

ONLINE AND ONSITE UNION ORGANIZING EFFORTS: AMAZON WORKERS' PURSUIT
OF A COLLECTIVE VOICE

By

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ABSTRACT

Union membership decline has been a main characteristic of the American labor movement. However, more recently, we have been witnessing an upsurge of efforts to gain a collective voice. Importantly, workers challenging the status quo by going through a representation process are emerging against big non-union corporations that are notably more resourceful and powerful. Unions and workers recognize that power imbalance and have been more creative, innovative, and intentional in regards to how they communicate with others through collective action frames, how they gain support from other social actors, such as the general public via social media, and how they lead and act collectively to unionize their workplaces. This dissertation first examines whether a union's collective action frames during the stages of the representation process influenced the public's support of unions in social media, and how this influence varies throughout the stages of the representation process. Next, it analyzes how members of the general public interact with a union in social media throughout the multiple stages of the process, while also identifying those relationships or ties that are crucial in the dissemination of a union's collective action frames within these social networks. Finally, this dissertation examines the emergence of a grassroots independent union, emphasizing the crucial role of its worker-leaders. These leaders, whose backgrounds are marked by systemic discrimination and shared experiences of workplace exploitation, are vital to the union's development and resilience. These studies employ data from unionization efforts of Amazon workers in Alabama and North Carolina.

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This dissertation is dedicated to my mom Guadalupe Aranzaes
and my beloved husband Leo.
Your love is the source of my strength.

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TABLE OF CONTENTS

INTRODUCTION 1

CHAPTER 1: GAINING SUPPORT VIA SOCIAL MEDIA: EVIDENCE FROM AMAZON’S UNIONIZATION CAMPAIGN 7

CHAPTER 2: DISSEMINATING COLLECTIVE ACTION FRAMES. THE IMPORTANCE OF TIES WITHIN SOCIAL MEDIA. 37

CHAPTER 3: FROM MARGINALIZATION TO LABOR ORGANIZING: INDEPENDENT UNIONIZATION IN NORTH CAROLINA 67

NOTES..... 94

REFERENCES 96

APPENDIX 1A: CAMPAIGN TWEETS 109

APPENDIX 1B: CLASSIFIER.....112

APPENDIX 1C: PROPORTIONAL STRATIFIED SAMPLING119

APPENDIX 1D: CORE FRAMING TASKS PER COLLECTIVE ACTION FRAME..... 120

APPENDIX 2A: NEGATIVE BINOMIAL REGRESSION 139

APPENDIX 3A: INTERVIEW GUIDE 140

INTRODUCTION

Unionization levels in the United States are low compared to other developed economies (Bamber *et al.*, 2021). Although the number of wage and salary workers increased to 10.8% in 2020 during the pandemic, the union membership rate hit a historic low of 10% in 2023 (U.S. Bureau of Labor Statistics, no date). Despite this decline, there is evidence that workers in the American workforce have been increasing their efforts to gain a collective voice. Unionized workers have been shown to benefit even during disruptive events such as COVID-19, experiencing greater job security than their non-union counterparts (Han, 2022). Importantly, the pandemic has paved the way for a wave of inspiring young workers motivated to unionize (Naidu, 2022).

From 2019 to 2023, the number of representation petitions increased by approximately 26% (from 1,673 to 2,115), and held elections rose by 40%. However, these campaigns experienced significantly more losses (nearly four times as many) than wins compared to 2019 (National Labor Relations Board, no date d). Regarding these losses, Ferguson (2018, cited in Gould IV, 2022, p. 143) noted a positive relationship between an organizing upsurge and election losses, as “exploration requires experimentation, and real experiments often fail.” Experimentation requires an increased allocation of resources in organizing the unorganized workers, something that does not necessarily occur today (Gould IV, 2022).

The decline in union membership extends beyond key economic sectors such as manufacturing and is also evident in sectors like transportation and warehousing (Mishel, Rhinehart and Windham, 2020). Amazon, the largest logistics company in the United States, exemplifies this trend, with its wealth largely derived from the value added by its workforce rather than its consumers (Moody, 2020). As of 2022, 61% of Amazon’s workers were laborers and helpers (*Our workforce data*, 2021), which is indicative of the power warehouse workers can have in the potential case of workers-led disruptions. Notably, Amazon workers have begun to tackle the challenge of organizing their workplaces amid the pandemic, which has exposed existing inequalities and vulnerabilities (cf., Côté et al., 2021).

As for 2021, Amazon employed approximately 1.6 million individuals worldwide, with 1.1 million in the United States (Bishop, 2022). The majority of Amazon’s American workforce is located in California, Texas, Washington, and Florida (Bishop, 2022). Despite the large workforce, organizing efforts in the United States have been relatively recent. Publicly known

unionization campaigns have surged in states such as Alabama (approx. 9000 employed people), New York (approx. 39000 employed people), Kentucky (approx. 25000 employed people) and North Carolina (approx. 32000 employed people).

The need for such organizing efforts becomes evident when considering the broader context of employment relations in the United States. Employers hold most of the power in the employment relations system (Katz and Colvin, 2020). Amazon exemplifies this with its numerous union-busting actions, which follow the traditional employers' union busting playbook (Snow, 2022; Greenhouse, 2023). This power imbalance underscores the importance of workplace organizing and worker empowerment (Kassem, 2022).

This dissertation focuses on the unionization process at two large Amazon warehouses in the US South, specifically in Alabama and North Carolina. Broadly, it addresses the following questions: How do collective action frames influence public support for unions on social media? How do members of the general public interact with unions on social media, and which ties contribute to the dissemination of collective action frames? How do internal dynamics and broader structures contribute to the emergence of a grassroots independent union in a right-to-work state? More specifically, Chapters 1 and 2 are quantitative studies analyzing a union's collective action frames on social media during the representation process in Alabama. Chapter 3, on the other hand, is a qualitative study examining the emergence of collective action and the critical role of leader configurations in a union organizing effort in North Carolina.

Amazon warehouse workers at a facility in Bessemer, Alabama were the first to file a representation petition, attracting interest from multiple social actors, including organized labor, politicians, media, scholars, and the general public. The general public has proved to be a critical ally in addressing the power disparity between employers and workers during union representation efforts (e.g., support shown to the Smithfield workers' unionization efforts in North Carolina; Waltz, 2018). Recognizing this, workers in Bessemer, Alabama, seeking representation through the Retail, Wholesale and Department Store Union (RWDSU), attempted to engage with the public via social media throughout their first campaign. Twitter (now called X), in particular, served as the channel through which RWDSU disseminated their collective action frames, which are meanings designed to motivate, mobilize and legitimize a movements' activities (Benford and Snow, 2000). However, sharing and communicating collective action

frames on social media does not guarantee that these frames increase public support for a unions' campaigns, nor does it ensure impact on the intended audience.

Theoretically, collective action frames containing elements such as the identification of a problem, its causes, solutions, and a call to action can mobilize others (Snow and Benford, 1988). However, this has not yet been empirically evidenced. The available data of RWDSU's use of social media during the first representation process of Amazon workers in Alabama provide scholars with an opportunity to explore the interactions between the union and the general public and assess shifts in public support. Moreover, collective action frames reflect the different challenges a union may encounter. RWDSU created and communicated their collective action frames according to the stages that their campaign: a card drive, filing a representation petition, the notice of election, the election, and the tally of ballots (c.f. National Labor Relations Board, no date a). Ferguson (2008) has highlighted the importance of recognizing unionization as a process with different stages, each presenting different challenges.

RWDSU's engagement and interaction with members of the general public via Twitter during the first representation process in Alabama resulted in the formation of connections with social media users throughout the stages of this process. Similar to in-person interactions, social media enables the creation of structures or social networks that range from simple to complex relationships. The relationships or ties developed between members of the general public and the union varied in their strength (Granovetter, 1973), which can be assessed by the familiarity between ties and their reciprocity. High familiarity and reciprocity indicate strong ties, while low familiarity and reciprocity suggest weak ties (Granovetter, 1973). According to Granovetter (1973, 1983), weak ties are particularly important as they facilitate the flow of information beyond clusters where strong ties prevail. Consequently, the presence of weak ties within RWDSU's social networks on Twitter during the first unionization campaign of Amazon workers facilitate the dissemination of collective action frames to a wider audience beyond union sympathizers.

As mentioned above, Amazon workers' efforts to gain a collective voice also emerged in other facilities in the U.S. These efforts distinguish from one another in the stages each group of workers has achieved within the representation process. Notably, the case of workers in North Carolina stands out as it continues to gather support on the shop floor in preparation for a card drive that will eventually lead to the filing of a representation petition. The efforts of these

leading workers provide an opportunity to explore the emergence of an independent union, a phenomenon less examined in social movement literature. Social movement scholars debate the importance of balancing the external and internal dynamics of a movement (McAdam, Tarrow and Tilly, 2001). Additionally, understanding structural racism and oppression is crucial (Lee and Tapia, 2021), as these factors can significantly impact efforts to change the status quo. These considerations highlight the key role of leaders in shaping their union and developing their strategic capacity.

Altogether, the interplay between collective action frames, public support via social media, the nature of social networks and the emergence of an independent union to attain a collective voice at Amazon offers the opportunity to expand our understanding of the unionization process. This dissertation delves into these interconnected topics, shedding light on how they shape the landscape of labor relations and workers' outcomes.

First, in Chapter 1, I examine the relationship between the collective action frames created and disseminated by RWDSU and the support from the general public through Twitter, a social media platform, in the first representation process of Amazon workers in the U.S. which took place in Bessemer, Alabama. As unions convey their efforts to represent workers' interests, the framing of their messages and narratives becomes instrumental in garnering support. By effectively articulating the challenges faced by workers and advocating for their rights, unions can resonate with the public and elicit solidarity and support via social media channels.

In Chapter 2, I delve into the representation process in Alabama, with a focus on the social networks developed between RWDSU and social media users throughout the campaign. This analysis explores both strong and weak ties surrounding RWDSU's social media account and examines the dissemination of information within an increasingly dense network. Within social media, weak ties contribute to the spread of collective action frames; however, due to the configuration of social media platforms, strong ties play a critical role in making information accessible to outsiders. By maintaining relationships with supporters on social media, unions can potentially spread their messages to members of the public who are unaware of unionization efforts.

