movement is characterized by TUs’ centrality in the communication network. In measures that indicate leadership, popularity and social capital, TUs and TU officials dominate. The network furthermore mainly consists of one-way communication, and TU officials specifically do only to a limited degree engage in
dialogue with other actors in the network. However, many of the participants in the network are not linked to TUs at all, unless one conceives Twitter itself as an organizing agent that mediate connections between human agents. The organization of people through communication on Twitter is thus only partly done by TUs; the main organizing agent is Twitter itself. It does not seem though as hashtags mediate connections between human actors that are in opposition to the TUs since no communities autonomous from TUs are visible. Furthermore, the importance of hashtags has not diminished the centrality of human actors, it rather seems like human actors and non-human actors complement each other as organizing agents.

These results indicate that despite the advent of new social technologies and media platforms which allow workers to mobilize independently of TUs, TUs still played a huge role in what I have defined as the labor movement on Twitter during the labor conflict of 2018. We can thus already now conclude that Twitter was not used as a platform for crowd-based connective action. However, whether what happened on Twitter is best characterized as collective action or organizationally-enabled connective action, or if whether it contained elements of both, is not possible to know based on the results of this network analysis. All we can conclude for now is that TUs still played a big role in the mobilisation processes on Twitter, and the next step is then to investigate what that role was: Did TUs try to impose collective action frames on participants, or did they provide inclusive personal action frames which allowed each participant to participate for his or her own reasons? To investigate whether the action frames in the Twitter stream is inclusive or exclusive and whether there was a distinct collective identity shared among the participants, we need to move on and focus on the semantics in the Twitter stream.
8. Semantic network analysis

A semantic network analysis consists of two different modes of analysis: A network analysis where nodes are words and ties between words are collocations, and a visual reading of the network. First, I will analyze the network measures and afterwards interpret the different semantic network visualizations.

8.1 Measures of meaning

A quantitative approach to semantics can contribute with measures of meaning (Johnson, 2006). Such measures are rather superficial, but they can give an overview of a text, and in our case the overall changes (framing processes) over time in the #ok18 Twitter stream. The six tables below each contain the words with the highest degree centrality scores in the semantic networks, two networks for every month. Hashtags, usernames and stopwords are not included. In the tables, each network’s density score and the number of unique words in the network are also added.

<table>
<thead>
<tr>
<th>Table 3 01/02 – 14/02</th>
<th>Table 4 14/02 – 28/02</th>
<th>Table 5 01/03 – 15/03</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word</strong></td>
<td><strong>Word</strong></td>
<td><strong>Word</strong></td>
</tr>
<tr>
<td>Municipality</td>
<td>Employees</td>
<td>Employees</td>
</tr>
<tr>
<td>Teacher</td>
<td>Public</td>
<td>Public</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Municipality</td>
<td>Conflict</td>
</tr>
<tr>
<td>Work</td>
<td>Negotiation</td>
<td>Work</td>
</tr>
<tr>
<td>Agreement</td>
<td>Work</td>
<td>Employer</td>
</tr>
<tr>
<td>Public school</td>
<td>Teacher</td>
<td>Municipality</td>
</tr>
<tr>
<td>Employees</td>
<td>Salary</td>
<td>Danish</td>
</tr>
<tr>
<td>Equal salary</td>
<td>Agreement</td>
<td>Salary</td>
</tr>
<tr>
<td>Hope</td>
<td>conflict</td>
<td>Day</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td>Teacher</td>
</tr>
<tr>
<td><strong>Number of nodes</strong></td>
<td><strong>Number of nodes</strong></td>
<td><strong>Number of nodes</strong></td>
</tr>
<tr>
<td>762</td>
<td>2151</td>
<td>3055</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td><strong>Density</strong></td>
<td><strong>Density</strong></td>
</tr>
<tr>
<td>0.027</td>
<td>0.015</td>
<td>0.013</td>
</tr>
</tbody>
</table>

---

6 “Equal salary”, “public School”, and “lunch break” are one word in Danish, which is why they appear in the tables.
Starting with the density scores, which indicate semantic coherency (Drieger, 2013). It is clear that the density is rather constant throughout the whole period, except for the first two weeks of February. In the other five periods the density score is between 0.013- 0.015. In February, the density score drops from 0.027 to 0.015, which might indicate that the emerging conflict made participants and TUs articulate new and unconnected frames. However, the size of the network is a confounding variable since densities usually are higher in small networks (Borgatti, Everett & Johnson, 2018), and since the network described in table 4 is significantly bigger than in table 3 – which is connected to the rapid increase in activity – the decrease in density is not very surprising. What we can say, however, is that the variety in language expressions increased when the conflict began, which might indicate the emergence of new frames. However, the stable density scores suggest that the semantic coherency does not change a lot during the labor conflict, which started on February 23 and ended on April 28. Thus, nothing directs us to believe that the Twitter stream moves towards containing either more or less personal action frames. However, since density scores do not say anything in themselves but only through comparisons with other networks (Borgatti, Everett & Johnson, 2008) these results do not tell about the degree to which personal and collective action frames exist in the Twitter stream, only that the relation between these two types is rather constant.

The topics that were introduced into the Twitter stream when the conflict started, at least the big ones, can be interpreted from changes in the table of the words with the highest centrality scores and my background knowledge about the conflict (Drieger, 2013).
Obviously, “conflict” in table 5 indicates the transition from negotiation to conflict, and as the word “hope” vanishes, the hope for an agreement is replaced by discussions on the conflict. The word “Danish” also appears, which we from the semantic network below know often appears together with the word “model” and creates the concept “Danish model”. One last change is how the discussions on “equal salary” changes and become discussions on “salary” in general – this finding will be elaborated later in the visual readings.

One last noteworthy change with high-scoring words in terms of degree centrality happens in April. If one compare table 7 and 8, we see that the words “teacher”, “stand” (which in that period is used together with “together”) and “negotiator” rise to prominence. This is the first time the word “negotiator” emerges, and it happens at a moment where one specific negotiator makes a controversial decision: Dennis Kristensen, who represented LO, broke the ”musketeer oath”, which was the beginning of the end for the solidarity between all TUs. Thus, in the last weeks of the conflict, these measures of meaning indicate that a new frame is articulated (Benford & Snow, 2000), probably with the negotiator Dennis Kristensen as an important actor within its grammar. This might also explain the rapid increase in number of words and the small decrease in the density score, since this betrayal of the “musketeer oath” also meant a fragmentation of the collective “We”, a result that will be presented later in this thesis.

