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SOCIAL MEDIA AND SOCIAL MOVEMENTS: A CASE OF WOMEN'S MARCH¹

Research paper

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Abstract

Social media is a powerful medium to organize and mobilize social movements. In this study, we concentrate on the content of messages sent through social media during a particular social movement. Specifically, we focus on Twitter messages related to the Women's March. Accordingly, we conduct a qualitative analysis of the content of the tweets posted during the marches held in January 2017 and January 2018. Through our analysis, we identify the different types of messages associated with the movement. These messages are classified through a set of categories and sub-categories. We found that most of the messages are used to motivate and mobilize individuals. Our research contributes to social movement and social media literature and enhances the understanding of how social media is used to motivate and mobilize people. The findings could also help social movement organizers in learning different ways in which social media can help them to frame their messages beyond motivation and mobilization.

Keywords: Social movement, Framing, Mobilization, Social media, Qualitative study.

1 Introduction

Social media has emerged as a powerful medium to organize and mobilize social movements (Van Laer and Van Aelst, 2010; Oh et al., 2015; Selander and Jarvenpaa, 2016). The participatory nature of social media not only allows a wide diffusion of information to mobilize people but also reduces the barriers to participation (Harlow, 2012; Tufekci and Wilson, 2012). Through the use of social media, leaders of social movements distribute messages related to social or political concerns with the purpose of encouraging current members and enrolling new ones (Van Laer and Van Aelst, 2010; Lotan et al., 2011; Tufekci and Wilson, 2012; Hwang and Kim, 2015). Furthermore, the global reach of social media enlarges the boundary of social movements beyond a specific community and location and gives movements a transnational spin (Hwang and Kim, 2015).

In recent years, a large body of research has examined the impact of social media on society and the economy (Berger et al., 2014; Leonardi and Vaast, 2017). Information systems (IS) scholars have also begun to explore the role of social media technology in shaping social movements (Oh et al., 2015; Selander and Jarvenpaa, 2016). For this paper, we concentrate on the meaning and content of messages associated with a specific movement sent through social media. We argue that understanding content characteristics is the first step towards exploring the process of diffusion of an online movement. Calls to conduct exploratory content level analysis for social movement mobilization has been made in prior research (see Oh et al., 2015).

In this study, we conduct a qualitative content analysis of social media messages related to a social movement. We use the case of Women's March (WM), primarily a women-led movement that originated after the 2016 U.S. presidential election. We collected Twitter postings, simply referred to as

¹ Both authors contributed equally on this paper.

tweets, for the inaugural march held in January 2017 as well as the anniversary march held in January 2018. Informed by Garrett (2006) framework, we analyzed the tweets to formulate a theoretical classification of the types of messages communicated in the case of a social movement. Through qualitative analysis, we identify the message categories and sub-categories, and how different messages categories are used to mobilize an online movement. Specifically, we address the research question: *How is social media used in the context of social movements?* We aim at understanding the use of social media by interpreting the content of the messages. In doing so, our study makes contributions to the research program that focuses on the relationship between social media and IS. Our study is a response to the call to conduct further research on the content of messages transmitted within social networks (Borgatti and Foster, 2003) and to investigate the digital repertoire of actions available for social movements (Selander and Jarvenpaa, 2016). Specifically, the set of categories can be used to conduct more precise network analysis of messages in social movements. Further, the categorization of messages identifies specific digital actions deployed by social movements through their use of social networks.

2 Literature and Theory

2.1 Definition of Social Movement

Social movements are defined as “a network of informal interactions between a plurality of individuals, groups and or organizations, engaged in a political or cultural conflict, on the basis of shared collective identity” (Diani, 1992). Hwang and Kim (2015) define social movements as collective efforts by a large group of people aimed at solving a particular problem of often political, economic or social nature. As emphasized in the definitions, the “collective” aspect is fundamental to a social movement. Both Diani (1992) and Hwang and Kim (2015) also emphasize the network nature of social movements as movements often link heterogeneous individuals, groups, and organizations. Social movements are often characterized by protests against the government, elites or even corporations (Schneiberg et al., 2008). Social movements exhibit a sustained effort to make their claims heard by their target group and do that through political action, the creation of alliances, demonstrations, drives, and communication through public media (Snyder and Tilly, 1972).

Social movements are organized collective endeavors to solve a social problem (Rao et al., 2000). Social movement literature notes that the ability of activists to bring social change depends on the framing processes, mobilizing structures, and political opportunities (McAdam et al., 1996). Activists frame the grievances and interests of affected constituents, attribute blame, identify causes, offer solutions, and enable collective attribution process and mobilize resources including personnel and finances (Snow and Benford, 1992). Additionally, collective vehicles through which people mobilize and engage in collective action are also essential for social movements. Such structures include formal social movement organizations (McCarthy and Zald, 1977) as well as informal friendship networks (Tilly, 1978). The primary goal of social movement organizations is to change or restructure society and its members (McCarthy and Zald, 1977; Zald, 1996). Further, contrary to other organizations where members benefit from material (money and goods) incentives or solidary incentives (prestige, respect, friendship), the social movement organizations are characterized by incentive structure dominated by purposive incentives (value fulfillment). We further discuss these theoretical elements in section 2.3.

2.2 Social Media and Social Movements

Social media has had a tremendous influence on how people socialize, meet, and communicate (Zhang and Venkatesh, 2013). A 2018 Pew Research Centre survey notes that 68% of the U.S. adults are active Facebook users (Smith and Anderson, 2018). Additionally, the median American uses three social media platforms. Social media platforms facilitate sharing information and interests which brings people together (Pan et al., 2017). In extant literature, social media has been noted to play an important role in society, particularly in the case of online activism and politics. For instance, social media has

been a communication platform during Arab Spring (Bruns et al., 2013) and to spread news globally (Lotan et al., 2011) as the platform is difficult to be censored or controlled (Tufekci and Wilson, 2012).

Social media allow researchers to study human interaction in more detail and greater scale than before (Sundararajan et al., 2013). Social media are deemed as networks constituted by actors connected among themselves through ties (Zhang and Venkatesh, 2013). Social networking enabled by the Internet – we will refer to these as social media – are platforms that facilitate personal connections and communications (Salehan et al., 2017). These have been widely used since about 2005 (Schlagwein and Hu, 2017). Their use has extended from personal purposes to managerial activities and social movements. The core properties of social networks (enabled by the Internet) are: having a digital profile for individuals, providing relational ties, offering search and privacy settings as well as network transparency (Kane et al., 2014). Social networks take form according to two main mechanisms: structure and content (Zhang and Venkatesh, 2013). According to Borgatti and Foster (2003), the network structure refers to the shape the network takes according to the configuration of ties among actors, whereas the content refers to the messages actors in the network share and exchange. We argue that in order to understand the influence that social media has on society and in politics we need to explore the relationship between content and structure. In fact, this topic has been identified as one of the areas that IS research can make a substantive contribution (e.g., Kane et al., 2014).

Accordingly, in this study, we concentrate on the content of information transmitted by social media in the specific case of social movements. In the extant literature, scholars have begun to analyze the role of social media in actual protest participation and collective action. For instance, Harlow (2012) notes that social media mobilized the ground level protest in the case of Guatemalan justice movement. Other researchers have also concluded that social media increases both willingness and actual participation (Van Laer and Van Aelst, 2010; Tufekci and Wilson, 2012; Hwang and Kim, 2015).