Finally, in Chapter 3, I investigate the emergence of an independent union among workers at an Amazon facility in North Carolina, a state marked by systemic inequalities and an increasingly diverse workforce. This analysis considers both external and internal dynamics,

emphasizing the significance of context and the workers' awareness that collective action can drive change. Crucially, the group of worker-leaders, shaped by personal histories of systemic discrimination, determination, and shared experiences of workplace exploitation, plays a vital role in the union's formation and the subsequent development of strategic capacity.

By examining collective action frames, public support via social media, social networks, and independent union emergence, we gain deeper insights into the complex dynamics within the representation process. Furthermore, these studies encompass implications not only for theory, but also for empirical research, and practitioners. This dissertation contributes to theoretical understanding in several ways. First, it advances framing theory by providing empirical evidence that supports the theorized relationship between collective action frames and mobilization. Second, it enhances social network theory in the context of labor movements and social media by demonstrating the strength of social connections and the dissemination of collective action frames. Finally, it enriches social movements literature and the political context framework by examining the emergence of an independent union, considering the interplay of political structures, leader configurations, and the development of relationships with other social actors. From an empirical perspective, these studies underscore the importance of several key elements. First, they highlight the need to analytically recognize the multiple stages and challenges inherent in the representation process. Second, they emphasize the value of incorporating a social network approach in the analysis of labor phenomena. Finally, they advocate for establishing a collaborative research agenda that not only enhances our knowledge but also empowers the subjects of our research. Finally, my findings also provide practitioners with valuable evidence on several fronts. First, they demonstrate the potential of collective action frames and social media to garner support from other social actors. Second, they underscore the importance of monitoring relationships that develop both within and beyond the labor sphere. Finally, they show how organizing efforts can signal changing opportunities for other workers, thereby motivating collective action in pursuit of better wages and working conditions.

This dissertation answers the following questions:

Chapter 1: Gaining support via social media: evidence from Amazon's unionization campaign.

- What is the relationship between a union's collective action frames and the general public's support during a representation process?

- Does the relationship between a unions' collective action frames and support from the public vary across the representation stages?

Chapter 2: Disseminating collective action frames. The importance of ties within social media.

- How do members of the general public interact with a union in social media?
- What social structures develop between a union and the public in social media?
- Who among those connections are more critical in disseminating a union's collective action frames?

Chapter 3: From Marginalization to Labor Organizing: Independent Unionization in North Carolina.

- How can we explain the emergence of a grassroots independent union in a right-to-work state against the second largest employer in the country?
- How do internal dynamics within an Amazon facility in North Carolina, influenced by broader structures, contribute to the emergence of an independent union?

CHAPTER 1: GAINING SUPPORT VIA SOCIAL MEDIA: EVIDENCE FROM AMAZON'S UNIONIZATION CAMPAIGN

Abstract

Unions and other social movements can rely on public support to achieve their goals and advance their causes. Social media platforms are becoming more prominent as a means of gaining such support. On these platforms, two aspects stand out: first, how ideas and information are framed, and second, how these ideas are disseminated to the general public, all of which are critical for garnering traction. Analyzing open and extensive Twitter data from the representation process led by the Retail, Wholesale and Department Store Union (RWDSU) at Amazon's warehouse in Bessemer, Alabama, I aim to answer whether collective action frames during the stages of the representation process influenced the public's support of unions in social media, and if so, whether the influence of collective action frames varies throughout the stages of the representation process. I conduct a hierarchical linear model analysis taking into consideration the stages of the unionization effort. This analysis of Twitter data allows for a better understanding of how US unions acquire supporters through social media which can be critical especially during representation efforts.

Introduction

Unions have been a traditional means for American workers to act collectively. Despite their importance in the clash of interests between labor and capital, the proportion of unionized workers has steadily declined. The current legislation that decentralizes the representation process (Fantasia and Voss, 2004; Garcia, 2019), the strong opposition of anti-union employers and the anti-labor industry (Kleiner, 2001), and a lack of representation for the vulnerable workforce in union leadership (Milkman and Voss, 2004) are all major factors influencing this trend. Interestingly, the role of public support and bystanders in this decline is frequently underestimated. The general public has the potential to serve as an ally in supporting union certification efforts, advocating for fair union elections, and serving as an important source of information for individuals contemplating collective action and union membership. However, if the general public and bystanders hold an oppositional stance towards unions, it is likely to discourage potential union members from embracing collective action, and the possibilities of furthering union initiatives are diminished.

Recognizing the importance of support from bystanders other than workers, unions attempt to gain the public's support throughout collective action frames. Frames are interpretative notions that people use to make sense of social events (Goffman, 1974). Among the existing frames, collective action frames found in texts are more accessible to analysis; key elements of these frames include the issue at hand, the cause, possible solutions, and most importantly, a call for action (Snow and Benford, 1988). However, not much attention has been paid to the impact of these collective action frames, and their relationship with support from the general public.

In the era of social networking sites, unions have increasingly adopted social media as a means of communicating with members and bystanders for collective action (e.g., Hodder & Houghton, 2020). Simultaneously, social media platforms provide a channel through which the general public is likely to express their support for unions. Traces from user-generated content, such as those found on Twitter, for example, enable scholars to research systematically collective action frames and the support for unions.

Among the array of campaigns and initiatives undertaken by unions, the process of union representation stands out, encompassing various challenging stages from the initial decision to seek a collective voice to the negotiation of contracts that aim to improve wages and working conditions. As with other endeavors, support from the general public can also be garnered during a representation process through the strategic use of collective action frames via social media, and such support can also be expressed via social media as well, which constitutes the central focus of this study.

Using public Twitter data (now called X), the goals of this paper are to (a) assess the relationship between a union's collective action frames and the general public's support during a representation process; and (b) determine whether the relationship of unions' collective action frames and support from the public varies across the representation stages. This research contributes to framing theory by providing preliminary support for the relationship between collective action frames and mobilization, specifically achieving support from the general public through social media. A better understanding of how American unions acquire supporters among bystanders through collective action frames in social media will shed light into the success of unions in preserving and expanding labor rights.

To achieve this objective, the subsequent sections of this study are structured as follows: Firstly, a comprehensive literature review is presented, emphasizing the significance of garnering support from the general public, the role of unions' collective action frames in attaining such support, social media platforms as means of interactions between unions and the general public, and the representation process in the U.S. Subsequently, hypotheses are formulated, and contextual information pertaining to the case study is provided. The methodology employed in the research is then outlined, and the obtained results are presented. Lastly, an analysis of the findings is conducted, leading to the formulation of conclusions.

Literature review and hypotheses

Workers come together and engage in collective action to challenge their workplace's current conditions and accomplish shared objectives. Unions, an example of collective action, have been essential in labor-capital conflicts in the United States since at least the nineteenth century (cf. Dubofsky, 1994). The fact that in the United States most social benefits depend on union membership makes unions critical and essential for the preservation and expansion of labor rights (Fantasia and Voss, 2004).

The general public

Most often, unions seek primarily to influence specific concessions and actions taken by dominant groups, such as improved working conditions from employers. Nevertheless, unions have come to acknowledge the importance of garnering support from individuals outside of the labor arena. Key stakeholders are tactically identified and brought on board by contemporary social movement unionism (Fantasia & Voss, 2004); in particular, the support of the general public and bystanders has been theorized as an environmental factor that can be both pervasive and crucial in determining the primary outcomes of unions (Gall & Fiorito; 2016).

Unions have expanded their efforts to actively involve society in their initiatives and cultivate their support (e.g., Maharaj, 2019). Moreover, the general public has the potential to serve as an ally in urging employers to voluntarily acknowledge a union through the presentation of union-authorization cards (Fantasia & Voss, 2004). The community can also play a crucial role by advocating for fair conditions to facilitate the process of union representation (e.g., support shown to the Smithfield workers' unionization efforts in North Carolina; Waltz, 2018). Most importantly, the broader public has the ability to impact prospective members considering unionization. Notably, workers do not shape their ideas and interests solely via their interactions

with coworkers; they can also shape them through their relationships with third parties outside the workplace, relying on the experiences and opinions of others. Workers can base their decision to participate in collective action based on the perceived reactions of significant others (Kelly, 1998).

Support from the public has shown to be stronger when there is a perception that unions are concerned with all working people and not just their members (Fiorito and Padavic, 2022). Unfortunately, the general public is less likely to understand the union goals and is more likely to disapprove and not support unions as a result of the media's unfavorable portrayal of them rather than by their actual actions (Heshizer, 1985). While the public may perceive both businesses and unions as powerful institutions with their own agendas, there tends to be a higher level of scrutiny and criticism directed towards unions (Heshizer, 1985). For example, Kane and Newman (2019) have demonstrated that exposure to anti-union rhetoric leads to a reduction in public support, as well as a division between union and non-union workers. Not surprisingly, the public's approval of unions has decreased steadily since the 1960s, although it had recently recovered some ground during the pandemic (McCarthy, 2022).

The general public has multiple avenues to express their support for unions. For instance, bystanders can openly affirm their support when specifically prompted about their approval or disapproval of labor unions (e.g., Fiorito & Padavic, 2022; McCarthy, 2022), when prompted about union workers deserving support from others in their struggles (e.g., Kane & Newman, 2019), or they can manifest their endorsement when necessary. Such expressions of support for unions may include, among others, positive and favorable remarks about unions, their leaders, members, campaigns, goals, tactics, and achievements.

Gaining support via collective action frames

To gain support for the attainment of goals and to communicate with sympathizers and bystanders, unions construct and design frames. Frames are the conceptual basis or schemata of interpretation by which an individual makes sense of social events (Goffman, 1974). Frames and their relationship with relevant concepts to this study emerge from diverse perspectives and disciplines such as political science (e.g., anti-union rhetoric and public support; Kane & Newman, 2019), political communication (e.g., understanding frames and framing; Entman, 1993), communication (e.g., framing and opinion formation; Chong & Druckman, 2007),

psychology (e.g., collective action frames and mobilization; Wlodarczyk et al., 2017), and sociology (e.g., frames and social movements; Snow & Benford, 1992).