8.2 Visual readings of the semantic networks

None of the semantic networks have a clear community structure measured through the modularity scores of the networks (Blondel & Lefebvre, 2008). This is not surprising considering the results of the social network analysis where ties between actors are “culturally constituted processes of communicative interaction” (Mische, 2002, p. 259). The social network between actors showed no signs of strong sub-networks, and since networks are conceptualized as “Islands of meaning”, naturally there are no strong semantic communities in the form of sub-networks in the semantic networks either – because there is only one “Island of meaning”. Thus, the social network analysis and the semantic analysis are two sides of the same coin, which these results confirm. However, this means no clear sub-structures exist in the semantic networks. This complicates matters since frames in semantic networks are conceived as “system of signs”, a notion that builds on semiotic theory (Drieger, 2013), however, it seems like these “systems of signs” do not appear as clear sub-networks of words in the semantic network. Instead a more hermeneutical analysis of the network is needed. To guide this hermeneutical process of identifying action frames, I only included the
strongest 350 ties in each network, as that visualizes the strongest “systems of signs” in the network. Leaving all ties between actors make the networks completely unreadable due to their sizes and complexity. Specific tweets will be presented with a reference to a specific appendix number and table row in the following format: (A?, R?). The number following A specifies the appendix, and the numbers following R specifies the rows. In instances where several rows are referenced, more than one number can follow R. For example, if I make a reference to appendix 5, row 5, 77 and 99, the reference is: (A5, R5, 77, 99).

8.2.1 The first two weeks of February (Table 3)
In the first two weeks of February three frames were identified by visual inspection, which all frame the collective bargaining. There is a” feminist frame”, a “public employees vs. private employees frame”, and a “Danish model frame”.

Figure 10. Semantic network of the labor movement’s tweets in #ok18 from feb. 01 – feb
Figure 10 above illustrates the feminist frame. The center of this frame is “equal pay”, and it is linked to the words: “work”, “equality”, “pay”, “year”, “labor market”, “woman”, “funds”, “TU”, “pedagogue”, “organize”, “total” and “field”. Clearly, the issue of equal pay is here understood as gender equality, which TUs should fight to achieve. Particularly this is debated in relation to the vocation of pedagogues. A sample of tweets were drawn where the criterion was that it should include the word “equal pay” and minimum one of the other words in this “system of signs” – a purposeful sampling strategy that differs from mere cherry-picking since we know from both table A and its corresponding semantic network that “equal pay” is an important word in the Twitter stream. Exemplar tweets are:

“We live in 2018. But the salary for female occupation reflect another time. It can and shall be done better. Our work is worth more – also in Danish crones. #dkpol #ok18 #ligeløn. “ (A5, R1059).

“We really don’t have equality on the labor market, but maybe @Ckjersgaard[Danish talkshow host] should ask whether they are ready to support an equal pay fund...” (A5, R1336).

These two tweets represent the diagnosis frame and the prognosis frame: The diagnosis, or the injustice frame, is gender inequality in terms of salary, and the way it should be fixed is through an equal pay fund.

The next frame of importance is about the relation between public and private employees in terms of salary. It consists of the words: “sector”, “private”, “wage development”, “public”, “state”, “salary”, “employees” and the hashtag #nokernok. Here, the diagnosis frame is not the inequality between men and women, but instead between private and public employees: The wages of the public employees are not following the development in the private sector, which damages the quality of work and the capabilities of the employees (A5, R1076, 1098).

The prognosis frame is a better salary for public employees (A5, R1315, 1130), for example:

“Still relevant! DMF also believes that the public wage must follow the private (A5, R1325)
One public employee even @mention all TUs negotiators and write that public they are ready for a conflict if they do get what they deserve. (A5, R1119).

Figure 11. Semantic network of the labor movement’s tweets in #ok18 from feb. 01 – feb 14. Public employees vs. private employee frame.

The last frame identified in the semantic network is about the injustice of the teachers’ working hours agreement that was made through legislation during the collective bargaining in 2013 (See chapter 2). It is at the center of the semantic network, and it can be found in figure 12 below. It consists of the words: “working hours agreement”, “teacher”, “happen”, “TU”, “push”, “stand”, “municipality”, “go”, “pause”, “agreement”, “work” and “employee”. The diagnosis frame here is that the teacher’s working hours agreement is “about more than just the teachers – it is about the Danish model…”(A5, R2066), and all TUs stand together against the municipality negotiators and push for the teacher’s right to a voluntary agreement (A5, R 1272, 1245, 1241). In contrast to the two other frames about salaries, this frame is almost exclusively articulated by TUs. This means that the injustice of the teachers’ working agreement – the undermining of the Danish model – and the solution to this injustice – workers solidarity – are frames mainly used by TU officials to understand the problems during the collective bargaining: It does not have resonance (Benford & Snow, 2000).
Thus, clearly, there exists multiple and co-existing diagnosis frames in the first two weeks of February on Twitter, which each has different prognosis frames that fits the diagnosis – all this is in line with the processes explained by Benford & Snow (2000). However, none of the tweets in the samples had elements of motivational frames, which seems logical since the collective bargaining is on the tracks: No vocabulary of motives (Benford, 1993) are articulated to make participants engage in collective action, however, this also means that these tweets are not mobilizing. Lastly, it should be noted that none of the tweets in the samples showed any signs of inclusive action frames: No one shared personal stories or reasons for the injustice – it was all on very general levels, either by referring to statistics about wage development or articles about the Danish model.
8.2.2 The last two weeks of February (Table 4)

If we start by tracking the development of the frames in the earlier semantic network, we see from figure 13 below that the “equal pay” frame has changed. Both in terms of its connectedness to other important nodes (it has moved to the center of the graph), and in terms its signification. Earlier, it was clearly a feminist frame, which might have explained its position in the outskirt of the graph, but that has changed: Instead of focusing on the equal pay between men and women, the term “equal pay” has now come to be used together with the words: “teacher”, “working hours”, “demands”, “work”, “lunch break”, “fulfill”, “real wages”, “strength”, “public” and “salary”. This means that equal pay is no longer used in tweets debating the particular case of women on the labor market, but instead together with the other main disagreements between public employers and TUs during the collective bargaining: The teacher’s working hours agreement, the paid lunch break and the salary of public employees in general (FOAS, 2019). “Equal pay” is no longer the hub in a system of signs that constitute its own frame, which also is indicated in table B where “equal pay” no longer is one of words with the highest degree centrality scores. Interestingly, “equal pay” is used in a lot of tweets together with hashtags who invite to be used to express solidarity and collectivity between all vocations, #samletstyrke (collective strength) and “#sammenervistærkest (we are strongest together), thus the particularity of the vocation of pedagogues has also vanished in the tweets around the topic. All this shows that the “equal pay” frame has been absorbed into another frame through a process of frame extension (Benford & Snow, 2000), but in that process the feminist aspects have been downplayed.
If we turn our attention to the frame that before had “public” as the central word in its system of signs, we can see in figure 14 below how it has moved to the center of the semantic network where it is right beside “employee”. These two words together – “public employee” – are the new center of the semantic network, and in my interpretation, they also constitute the center of the collective action frame that was extended and absorbed the feminist frame. In fact, this has become the shared collective action frame within the labor movement: It frames the collective bargaining and a possible future conflict. The bottom of this system of signs consist of the same elements as the original frame that had “public” at its center: The “salaries” of “competent” “public employees” are not as good as in the “private” sector, which is wrong since there is an economic “boom”, thus, public employees deserve “equal pay”. However, now this framing of the conditions of the public employees has become linked to the possibility of a “conflict” with the “employees”.
A sample of tweets were drawn that included “public” and one of the other words in this “system of signs”. Since this frame, as explained, has become the overarching frame used by the labor movement to attribute meaning to the collective bargaining, the number of tweets that contain these words are extensive. Therefore, I took a random sample of 50 tweets from this purposeful sample.