Recently IS scholars have also begun to explore the relationship between social media and social movements. For instance, Oh et al. (2015) analyzed the Egyptian revolution to understand how social media platforms and users together engage in collective sensemaking, which is “manifested as the communication behaviors of active information seeking, offering, and sharing among like-minded groups of people” (pg. 212). The authors note that collective sensemaking developed on social media is subjected to the technical characteristics of social media, for example, and the connective power of technology. Selander and Jarvenpaa (2016) examined the values of social movement organizations and the influence of values on digital action repertoire. The authors conclude that digital action repertoire both stabilize and challenge SMO values and at the same time broadens the supporters and enhances social media engagement. In another study, Miranda et al. (2016) analyzed social media participation in the case of the Stop Online Privacy Act (SOPA). The authors conclude that social media are more structurally emancipatory by allowing broader participation but are hegemonic with regard to content as few users control the ideology. Recently Stewart and Schultze (2017) analyzed the role of social media in creating an identity of activist and in social movement’s collective identity. The authors note that social media provides a space to express feelings by virtue of content creation and sharing. The content affects viewers who then participate in acts of bravery and courage and thereby develop an identity of activists and create a collective identity of a social movement.

In summary, the existing literature has enhanced our understanding of the impact of social media on society and the economy. The role of social media in broadening the participation in social movements has also received some attention. However, little research has explored the characteristics of the information generated on social media and the nature of movement messages. We argue that understanding content characteristics is the first step towards understanding the process of diffusion of an online supported movement.

2.3 Theoretical Framework

To integrate the major developments in social movement literature, McAdam et al. (1996) offered a framework based on three factors: (1) mobilizing structures, (2) opportunity structures, and (3) fram-

ing processes. The purpose of the framework is to explain the emergence, development, and outcome of social movements. Recently, Garrett (2006) conducted an extensive review of the literature on social movements while examining the relationship of these factors within Information and Communication Technologies (ICTs) context². The purpose of this review is to explain the relationships between ICTs and social movements, which would help to identify research issues

The concept of mobilizing structures refers to the mechanisms that individuals within the movement employ to organize and participate in the collective action as well as social structures and tactical repertoires (McCarthy, 1996). Social structures could be formal such as social movement organizations or informal such as friendship and activist network. Tactical repertoires are the forms of protest and collective action that activists utilize. ICTs facilitate mobilization structures as they reduce the costs of participation, promote a collective identity, and facilitate the creation of a community (Garrett, 2006). Further, research suggests that ICTs can also extend the repertoire of actions (Selander and Jarvenpaa, 2016). Collective identity is a perception among individuals that they are members of a larger community by virtue of grievances they share.

Opportunity structures refer to the conditions in the social environment that favor the movements' actions. These structures refer to elite allies, the political configuration of alliances among elites, and the opportunity of the state to exercise repression (McAdam et al., 1996). These are different aspects of a social system that favor or hinder movements' activities. Garrett cites Ayres (1999) and indicates that ICTs provide opportunities as individuals in social movements can identify elites. The second opportunity refers to the difficulty that governments have in regulating or censoring activities. This is the opportunity provided by ICTs to bypass censorship. Garrett, however, concludes that the opportunity of bypassing censorship is only temporary.

Framing processes refer to the narratives for describing, disseminating, supporting, and contesting the movements (Zald, 1996). The narratives legitimize the movement's actions. Benford and Snow (2000) note that collective frames are generated as adherents share a common understanding of a problem they believe needs to be solved, attribute blame, articulate possible alternatives, and urge others to act in concert to affect change. Garrett (2006) observes that ICTs facilitate the dissemination of information along broad geographical areas. This refers to ICTs ability to bypass editorial controls that are traditional in mainstream media. This framing process then refers to the possibility of ICTs to favor different interpretations or narratives of their movements. Garrett observes that the lack of editorial control makes it difficult to establish the accuracy of information. Another risk observed by Garrett is that of information overload. Finally, Garrett (2006) calls for future research and states that the most compelling studies are those that use multiple methods. Although case studies allow for more depth, Garrett notes that through different bodies of evidence researchers can find more connections among phenomena. Another area of further research is to study the factors that determine the adoption of ICTs by activists and especially identify how the use of technologies shape the movements. One interesting question is to see whether technologies increase participation or not. Another area of further research is to study the negative effects of the use of technologies. Such negative events can be violent conflict escalations, large flows of misinformation, and political polarization.

For this paper, we will draw on the aforementioned Garrett (2006) framework to conduct an initial analysis of the WM messages on social media. We selected Garrett's framework because it builds on a well-established set of theoretical concepts proposed by McAdam et al. (1996) for studying social movements in the context of ICTs³. In the extant literature, the framework has been applied in several contexts (e.g., see Johnson et al., 2009; MacKay and Munro, 2012; Sandoval-Almazan and Gil-Garcia, 2014). We apply Garrett's framework as a theoretical lens to tease meanings out of the WM tweets. Accordingly, we will interpret the messages and establish whether they refer to mobilizing structures,

² Garret uses the term ICTs in his original work. However, when we refer to ICTs in this section we relate specifically to Social Media. We kept the term ICTs in this section for the sake of faithfulness to Garret's original work.

³ According to Google Scholar, the article has received more than 800 citations as of August 8 2018.

opportunity structures, or framing processes. We also conduct data analysis to identify any new categories of messages. It is not our objective to make contributions to the framework. We discuss our approach to data analysis in the next section.

3 Research Methodology

We conducted a qualitative study to formulate a set of categories (Eisenhardt, 1989). We followed an interpretive approach which is appropriate to provide deep insights into "the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994, p. 118). The interpretive approach is suitable to understand "how practices and meanings are formed and informed by the language and tacit norms shared by humans working towards some shared goal" (Orlikowski and Baroudi, 1991, p. 14). To obtain fine-grained data, we engaged in a single case design (Yin, 1984) which for the purposes of our study was the WM. In this section, we present the research context, as well as our data collection and data analysis approach.

3.1 Research Context

Women's March is a women-led movement whose mission is to build an inclusive social structure through non-violent resistance. The movement originated after the 2016 US presidential election. Devastated by the election results, few women created a Facebook event page calling for a march on Washington after President Trump's inauguration (Agrawal, 2017; Carson, 2017). At the same time, few other activists also created social media pages calling for protests. This eventually led to the consolidation of Facebook pages and followed by recruitment of activists to be co-chairs of the national march.

The first inaugural march was held on January 21, 2017, at Washington D.C. However, given the popularity of the movement, many sister marches emerged across the US and worldwide. According to media reports, the 2017 protest was one of the largest protests in American history drawing a crowd of over 4 million people (Chenoweth and Pressman, 2017). In Washington D.C. alone, approx. 500,000 participants took to the streets. On January 20, 2018, people across the US and the world marched for the second annual WM. Although there was a decline in the number of protestors, still millions of people participated across the nation (Arnold, 2018). For instance, Los Angeles was reported to draw biggest number with half a million people (Morris, 2018). Although the majority of marchers both in 2017 and 2018 were women, people of every age, gender, and ethnicity participated.