Snow and Benford (1992) conceptualized framing as the process through which a movement's organizations and actors create, transform, and maintain meanings for their constituents; furthermore, they refer to collective action frames as the output of this process. Collective action frames are "action-oriented sets of beliefs and meanings that inspire and legitimate the activities and campaigns of a social movement organization" (p. 614, Benford & Snow, 2000). Collective action frames are instrumental in mobilization as they attract and gather new adherents and supporters (Snow, Vliegenthart and Ketelaars, 2018).

Snow and Benford (1988) theorized that in order to achieve mobilization, movements' framing efforts, and consequently, collective action frames, address three core framing tasks: diagnostic, prognostic, and motivational framing. Diagnostic framing involves the identification of a problem, emphasizing a specific situation or aspect of social life as problematic and requiring change or remedy, while also identifying its underlying causes. Prognostic framing involves identifying potential solutions and outlining the necessary actions to address the identified problematic situation. Motivational framing refers to the "elaboration of a call to arms or rationale for actions" (p.202) that persuades, motivates, and incentivizes others to take action (Snow & Benford, 1988). Consequently, diagnostic, prognostic, and motivational framing are critical dimensions to consider when assessing the influence of collective action frames. Entman (1993) identified similar tasks or functions related to framing, with the exception of the motivational aspect. Notably, Entman (1993) observed that a frame within a text may encompass all, some, or none of these frame elements, and that it is not obligatory for a frame to include any of them. Nonetheless, existing research has not yet conducted empirical studies into the relationship between collective action frames and public support for unions, nor has it thoroughly explored the inclusion of diagnostic, prognostic, and motivational framing within this context.

Furthermore, when examining frames, it is advisable to identify the location of the frames under study as identified by Entman (1993) within the communication process; for example, frames located in the communicator's mind, or frames located in a written text. Notably, frames contained within a text afford researchers the opportunity to examine and recognize framing efforts even long after their creation. A collective action frame draws attention to specific elements; both the inclusion and the omission of elements in a frame can impact how

a receiver interprets it (Entman, 1993). An important aspect in influencing people to take agency is how the issue is framed; for example, social movements more often seek for support by emphasizing injustice as part of their frames (Benford and Snow, 2000; Kelly, 2011).

Snow and Benford (1988) noted that an individual's familiarity with a given frame positively influences the frame's effect or resonance. Similarly, Chong and Druckman (2007), and Entman (1993) identified that the level of knowledge and information possessed by the individuals being targeted becomes an important determinant when evaluating the relationship between frames and their impact on the targets. Consequently, the relationship between a union's collective action frames and the garnered support from the public may vary when bystanders are more or less familiar and knowledgeable of unions and the labor movement.

There remains a need for further exploration into the relationship between collective action frames and the support garnered from the general public. Benford (1997) noted that empirical research on framing has been overly focused on identifying and describing specific frames (e.g., conflict frame, free market frame), yielding more descriptive rather than analytic results. Moreover, Benford (1997) acknowledged the inadequacy of social movement research in demonstrating the impact of collective action frames on mobilization. Consequently, the contribution of Maharaj (2019) stands out as one of the limited analyses examining unions' endeavors to shape public opinion. In their dissertation studying teachers' unions in British Columbia and Ontario, Maharaj (2019) identified that unions sought to promote their objectives by actively engaging with members of society and exerting influence on public discourse in the recognition of the significance of public support. This study aims to investigate the collective action frames utilized by unions and their relationship with public support, specifically focusing on the diagnostic, prognostic, and core framing tasks present within the collective action frames expressed in written text.

Social media allowing diffusion of a union's collective action frames, public support, and their interactions

Unions communicate and disseminate their collective action frames (CAFs) through social networks, which provide the opportunity for individuals to build and strengthen their identification with certain issues (Passy, 2003). Given the prevailing state of the internet, it is highly possible that this communication process takes place through social media platforms, in addition to the traditional one-on-one communications. The utilization of social media by unions

aligns with the experimental and innovative approaches identified in contemporary social movement unionism, as described by Fantasia and Voss (2004). Unions have used social media for political purposes (Fowler and Hagar, 2013), to promote union's campaign activities (Hodder and Houghton, 2020), to inform about their current campaigns (Frangi, Zhang and Hebdon, 2020), and to communicate with both their members and the public (Hansen and Hau, 2022). Although others have explored the impact of social media on union members (e.g. Barnes et al., 2019), the study of unions' use of social media and public support needs further exploration.

Social media platforms can also be utilized by the general public to actively participate and express their support for unions, much like other relevant topics that are increasingly discussed in today's digital sphere. Since the early 2000s, social media usage has increased steadily (Perrin, 2015), and approximately 69% of U.S. adults use social networking sites (Poushter and Stewart, 2021).

Both unions and the general public may also interact through social media. Research indicates that social media users, including those on platforms like Twitter, gain knowledge through their online exposure to political information (Bode, 2016), that the use of social networking is related to offline civic engagement and collective action (Pasek, More and Romer, 2009), and that social media shapes the difference of political opinions, and consequently the support of a specific political topic (Kubin and von Sikorski, 2021). Such findings suggest a possible relationship between a union's collective action frames and union support from the general public on social platforms. Moreover, such relationship can be of importance and beneficial to unions' goals given that individuals who actively engage with news and political content on social media are more likely to influence the attitudes and behaviors of other online users (Weeks, Ardèvol-Abreu and De Zúñiga, 2017). This suggests that the general public interacting with a union's CAFs can influence the support for unions among other bystanders within their own social media networks.

Public support during a representation process

American unions have acknowledged the significance of the public support on organizing and bargaining (Craft, 1990). The support of the general public holds similar importance in a representation process, as it empowers workers to seek representation through a union and amplify their collective voice. Within the American labor movement, Ferguson (2008, 2016) underscored the importance of recognizing the different stages that exist between workers

expressing their intention to be represented by a union and the eventual attainment of concessions from employers via a collective bargaining agreement [1]. A depiction of the stages of the representation process prior to bargaining a contract include a) from the time workers decide to unionize until they file an election petition, b) from the submission of the petition to the NLRB's decision regarding holding an election, c) if favorable, from the decision to hold an election up until the day(s) of election, d) the election, and e) the tally of ballots. The opportunity for bargaining a contract with enhanced working conditions moves one step closer upon completion of each stage. However, in the early stages of this process, filing a petition is equivalent to revealing the union's intention to represent workers, which often triggers strong opposition from the employer against the union's organizing efforts (Fiorito, 2003). Such opposition can manifest in various ways, including unfair labor practices, the involvement of union-avoidance consultants, or even the firing and intimidation of workers. Through an analysis of organizing drives between the late 1990s and early 2000s, Ferguson (2016) observed that unions have a one-in-five chance or less of reaching a contract if unfair labor practices are employed during the representation process. Thus, it can be suggested that as the representation process progresses and a union moves closer to an election, employers' opposition will intensify and unions will gradually counteract such opposition and "build support toward the goal of winning a representation election or securing voluntary employer recognition upon alternative demonstration of majority support" (p. 200, Fiorito, 2003).

Furthermore, at each stage of the representation process, unions encounter distinct and unique challenges that necessitate the strategic use of CAF to gather increasing support from the general public. As the process progresses, it becomes crucial for unions to effectively communicate their message and engage the public in order to garner greater support. However, existing research has yet to examine the relationship between a union's collective action frames and the support it garners from the general public during the representation process and its various stages via social media.

Hypotheses

Reflecting on this literature, the theorized relationship between a union's CAFs and mobilization, specifically the support for unions from the general public, the contemporary use of social media, and the empirical evidence of how these platforms may shape the support for political issues, I expect that:

H1: The general public who interacts with the union's collective action frames through social media during a representation process will express support for unions.

In addition, advancements in the study of support for unions include the differentiation of existing stages of union representation, as each stage forward may present a unique set of challenges. Consequently, each stage might require distinct collective action frames that motivate more support.

H2: The relationship between a union's collective action frames and public support for unions through social media strengthens as the union moves forward through the stages of a representation process.

Background

This study was conducted using Twitter data pertaining to the Retail, Wholesale and Department Store Union (RWDSU) first effort to represent Amazon warehouse workers in Alabama. In the following, I contextualize this study by providing some background information.

The 855,000-square-foot Amazon warehouse in Bessemer, Birmingham, Alabama began operations by the end of March 2020 (Thorton, 2020). Population estimates of 2019 describe Bessemer with a majority (70%) of Black or African American residents, with half of them female (U.S. Census Bureau, no date). In November of 2020, workers of the Amazon warehouse in Bessemer filed a petition for a representative election, identifying 1500 eligible employees for voting purposes including all hourly full-time and regular part-time fulfillment center employees, and identifying RWDSU as the petitioner (National Labor Relations Board, no date a).

Organizing efforts can be traced to October of 2020 via a website created by the RWDSU under the banner of the "BAmazon Union" campaign and via a Twitter account with the username @BAmazonUnion created in September of the same year. The hashtag #BAmazonUnion was first used on November 23rd, 2020. On January 19th, 2021, the notice of election was made public after concerns about COVID were addressed; the election was set to be conducted by secret ballot through the U.S. mail, with ballots being mailed to eligible employees and a ballot count set for March 30 (National Labor Relations Board, no date a).

During the election, when workers assessed whether to be represented or not, the support of the public was critical. Amazon workers were not only likely to seek information and consult with their coworkers, but also engage in discussions with individuals from the general public. Additionally, through social media platforms, workers may have come across supportive posts

from other individuals in response to the Twitter account of RWDSU, which could have provided them with valuable information and motivation to pursue union representation. Support was expressed from public figures (e.g., actor Danny Glover), government (e.g., U.S. President Joe Biden, Senator Bernie Sanders) and the general public via posts on Twitter. RWDSU held rallies to encourage workers to vote in support of representation and used its Twitter account to communicate with eligible voters and the general public. However, RWDSU's campaign did not go uncontested. The employer, Amazon, employed various measures in an effort to discourage union representation among its workers. These tactics included conducting meetings aimed at dissuading unionization, launching the hashtag #doitwithoutdues and the website doitwithoutdues.com (which is no longer available), displaying anti-union notices in the facility's restrooms, and cautioning workers about the potential closure of the warehouse in the event of a successful union election (Greenhouse, 2021).