Table 9 below shows the results of the coding of the sample of tweets as outlined in chapter 6.5. The table should be read horizontally from left to right. It is clear that Twitter is used by the labor movement to frame the collective bargaining and conflict. However, Twitter is still almost exclusively utilized for the core framings tasks of diagnosis framing and prognosis framing.
Table 9. Overview over sample of tweets from collective action frame in Twitter stream from Feb. 15 – Feb. 28. (n=50)

<table>
<thead>
<tr>
<th>Tweets that contained action frames in total</th>
<th>Diagnosis frames</th>
<th>Prognosis frames</th>
<th>Motivational frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>7</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Tweets that contained identity fields in total</td>
<td>Protagonist field</td>
<td>Antagonist field</td>
<td>Audience field</td>
</tr>
<tr>
<td>23</td>
<td>7</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Tweets sent by TUs</td>
<td>Tweets sent by participants</td>
<td>Tweets sent by Opponents</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The diagnosis frames are built on two pillars: One, there is an economic boom in Denmark (A6, R44, 25, 12). Two, public employees are underpaid, and their working conditions are horrible (A6, R31, 30), but in spite of that they still deliver great service every day (A6, 32, 28). Examples are:

"@sophielochde 7500000 voters who also are employed in the public sector want you to understand the value of a strong public sector. We deliver on your politics to the citizens, despite the ridiculous resources and conditions. THINK A LITTLE. “ (A6, R31).

“It is pathetic that we are expected first one thing then another and another, but when we have three demands, then we just take and have a entitlement mentality” (A6, R7).

The prognosis frame is an increase in worker’s salary so they match the wages in the private sector, and that it is a matter of respect and recognition for their hard work (A6, R40, 19, 44, 17, 15). Interestingly, there is no real prognosis frame for the horrible working conditions as an wage increase will not increase the money in the public sector as such. This might also be linked to the fact that the declining working conditions is about New Public Management, which is not what is up for discussion doing the collective bargaining. However, including these grievances might very likely increase the collective action frame’s
resonance among the public employees, which is the whole function of frame extensions (Benford & Snow, 2000).

Even though several other frames articulate that public employees are ready for a conflict (A6, R26), there is only one tweet that present an actual motivational frame:

“A conflict is one step closer, and it almost seems uninventable…Does Denmark benefit from a grand conflict, I do not think so… But Denmark does really really not benefit from a public sector in decay… #thatisnotOK #OK18. (A6, row 34).

The vocabulary of motive is here severity (Benford, 1993) – the public sector is in decay, something has to be done, and that is why they participate.

Thus, the “schema of interpretation” that makes the collective bargaining and possible future conflict meaningful for the labor movement is a narrative about hardworking but unappreciated public employees who deserve and demand higher wages – and if that is not given they will go on strike.

From the contributors to this frame, we can see how both regular participants and TUs leaders articulate it. Therefore, it is uncertain whether the frame extension that absorbed the feminist frame within the labor movement were done for strategic reasons by the TUs as a way to unify the whole labor movement on Twitter under one collective “We”, or if the particular “We” of female public employees were broken down through negotiations from the bottom and up. However, it is noteworthy that the TU BUPL (A6, row 17, 18, 37) is active without mentioning the inequality between men and women, even though they were the only TU participating in the articulation of the feminist frame earlier in the moth: It therefore could seem like the TUs together agreed on a new collective action frame representing all public employees. The development of identity fields will be elaborated on in the in the next chapter.

Lastly, we should note that only one tweet included a personal reason for a possible future conflict. The tweet linked to a personal blogpost where a man shares a personal story about his working conditions at the hospital.

The frame extension that took place in the two last weeks of February in the #ok18 Twitter stream therefore seems to have merged all frames into one collective action frame that included a shared diagnosis frame and a shared prognosis frame. In this collective action frame there also is a motivational frame which is not used as much. I argue for this interpretation since 1) all nodes with high degree-centrality scores are centered in the middle.
of the graph, contrary to the earlier semantic network in the beginning of February, and 2) the qualitative analysis of the sample of tweets framed a possible future conflict with diagnosis frames and prognosis frames for the whole public sector. This can be interpreted as the ideational outcome of the “musketeer oath”: A necessary condition for solidarity among all workers during the collective bargaining and a possible future conflict was that the “schema of interpretation” to make sense of the collective bargaining and future conflict had to be shared among all members.

8.2.3 March (Table 5 and 6)
Since the measures of meaning in table 5 and 6 did not indicate any important framing processes, particularly any new frame articulations, I decided to merge the two networks from March and visualize them as one. In the last section I argued that a frame extension had taken place, probably as a strategic move to unite the whole labor movement by creating one shared “schema of interpretation” – a collective action frame. In March, as the measures of meaning also indicated, both the grammar and the index of the collective action frame stay the same. If we take a look at figure 15 below, “public” and “employee” are at the center of the semantic network, and in general all words with high degree centrality are positioned in the middle of the graph – except for the hashtag #nokernok. However, the most central word in the network, both in terms of its degree centrality score and its position in the network, is the hashtag #enløsningforalle (a solution for everyone).

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7 It was investigated whether #nokernok (#enough is enough) was a personal action frame due to its position in the network and its symbolic inclusiveness: It mirrors an empty signifier as it absorbs meaning rather than emits meaning (Buchanan, 2010), since “enough is enough” does not mean anything independent of a semantic context. However, none of the tweets in the samples included personal reasons for participating. This analysis is not included to save space.
Figure 15. Collective action frame shared by the labor movement on Twitter in March 01-31.
The hashtag #enløsningforalle is connected to all other words with high degree-centrality scores in the network from table C and D: “employees”, “public”, “work”, “stand”, “conflict”, “employer”, “salary”, “municipality”, “Danish”, “thanks”. This indicates it is used in tweets all covered by the shared collective action frame. However, it first appeared March 1. when an agreement could not be made, and a future conflict was as close as ever.

Therefore, I propose #enløsningforalle not only is an organizing agent but also the result of the discursive process called frame amplification where a particular value in the collective action frame is highlighted as extra important and formulated in for instance a slogan that can be easily distributed (Benford & Snow, 2000). Here, the particular value is the solidarity between all public employees, since the grammar of the diagnosis frame connect all public employees’ grievances as the same. This frame amplification was done by the teacher’s TU leader, Anders Bondo, who introduced the hashtag in the following tweet:

“Thank you for the support for the conciliation board! #asolutionforeveryone #OK18” (A5, R 2771).