WM is an interesting case to analyze the role of social media in fuelling social movements. The organizers note that social media streamlined the march and made participation easier for people (Carson, 2017). Further, the pre-protest social media discourse gave organizers an idea about interested participants, logistical issues, and the important issues to the public. Additionally, interested participants were able to create groups to work with different stakeholders such as local and state organizers, and partner organizations. The organizers note that even after the months of inaugural march, they rely on social media for keeping the momentum going.

3.2 Data Collection and Analysis

We collected the data from Twitter's public API using customized R script. Specifically, following Syed (2018), we used *twitteR* package that provides access to the Twitter API (Gentry, 2012). We closely followed traditional news outlets and social media sites to identify the trending hashtags for data collection purposes. For the inaugural march, the data was collected from January 02, 2017 and January 25, 2017. For the second annual march, we collected the data from January 17, 2018, to January 21, 2018. After removing duplicate and irrelevant tweets, our dataset consists of 48,383 distinct tweets for the inaugural march and 129,600 distinct tweets for the anniversary march.

In this study, we adopted an inductive and iterative approach to data analysis (Walsham, 1995; Klein and Myers, 1999; Mayring, 2014). The current literature on ICT based social movement served as a "sensitizing device" to understand the relation between ICTs and social movements (Klein and Myers,

1999). The interpretive approach not only allowed us to conduct the data analysis within the purview of prior theories but also allowed us to iterate between data and theory to identify new themes and constructs (Glaser and Strauss, 1967; Charmaz, 2006).

In this study, we relied on Garrett (2006) framework to understand the interrelationship between social media and social movements. In applying Garrett's framework as a theoretical lens, we closely followed the tradition of using theory in an interpretive study (Walsham, 1995). The theoretical lens served as a guide for the research design and data collection. The theoretical lens also allowed us to engage in iterative data collection and analysis (Walsham, 1995). Hence, in this study, we used the three factors of Garrett's framework (mobilizing structures, opportunity structures, and framing processes) as categories of analysis which allowed us to study the phenomenon of online social movements objectively. Our methodological choice also allowed us to anticipate the emergent findings (i.e., the process of mobilizing online movements).

We began analyzing data as we collected it (Eisenhardt, 1989). Informed by the theoretical framework, each author independently analyzed the hashtags for both marches and classified them into three categories (mobilizing structures, opportunity structures, and framing processes). Next, we summarized the data into a tabular format corresponding to the hashtags, which formed the main corpus of the data we used for subsequent analysis. We then independently analyzed random 500 tweets for each category to further explore the emergent categories and sub-categories. Following Mayring (2014), we followed the inductive approach to category development where categories are seen as tentative and revised in a subsequent iteration. The analysis of the data was done using NVivo software. We drew on Garrett's framework to create an initial set of nodes which were later extended with the emerging categories. We conducted this analysis independently. Using the Memo tool in NVivo, we wrote short notes conceptualizing the emerging categories.

Next, we examined the "underlying coherence" of our interpretation by juxtaposing the tentative nodes and explanations for each category. We developed further subcategories (see Table 1). For example, for the "mobilization" category we found five sub-categories: symbolic association, organizing, inclusion, emotions, and elite coalitions. These sub-categories were identified after a second iteration in which we further interpreted all the messages that were coded under the category of "mobilization." As we proceeded to further data analysis, each round improved the clarity of explanations as we developed a better understanding of data and theory through inductive reasoning. We reiterated the analysis until we achieved all explanations and abstractions as well as the agreement.

Next, we analyzed the underlying patterns across the categories so we could establish relationships between them. We followed the logic of constant comparison to tease out the distinctiveness of findings (Charmaz, 2006). For instance, we found that the category 'emotional appeal' can be used to motivate individuals as well as to mobilize the movement. We teased out the difference in the type of emotional appeals in these two processes. Further, we resolved the disagreements by reviewing the literature references relevant to emerging themes. We repeated the process described in the above paragraphs to reveal and further refine the sub-categories. In doing so, we ensured correspondence among data, theory, and findings until we resolved all disagreement and finalized the findings (Klein and Myers, 1999).

4 Results

In this section, we present the results of our analysis in the form of categories and sub-categories. The categories correspond to those of our a-priori theoretical framework as explained in a previous section, that is, framing, mobilization, and political opportunity. In analyzing the tweets, we did not find many that would fall into the political opportunity category. This perhaps is because of the nature of tweets that are pieces of discourse directed to motivate actions or to send specific messages. Table 1 provides a summary of our results as well as the percentage of tweets that fall under each sub-category.

Conceptual Categories*	Subcategories (% tweets)†	Exemplar Tweets
Diagnostic Framing	Identity movement (17%)	<i>why we march- for each other! thanks for the sister love @womensmarchlv #womensmarch_sd #solidarity #marchwithus</i>
Prognostic Framing	Resistance (5.6%)	<i>"you cannot silence us @boswomensmarch #notmypresident"</i>
	Elections (21%)	<i>"we're coming for you and all your friends in the next election cycle."</i>
Motivational Framing	Numbers – Cascading (6.7%)	<i>@nycwomensmarch: our numbers keep growing! over 40k newyorkers marching.</i>
	Report Joining or Marching (9.2%)	<i>"walking to @boswomensmarch bc public transit is packed. woman waves and smiles from window"</i>
	Thanks (3%)	<i>"thanks to all #menmarching in #solidarity thank you, Senator Casey! #istandwithpp"</i>
	Global (19%)	<i>"@carmenn1955: @b52malmet there is a #womensmarch2018 here in winnipeg, manitoba, canada is solidarity with our american sisters"</i>
	Emotional Appeal (43%)	<i>@womensmarchhd: take your broken heart and make a march. #womensmarch #sistermarch #hdwomensmarch #heidelberg #wmglobal #whyimarch"</i>
Mobilization	Symbolic Association (32.4%)	<i>@boswomensmarch: "we have to step up as women and take the lead."— beyoncé #womensmarch step up now and register to march!"</i>
	Organizing (18.7%)	<i>all the info you need for the march on saturday january 20th. #womensmarchyqr #lookbackmarchforward #whyimarch</i>
	Inclusion (7%)	<i>@stormresist: love this thread- if you can't march in person, here's some things you can do instead!! #womensmarch2018;</i>
	Emotions (27%)	<i>RT @womensmarch: When they go lower than we ever could have imagined, we keep going high. Happy birthday to our shero, @MichelleObama!??</i>
	Elite coalitions (21.4%)	<i>@womensmarchcpa: #merylstreep speaks on behalf of our broken heart? #beautifully said from a #beautiful soul #womensmarchcpa thanks you";</i>

* Our conceptual categories are informed by Garrett (2006) framework

† Tweets may not add up to 100% as one tweet may refer to multiple subcategories

Table 1. Categories, subcategories and exemplar tweets.

4.1 Framing

As discussed in the theoretical framework section, framing consists of articulating messages that convey meanings and extant ideas. The framing of messages grows out of structural arrangements, unanticipated events or current ideologies which Garrett refers to as frames. Further, the meanings and ideas are produced by agents, antagonists and bystanders, media, local governments, and even the state. Framing entails agency as the movement evolves due to the involvement of several agents including social movement organizations and activists. The frames are also contentious as they not only oppose current frames but also challenge them. These are collective action frames. As Benford and Snow (2000) note, "collective action frames are action-oriented sets of beliefs and meanings that inspire and legitimate the activities and campaigns of a social movement organization (SMO)" (p. 614).