The count of ballots, which was made public on April 4th, showed that out of approximately 5,800 eligible voters, nearly four times the amount considered in the petition, 2,536 votes were valid, with 1,798 voting against the union (National Labor Relations Board, no date a). As the representation process advanced, the RWDSU developed and deployed CAFs tailored to each stage. Notably, there was an emphasis on the election stage, during which the majority of the frames were communicated. Table 1.1 outlines the duration and dates of each representation stage that will be included in the analysis.

Method

Data

The dataset was built through Twitter Application Programming Interface (API), which is a set of programmatic endpoints; this access is provided by Twitter through an Academic Research product track that enables academic researchers to have access to endpoints (Twitter, no date b). Twitter provided academic researchers with a set of keys and access tokens that they can utilize in their preferred programming language (e.g., R, Python). I used R, version 4.0.3 (R Core Team, 2020); also, I employed Postman, a web tool recommended by Twitter for using its APIs (Twitter, no date a).

Throughout the representation process, RWDSU [2] posted 310 Tweets on their Twitter account @BAmazonUnion. However, only 97 of these 310 Tweets are considered original postings, meaning they were created by the union. For the purposes of this study, these original

Tweets are considered the union's CAFs. The remaining 213 Tweets are Retweets, meaning RWDSU retweeted or reshared the posts of other users via its account. The analysis focuses solely on RWDSU's 97 collective action frames, as they more accurately reflect the union's direct attempt to influence the general public on Twitter. Appendix 1A depicts the distribution of the 310 tweets during the stages of analysis, as well as the distinction of RWDSU-CAFs. Table 1.1 illustrates the progression of the union's use of CAFs throughout the representation process, with the majority of them, 74 CAFs, being posted during the late stage of elections.

Sample

I obtained the list of users who retweeted each of @BAmazonUnion's 97 collective action frames using R and Postman. Retweeting or resharing a post indicates that members of the general public interacted with RWDSU's collective action frames on Twitter. A recent Twitter development (Garson, 2022) made it possible to extract Twitter users who retweeted or reshared the union's 97 CAFs; previously, there was a restriction of extracting only the 100 most recent Retweets. This also demonstrates how volatile the available data is for academics at any given time, as Twitter's tools continue to evolve. Differences between the number of retweeters retrieved via Postman and the count of retweets displayed in the web interface may be caused by protected accounts or accounts that no longer exist. There were a total of 6,769 users from the general public who retweeted @BAmazonUnion's 97 CAFs. Twitter users who interacted with the union's collective action frames, by retweeting or resharing @BAmazonUnion's posts, may tend to possess more knowledge and information regarding union representation, which becomes important when evaluating the relationship between CAFs and their impact (Entman, 1993; Chong and Druckman, 2007)

I retrieved all Tweets, Retweets and Quote Tweets (retweets with added comments) posted by the Twitter users or members of the general public who interacted with RWDSU's collective action frames between May 2020 and September 2021. The collection of Twitter data prior to October 20th 2020 addresses the need to have historical data to measure and control for prior union support before the representation process; similarly, the collection of data after April 2021 addresses the need to assess the influence of CAFs after the representation process. A total of 4,993,091 posts were obtained from 2,125 Twitter users (31%) out of 6,769 users initially identified. Additional 26% of the users had available data; however, I was unable to evidence retweets from RWDSU in their records, so the data of these users was not used; this indicates,

once again, that retrievable data is somewhat limited despite API access. No data was obtained from 2,782 Twitter users (41%), neither R nor Postman provided information for these users. In addition, data from 89 Twitter users (1%) returned an error corresponding to “A problem that indicates you are not allowed to see a particular Tweet, User, etc.”, and data from 46 Twitter users (1%) returned an error corresponding to “A problem that indicates that a given Tweet, User, etc. does not exist.” The fact that users can choose whether their tweets are visible to the public or only to a select group of users exemplifies one of the distinguishing characteristics of Twitter in terms of privacy (Giachanou and Crestani, 2017).

Taking into account a Twitter-user’s account description, out of the 2,125 Twitter users who were exposed to or interacted with RWDSU’s collective action frames, 1,623 individuals (53.62%) had no expressed affiliation to a union collection (i.e., the general public with no apparent union information or union-related knowledge), 236 individuals (15.59%) had a expressed union affiliation, or were part of union staff prior to or at the time of data collection (i.e., the general public with union information or union-related knowledge), 132 Twitter accounts (13.08%) belonged to a union or a union branch, and 134 Twitter accounts (17.71%) belonged to an organization. This study focuses on Twitter users within the first two identified subgroups, Twitter users who had no expressed affiliation to a union (1,623), and Twitter users who had expressed affiliation to a union (236), making a total sample of 1,859 individuals, as they more closely represent members of the general public, the main focus of this study. Unfortunately, the available information from Twitter-users’ accounts does not allow the identification of demographic data that could better describe Twitter users of this sample.

While the initial identification of 6,769 Twitter users provided a substantial dataset, the final sample size was significantly reduced to 1,859 individuals, along with a total of 14,875 observations (i.e., tweets or posts). This reduction occurred due to several factors, including the unavailability of data for a portion of users, errors indicating restricted or nonexistent accounts, and the exclusion of users without recorded interactions with RWDSU. Consequently, this smaller sample might introduce limitations in the representativeness of the findings. Specifically, the reduced sample may not fully capture the diversity of perspectives and engagement behaviors present in the broader population of Twitter users who interacted with RWDSU’s collective action frames. This limitation underscores the need for caution when generalizing the results, as

the available data may not adequately reflect the experiences and characteristics of the entire group initially identified.

Measures

Union support

For the purposes of this study, public support for unions or union support refers to the general public's expressed written support for unions as indicated in their Tweets. In order to identify such support, the use of lexicons composed of semantic features, such as words or phrases that indicate opinion and words that indicate support or opposition, is helpful in the detection of sentiment. The lexicon-based method for analyzing Twitter data employs a list of terms developed manually or automatically, which contains positive and negative terms, as well as terms associated with the subject of study, all of which have a polarity score to estimate the sentiment score of a text (Giachanou and Crestani, 2017).

Although there are research-developed lexicons, they are context-independent and may not be ideal for detecting specific sentiments and opinions. Therefore, I constructed a lexicon-classifier to identify union support Tweets. I selected a sub-sample of 20 users at random from members of the general public who interacted with the union's collective action frames; from this subset, only 13 users had data available. I reviewed a sample of 11, 428 Tweets of these 13 users; these Tweets were posted during the unionization process, from October 2020 to April 2021. This review aimed to identify key words within union support Tweets. This procedure resulted in the creation of the first part of a lexicon-classifier comprising 172 words that also incorporate various verb forms (e.g., unionize, unionizes, unionizing).

A second strategy to detect sentiment on Twitter is through distant supervision or indirect crowdsourcing using emoji, emoticons, and hashtags as sentiment labels, which is ideal for large datasets (Giachanou and Crestani, 2017). Thus, in addition and during the prior review, I identified key hashtags within union support Tweets and searched the web for union-related hashtags (e.g., <https://infobo.com/blog/what-are-most-popular-union-hashtags>), resulting in the identification of 21 key union support hashtags which constitute the second part of the classifier for this study.

Given the nature of this sample I was unable to uncover key terms in this dataset that could be related with opposition-to-union Tweets. In addition, a web search did not reveal any trending hashtags in opposition to unions. Thus, I used Twitter's search engine to detect

opposition-to-union Tweets using word combinations such as against-union or no-unions, which led me to 2 pertinent hashtags for the classifier: #NoUnions and #RightToWork. The latter hashtag refers to right-to-work laws, these laws have prohibited union-security agreements (National Labor Relations Board, no date b). The American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) has recognized right-to-work laws as a means to exacerbate the disparity between corporations and working people, making unionization and collective bargaining more difficult to achieve (American Federation of Labor and Congress of Industrial Organizations, no date). Amazon also prompted a specific hashtag (#doitwithoutdues) against unions during the representation process under study; however, users supporting unions used that hashtag to highlight Amazon's anti-union tactics and not necessarily using it as a sign of a sentiment against unions; in order to avoid misclassifications the hashtag #doitwithoutdues was not included in the classifier. Finally, the analysis of opposition-to-union Tweets and hashtags led me to uncover 3 salient anti-union terms (See Appendix 1B for the complete classifier, a total of 198 terms).

Considering that lexicons additionally classify or rank their terms to identify their polarity first I assigned a label of 1 to the 172 union support words and 21 hashtags, a label of -1 to the 2 hashtags and 3 words depicting opposition to unions. The selection of attribute labels (i.e., 1, -1) is similar to labels such as "satisfied" or "dissatisfied", these help to identify words that are more likely to be used within union support Tweets from those who are not, but it does not quantify the levels of support (cf., Bhattacharjee, 2012).

Next, each Tweet of every one of the 1,859 members of the general public was divided into tokens, which are meaningful units of the text (e.g., words, hashtags, numbers) following text mining procedures in R suggested by Silge and Robinson (2017). Then, each token was compared to the words in the lexicon-classifier; if the token appeared in the classifier, it was assigned the corresponding value (e.g., workers = 1; fight = 1; working = 1). In consequence, a Tweet's total value was determined by the matching tokens; for example a Tweet stating "Sometimes it comes down to who do workers trust and believe will fight for their pay and working conditions. The answer to that question in Chicago is the Teamsters!" would have a total value of 3. A threshold was applied to each Tweet in the dataset in order to distinguish Tweets supporting unions versus Tweets opposing unions, such that Tweets with a total value equal or greater than 3 was identified as supportive of unions, a value equal or smaller than -1 was

identified as Tweets opposing unions, and other values were identified as union-non-related. This threshold addresses the need to refine the identification of union-supporting Tweets; for example, words such as vote, campaign, or win, as well as their verb forms, can also be associated with other event such as political elections.