To analyze the development of the labor movements collective action frame on Twitter I took a purposeful sample from the semantic network that used the frame amplification slogan and one of its tightly connected words. From these I took a random sample of 50 tweets for each network. This was done to investigate the development of the diagnosis and prognosis frames, but also to analyze whether the core framing task of motivational framing were more present since the possibility of a conflict was higher in March than in February.
Table 10. Overview over sample of tweets from the collective action frame in the Twitter stream from March 01 – March 31. (n=50)

<table>
<thead>
<tr>
<th>Action frames</th>
<th>Diagnosis frames</th>
<th>Prognosis frames</th>
<th>Motivational frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>7</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Identity fields</td>
<td>Protagonist field</td>
<td>Antagonist field</td>
<td>Audience field</td>
</tr>
<tr>
<td>21</td>
<td>5</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>TUs</td>
<td>Regular participants</td>
<td>Opponent</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>15</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Table 10 above show some changes compared to the collective action frame from the two last weeks of February. There are more motivational frames, but they are still fewer than both diagnosis and prognosis frames. An audience field is constituted as well, and from this sample of tweets it seems like this collective action frame mainly is rearticulated by TUs.

The diagnosis frames and prognosis frames similar to the previous action frame, with the exception that the grammar of the diagnosis frame has been expanded in time, so the teachers’ “lockout” in the collective bargaining of 2013 (see chapter 2) now is connected to the employers’ present day “lockout” warning. Thus, not only are the public employers not willing to raise the employees’ wages during an economic boom (A7, R14, 16, 25), they are also trying to circumvent the Danish model yet again (A7, R28, 49). An exemplar tweet of the latter is:

"...We stand shoulder by shoulder and fight a mutual battle for a #SolutionForEveryone, but there is more at stake. The Danish model that we are so proud of is under attack. “ (A7, R28)

The solution to this problem, the prognosis frame, is highlighted in the hashtag #enløsningforalle (A7, R35, 4), which includes solidarity and respect (A7, R43, 8). Thus, even though a future conflict will be damaging public employees should still be ready to strike (A7, R24). Because, and this is the motivational frame, it is necessary (A7, R19) to protect the severe attack on the Danish model (A7, R28, 49).
This is a classic example of how past events is linked to present day events which creates consistency in terms of identity and SM narratives (Della Porta & Diani, 2006), and how a frame can encompass an answer to an expected counter-frame (Benford & Snow, 2000): By acknowledging that a conflict will be damaging – which would be an expected counter-frame articulated by the employers – but offering a reason why it still is a necessary evil and that the employers caused it, they protect themselves from that particular counter-frame.

Lastly, no personal action frames or personal reasons for participating was found in the sample. That might not be a big surprise since the collective action frame highlight the importance of standing together as one group, nevertheless, this indicate that there still is no sign of a personalization of labor politics.

8.2.4 April 1-15 (Table 7)
The measures of meaning did not indicate any changes in the Twitter stream from March to April (table 6 to 7), however, since this network describes the two weeks that lead up the moment when the negotiator for LO broke the “musketeer oath”, it was important to investigate whether a different frame in the Twitter stream had emerged. Such a frame could have been articulated by the TU itself to legitimize their future action (Benford, 1993). It could also have appeared in the form of “sentiment pool” representing a part of the labor movement participants who did not feel that “a solution for everyone frame” resonated with them (Snow & Benford, 2000). However, if one looks at the system of signs in figure 16 below where the frame amplification #enløsningforalle is the center, it is clear that this is not the case.
Figure 16. Collective action frame shared by the labor movement on Twitter from April 01-15
All words with high degree centrality score are still centered around the collective action frame that has #enløsningforalle as its slogan. No nodes in the outskirt of the graph have any strong ties between them. If another collective action frame had been articulated with any form of resonance among other TUs or labor movement participants, such frame would have appeared in the graph with visible ties between them. The same goes for existence of a possible personal action frames. Instead, it appears that the collective action frame has come to encompass an even bigger amount of the semantic network, and thus expanded the frames grammatical composition, since the #nokernok18 has moved to the center as well, and the number of strongly connected words have increased. The bottom of the graph describes the negotiations, the future conflict and the diagnoses frames, while the top half of the system of signs contains the prognosis frames and the motivational frames. Therefore, there is no need to analyze a sample from this period, since neither the measures of meaning or a visual interpretation of the semantic network shows any signs of a change in the collective action frame.

There were therefore no signs in the Twitter stream in the two first month of March that could have predicted the break of the “musketeer oath” and the labor movement’s collective action frame’s frame amplification “a solution for everyone”. This interpretation is supported by the density score, which has increased a little bit from table 6 to table 7.

8.2.5 April 16-30 (table 8)
From the measures of meaning, we know that the framing of the collective bargaining changed its focus: The two highest scoring words in terms of degree centrality were in the beginning of April “employees” and “stand” (as in stand together), but in the last two weeks it was “teacher” and “stand”. Thus, like in the beginning of the collective bargaining (table 3), the particularity of the vocation of teachers became prominent in the semantic network. This could indicate a division within the labor movement between the teachers and the rest of the public employees, which would reflect the fact that LO broke the “musketeer oath” and signed a collective agreement with the public employers – and as a result the teachers did not get a new working hours agreement. This might also explain the fact that the network’s density score decreases a bit again. However, if we look at graph 17 below, at first sight it does seem like the labor movement’s collective action frame in fact did fragment either leading up LO’s betrayal or as a result of it. Still, all the words with high-degree centrality scores are in the middle of the graph, and they are all connected to the collective action frames amplification #enløsningforalle. Furthermore, the words “teacher”, “public” and
“employee” are very close to each other in network. Thus, since networks of signs constitute frames, the fact they “teacher” and “public” employees appear so close shows that they in fact still belong to the same action frames.

Graph 17. Fragmentation of the collective action frame on Twitter from April 16-30

The two boxes represent to possible “networks of signs”, in other words frames.
A possible explanation to this fact could be a frame dispute (Benford & Snow, 2000), but internally in the labor movement. One of the possibilities of analysis with the semiotic perspective on semantic networks is to analyze whether certain signifiers in the network belong to different networks of signs – because the meaning of a certain sign, its signified, is defined by the network of signs it is a part of. However, different actors often try to assign different meanings to the same signs. There is a possibility that different actors within the labor movement on Twitter try to assign different meanings to the signifier #enløsningforalle, since it is the frame amplification of the collective action frame constructed to make sense of the collective bargaining and possible future conflict: By changing the meaning of #enløsningforalle, the “schema of interpretation” to understand the “musketeer oath” would also change – maybe even in a way which made LO’s collective agreement less of a betrayal.

If we take another look at figure 16 above, I have added two boxes that divides the upper part of the network of signs in two. The words with the highest degree centrality scores on the left side are: “negotiations”, “agreement”, “conflict”, “had to”, “negotiator”, “chairman”. And even more interestingly there is a direct line between “find”, “solution” and “grand conflict”. This could be the main words in a system of signs that frame the TU chairman and negotiator Dennis Kristensen’s agreement: It had to be made to avoid a grand conflict. The words with the highest degree centrality score in the right box are: “Teacher”, “lunch break”, “public”, “employees”, “stand”, “together”, “model”, “collective agreement”, “salary”, “solidarity”, #shoulderbyshoulder”, and “fight”. This sounds more like the already existing collective action frame where all public employees stand together in solidarity to protect the Danish model and for the teacher’s working hours agreement.