Per Benford and Snow (2000), there are three core types of framing tasks: (1) Diagnostic framing establish what is wrong and who is to blame. (2) Prognostic framing involves the articulation of a solution to a problem. (3) Action or motivational framing is a "call to arms" for collective actions, creates a vocabulary for motives, maybe symbols. We present the sub-categories for each of the three types of framing that emerged from our research context in the following paragraphs (examples of tweets are presented in italics).

4.1.1 Diagnostic framing

Our analysis of WM suggests that social media messages call attention to the problems in society and the attribution of responsibility for the problems. The messages frame women and minorities as "victims" of the system and define the action of current political authorities as unjust. Example: "*#thefu-*

tureisfemale #poweothepolls this isn't the contract we agreed to. This isn't representative democracy.”
“we are literally fighting for services that keep us alive dynah haube #alwaysforwardneverback
@womensmarchpa” “@hdgregg: every woman is a precious gift from god and has the right to control
her own body and reproduction. #womensmarch2018.”

Our analysis suggests that WM is framed as an **identity movement** and social media is used as a tool to promote the recognition of the problem source and attribution of blame. Similar to other identity-based social movements such as Civil Rights and feminists movements that are based on issues involving race, gender, sexuality, human rights and ethnicity (Polletta and Jasper, 2001), the purpose of WM is to frame issues and grievances related to the identity of women. The movements borne out of identity-related grievances are increasingly common in the era of cyberactivism (Benford and Snow, 2000; Stewart and Schultze, 2017). Our analysis is consistent with Benford and Snow (2000) who observe that in social movements, members communicate and reinforce their identities. In this sense, Garrett (2006) observes how ICTs in social movements help in promoting a collective identity. Hwang and Kim (2015) make a similar assertion. The use of hashtags allows the movement members to create an identity and frame the movement as largely related to women grievances. Example: *“why we march- for each other! thanks for the sister love @womensmarchlv #womensmarch_sd #solidarity #march- withus”*; *“the rest of us will be protesting. #womensmarch2018 @womensmarchnyc: it's time to even the playing field.”*

4.1.2 Prognostic framing

Prognostic frames relate to telling the WM members the plan of action and the strategies for the action. As Benford and Snow (2000) note, the range of reasonable actions and strategies are constrained to the identification of problems and causes. Examples of tweets within this category include: *“mariel main at #alwaysforwardneverback & co-org for #womensmarchpa: words do not matter so actions must @womensmarchpa; #alwaysforwardneverback dian williams: a movement means u stand outside of u and ask what is good for us all. @womensmarchpa @womensmarch.* Our analysis suggests two distinct types of prognostic frames:

- **Resistance:** Resistance implies behavior targeted towards rejection or circumvention of a social change (Benford and Snow, 2000; Snow, 2004). In the context of the WM, the resistance messages call for members to reject the ideology or actions of their target political group. In this case, it was mostly the resistance to the current US president Trump’s administration. Example: *“you cannot silence us @boswomensmarch #notmypresident”*; *“@emcollective: silence has consequences. it's time to raise your voice. show your support for the #dreamactnow at @womensmarch this week...#theresistance”*
- **Elections:** McAdam and Tarrow (2010) observe a clear pattern of how movements emerge in the post and pre-election situations. This is also related to the political opportunity factor as noted by Barnes and Connolly (1999), Benford and Snow (2000), Garrett (2006), McAdam and Tarrow (2010), (Rasler, 1996), and Schneiberg et al. (2008). We observed a large number of tweets calling members attention to future electoral action. The messages aimed at motivating people to vote against the target of the movement and in favor of the candidates supported by the movement. Example: *“women's marches across the country will focus on the vote #poweothepolls”*; *“@realdonaldtrump @auctnr1 won't happen. why? 2018 belongs to the people! #poweothepolls #bluwaveiscoming”*; *“get ready for an amazing and empowering launch to the #poweothepolls campaign on January 21st”*; *“we're coming for you and all your friends in the next election cycle.”*

4.1.3 Motivational Framing

A motivational frame is one that calls for collective actions and the vocabularies of motive (Benford and Snow, 2000). In the case of the WM, we observed that movement organizers use social media to create vocabularies providing significant, compelling accounts to mobilize the public, to engage them in collective action or to sustain participation. In the context of social media, the motivational framing often takes the form of generating “catchy” symbols (e.g., notmypresidenttrump, pussyhat, nastywomen) or emotional hashtags (e.g., #loveislove #lovewins; #girlpower). Individuals would indi-

cate their actions are in support of the movement and generate symbols, like *knitting pussyhats*. We found that quite often the motivation is for people to mobilize and participate. Example: “*you wear that #pussyhat with pride. we are proud of you! #pussyhatproject*”; “*@boswomensmarch: march with us! wear whatever the h*ll you want. #boston #womensmarch*”; “*what should my sign say? #notmypresidenttrump #resistance*”; “*i've made 19 #pussyhats since sunday. michael's nearly sold out of pink yarn*” Our data analysis suggested five sub-categories of motivational vocabularies:

- **Numbers – Cascading:** This category refers to tweets that report a great number of people joining the movement or participating in the march. The purpose is to motivate others to join and trigger a cascade effect. Sunstein (2002) observed the cascade effect in social groups and contested that a large group of people tend to believe something, no matter whether it is true or false, as a result of other people tending to believe it. The belief strengthens in so far as the larger number of people believe it. In such a situation an individual will require a very strong personality to oppose the frames. Example: “*over 100k? #feminists at the @boswomensmarch #pride*”; “*@nycwomensmarch: our numbers keep growing! over 40k newyorkers marching.*”
- **Report Joining or Marching:** In this motivational category the participants reported that they are joining or marching in support of the movement. The intent is motivational and to create a cascade effect for the collective action. Example: “*walking to @boswomensmarch bc public transit is packed. woman waves and smiles from window*”; “*heading to dc tonig for #womensmarch2018, just ahead of #trumpshutdown*”; “*@boswomensmarch: we are 4 women of 4 different generations who want to be seen and heard. ellen, jennie, jeremie and stella #whyimarch...*”
- **Thanks:** Thanking is a framing message that often is a response to a previous tweet, and that also has the effect of retweeting. Thanking is often related to a celebrity or elite person who has supported the movement. It aims at reinforcing the message of the movement, motivating people to participate, and conveying an idea of importance through the reputation of the individual involved in the thanking message. Sunstein (2002) observes for example how reputation is relevant in the polarization of ideas in a movement. Sunstein states that people will tend to imitate the behavior of people with large reputations. Example: “*thank you @ajenglish for presenting thought-provoking pieces! #whyimarch #womensmarch #alwaysforwardneverback*”; “*thanks to all #menmarching in #solidarity thank you, Senator Casey! #standwithpp*”; “*thank you congressman! #womensmarchwednesday*”; “*@womensmarchks: thank you @barackobama! just one of many reasons #whyimarch #womensmarch*”
- **Global:** These messages aim at mobilizing people in remote places and thus convey the idea that the movement has a global reach. In relation to social media and ICTs, Smith (2001) observes how the Seattle protests of 1999 turned into a global protest greatly because of the utilization of the Internet. In the literature, scholars note that transnational movements require framing messages that resonate in diverse cultural settings (McCarthy, 1997). In the case of the WM, such messages expand the notion of women and minority rights, aiming to find transnational allies. Example: “*can't be with us in person for #alwaysforwardneverback event today? follow us @womensmarchpa on instagram stories and live!*”; “*@womensmarchlv: when we march in las vegas we march with the world! ? #womensmarch #womensmarchlondon ?? these issues are global*”; “*@carmenn1955: @b52malmet there is a #womensmarch2018 here in winnipeg, manitoba, canada is solidarity with our american sisters*”; “*@womensmarchlv: love to our family in sydney because on the 21st they march in the streets to show their love for us! ?? #womensmarch ##...*”
- **Emotional Appeal:** Emotions are one of the central motivation and explanation of protests (Jasper, 1998). Jasper distinguishes between two types of emotions. One that is a more permanent feeling often labeled as affective emotions or sentiment. For instance, love and attraction to members, loyalty to shared symbols and identity, respect and trust for leaders, trust or mistrust of government officials, politicians and leaders. The other is the transitional response to external events and information, referred to as reactive emotions. For instance, anger, outrage, and indignation towards government actions and policies, and reactions to movement demands. In the case of the WM, we found that messages were framed to create emotional affect and solidarity towards the movement. Examples of these tweets are: “*@womensmarchhd: take your broken*