Consequently, expressed support for unions on Twitter from a member of the general public at a given stage of RWDSU's representation process was measured by the sum of their Tweets' total values identified as supportive of unions.

Validation of the lexicon-classifier

Multiple steps were involved in validating the generated classifier. I first reviewed the list of 198 terms with a union organizer who has worked with poultry workers in the US South for several years. The union organizer was asked to confirm those terms (i.e., words, hashtags) of the classifier that were anticipated to be included in Tweets supporting and opposing unions; 37 pro-union words, 3 pro-union hashtags, the 2 anti-union hashtags, and 7 anti-union words were removed, which represented the terms the expert disagreed with or was uncertain about. Additionally, the experienced organizer suggested the addition of 3 pro-union hashtags, 3 pro-union words, and 1 anti-union word resulting in a second version of the classifier of 133 pro-union words, 21 pro-union hashtags, and 6 pro-union words.

Next, a power analysis was conducted in R using the package `kappaSize` (version 1.2) using the Kappa statistic suggested by Giachanou and Crestani (2017) to estimate a sample size to test the null hypothesis ($\kappa_0 = .40$; $\kappa_1 = .60$); with an anticipated proportion of 50% pro-union Tweets, 40% anti-union Tweets, and 10% non-union Tweets; with 3 raters, two coders and the classifier; and an alpha of .05. Results showed that a total sample of 69 Tweets was required to achieve a power of .80.

I recruited two coders (a former and a current master's degree students from a university in Michigan) to manually classify or annotate a subset of 200 Tweets from the study's Twitter posts. Although a sample of 69 Tweets were indicated by the power analysis, I increased the sample to 200 to have the possibility to proceed with a proportional stratified sampling. Specifically, the Twitter dataset was categorized by stage of representation, including pre- and post-representation campaign stages. For each stage, a random sample of Tweets proportional to the available Twitter data in that stage was selected (See Appendix 1C). The coders were asked

to code the 200 Tweets as union supportive (value 1), opposing unions (value -1), or neutral, mixed or irrelevant to the topic (value 0).

The first and the second version of the classifier, the former developed by the researcher and the latter revised by a union expert, were each used to code the sample of 200 Tweets. Each version of the classifier was contrasted with the manually coded Tweets. Interrater agreement using Fleiss's kappa, which is recommended for three or more raters (Hancock, Stapleton and Mueller, 2019), between each version of the classifier and the independent classification of the two coders, were moderate to low ($\kappa_1 = .551$; and $\kappa_2 = .176$ respectively). Consequently, I retained the original version of the classifier and utilized it for data analysis.

The lexicon-classifier was used to identify union support of those members of the general public, 1,859 Twitter users, who interacted with the union's collective action frames during the time frame of analysis.

Furthermore, it should be noted that among these 1,859 members of the general public, there is a possibility that they may have interacted with, retweeted, or shared posts from Twitter users other than RWDSU. In order to measure and account for the influence of these additional social actors on public support for unions of the 1,859 Twitter users of the sample, the lexicon-classifier was also utilized to identify union-support frames from these other Twitter users.

Dimensionality of a union's collective action frames

The CAFs comprise the 97 original Tweets from RWDSU's Twitter account during the representation process. Collective action frames were assigned values based on the framing tasks contained within them. As a baseline, each CAF had a value of 1. Next, adhering to the framing tasks identified by Snow and Benford (1988), a value of 1 was assigned to each Tweet for each occurrence of a) identifying some event or aspect as problematic and in need of change; b) identifying a possible solution to that problem; and c) providing incentives for action. The resultant scheme of values for the dimensionality of a union's collective action frames included: a total value of 1 for CAFs without clear evidence of core framing tasks; a total value of 2 for CAFs with at least one core framing task (only element a, or b or c); a total value of 3 for CAFs with at two core framing tasks (elements a and b; elements a and c, or elements b and c); a total value of 4 for CAFs with the three core framing tasks (See Table 1.2 for an example). Two independent coders, each with a graduate-level educational background in Communication, collaborated in the assessment of the 97 CAFs. Each coder was provided with general

information about the study's context and the definitions of the core framing tasks relevant to this research. Independently, the coders reviewed the presence of the three core framing tasks in the CAFs. A value of 1 was assigned to a CAF only if both coders independently identified the presence of a framing task. In cases where there was disagreement between the coders regarding the presence of a framing task, the CAF was assigned a value of 0 for that specific framing task (See Appendix 1D for the complete list of assigned values). To assess interrater agreement, Cohen's kappa was calculated for each core framing task, following the recommendations by Fleiss, Levin and Cho Paik (2004). The results indicated that the interrater agreement for diagnostic framing was moderate ($\kappa = .433$), for prognostic framing was fair ($\kappa = .347$), and for motivational framing was moderate ($\kappa = .506$). These values provide a robust measure of the consistency between the two coders.

On the one hand, the assignment of values and the combination or summation allowed to generate an overall dimensionality for each CAF (97 original Tweets), which varies on the extent to which a CAF incorporates or not the three core framing tasks proposed by Snow and Benford (1988). On the other hand, the overall value of each CAF represents the general public's exposure to RWDSU's collective action frames when a Twitter user has shown to interact with or retweet one original Tweet in a given stage of RWDSU's representation process. An individual's exposure to the union's collective action frames in a given stage of the representation process is calculated by the sum of all collective action frames' total values with which that member of the general public interacted.

Only 2.07% of the 97 original Tweets or CAFs created by RWDSU during the representation campaign contained all three diagnostic, prognostic, and motivational framings suggested by Snow and Benford (1988); 8.25% of these CAFs demonstrated at least two of these core framings tasks; 19.59% of them contained at least one of these framings; and 70.10% of the 97 CAFs did not reflect any of the core framings tasks.

Stages

This study delineates seven distinct stages while aligning with the RWDSU's campaign activities (Table 1.1). These stages include pre-campaign and post-campaign periods to account for prior Twitter behaviors and to assess public union support after the campaign, lasting 171 and 178 days respectively. The cut-off points for these stages were determined based on the six-month duration of the campaign.

The initial stage, organizing a card drive, spans 30 days, during which there is documented evidence on Twitter of efforts to gather signed cards from at least 30% of Bessemer warehouse workers, indicating their desire for union representation. Following this, a 59-day period begins with the RWDSU filing the representation petition and ends with the National Labor Relations Board's (NLRB) decision to hold an election. The third stage, lasting 19 days, extends from the NLRB's election notice to the election date. The fourth stage, covering 49 days, encompasses the election process, which was conducted via mail-in ballots due to the pandemic. The fifth stage involves the tallying of ballots, lasting 5 days.

The stages are measured by the number of days within each phase, providing a precise differentiation of them throughout this process.

Control variables

General public status: A dummy-coded variable called was created to reflect whether a member of the general public had expressed union affiliation or were part of union staff (0) or had no expressed affiliation to a union (1) within the user's account description.

Exposure to others' union-support frames: Twitter users may interact with multiple users. Recognizing the nature of social media and the role of other users within members of the general public's social networks, I first identified posts that were retweeted by members of the general public of the study sample other than RWDSU's collective action frames. Next, each of these Tweets were assessed using the lexicon-classifier in order to identify union-support frames and their corresponding total values, such that the latter aggregated values were considered as the measure of exposure to other's union-support frames.

Prior union support: This control variable was constructed using the same procedure detailed for measuring union support. However, the key difference is that prior union support is measured from the stage preceding the current stage of analysis. This allows us to control for previously expressed support for unions on Twitter by members of the general public, ensuring that the analysis accounts for prior engagement and support.

Quantity of followers: This variable represents the number of other Twitter users who have chosen to view a specific user's tweets in their home timeline whenever they log in to Twitter (2021c). This variable controls for social desirability (Bhattacharjee, 2012), as Twitter users with more followers may be more likely to post content that aligns with socially desirable norms and behaviors.

Quantity of friends: This variable represents the number of Twitter users that a specific user follows, which is referred to as the quantity of friends in this study. This measure provides insight into the user's engagement with the Twitter community, as following more users may reflect a higher level of social interaction.

Analytical approach

In this study, union support throughout the stages of a representation process are nested within individuals. To examine the level of non-independence in the data, I calculated the intraclass correlation (ICC) for the outcome variable, the ratio of the second level variance to the total variance, which was 0.16, indicating that about 16% of the variance in union support is between individuals, and suggesting that there was moderate variation at the individual level to analyze the data with random coefficient modeling (Raudenbush & Bryk, 2002).

Additionally, I use the influence model, which represents how an individual's beliefs, knowledge or behavior is impacted by other individuals in the social network of the former (Frank, 2011). A two-level model was used focusing on union support at time t of members of the general public (i.e., 1,859 Twitter users).

At Level 1, I first include the focal variable, the exposure to the dimensionality of CAFs of RWDSU via Twitter from the previous stage to the stage of analysis; the public is exposed to CAFs at time $t-1$, and the model assesses the influence of CAFs at time t after this exposure. Next, I include the representation process stages in alignment with Ferguson's (2008, 2016) recommendation of recognizing the importance of the distinct stages within a representation process. Moreover, I model the interaction term between the representation process stage and exposure to the dimensionality of the union's collective action frames.

Following the influence model (Frank, 2011), Level 1 includes the exposure of user i to pro-union frames from other users within their Twitter network with whom they have interacted via retweets, measured from the previous stage to the stage of analysis (i.e., $t-1$ to t). By including users' social interactions (i.e., retweeting posts from other users), the model accounts for an individual's tendencies to interact with those who share similar behaviors (Frank, 2011). Additionally, the model includes the control variables general public status, prior union support, and the quantity of followers and of friends of user i .

In this random coefficient model, Level 2 variables (individual-level variables) are not included as random effects. Instead, the variables of interest are modeled at Level 1 (the

measurement level), reflecting the nested structure of the data, where repeated measures are nested within individuals. This approach acknowledges that the primary focus is on the repeated measures while accounting for the hierarchical nature of the data. By modeling the repeated measures (Level 1) predictors on the outcome variable and considering the individuals (Level 2) as the higher-level units without including Level 2 variables as random effects, the model ensures that the analysis accurately reflects the data's nested structure and the variability at the measurement level. All analyses were performed in SPSS Version: 28.0.1.1.