To investigate this further I drew two purposeful samples from the tweets sent in the last two weeks of April. One sample contained #enløsningforalle and the words from the left box, another with the #enløsningforalle as well as the words from the right box. Fifty tweets from each purposeful sample were randomly chosen and analyzed in the same way as above. The results showed that two different framings of the collective agreement indeed did co-exist within the labor movement. However, contrary to what was expected based on the visual interpretation of the semantic network, the different frames were not clearly divided into the two boxes. Instead, both frames were found in both purposeful samples. Therefore, the results will be presented together.

Two different framings of the collective bargaining in 2018 was identified. The first frame only consists of diagnoses frames and they are positive: The collective agreement
made at the regional level was a great success (A8, R15, 21, 32, 26, 30; A9, R 1,2,3,4 6,7, 8 16, 22, 36, 37, 42, 44). Interestingly, this fraction of the labor movement still uses the slogan “a solution for everyone” but in a new way: The “everyone” they refer to is everyone at the different levels of negotiations:

“We stuck together, we fought for a #solutionforeveryone and here it is at the municipality level…”(A5, R321)

So, the collective agreement at the regional level that broke the “musketeer oath” is framed such that it in fact still is a solution for everyone, because the signified to the signifier #enløsningforalle has changed. Another point to support the positive framing of LO’s deal with the employers at the regional level was that it opened up the negotiations and paved the way for solutions at both state and municipal level – so he actually caused a solution for everyone (A9, R30). Since there neither are prognosis frames or motivational frames in this framing of the collective agreement, this is no longer a collective action frame as it does not mobilize but evaluate.

A negative framing of the collective agreement was also identified. Here the diagnosis frame depicts LO’s agreement as betrayal (A9, R13, 35. 27. 50, 10). For example:

”@ dennisFOA @FOA_dk #ok18 #ASolutionForTheFew #ASolutionForDennis. I thought it was a #solutionforeveryone #disappointed #ok18” (A8, R10).

In this frame, it is particularly the teachers, LO has failed. The prognosis frame is the same as in the earlier collective action frame for the whole labor movement: The remaining TUs and their members should find a solution for everyone (A9, R13,17, 45, 47, 49) in solidarity with the teachers (A9, R14). Furthermore, the members of LO should vote no to the agreement made by LO in solidarity with the rest of the workers (A9, R35,50). No motivational frames were present. In both framings identified in this sample, both TU officials and regular participants contributed.
Table 11. Overview over sample of tweets from the collective action frame in the Twitter stream from April 16 – April 30. (n=100)

<table>
<thead>
<tr>
<th>Action frames</th>
<th>Diagnosis frames</th>
<th>Prognosis frames</th>
<th>Motivational frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>38</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Identity fields</td>
<td>Protagonist field</td>
<td>Antagonist field</td>
<td>Audience field</td>
</tr>
<tr>
<td>19</td>
<td>10</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>TUs</td>
<td>Regular participants</td>
<td>Opponent</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>57</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

This disagreement about the meaning of “a solution for everyone” shows that a frame dispute indeed did take place within the labor movement. Remember, such slogans are outcomes of frame amplifications where a particular value in the collective action frame is highlighted as extra important (Benford & Snow, 2000). One example of this:

“Agreed. Until now it is simply been a relaunch of “solidarity”. Across sectors, industries, academics and unskilled. #ASolutionForeverone has become the symbol of this solidarity…”(A19, R3).

This disagreement about the meaning of “a solution for everyone” indicated a fragmentation of the labor movement’s collective action frame. This fragmented the labor movement in two. This is an interesting result since it mainly was TUs that articulated “the Danish model frame” in the beginning of February. Compared to the “feminist frame” and the “public vs. private employees frame” it was almost exclusively articulated in a top-down manner. This indicates that the TUs’ framing of the collective bargaining was successful since participants seems to have adopted the “Danish model frame” as a key grammatical component into their “schema of interpretation”. It shows the dialectical relationship between events and frames (Benford & Snow, 2000): The agreement made by Dennis Kristensen necessitated a frame transformation (Benford & Snow, 1986) to avoid being conceived as hypocritical. Altogether, the different framing processes during the whole period of time are depicted in the figure 18 below.
Figure 18. Collective action frames and framing processes from 01/02 – 30/04

**Feminist frame**
*Diagnosis:* Unequal pay between men and women.
*Prognosis:* A fund to decrease inequality.

**Public vs. private employees frame**
*Diagnosis:* The salaries in the public sector do not follow the salaries in the private sector even though the economy in Denmark is healthy.
*Prognosis:* Public employees’ salaries should follow the salaries in the private sector.

**The Danish model frame**
*Diagnosis:* The teachers’ working hours agreement is an attack against the Danish model.
*Prognosis:* A new working hours agreement which is voluntary.

**The labor movement’s collective action frame:**
*Diagnosis:* The salaries in the public sector do not follow the salaries in the private sector even though the economy in Denmark is good. And the conditions in the public sector are horrible, but employees still do a great job.
*Prognosis:* Public employees’ salaries should follow the salaries in the private sector. Real wages increase: They deserve that.
*Motivation:* It must be done to protect the welfare state (vocabulary of motive: Severity).

**The labor movement’s collective action frame:**
*Diagnosis:* The salaries in the public sector do not follow the salaries in the private sector even though the economy in Denmark is good. And the conditions in the public sector are horrible, but employees still do a great job. The state tries once again to circumvent the Danish model like they did in 2013.
*Prognosis:* Public employees’ salaries should follow the salaries in the private sector. Real wages increase: They deserve that.
*Motivation:* It must be done to protect the welfare state (vocabulary of motive: Severity).

**The betrayal frame**
*Diagnosis:* The collective agreement at the regional level is a betrayal against the musketeer oath.
*Prognosis:* The rest of the trade unions should still stand together and fight for #asolutionforeveryone. Members of LO shall vote no to the deal.

**The success frame**
*Diagnosis:* The collective agreement is a huge success. It was a #asolutionforeveryone at the regional level. It was the solidarity between vocations and trade unions that was the foundation for this result.

01/02/2018 – 14/02/2018
15/02/2018 – 28/02/2018
01/03/2018 – 15/04/2018
16/04/2018 – 30/04/2018
8.3 Identity fields

As argued by (Hunt, Benford & Snow, 1994) in the process of articulating SM framings, identity fields are constructed as well. This is what has been called boundary framing (Benford & Snow, 2000) – the SM set the boundaries between who the protagonists, antagonists and the audience are when diagnosing the problem and proposing a solution. Furthermore, certain character traits can be attributed to these identity fields. From the coding of the data categorized in the three identify fields, I created the tables below. It describes the development of identity fields as a result of the labor movement’s different framing processes. Three phases are identified.

**Table 12. Identity fields constructed from 01/02/2018 – 04/02/2018.**

<table>
<thead>
<tr>
<th>Protagonist fields</th>
<th>Antagonist fields</th>
<th>Audience field</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public employees</strong></td>
<td><strong>Female public employees.</strong></td>
<td><strong>TU leadership</strong></td>
</tr>
<tr>
<td>Solidary</td>
<td>Skilled</td>
<td>Willing to discuss</td>
</tr>
<tr>
<td>Skilled</td>
<td>hard-working</td>
<td>open</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

During the first two weeks, three different actors in the protagonist field were present in the Twitter stream as a result of the three different framings of the collective bargaining. The public employees were described as solidary with each other and very skilled; the female public employee as a protagonist was skilled and hard-working; and the TU leaders who were negotiating were described as open and willing to discuss. All three protagonists were negatively constituted up against the same antagonist field: The public employers. The traits attributed to them were that they did not negotiate for real, they were slow to take decisions, they were stubborn in negotiation situation and hungry for power. No audience field were identified.