heart and make a march. #womensmarch #sistermarch #hdwomensmarch #heidelberg #wmglobal #whyimarch”; “@pacifistriseup: #whyimarch because love is love #loveislove #lovewins @womensmarchlon @womensmarchpa @womensmarch #womensmarch”; “@tlfhousehold: praying for all of you at the march!!! #marchforlife #prolife #womensmarch2018 <— yes we support women! amen amen! #pray...”

4.2 Mobilization

Mobilization refers to the process by which individuals organize and engage in collective action, including social movement organizations as well as tactical repertoires (McCarthy, 1997). In the context of ICTs, the mobilization messages refer to information regarding how to join and how to participate in the movement (Garrett, 2006). Jasper (2011) observes that messages of mobilization are often linked to emotional content. In this sense, McAdam and Tarrow (2010) also indicate that mobilization framing tends to occur before or after elections as it was the case with the WM movement. Smith (2001) studied how ICTs and social media was used to communicate mobilization messages to participants in the Seattle protests of November 1999. We also found that some tweets were informational about what to do and what to wear to align with the movement. For example: *“i’m ready to go!! who else is coming?! #womensmarch #chicago #protest #notmypresident.”* We identified five sub-categories of mobilization messages from our research context:

- **Symbolic Association:** In this category, individuals generate symbols such as hashtags to link their movement to another movement. They do so to associate the movements and expand the scope of their movement. Such symbolic associations allow the creation or promotion of collective identity, a perception that the individuals are members of a larger community who share common grievances (Garrett, 2006). The collective identity is then used to mobilize collective action (Myers, 2000). Examples of these tweets are: *“yoko #womensmarch #nyc @womensmarch #womensmarch @womensmarchnyc”; “@boswomensmarch: “we have to step up as women and take the lead.”— beyoncé #womensmarch step up now and register to march!”; “#womensmarch #togetherwerise #girlpower #thefutureisfemale #nastywomenunite”.*
- **Organizing:** These tweets provide information or status about the protest or movement. The information can relate to pre-protest, protest, and post-protest. As Garrett (2006) notes ICTs reduce the cost associated with making movement information available, which leads to increased participation. Further, information is provided in a range of modalities, including text and links to images and documents, and videos to enhance information absorption. Examples of tweets in this category are: *“all the info you need for the march on saturday january 20th. #womensmarchyqr #lookbackmarchforward #whyimarch”; “women’s march los angeles is tomorrow at 10am! #jointheuproar #womensmarch2018 ??”; “@rhutabhayga2: if you plan on attending the #womensmarch2018 or any march, please practice #peacefulprotest and be safe. #theresistance...”; “Here’s an attendee guide for tomorrow’s March on the Polls! Get your signs ready and meet”*
- **Inclusion:** Institutional movements are typically inclusive expanding the scope of mobilizing the movement (Curtis Jr and Zurcher Jr, 1974; Jenkins, 1983). A feature of ICTs is their ability to accelerate and geographically extend the diffusion of movement information (Myers, 1994). In the case of the WM, we observed that social media messages not only promote inclusivity among different segments of society but also allowed the diffusion of movement information globally. Examples of these tweets are: *“@stormresist: love this thread- if you can’t march in person, here’s some things you can do instead!! #womensmarch2018; “a guide 4 making meetings & marches accessible 2 people w disabilities is forthcoming; follow us @womensmarchpa on instagram stories and live”; “@ns_advocate: the need for rural women’s marches #nspoli #ruralwomen #womensmarch2018”; “disability is not a problem to be cured, but a pa of our diversity”.*
- **Emotions:** As noted before, social movements do not arise from mere political despair or distrust. They require emotional mobilization (Jasper, 2011). Emotions are the glue of solidarity and mobilize conflict (Jasper, 1998). In the WM case, the organizers post messages expressing anger,

outrage, and indignation towards the current US president and his policies. Prior research has noted that women based movement try to transform the negative feelings many women have because of their structural positions (Taylor and Whittier, 1995). Our analysis revealed several reactive emotional messages expressing anger, grief, sorrow, outrage, and indignation. For example: “RT @womensmarch: When they go lower than we ever could have imagined, we keep going high. Happy birthday to our shero, @MichelleObama!??:...””; “ABOUT DAMN TIME! Been getting old waiting on this.... #GalPower !#PowerToThePolls #paperballots...”; “IT'S NOW OR NEVER: Time for Women to take their place in time! @womensmarch @MomsDemand ...”

- **Elite Coalitions:** In the literature, the role of elites for movement mobilization has been noted. For instance, Jenkins (1983) states that social movement organizers tend to seek the patronage of select individuals who are more enmeshed in interpersonal networks, are active members of organizations supporting social change, ideologically committed to social change, and available to participate. In the context of social media, such elite coalitions can help the diffusion of social movement frames. We found that in the case of the WM, movement members post messages directed towards aligning with another movement organization or political and social elites. For example: “thank you congressman! #womensmarchwednesday”; “@boswomensmarch: “we have to step up as women and take the lead.”— beyoncé #womensmarch step up now and register to march!”; “@womensmarchpa: #merylstreep speaks on behalf of our broken heart? #beautifully said from a #beautiful soul #womensmarchpa thanks you”; “@womensmarchks: yes it does! we'd be honored if you and @michelleobama would march with us, @barackobama #womensmarch #whymarch”; “@womensmarchpa: @sofiavergara it would be amazing if you could give us a shout out tonight! #womensrigsarehumanrigs #goldenglobe @...”