Results

Means, standard deviations, and correlations for all study variables for each stage of the representation process appear in Table 1.3. The random coefficient model's results are summarized in Table 1.4.

The pseudo R-squared measures were calculated to evaluate the explanatory power of the model. The marginal pseudo R-squared, which assesses the variance explained by the fixed effects, was .078. The conditional pseudo R-squared, which includes the variance explained by both the fixed and random effects, was .280. Both measures provide a comprehensive understanding of the model's performance, highlighting the contribution of the fixed effects (7.8%) as well as the overall explanatory power of the model (28%).

The first hypothesis predicted that the public who interacts with the union's collective action frames through Twitter during a representation process will express support for unions. As it can be seen in Table 1.4, the main effect of the dimensionality of a union's collective action frames on union support is negative and statistically significant ($\beta = -1.066$, $p < .01$). The negative coefficient suggests that as the dimensionality of the union's collective action frames increases, union support decreases. Specifically, for each one-unit increase in the dimensionality of the CAFs, there is an estimated decrease in union support. Consequently, Hypothesis 1 was not supported.

Hypothesis 2 stated that the relationship between a union's collective action frames and public support for unions through Twitter would increase (i.e., become more supportive) as the representation process advanced. The interaction term highlights the relationship between union support and exposure to the dimensionality of the union's collective action frames in a given representation stage. The coefficient for the interaction term was positive and statistically significant ($\beta = .060$, $p < .01$) indicating that Hypothesis 2 was supported.

In addition, members of the general public who did not expressed union affiliation through their account descriptions, on average, showed more union support than members of the general public who did express union affiliation in their account descriptions ($\beta = 13.46$, $p < .01$). Furthermore, the model assesses the relationship between union support and exposure to pro-union frames from other Twitter users. This relationship was found to be negative and not statistically significant ($\beta = -.001$, $p = .876$). Notably, the negative and significant relationship between prior union support and union support at the current stage of analysis ($\beta = -.091$, $p < .01$) suggests that higher levels of previously expressed union support are associated with lower levels of union support during the current stage of analysis. This finding implies that individuals who initially supported unions may have experienced factors that decreased their support over time. Finally, although the effect sizes were small, the quantity of followers and friends were both positive and statistically significant ($\beta = .000$, $p < .01$; $\beta = .002$, $p < .01$).

Discussion and conclusion

This study was able to identify that as the dimensionality or multifaceted nature of the union's messages increases, union support decreases in a sample of members of the general public interacting with a union on Twitter. This can be attributed to several factors. Firstly, the complexity of such messages may overwhelm the audience, making it difficult for them to process the content. Secondly, the increased cognitive load required to engage with high-dimensional frames can lead to disengagement. Additionally, diverse audience segments might react differently to various dimensions, resulting in a lack of uniform resonance. Moreover, CAFs may sometimes convey conflicting messages, reducing overall effectiveness. Therefore, this finding suggests that focusing on simpler, clearer, and more targeted messaging strategies may be more beneficial in increasing public support for unions on social media platforms.

A closer examination of the CAFs at early stages of the representation process (see Figure 1.4) reveals that most of them did not address diagnostic, prognostic and motivational framing. This observation suggests that Snow and Benford's (1988) thesis, which posits that mobilization effectiveness is contingent on the inclusion of the three core framing tasks, was not supported in this study. As identified by Entman (1993), RWDSU's collective action frames do not necessarily need to encompass all of these framing elements. Thus, their presence in written text appears to be less relevant for garnering support on social media platforms.

The stages of the representation process provide valuable insights into the dynamics of public support for unions. The results reveals that as the representation process progresses, support for unions increases. This trend underscores the importance of the different stages in building and sustaining public support. The interaction term, which examines the relationship between union support and exposure to the dimensionality of the union's collective action frames at different stages of the representation process, indicates that as the representation process progresses, the public becomes more receptive to the union's collective action frames, leading to increased support. As the campaign advances, the cumulative exposure to union messages may enhance public awareness and understanding of the union's goals and actions. This increased familiarity can lead to greater support. In addition, the progression of the representation process often involves heightened activities and visibility, which can amplify the union's message and attract more support. The positive and significant interaction term suggests that the effectiveness of the union's collective action frames is contingent on the stage of the representation process. Early stages may not have the same impact as later stages when public interest and engagement are likely to be higher. This finding highlights the strategic importance of timing and sequencing in union campaigns.

Overall, these results emphasize the dynamic nature of public support for unions and the critical role of the representation process stages in shaping this support. By strategically managing the timing and content of their CAFs, unions can effectively increase public support throughout a campaign.

Furthermore, this study finds results that contradict the assertions of Snow and Benford (1988), Chong and Druckman (2007), and Entman (1993), which emphasize the importance of knowledge, information and familiarity with a given frame for its resonance. Members of the general public who did not express any affiliation with unions in their account descriptions showed higher support for unions when exposed to the union's collective action frames, compared to those who did express familiarity with unions in their online profiles. Individuals without prior union affiliation might have found the union's messages new and compelling, leading to a stronger positive response as this was the first representation campaign among Amazon workers. Without pre-existing affiliations, these individuals might approach the union's messages without the biases or preconceived notions that could affect their perception negatively. In addition, the CAFs might evoke a sense of empathy and solidarity with members of the

general public on Twitter, even among those who have not previously considered union involvement.

This study contributes to the framing literature by providing some empirical evidence for the theorized relationship between CAFs and mobilization, shedding light on this social phenomenon while also trying to respond to Benford's (1997) call for additional analytical research regarding CAFs. Nonetheless, this research has limitations that may inform future collective action framing theory. First, although the researcher is able to recognize framing efforts within a written text (Entman, 1993), it is not possible to identify whether all diagnostic, prognostic or motivational framings are equally related to the decrease of union support. Second, the analysis of CAFs in this study is limited to written text and does not include the analysis of mixed media (e.g., videos, images, GIFs) which can also contain core framing tasks and contribute to the theorization of framing in times in which social media has become relevant for social interactions. Third, this study examines a single case of unionization. While these initial findings support the theorized relationship between CAFs and union support from the public, future research may include a comparative analysis across cases for the understanding of CAFs, especially in light of the emergence of other representation efforts in the US led by Amazon workers for whom public support is essential. Finally, union support is operationalized as a social media user's expressed written support for unions; certainly, support for unions can adopt other forms such as taking part at a union rally, canvassing, or leafleting; nonetheless, union support in written form has the potential to bring unions to the forefront of the conversation and inform others about what they try to accomplish.

Regarding implication for empirical work, until recently, Twitter has been one of the social networking services that offered researchers unrestricted access to user-generated data. Similar to other platforms, Twitter has the potential to create alternative spaces where individuals can connect and engage in discussions with a broader range of people. However, it is important to note that Twitter can also foster exclusive and insular clusters that restrict interactions to specific topics or viewpoints (Bouvier & Rosenbaum, 2020). Social media provides the opportunity to collect valuable data, although the availability of it is not fully guaranteed as seen in this study. While the findings of this study provide valuable insights, it is important to exercise caution in their interpretation due to the small sample size. The reduced number of members of the general public with available data may affect the generalizability of the results, and the

observed effects might not fully represent the broader population. However, the findings are still informative for understanding the relationship between a union's collective action frames and the support for unions via social media.

The union only had 97 out of 310 Tweets, around 31% of the CAFs, designed specifically for constituents and bystanders, which is higher in comparison to other Tweeter users posting patterns. There is evidence, for instance, that extremely active Tweeter users create relatively few original tweets, roughly 14%, while producing 49% of retweets and approximately 33% of replies (Poushter and Stewart, 2021). The low proportion of CAFs containing core framing tasks (29.90%) among the original Tweets is compelling given the relevance of CAFs in motivating action, obtaining support, and even neutralizing opposition (Snow & Benford, 1992); these findings may be indicative of the preferences of communications strategies among unions, something that requires further exploration. These 97 CAFs also show that RWDSU became more active during the election, when workers were required to vote and mail ballots. This level of social media activity shows that the union recognizes the importance of certain stages during the representation in comparison to other stages, which supports Ferguson's (2008) call in that there is a need to analytically recognize the differences between the stages workers must go through in order to be represented, as each stage may require different resources and efforts.

The results also highlight the importance of other social actors besides unions who may become important when trying to explore the relationship between CAFs and union support from the general public in social media. Supporting the struggle of workers to gain a collective voice and improve working conditions can be considered as a means to be viewed favorably by others, especially now that approval of labor unions has returned to the level it was in 1965 (71%; McCarthy, 2022) and that journalistic accounts have also noted that "unions are cool again" (Teel, 2022). Previous research has indicated that Twitter users, including young people and adults, are likely to tweet in order to keep others informed about their lives and because it is vital for them that their followers admire them (Davenport *et al.*, 2014). This study illustrates the need of using other analytical tools such as social network analysis, which can enhance our comprehension of the role of other social actors and their interactions.

Among the implications for practitioners, this study casts light on the use of social media platforms to obtaining public support. According to Heshizer (1985), the general public is less likely to understand union goals and is more likely to disapprove of unions and not support them.

Perhaps a planned strategy may contribute to gaining more support from key stakeholders such as the general public. This study demonstrates that gaining support for unions via social media, specifically Twitter, is possible, even when a union's collective action frames do not fully contain the core framing tasks theorized by Snow and Benford (1988). Notably, union support via Twitter, as evidenced here, does not guarantee that users will materialize such support in other environments or through tangible acts; nonetheless, the findings provide a starting point for our understanding of the social media approach to build support for the labor movement as a whole.