Clearly, the symbolic construction of identity fields sets the roles in the narratives told to the public and their own members: The hardworking, skilled and solidarity employees/female employee are up against the power hungry-employers who not want to engage in real negotiations with the open and honest TU leaders. The construction of such narratives is particular important in this case because if the negations had ended up in a grand
conflict, the government could have lost the discursive battle of hearts and minds if the general public had bought these narratives created by boundary framings.

In the next period, which goes from February 15 to April 15, there are two protagonists, two antagonist and one audience. The different identity fields’ character traits are described in the table below.

**Table 13. Identity fields constructed from 15/02/2018 – 15/04/2018**

<table>
<thead>
<tr>
<th>Protagonist fields</th>
<th>Antagonist fields</th>
<th>Audience field</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Public employees</em></td>
<td><em>TU leadership</em></td>
<td><em>Public employers</em></td>
</tr>
<tr>
<td>Solidary</td>
<td>Willing to discuss</td>
<td>Aggressive</td>
</tr>
<tr>
<td>Skilled</td>
<td>Negotiating</td>
<td>non-negotiating</td>
</tr>
<tr>
<td>Faithful</td>
<td>Tough</td>
<td>Hungry for power</td>
</tr>
<tr>
<td>Valuable</td>
<td></td>
<td>Slow</td>
</tr>
<tr>
<td>Proud</td>
<td></td>
<td>Irresponsible</td>
</tr>
<tr>
<td>Committed</td>
<td></td>
<td>Overreacting</td>
</tr>
<tr>
<td>Human</td>
<td></td>
<td>Distrusting</td>
</tr>
<tr>
<td>Energetic</td>
<td></td>
<td>Hypocritical</td>
</tr>
<tr>
<td>Able to deliver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The different actor roles constituted by the labor movement’s shared collective action frame construct a similar narrative as above. The public employees have a lot of virtues, they deliver in a broken public sector, and they are represented by open-minded TUs leaders who are ready to negotiate. Nevertheless, the public employees do not engage in real negotiations with the TUs but instead they overreact in an irresponsible way by declaring a “lock out”. The politicians are on the public employers’ side, and they conceive humans as spreadsheets in a dehumanizing way, and they have no respect for the public employees; they just want to dismantle the welfare state. The audience field is the Danish public who by the actors in the protagonist field are thanked for being sympathetic and supportive of the labor side. They are constructed in such a way that they should be supportive of the movement’s cause (Hunt, Benford & Snow, 1994).
It is clear how the antagonist field is the negation of the protagonist field: While the public employees are fair, faithful and human, the politicians are deceitful and conceives people as spreadsheets; and while the TUs leaders are willing to discuss but still tough; the public employers are slow, distrusting and not willing to negotiate for real. The necessity of constructing such an antagonist field when articulating a protagonist field or a collective identity – what in post-structuralist theory is called the constitutive outside – is an epistemological necessity due to the lack ontological grounding (Richter, 2016): The public employers have no shared essence that binds them together – believing that is the Marxist fallacy of class reductionism and more generally an example of essentialism (Laclau & Mouffe, 1985) – and it is therefore necessary to not only articulate what the public employees are, but also what they are not. This becomes clear if one pay attention to the character traits of the protagonists: They are all very generic, everyone can fit within this “We”. This is a result of the shared collective action frame that had to encompass the injustice experienced by all public employees, from academics to unskilled workers, however, this also means that there was no chance for the articulation of particular grievances within that collective action frame. At first sight this might sound paradoxical, since the generalness and non-particularity of the collective “We” might appear inclusive: All social groups are able to identify with the character traits. However, if one takes the diagnosis frame and prognosis frame into account, it stresses “a solution for everyone”, thus, the overall idea in the collective action frame is “one shared problem, one shared solution”. Therefore, all social groups can identify with the collective “We” articulated by the labor movement but only if they forget all the particular injustices experienced by this particular group. This is best exemplified by the fact that the feminist frame present in the first two weeks of February is absorbed into the collective action frame shared by the whole labor movement and as a result disappears: The particular injustice of inequal salaries between men and women fall victim to the construction of a shared collective action frame representing the whole labor movement. So, the labor movement’s shared collective identity was defined by its inclusiveness in terms of representing different groups, but symbolically exclusive since they did not represent particular groups’ grievances.

The last change in the identity fields happen after the LO breaks the “musketeer oath”. The faction of the labor movement that is in line with the collective agreement at the regional level is no longer mobilized, they do not articulate any identity fields. Instead, it is the remaining participants that constitute the protagonist field. Their character traits are solidarity and fighting spirit; they still stand together and fight for a solution for everyone. Interestingly,
the main actor in the antagonist field is no longer the public employers, instead it is LO’s negotiator Dennis Kristensen. He is the opposite of the remaining public employees: selfish, hypocritical and traitorous.

**Table 14. Identity fields constructed from 16/04/2018 – 30/04/2018**

<table>
<thead>
<tr>
<th>Protagonist field</th>
<th>Antagonist field</th>
<th>Audience field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public employees</td>
<td>Dennis Kristensen</td>
<td></td>
</tr>
<tr>
<td>Solidary</td>
<td>Selfish</td>
<td></td>
</tr>
<tr>
<td>Fighting spirit</td>
<td>Hypocritical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Traitorous</td>
<td></td>
</tr>
</tbody>
</table>

From this analysis of the identify fields constituted by the labor movement it is clear that the mobilisation during the collective bargaining of 2018 was done by constructing shared collective identities. They changed several times over the three months, but nevertheless, the protagonist field was always some sort of collective participating for a common goal rather than an aggregation of individuals participating for personal reasons.
9. Discussion and conclusion

The aim of this thesis was to investigate the mobilisation processes during the 2018 collective bargaining on Twitter as a way to analyze 1) the form of contentious politics practiced by the Danish labor movement and 2) the role of TUs in the Danish labor movement. For that purpose, three research questions were formulated.

RQ1: What is the structure of communication within the labor movement on Twitter during the collective bargaining in 2018?

The structure of communication within the labor movement is characterized by TUs’ centrality in the communication network. In measures that indicate leadership, popularity and social capital, TUs and TU officials dominate. The distribution of in-degree centrality is a power law distribution, which indicates a strong hierarchy in the movement. The network furthermore mainly consists of one-way communication, and TU officials do only to a limited degree engage in dialogue with other actors in the network. The centrality of TU actors in the network is not a result of activity on Twitter, both in terms of dialogue with other actors and contributions to the Twitter stream. Therefore, it seems very likely that the centrality of TUs in the digital labor movement on Twitter is a result of the centrality of TUs in the labor movement in general. The organization of people through communication on Twitter is only partly done by TUs; the main organizational agent is Twitter itself. It does not seem though as hashtags mediate connections between human actors that are in opposition to the TUs since no communities independent from TUs are visible.