5 Discussion

When looking into the relationship among categories, we noticed that one of the most salient relationships is that of motivation and mobilization. We found that the majority of tweets related to the motivation category were intended to mobilize protesters. Our findings coincide with what Harlow (2012) found when studying a Facebook-based social movement in Guatemala. Harlow notes that most of the messages transmitted regarding the movement were aiming at motivating people to demonstrate on the streets and to gather on public squares so protesters could show their discontent with the government. Both Harlow's and our findings are consistent with what has been observed in other social movements such as the Battle of Seattle in 1999, Occupy Wall Street in 2011, the Arab Spring in East and Northern Africa in 2010, and Egyptian Revolution in 2011; in all these movements a major function of social media has been to motivate citizens to participate in protests (Smith, 2001; Van Laer and Van Aelst, 2010; Tremayne, 2014; Oh et al., 2015; Suh et al., 2017). In addition to regular citizens, we found that the motivation and mobilization messages were also directed to elites. In our case, these elites were celebrities to whom messages were directed asking them to re-tweet or to join the movement. Although we do not find previous studies that report the use of social media for enrolling elites, the creation of alliances with elites is known to be a fundamental line of action of social movements (e.g., Andrews, 2001; McAdam and Tarrow, 2010). We can conjecture that the messages asking for elites' help would be not only for obtaining their support but also to seek re-tweets which give original messages wider reach.

As stated above, the concept of prognostics refers to movement messages calling members for particular actions. In addition to messages motivating people to join the movement, we found that messages were also calling protesters to resist by participating in the forthcoming elections. Concretely, tweets were asking people to vote against the incumbent government. Resisting after or before elections is known as being part of the repertoire of actions of social movements (McAdam and Tarrow, 2010). The framing of prognostics is very close to that of diagnostics. Diagnostics is a type of framing that addresses the problems the movement is aiming to solve. Yet contrary to what was assumed from our original theoretical framework, we did not find many messages that were related to diagnostics of the political situation. This may suggest why these movements do not live for a long time and are mostly associated with specific marches or demonstrations. This is because, to be effective, messages have to

resonate with their target audience (Benford and Snow, 2000); resonance in this sense means that the messages have to be empirically legitimate to the target audience. We also found very few tweets related to the political opportunity as suggested by Garrett (2006) framework. It is possible that the political opportunities for protesters were tacitly shared among the social movement members. Nevertheless, leaders of socio-political movements may consider the use of social media to identify political opportunities that could be realized by their members. Organizers of political movements using social media may consider sending messages calling their members to concrete actions. Given the reach of social media, those messages could help to increase the scope of influence of their movements.

As discussed in the literature review section, social media has allowed social movements to expand their repertoire of actions, which means that social media facilitate new forms of protests (Smith, 2001; Van Laer and Van Aelst, 2010; Selander and Jarvenpaa, 2016). We found that social media allow for extending the repertoire of actions by facilitating virtual participation in the movement. By this, we mean that people tweeted that they were not able to join the march physically, but they were participating virtually from their current location. We argue that this was done with the purpose to motivate mobilization and also as a way of showing solidarity. Virtual participation also took the form of embracing symbols, like knitting pussyhats, for example. Another finding in relation to virtual participation is the global character of messages in which individuals would report participating in marches in other parts of the world. This is consistent with the current literature in IS and social movements who have consistently observed how social media enables the globalization of social movements (Van Laer and Van Aelst, 2010; Selander and Jarvenpaa, 2016). The motivating effect of a message that reports joining the movement is consistent with the political science literature that recognizes how individuals tend to join a movement once they know others are doing that. As mentioned before, this phenomenon is known as a social cascade (Sunstein, 2002).

We also found that a substantial number of tweets were classified under the category referred to as Symbolic Association. In this category, messages consist of hashtags that linked the women's movement with other social movements. In our study, we found that through the tweeting of hashtags from other movements, protesters provide identity to their actions and discourses. In studying hashtags during the Egyptian Revolution of 2011, Oh et al. (2015) found that hashtags were used as a means for collective sense-making. Oh and his colleagues understand hashtags in tweets as a way of identifying clusters of local themes; they are a form of synthesized information that provides identity and a sense of purpose. Thus, hashtags, because of their synthetic nature, are able to define the unfolding movement by giving it a collective identity and specific goals. The category of Symbolic Association is, then, an example of how social media extend social movement repertoire of actions by providing identity and purpose.

6 Conclusions

Our study contributes to the body of knowledge in IS that concentrates on the relationship between social media and social movements. Central premises in this area are that social media exerts a crucial influence on social movements by facilitating the mobilization of resources and providing global dimension (Garrett, 2006). Moreover, research in this area has shown that contemporary social movements such as the Zapatistas, the Battle of Seattle, the Arab Spring, the Egyptian Revolution, and Occupy Wall Street, would not have occurred without the support and influence of social media (Tufekci and Wilson, 2012; Tremayne, 2014; Oh et al., 2015; Suh et al., 2017). Our study advances this body of knowledge by providing theoretical and empirical content regarding the use of Twitter in social movements. Specifically, we enrich the empirical content of this area by analyzing the content and meaning of tweets transmitted during the WM movement.

Theoretically, we provide a detailed set of categories that classify the tweets transmitted during the WM movement. The formulation of these categories enhances the understanding of the purpose of using social media by social movement organizers. This set of categories answers the question of how social media is used in social media in terms of the content of Tweet messages for this particular social movement. The proposed categories also add to the extant body of knowledge that looks into how so-

cial media increases the action repertoire of social movements (Smith, 2001; Garrett, 2006; Walker et al., 2008; Van Laer and Van Aelst, 2010; Selander and Jarvenpaa, 2016). Before the advent of the Internet, social movements relied on periodicals, radio, TV, and pamphlets to convey their messages and mobilize resources (Suh et al., 2017). In this sense, we have contributed by identifying digital actions that consist of the framing of social movement messages through tweets (Benford and Snow, 2000). Digital messages constitute an addition to the action repertoire of social movements as they facilitate these movement protests by providing immediate ways of communication which in turn motivates and mobilizes people as well as permits virtual participation. Regarding the practical implications, our findings could help social movement leaders in learning different ways in which social media can help them to frame their messages. Particularly, social movement organizers may consider drafting and transmitting messages that address the diagnostics and prognostics of the political or social situation that the movement aims at solving. This, we argue, may help them in making their messages resonate with their target audience.

Our study also contributes to the research program in IS that concentrates on networks enabled by social media (Borgatti and Foster, 2003). This research program concerns the relationship between networks structure and content of the networks. In the case of Twitter, the network structure broadly refers to who is following who and the trajectory of re-tweeted messages (Grandjean, 2016; Miranda et al., 2016). However, researchers such as Borgatti and Foster (2003) have argued that network structure studies need to be complemented by research that looks into the content of messages. There are some studies in IS literature that focuses on the content of messages; see for example Selander and Jarvenpaa (2016) who analyzed the content of Amnesty International's Facebook messages and Oh et al. (2015) who analyzed hashtags used in social media during the Egyptian revolution of 2011. Our contribution to the network and social media research program, then, is to provide a theoretical categorization of messages used by social movements. These categories could be used to classify messages from other social movements and to be the starting point for network topology analysis that could look into the relationship between the message content and the network structure.