Tables

Table 1.1

Representation Stages

N. Stage	Stage	Begins	Ends	Number of days	Description	Quantity of Collective Action Frames
0	Pre campaign	May 1, 2020	October 19, 2020	171	Historical available data.	0
1	Organizing a card drive	October 20, 2020	November 19, 2020	30	The union interested on representing workers of a given unit, must collect at least 30% of sign cards stating the workers want a union.	5
2	Representation petition	November 20, 2020	January 18, 2021	59	A representation petition is filed, and the Board assess the case to make a decision.	4
3	Notice of election	January 19, 2021	February 7, 2021	19	Board defines election date, time, place of balloting, ballot languages, the device, and a system to identify who may vote. A Notice of Election is posted and communicated to workers.	14
4	Elections	February 8, 2021	March 29, 2021	49	Elections take place.	74
5	Tally of ballots	March 30, 2021	April 4, 2021	5	Ballots are counted. A majority of workers must vote to be represented for the union to be recognized.	0
6	Post campaign	April 5, 2021	September 30, 2021	178	Post representation process available data.	-

Table 1.2
Assigned Values for Core Framing Tasks

		Value
Collective action frame	#Halloween is just around the corner, and we cannot fall for @Amazon’s tricks! The raise we received is thanks to your efforts & [&]; all of us coming together for change. RT now & [&]; urge our co-workers to sign a union authorization card today at https://t.co/QAeSFotMPL ! #1U #union https://t.co/XtYkNpCfkt	1
Prognostic framing	Diagnosis of some event or aspect of social life as problematic and in need of alteration	1
	Yes	
Diagnostic framing	A proposed solution to the diagnosed problem that specifies what needs to be done	0
	No	
Motivational framing	A call to arms or rationale for engaging in ameliorative or corrective action	1
	Yes	
	Total value/Dimensionality	3

Table 1.3
Means, Standard Deviations, and Correlations

Variables	n	Mean	SD	1	2	3	4	5	6
1 Public support	14,875	13.82	54.055						
2 Dimensionality of a CAF	14,875	.21	.739	-.03**					
3 Stages	14,875	73.00	66.324	.19**	-.24**				
4 Exposure to other's frames	14,875	36.29	86.944	.02**	.23**	-.26**			
5 Prior public support	14,875	9.75	42.801	.17**	.06**	-.14**	.33**		
6 Quantity of followers	14,875	5,275.96	133,152.302	.11**	-.00	.00	.01	.10**	
7 Quantity of friends	14,875	1,101.78	1,101.780	.11**	.03**	.00	.11**	.08**	.09

Note. ** $p < .01$.

SD = Standard deviation.

Table 1.4
Results of Random Coefficient Model Analysis Predicting Union Support

Effect	Estimate	SE	95% CI		<i>p</i>
			LL	UL	
Fixed effects					
Intercept	-1.220	.730	-2.652	.211	.095
Dimensionality of a union's CAFs	-1.677	.587	-2.827	-.527	.004
Stage (time)	.079	.004	.070	.087	<.001
Dimensionality of a union's CAFs x Stage (time)	.060	.023	.015	.106	.009
Public status	13.460	1.408	10.708	16.231	<.001
Exposure to pro-union frames of others	-.001	.004	-.009	.008	.876
Prior union support	-.091	.010	-.110	-.072	<.001
Quantity of followers	.000	.000	.000	.000	<.001
Quantity of friends	.002	.000	.001	.003	<.001
Pseudo R2	.280				
Random effects					
Intercept	264.963	14.768	237.542	295.549	<.001
Residual	946.669	12.909	921.702	972.312	.000

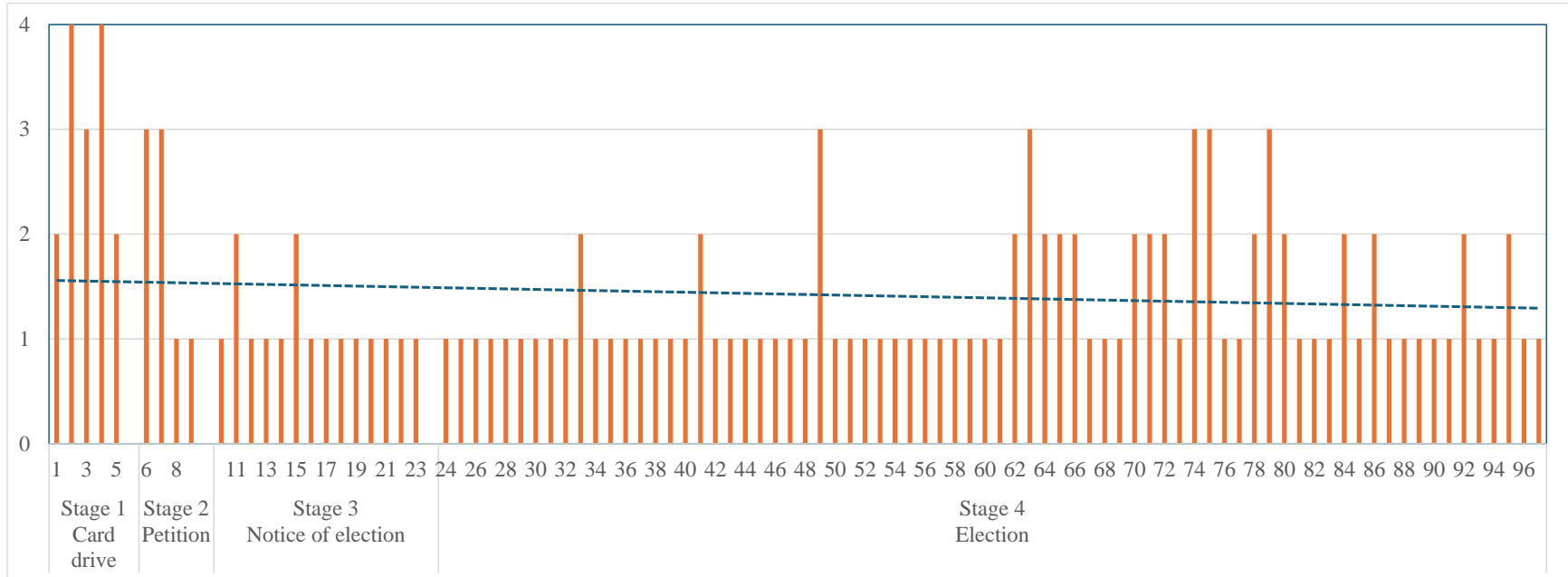
Note. N = 1,974. Observations = 7,896.

Public status, where 0 = expressed union affiliation and 1 = non-expressed union affiliation.

SE = Standard error. LL = Lower limit. UL = Upper limit.

**Figure
Figure 1.1**

Distribution of Collective Action Frames and Dimensionality



CHAPTER 2: DISSEMINATING COLLECTIVE ACTION FRAMES. THE IMPORTANCE OF TIES WITHIN SOCIAL MEDIA

Abstract

Unions create and design collective action frames that reach multiple actors among which potential members and the general public are part of. The current evolution of social media has created an additional route through which unions can disseminate these frames. Similar to face-to-face interactions, unions can establish relationships or ties with members of the public in these virtual spaces, consequently forming social networks. However, these ties can vary in strength, indicating differences in the frequency of interaction, level of familiarity, and degree of affection between the connected parties. These variations in tie strength contribute distinctively to the extent of information dissemination through these networks. Analyzing Twitter data from the first representation process of Amazon workers at a facility in Bessemer, Alabama, I examine how members of the general public interact with a union in social media throughout this process, while also identifying those ties that are key in the transmission of a union's collective action frames within these social networks. A better understanding of the social structures between a union and members of the public can inform unions' strategies to communicate and distribute their frames more effectively, thereby gaining more supporters who can be a crucial balancing force between employers and workers

Introduction

In the evolving landscape of unions attempting to unionize workplaces and industries that have not been yet conquered, the proliferation of social media represents a digital and innovative tool in unions' toolbox to engage with potential members and the general public. The relationships that emerge in social media platforms between the union and social media users call for a deeper understanding of social networks, as complex ecosystems that allow the dissemination of information, ideas, and collective action frames. Rooted in the seminal work of Granovetter (1973, 1983), this study attempts to understand a) how do members of the general public engage with a union in social media, b) what social structures develop between a union and the public in social media, and c) who among those connections are more critical in disseminating a union's collective action frames.

The theory of weak ties (TWT), introduced by Granovetter (1973), suggests that less intimate relationships serve a crucial dissemination role across different groups, enabling the

spread of information far beyond the reach of close and strong ties. This theoretical framework underpins the current study into how unions leverage both weak and strong ties within social media to foster a network of advocates and supporters.

Although the interplay between social media and the strength of ties has been explored in social movements, these empirical studies have revealed that ties may have different roles based on the context and the resources that flow through their networks. Moreover, the strategic utilization of these networks by unions, particularly in the dissemination of collective action frames, remains underexplored. This study aims to contribute to the literature by analyzing the interactions between a union and the public on a social media platform, with a specific focus on Twitter (now called X). By employing data from the Retail, Wholesale, and Department Store Union's (RWDSU) campaign to represent Amazon warehouse workers in Alabama as a case study, this research seeks to unravel the complex interplay between the strength of social ties, network density, and the effective dissemination of collective action frames.

By exploring these dynamics, the study contributes to the broader discourse on social movements, labor unions, and the strategic use of social media in contemporary collective action. It not only sheds light on the social structures that amplify labor movements' messages but also highlights the potential for expanding support for these movements on a broader scale. As unions continue to navigate the challenges and opportunities presented by the digital landscape, this research offers insights into the effective leveraging of social media for organizing and mobilization efforts.

The subsequent sections of this study unfolds as follows: First, a comprehensive literature review is presented exploring key concepts related to social networks, subsequently contextualizing these within the realms of employment relations and the unionization process. Following this overview, hypotheses are formulated. The research methodology employed is detailed next, providing a clear roadmap of the analytical approach taken. This is followed by the presentation of the results, an analysis of the findings, leading to the articulation of conclusions.

Literature review and hypotheses

Social networks and the strength of ties

Social networks can be defined as a collection of social units or nodes, such as individuals, organizations, and events that are connected or tied by one or more relationships, ranging from simple to sophisticated structures and patterns (Kadushin, 2012; Marin and Wellman, 2014).