These results indicate that despite the advent of new social technologies and media platforms which allow workers to mobilize independently of TUs, TUs still played a huge role in what I have defined as the labor movement on Twitter during the labor conflict of 2018. Twitter did function as an organizing agent, but instead of replacing TUs, it complemented them.

RQ2: What framing processes were taking place and what frames were present in the #ok18 Twitter stream during the collective bargaining in 2018?

Several framing processes and frames were present in the #ok18 Twitter stream. To begin with, three different collective action frames were articulated by the labor movement: a “feminist frame”, a “public vs. private employee frame”, and a “Danish model frame”. Each
of these served as a schema of interpretation for how the collective bargaining should be understood and outlined different diagnosis frames and prognosis frames. In the last two weeks of February when the negotiation broke down, a frame extension took place: The “public vs- private employee frame” was extended, and it absorbed both the “feminist frame” and the “Danish model frame”. As a result, the “feminist frame” ended up being downplayed before it eventually vanished altogether. Furthermore, a motivational frame was articulated, which used severity as its vocabulary of motive: If nothing is done the public sector and the welfare state will break down. In all of March, one collective action frame was used and rearticulated by the labor movement. Its grammatical composition connected the lunchbreak, the teacher’s working hours agreement and the public employees’ wages. A frame amplification took place where the most important value, solidarity, was formulated in the easily spreadable hashtag #enløsningforalle. The key to understand why the feminist frame disappeared is exemplified by that frame amplification: In their effort to mobilize all public employees, the collective action frame used to make sense of the bargainings and possible future conflict had to represent all public employees, thus, the grievances had to be general and applicable to all social groups. Thus, the particular grievances experienced by for instance women had to be downplayed. These results show that the Danish labor movement acted as a one-identity movement instead of a multi-identity movement, which is the traditional way TUs act, where mobilisations are based on the lowest denominator namely a common class affiliation (Kurtz, 2002). Here it is important to stress that this common class affiliation is constructed discursively, it is does not exist “outside the political” as in Marxist theory (Beck Holm, 2014), and it is negatively constituted up against the public employees who are everything the public employees are not.

The collective action frame shared by the whole labor movement on Twitter was fragmented when the negotiator for LO broke the “musketeer oath” and made an agreement with the public employers at the regional level. One faction of the labor movement framed the agreement as a success, a result of the solidarity, and that this had been the meaning of “a solution for everyone” all along – a solution for everyone at the regional level. Thus, this faction made a frame transformation. The other faction framed the agreement as treachery and disloyalty and proposed that the rest of the TUs and participants should stay together in solidarity.

RQ3: What logic(s) of action were deployed by the labor movement during the collective bargaining of 2018.
The logic of action deployed by the labor movement during the collective bargaining of 2018 was organizationally brokered collective action, and the most important organizations were TUs. In other words, the mobilisation of workers during collective bargaining was business as usual – the only difference was that this time it also happened online. This conclusion is based on the results in RQ1 and RQ2. First, the social network analysis showed that TUs and their leaders were the most central human actors in the Twitter network that constituted the labor movement. They were the leaders in the Twitter stream and in the foreground of the protest coalition, which is a key feature of all conventional collective action. The communication was predominantly one-way communication, which indicated – together with the out-degree centrality scores – that the TUs disseminated information to the participants rather than engaged in dialogue. These results give us an increased understanding of the articulation of collective action frames, since “to give an account of discourse; we need to know the conditions governing the constitutions of the group within which it functions” (Bourdieu, 1997, p. 650, as quoted in Lindgren & Lundström, 2011, p. 1008). Thus, the social network analysis shows that the TUs most likely had a greater impact on the articulation and negotiation of frames than regular participants. This is also emphasized by the fact TUs introduced all popular hashtags in the Twitter stream. Second, these frames were collective action frames: They were shared schemata of interpretation that attributed meaning to occurrences leading up to and during the collective bargaining. This means that the collective action frames articulated by the labor movement all were symbolically exclusive, which was a result of its demographic inclusiveness. The collective frames were able to represent all public employers’ grievances, but only because the protagonist field and its grievances were formulated in a general way. As argued by Gerbaudo (2012) and Laclau (2004), mobilisations entail a reduction of the complexity of the social. This idea stands in opposition to the theory of connective action by Bennet & Segerberg (2013) where personal action frames in fact can encompass the complexities of the social as individuals participate for multiple personal reasons.

Nevertheless Bennet & Segerberg’s theory of connective action did not describe what was taking place during the collective bargaining on Twitter, it does of course not say anything about the usefulness of the theory on a more general level. These results only say something about the particular case of the labor movement on Twitter. Furthermore, one aspect of the theory of connective action offered some interesting results, namely the understanding of social technologies and media platforms as organizing agents. By including
hashtags to the social network analysis, we saw how hashtags introduced by the labor movement served as organizing agents and “transmission belts” for tweets articulating frames and identities. Thus, the mobilization on Twitter was an outcome of both human and platform agency. This might serve as an example of how trade unions can use social media platforms strategically by letting the platform “work for them”. Furthermore, that the mobilization on Twitter by the labor movement included one characteristic of connective action confirms Bennet & Segerberg’s point that these different forms of logics of action are ideal types, and in reality, protest network often include characteristics from both.

Even with the use of Twitter as an organizing agent, there was still a hierarchy in the labor movement with strong organizations – trade unions – at its top, just like in traditional collective action. Ideas of the cultural logic of networking (Juris, 2004) and networked social movements (Castells, 2012) where the decentralized network structure of the internet determines a decentralized network structure within social movements that use the internet for mobilization purposes are therefore not visible from these results. Thus, it appears that the internet itself as a technology is not a mono-causal variable leading to more decentralized communication and organization in social movements.

9.1 Where is the labor movement heading?
In line with previous research presented in the literature review, the Danish TUs did not utilize all participatory features of a media platform like Twitter. The proposition that new web 2.0 technologies could break the Iron Law of Oligarchy and increase rank-and-file members’ participation understood as the equalization of power relations within TUs does not seem to be the case either – at least not on Twitter during the collective bargaining of 2018. TUs did what central organizations and leadership always have done in SMs: They imbued workers with sense of grievance, created a sense of social identity, urged to collective action and legitimated such action in the face of hostile criticism. (Kelly, 1998). Neither are there any indications of a personalization the contentious politics practiced by the labor movement and specifically TUs. Media platforms and social technologies as well as the macro-sociological context theorized as the post-industrial society have therefore not pushed the labor movement and TUs in the direction of personalization and pluralization. The proposed explanation for the successful mobilisation outlined in the beginning of this paper, that the labor movement had changed its form of contentious politics to align with the values in post-industrial society, does therefore not hold. Instead, this analysis, which admittedly only has analyzed a small part of the protest space, indicates that what we witnessed during the
The collective bargaining of 2018 was a revitalization of traditional TU politics. The preposition that a TU revitalization needs to include an increase in dialogue and internal negotiations and differences instead of an imposed identity from above, which has been coined a “mechanical solidarity” (Hyman, 2007), does therefore not seem to be the case in Denmark.