Moreover, we found out that social media is used to enroll celebrities which may help to enlarge the reach of messages. We also found that, at least for the particular movement we studied, social media was not widely used for prognosis or the articulation of political opportunities. Instead, Twitter was used mostly for motivation and calling for mobilization. Our study suggests that social movement leaders could expand the influence of their movements, beyond mobilization and motivation, by sending messages calling for concrete actions related to the objectives of their movement. Another contribution of our study is the application of Garrett's ICTs framework to analyze the content of messages related to a particular social movement. Garrett intended his framework as a broad lens to explain how ICTs influence social movements. He developed his framework through an extensive literature review, and he did not focus on any technology in particular. In this paper, we have added empiric content to Garrett's work by concentrating on a specific technology, Twitter, and by specifically analyzing the content of messages sent by the WM using such a technology.

One of the limitations of our study is that we did not analyze all the tweets that we collected for this study. Yet, our working data set was a large random sample of tweets transmitted by the WM movement, and we are confident of its representation. However, we believe that an exhaustive analysis of all messages could provide a high level of confidence in quantitative studies exploring the structures of networks. The analysis of all the tweets could be done by enrolling a larger group of research assistants who would help with the coding of messages as well as a combination of Amazon Mechanical Turk with machine learning algorithms. Another limitation of our study is that we could not quantify the reach of each type of message. This could be done through thorough network analysis. Likewise, future network analysis studies could draw on the categorization formulated in this paper to establish the relationship between the content of messages and the topology of networks. In this sense, the detailed description of the categories provided in this study may be a solid starting point. Furthermore, our study concentrated on a particular social movement to provide deeper insights. However, future studies could focus on other social movements to extend, confirm or modify the theoretical categorization presented in this study.

References

- Agrawal, N. (2017). *How the women's march came into being*. URL: <https://www.latimes.com/nation/la-na-pol-womens-march-live-how-the-women-s-march-came-into-1484865755-htmlstory.html> (visited on 3/23/2019).
- Andrews, K. T. (2001). "Social movements and policy implementation: The Mississippi civil rights movement and the war on poverty, 1965 to 1971." *American Sociological Review*, 71-95.
- Arnold, A. (2018). *How Many People Were at the Second Annual Women's March?* URL: <https://www.thecut.com/2018/01/how-many-people-were-at-the-second-annual-womens-march.html> (visited on 3/23/2019).
- Ayres, J. M. (1999). "From the streets to the Internet: The cyber-diffusion of contention." *The Annals of the American Academy of Political and Social Science* 566(1), 132-143.
- Barnes, D. A. and C. Connolly (1999). "Repression, the judicial system, and political opportunities for civil rights advocacy during reconstruction." *The Sociological Quarterly* 40(2), 327-345.
- Benford, R. D. and D. A. Snow (2000). "Framing processes and social movements: An overview and assessment." *Annual Review of Sociology* 26(1), 611-639.
- Berger, K., J. Klier, M. Klier and F. Probst (2014). "A review of information systems research on online social networks." *Communications of the Association for Information Systems* 35(1), 145-172.
- Borgatti, S. P. and P. C. Foster (2003). "The network paradigm in organizational research: A review and typology." *Journal of Management* 29(6), 991-1013.
- Bruns, A., T. Highfield and J. Burgess (2013). "The Arab Spring and social media audiences: English and Arabic Twitter users and their networks." *American Behavioral Scientist* 57(7), 871-898.
- Carson, E. (2017). *How Facebook, Twitter jumpstarted the Women's March*. URL: <https://www.cnet.com/news/facebook-twitter-instagram-womens-march/> (visited on 3/23/2019).
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. London: SagePublications Ltd.
- Chenoweth, E. and J. Pressman (2017). *This is what we learned by counting the women's marches*. URL: https://www.washingtonpost.com/news/monkey-cage/wp/2017/02/07/this-is-what-we-learned-by-counting-the-womens-marches/?noredirect=on&utm_term=.a9746e80b223 (visited on 3/23/2019).
- Curtis Jr, R. L. and L. A. Zurcher Jr (1974). "Social movements: an analytical exploration of organizational forms." *Social Problems* 21(3), 356-370.
- Diani, M. (1992). "The concept of social movement." *The Sociological Review* 40(1), 1-25.
- Eisenhardt, K. M. (1989). "Building theories from case study research." *Academy of Management Review* 14(4), 532-550.
- Garrett, R. K. (2006). "Protest in an information society: A review of literature on social movements and new ICTs." *Information, Communication & Society* 9(02), 202-224.
- Gentry, J. (2012). *twitter: R Based Twitter Client*. URL: <https://cran.r-project.org/web/packages/twitterR/twitterR.pdf> (visited on 3/23/2019).
- Glaser, B. and A. L. Strauss (1967). *Discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Grandjean, M. (2016). "A social network analysis of Twitter: Mapping the digital humanities community." *Cogent Arts & Humanities* 3(1), 1171458.
- Harlow, S. (2012). "Social media and social movements: Facebook and an online Guatemalan justice movement that moved offline." *New Media & Society* 14(2), 225-243.
- Hwang, H. and K. O. Kim (2015). "Social media as a tool for social movements: the effect of social media use and social capital on intention to participate in social movements." *International Journal of Consumer Studies* 39(5), 478-488.
- Jasper, J. M. (1998). "The emotions of protest: Affective and reactive emotions in and around social movements." *Sociological Forum* 13(3), 397-424.
- Jasper, J. M. (2011). "Emotions and social movements: Twenty years of theory and research." *Annual Review of Sociology* 37, 285-303.

- Jenkins, J. C. (1983). "Resource mobilization theory and the study of social movements." *Annual Review of Sociology* 9(1), 527-553.
- Johnson, T. J., S. L. Bichard and W. Zhang (2009). "Communication communities or "cyberghettos?": A path analysis model examining factors that explain selective exposure to blogs." *Journal of Computer-Mediated Communication* 15(1), 60-82.
- Kane, G. C., M. Alavi, G. J. Labianca and S. Borgatti (2014). "What's different about social media networks? A framework and research agenda." *MIS Quarterly* 38(1), 274-304.
- Klein, H. K. and M. D. Myers (1999). "A set of principles for conducting and evaluating interpretive field studies in information systems." *MIS Quarterly* 23(1), 67-93.
- Leonardi, P. M. and E. Vaast (2017). "Social media and their affordances for organizing: A review and agenda for research." *Academy of Management Annals* 11(1), 150-188.
- Lotan, G., E. Graeff, M. Ananny, D. Gaffney and I. Pearce (2011). "The Arab Spring| the revolutions were tweeted: Information flows during the 2011 Tunisian and Egyptian revolutions." *International Journal of Communication* 5, 1375-1405.
- MacKay, B. and I. Munro (2012). "Information warfare and new organizational landscapes: An inquiry into the ExxonMobil–Greenpeace dispute over climate change." *Organization Studies* 33(11), 1507-1536.
- Mayring, P. (2014). "Qualitative content analysis. 2000." In: *Forum: qualitative social research*. 2-00.
- McAdam, D., J. D. McCarthy and M. N. Zald (1996). Opportunities, mobilizing structures, and framing process-toward a synthetic, comparative perspective on social movements. In: D. McAdam, J. D. McCarthy and M. N. Zald (Eds.), *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures and Cultural Framings*, p. 1-20. Cambridge, England: Cambridge University Press.
- McAdam, D., J. D. McCarthy and M. N. Zald (1996). "Opportunities, mobilizing structures, and framing process-toward a synthetic, comparative perspective on social movements." *Doug McAdam, John D. McCarthy, and Mayer Zald*.
- McAdam, D. and S. Tarrow (2010). "Ballots and barricades: On the reciprocal relationship between elections and social movements." *Perspectives on Politics* 8(2), 529-542.
- McCarthy, J. D. (1996). Constraints and opportunities in adopting, adapting, and inventing. In: D. McAdam, J. D. McCarthy and M. N. Zald (Eds.), *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures and Cultural Framing*, p. 141-151. Cambridge, England: Cambridge University Press.
- McCarthy, J. D. (1997). The globalization of social movement theory. In: J. Smith, C. Chatfield and R. Pagnucco (Eds.), *Transnational social movements and global politics: Solidarity beyond the state*, p. 243-259. Syracuse, New York: Syracuse University Press.
- McCarthy, J. D. and M. N. Zald (1977). "Resource mobilization and social movements: A partial theory." *American Journal of Sociology* 82(6), 1212-1241.
- Miranda, S. M., A. Young and E. Yetgin (2016). "Are social media emancipatory or hegemonic? Societal effects of mass media digitization." *MIS Quarterly* 40(2), 303-329.
- Morris, C. (2018). *Here's How Many People Participated in Women's Marches This Year*. URL: <http://fortune.com/2018/01/22/womens-march-2018-numbers/> (visited on 3/23/2019).
- Myers, D. J. (1994). "Communication technology and social movements: Contributions of computer networks to activism." *Social Science Computer Review* 12(2), 250-260.
- Myers, D. J. (2000). "The diffusion of collective violence: Infectiousness, susceptibility, and mass media networks." *American Journal of Sociology* 106(1), 173-208.
- Oh, O., C. Eom and H. R. Rao (2015). "Research note—Role of social Media in Social Change: An analysis of collective sense making during the 2011 Egypt revolution." *Information Systems Research* 26(1), 210-223.
- Orlikowski, W. J. and J. J. Baroudi (1991). "Studying information technology in organizations: Research approaches and assumptions." *Information Systems Research* 2(1), 1-28.
- Pan, Z., Y. Lu, B. Wang and P. Y. Chau (2017). "Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage." *Journal of Management Information Systems* 34(1), 71-101.

- Polletta, F. and J. M. Jasper (2001). "Collective identity and social movements." *Annual Review of Sociology* 27(1), 283-305.
- Rao, H., C. Morrill and M. N. Zald (2000). "Power plays: How social movements and collective action create new organizational forms." *Research in Organizational Behavior* 22, 237-281.
- Rasler, K. (1996). "Concessions, repression, and political protest in the Iranian revolution." *American Sociological Review*, 132-152.
- Salehan, M., D. J. Kim and C. Kim (2017). "Use of Online Social Networking Services from a Theoretical Perspective of the Motivation-Participation-Performance Framework." *Journal of the Association for Information Systems* 18(2), 141.
- Sandoval-Almazan, R. and J. R. Gil-Garcia (2014). "Towards cyberactivism 2.0? Understanding the use of social media and other information technologies for political activism and social movements." *Government Information Quarterly* 31(3), 365-378.
- Schlagwein, D. and M. Hu (2017). "How and why organisations use social media: five use types and their relation to absorptive capacity." *Journal of Information Technology* 32(2), 194-209.
- Schneiberg, M., M. King and T. Smith (2008). "Social movements and organizational form: Cooperative alternatives to corporations in the American insurance, dairy, and grain industries." *American Sociological Review* 73(4), 635-667.
- Schwandt, T. A. (1994). "Constructivist, interpretivist approaches to human inquiry." *Handbook of Qualitative Research* 1, 118-137.
- Selander, L. and S. L. Jarvenpaa (2016). "Digital action repertoires and transforming a social movement organization." *MIS Quarterly* 40(2), 331-352.
- Smith, A. and M. Anderson (2018). *Social Media Use in 2018*. URL: <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/> (visited on 3/23/2019).
- Smith, J. (2001). "Globalizing resistance: The battle of Seattle and the future of social movements." *Mobilization: An International Quarterly* 6(1), 1-19.
- Snow, D. A. (2004). Framing processes, ideology, and discursive fields. In: D. A. Snow, S. A. Soule and H. Kriesi (Eds.), *The Blackwell companion to social movements*, p. 380-412. Oxford, UK: Blackwell Publishing.
- Snow, D. A. and R. D. Benford (1992). Master frames and cycles of protest. In: A. D. Morris and C. M. Mueller (Eds.), *Frontiers in social movement theory*, p. 133-155. New Haven, CT: Yale University Press.
- Snyder, D. and C. Tilly (1972). "Hardship and collective violence in France, 1830 to 1960." *American Sociological Review*, 520-532.
- Stewart, M. and U. Schultze (2017). "A Performative Identity Perspective of Cyberactivism: The Case of My Stealthy Freedom." In: *International Conference on Information Systems*. Seoul, South Korea.
- Suh, C. S., I. B. Vasi and P. Y. Chang (2017). "How social media matter: Repression and the diffusion of the Occupy Wall Street movement." *Social Science Research* 65, 282-293.
- Sundararajan, A., F. Provost, G. Oestreicher-Singer and S. Aral (2013). "Research commentary—information in digital, economic, and social networks." *Information Systems Research* 24(4), 883-905.
- Sunstein, C. R. (2002). "The law of group polarization." *Journal of Political Philosophy* 10(2), 175-195.
- Syed, R. (2018). "Enterprise reputation threats on social media: A case of data breach framing." *The Journal of Strategic Information Systems*. <https://doi.org/10.1016/j.jsis.2018.12.001>.
- Taylor, V. and N. Whittier (1995). Analytical approaches to social movement culture: The culture of the women's movement. In: H. Johnston and B. Klandermans (Eds.), *Social movements and culture*, p. 163-187. Minneapolis, USA: University of Minnesota Press.
- Tilly, C. (1978). *From mobilization to revolution*. Reading, MA: Addison-Wesley.
- Tremayne, M. (2014). "Anatomy of protest in the digital era: A network analysis of Twitter and Occupy Wall Street." *Social Movement Studies* 13(1), 110-126.
- Tufekci, Z. and C. Wilson (2012). "Social media and the decision to participate in political protest: Observations from Tahrir Square." *Journal of Communication* 62(2), 363-379.

- Van Laer, J. and P. Van Aelst (2010). "Internet and social movement action repertoires: Opportunities and limitations." *Information, Communication & Society* 13(8), 1146-1171.
- Walker, E. T., A. W. Martin and J. D. McCarthy (2008). "Confronting the state, the corporation, and the academy: The influence of institutional targets on social movement repertoires." *American Journal of Sociology* 114(1), 35-76.
- Walsham, G. (1995). "Interpretive case studies in IS research: nature and method." *European Journal of Information Systems* 4(2), 74-81.
- Yin, R. (1984). *Case Study Research: Design and Methods*. Beverly Hills, CA: Sage.
- Zald, M. N. (1996). Culture, ideology, and strategic framing. In: D. McAdam, J. D. McCarthy and M. N. Zald (Eds.), *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures and Cultural Framings*, p. 261-274. Cambridge, England: Cambridge University Press.
- Zhang, X. and V. Venkatesh (2013). "Explaining employee job performance: The role of online and offline workplace communication networks." *MIS Quarterly* 37(3), 695-722.