9.2 Methodological reflections

Using semantic networks as a way to investigate frames and framing processes in the Twitter stream has not proved to be as straightforward as hoped. Especially the theoretically developed assumption based on semiotic theory that networks of signs constitute frames, which is inspired by Drieger’s methodology of semantic networks (2013), has in practice been more challenging to realize than expected. Contrary to other empirical investigations that use semantic networks to detect different frames or discourses (Kwon et al. 2015; Dahlberg-Grundberg, Lundström & Lindgren, 2016), the “networks of signs” that constitute frames and the boundaries between them did not appear clearly. Some networks of signs were so complex that they were hard to interpret and, some might argue, could have been interpreted in different ways. One could therefore say that it has affected the reliability of this thesis since another analysis of my data might lead to slightly different results. However, reliability in qualitative research is understood as how transparent and explicit one has been about the ways in which the data has been created and processed (Halkier, 2014). Any interpretational analysis, in our case the visual readings of the semantic networks, will always be made from a particular perspective (Taylor, 1971) and is thus not reproducible. Therefore, I have provided detailed description of how all data is obtained, managed and visualized as well as the guiding principles of analysis.

The theoretical framework of different logics of action as outlined by Bennet & Segerberg (2013) as well as the theory of collective action framing and framing processes by Benford & Snow (2000; 1986) has proved very applicable to the case of the labor movement’s mobilisation on Twitter during the collective bargaining of 2018. However, it can be argued that the relative low amounts of motivational frames in the Twitter stream indicate that Twitter is not a platform from where the whole mobilisation process occur, but mainly diagnosis and prognosis framing. This might be linked to the one-platform bias discussed in the methodology chapter or the fact that I only have analysed the linguistic signs in the Twitter stream – motivational frames might be articulated through images from actual protests.
This research was designed such that the different methods complemented each other in a way where each method’s blind spots were illuminated by one of the other methods. This research design proved to be useful and well-chosen. The social network analysis mapped the communication between actors and thereby found that TUs by far were the most popular and important actors within the labor movement on Twitter. The cultural material and negotiations of meaning which is what these ties consist of, but what a social network analysis is unable to identify, were investigated through the semantic network analysis. The semantic network analysis gave an overview of the overall frames in the Twitter stream under investigation and how they changed over time. Detailed description of these frames’ grammar and index (Benford & Snow, 2000) were identified through analyses of samples that were drawn on the basis of the results in the semantic network analysis. Thus, the semantic network analysis was a necessary step to be taken before the qualitative interpretative analysis of the samples. Furthermore, if I only had analysed samples of tweets, it would have been impossible to investigate the changes in the Twitter Stream over time. If one of these methods had not been used to analyse the data, the quality of this research would have decreased significantly because the conclusions I draw are derived from analyses of the same data from different complementing perspectives. This mixed-method research design has therefore increased the validity of this piece of research.

9.3 Contributions to framing research

One result of a more methodological nature is also worth to mention: The critique of framing theory – that it fails to encompass the negotiations over meaning and thus mistakenly conceives frames as stable cultural forms – has been met by using semantic networks. The semantic network analysis was able to show how action frames change over time. This is an important achievement, and I believe this method prospectively can contribute to the social constructionist paradigm in SM research, but more importantly to framing research in media and communication studies. Using semantic networks to analyze changes in framings over time in large text corpuses has been absent from earlier media and communication research. This thesis has shown how SM theory about framing and the social construction of collective political actors on the media platform Twitter can explain political mobilization. Furthermore, the results indicated how Twitter itself serves as an organizing agent, which is in line with van Dijck’s and Poell’s theorization about a certain social media logic (2013), particularly the aspects of connectivity and platform agency. While this thesis focused on a social movement as a signifying agent and how that lead to the mobilization of labor, it could
just as well have been an analysis of different media companies as signifying agents and how they might have contributed to mobilization processes. Media companies can either promote mobilization, but as the literature review showed, especially mass media often counter-act mobilizations by offering counter-frames and thus engage in frame disputes with either social movements or alternative media.

Other examples of how the methodology used in this thesis can be used in the field of media and communication studies is in research on news framing as described in the literature review. Changes in Danish news framings over time could be analyzed by constructing semantic networks from all newspaper articles of interest published in Denmark in a certain time period. This could be done by using the database Mediastream where all Danish newspapers are in digital form. If one for instance were interested in investigating the changes in how Danish news media frame Muslims or Islam, semantic network could be constructed with all articles including the words “Muslims” or “Islam”. The most popular words associated with Muslims and Islam would thus be visualized and they would show the “network of signs” that constitutes the news frames. The agenda-setting theory could also be tested by using semantic networks: In cases where survey-data is accessible that shows the changes in attitudes in a given population towards a topic of interest, it could be investigated whether changes in the media-agenda visualized with semantic networks occurred before similar changes in the public agenda. This should be topics for further research.
References


FOAS (2019). *FAOS information nr. 1, 2019*. Retrieved the 22. of April from: 
[https://faos.ku.dk/publikationer/faos_information/](https://faos.ku.dk/publikationer/faos_information/)


Geelan, T, (2015), Danish TUs and young people: Using media in the battle for heartsand minds, In *Young Workers and TUs* (pp. 71-89), Palgrave Macmillan, London,


Appendix 1

**Labor movement hashtag**

'#{sammenervistærkest}',
'#{ViErMereVærd}',
'#{musketered}',
'#{skuldervedskulder}',
'#{enløsningforalle}',
'#{EnLøsningForAlle}',
'#{ligeløn}',
'#{nokernOK18}',
'#{DenDanskeModel}',
'#{viermereværde}',
'#{nokernok}',
'#{bupl}',
'#{samletstyrke}',
'#{Enløsningforalle}',
'#{EnLøsningforAlle}',
'#{solidaritet}',
'#{SammenErViStærkest}',
'#{NokErNok}',
'#{nokernok18}',
'#{dererråd}',
'#{NokErnOK18}',
'#{nokernOK}',
'#{deterikkeOK}',
'#{SkulderVedSkulder}',
'#{NokerNok}',
'#{enloesningforalle}]

**Manually included a posteriori:**

'#{væktilliden}',
'#{Sophieslønfest}',
Manually sorted out a posteriori:

'#gymnasiechat',
'#lockout',
'#dendanskemodel',

Manually sorted out a priori

['#ok18',
'#arbejde',
'#OK18',
'#dkpol',
'#dkmedier',
'#ok13',
'#sundpol',
'#kompol',
'#kompoldk',
'#uddpol',
'#Ok18',
'#DKpol',
'#skolechat',
'#dkøko',
## Appendix 2

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Appendix 3

The power law distribution of the weighted in-degree measures in the labor movement.
## Appendix 4

**Most popular human actors sorted by out-degree**

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<tr>
<th>Name</th>
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<th>Weighted out-degree</th>
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### Most popular human actors sorted by Eigenvector centrality

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<th>Out-degree</th>
<th>Eigenvector</th>
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Most popular human actors sorted by In-degree centrality

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