These social relationships encompass interactions that manifest as transactions comprised of discrete events, which facilitate the exchange of information (Borgatti, Brass and Halgin, 2014). Assessing individuals embedded in social networks moves beyond traditional approaches that focuses on individuals' attributes and their actions as independent within exclusive groups. Instead, social networks recognize individuals and their relationships with multiple groups as the foundation for understanding individuals' behaviors and the outcomes of interest (Marin and Wellman, 2014; Brass, 2022). At the level of network analysis, the emphasis is placed on examining the features of networks - such as their size, connections, and frequency of contact - in order to determine which of these aspects are associated with social phenomena (Wellman and Frank, 2017). Therefore, adopting a social network approach enhances our understanding of social phenomena by recognizing the importance of the relationships individuals maintain.

Central to social network theory are the concepts of homophily and influence. Homophily suggests that social units with similar characteristics or behaviors tend to connect, while influence states that connected nodes influence each other, often leading social units to acquire the same characteristics or behaviors (Kadushin, 2012; Knoke & Yang, 2020; McPherson et al., 2001). This underscores the importance of individuals forming connections even when initial commonalities are scarce. Should they uncover shared characteristics, they are more likely to engage in continued interaction. As these interactions increase, individuals have the potential to adopt each other's characteristics or behaviors, resulting in a greater similarity between them.

Granovetter's (1973) theory of weak ties (TWT) further enriches this perspective by suggesting that the relations, connections, or ties between nodes can be characterized by the amalgamation of various elements that indicate the strength of such ties, included but not limited to familiarity and reciprocity. Nodes may vary in the level of acquaintance; minimal familiarity points to a 'weak tie', while a deep acquaintance suggests a 'strong tie'. In addition, the extent of mutual exchange within a relationship also differentiates the strength of ties, such that limited reciprocity indicates a 'weak tie', whereas considerable reciprocity characterizes a 'strong tie'. This stresses that the intensity of ties can vary across a variety of factors, spanning from minimal to high levels.

Granovetter (1973) posited that within a network of strong ties, information circulates easily among connected nodes, leading to a uniformity of information; however, without links to external groups, this results in information saturation, where unique information remains

confined within the group and no new information is introduced. Nevertheless, it is likely that one or more of these nodes also maintain weak ties with nodes outside their primary group. These external nodes may be connected to other distinct groups. These weak ties facilitate the transfer of information between these otherwise isolated groups. Notably, Granovetter's seminal work in 1973 prominently highlighted the importance of weak ties in job hunting, positioning them as crucial conduits for accessing employment information. His analysis underscores the critical role of ties with low or minimal intensity in facilitating access to information beyond one's primary social group.

However, after examining a decade of studies since the inception of TWT, Granovetter (1983) identified that scholars found that weak ties do not contribute to accessing new information regarding job openings in low socioeconomic groups, unlike weak ties in higher socioeconomic groups. This finding underscored the need to consider additional factors, such as socioeconomic status, in the functionality of weak ties. Granovetter (1983) also acknowledged calls from other scholars to focus more on the nature and frequency of the information being delivered. Strong ties have also proven to be critical. For example, Bian (1997) demonstrated that strong ties can also play a crucial role in jobseekers' networks, especially when these networks are used to obtain favors. This highlights the importance of both assessing strong ties and distinguishing whether information or influence is flowing through the social networks being analyzed. Furthermore, Granovetter (1983) emphasized that features of strong ties, such as motivation, availability, and utility, warrant additional examination, as they may elucidate the significance of strong ties within specific contexts. Although TWT emphasizes weak ties, the findings from subsequent studies underscore the importance of examining both weak and strong ties in greater detail.

Notably, despite a pivot in some areas of social network research, such as organizational psychology and organizational behavior, towards Ronald Burt's theory of structural holes, which emphasizes the strategic advantages individuals or organizations gain by occupying central positions within a network to access diverse information and resources (Brass, 2022), the theory of weak ties remains a cornerstone in the study of information dissemination and social movements.

Social interactions can occur both in physical settings and, increasingly, through online platforms. Evidence supporting the TWT within social media contexts has been substantiated by

several studies. For example, Shi et al. (2014) analyzed popular social media posts over a span of nearly five months, revealing that weak ties significantly bolster content dissemination in Twitter. Complementarily, Bakshy et al. (2012) utilized an experimental methodology to demonstrate the pivotal role of weak ties in information spread on Facebook. Additionally, research by Zhao et al. (2010) within a video-sharing and social media platform indicated that weak ties connect isolated groups, although the selective preference for weak ties does not necessarily correlate with accelerated information diffusion. Heckscher and Mccarthy (2014) argue that contemporary weak ties have become more complex. In the digital age, weak ties traverse broader boundaries, are more dynamic, encompass diverse identities, and exhibit loyalty to multiple groups, which stands in contrast to traditional in-person social structures where the majority of individuals typically engaged with very few groups, with loyalty to a limited number of groups, and with a more homogeneous identity. This evolution reflects a shift to more multifaceted ties. Thus, these studies continue to highlight the significant role of weak ties in enhancing information dissemination within social media platforms.

Social networks in employment relations and the unionization process

The role of social networks extends into employment relations and unionization processes, where they serve as conduits for information dissemination and collective action. Employment relations involve an “institutional structure and behavioral interdependencies in the world of work” (Kaufman, 2004). Within this system, social units include workers, their representatives, and increasingly, identity groups and social movement organizations that support workers (Heery *et al.*, 2008). Unions strategically form ties with other social actors to achieve their goals. These alliances provide unions with communication networks and the ability to mobilize support and resources, whether discreetly, occasionally, or consistently (Frege, Heery and Turner, 2004).

Social networks become critical when informing about unions’ benefits and persuading others to unionize (Naidu, 2022). These networks serve as channels through which collective action frames (CAFs) are crafted, modified, and sustained. CAFs emerge from the dynamic process by which social movements tailor messages or meanings specifically designed for their target audiences (Snow and Benford, 1992). Interpersonal interaction is essential for spreading and adopting collective beliefs or CAFs (Klandermans, 2014). Through these interactions and networks, the power of collective action frames is amplified, making social networks important for the success of union efforts, particularly when organizing the unorganized.

Labor research has identified that strong ties, such as those with people closest to workers, play a crucial role in providing union information. These immediate social networks significantly influence the decision to act collectively and unionize. Key social units in this process include household members (Deshpande and Fiorito, 1989), parents (Barling, Kelloway and Bremermann, 1991; Bryson and Davies, 2019), and friends and coworkers (Gordon and et al, 1980; Griffin and Brown, 2011). If individuals lack close ties with knowledge about unions, this information will likely enter their social groups through connections with other individuals or groups. According to Granovetter's (1973) theory, this knowledge about unions and their messages can be facilitated through weak ties.

Passy and Giugni (2001) demonstrated that social movements attract considerable support through their highly engaged activists. These activists actively seek to connect or establish weak ties with individuals unfamiliar with the movement, providing information and persuading others to join. Similarly, Frangi, Masi and Poirier (2022) examined the social networks developed by Canadian labor unions, focusing on the nature and dynamics of their relationships with various organizations and individuals. Their findings indicate that weak ties, or brief interactions with non-union individuals, were strategic to inform the public about the negative outcomes of bargaining processes, ultimately garnering public support.

In an online setting, Brescia (2020) analyzed how school teachers in Virginia utilized Facebook to organize and inform the public about the actions of the Public Employees Insurance Agency and its effects on the wages and working conditions of public employees. Initially, the network began with a small and exclusive group of people characterized by strong ties. However, the network expanded to include less close relationships, or weak ties, which played a significant role in spreading information. These digital weak ties also created opportunities for these relationships to strengthen through in-person gatherings such as rallies, protests, and walkouts.

Evidence suggests that unions recognize the benefits of using specific platforms based on their perceived capacity to disseminate information. For instance, British unions find Twitter more effective for information sharing than Facebook, anticipating that weak ties can help expand their audiences (Panagiotopoulos, 2021).

The dissemination of collective action frames is critical during a unionization process as it helps shape the perceptions and motivations of both potential union members and the general public. For potential union members, these frames foster a shared sense of identity and purpose

by articulating the injustices faced by workers, proposing solutions, and aligning individual grievances with collective goals. Effective dissemination ensures the message reaches a broad audience, enhancing solidarity and engagement among workers. For the general public, these frames raise awareness about the workers' struggles and the legitimacy of their demands, garnering public support and countering anti-union narratives. By empowering workers with information and encouraging active participation, and by informing and mobilizing public opinion, the dissemination of collective action frames facilitates the momentum necessary for successful unionization efforts.

The potential of weak ties disseminating messages, such as CAFs during a representation process, within the social media context has not been fully explored. On Twitter, the dissemination of messages and ideas is achieved through 'Retweets,' where users repost someone else's 'Tweet' on their personal account, thereby making the post available to their network. Building on the findings of previous research that provide evidence for the TWT and highlight the role of weak ties in the dissemination of information about unions, their attributes, campaigns, and bargaining challenges, I hypothesize that during a representation process on Twitter:

H1: The dissemination of a union's collective action frames is inversely related with the strength of a union tie, such that weak ties are more strongly related to the dissemination of CAF compared to strong ties.

Knowledge and information within a close-knit group of strong ties can become exclusive or redundant without external connections (Granovetter, 1973). This insularity can render CAFs redundant within a social media network closely aligned with the labor movement, limiting their broader appeal and reach. Evidence of this phenomenon can be found on Twitter, which, like other social networking sites, has proven to create spaces where users can connect and exchange information, while also having the potential to form exclusive clusters around certain topics (Bennett, Segerberg and Walker, 2014).

Given the propensity of individuals to gravitate toward those with similar interests, known as the homophily principle, it is anticipated that the dynamics of social media users mirror those observed in face-to-face encounters. Consequently, members of the public or social media users are expected to engage more frequently with peers within their interest group than with the broader network.

Furthermore, Snow and Benford (1988) observed that in the initial stages of a protest cycle, achieving resonance with transmitted frames, encompassing ideas and meanings, can prove more challenging among individuals who are less acquainted with these conceptual frameworks compared to those who possess a deeper familiarity with the ideas being shared. Building on the principle of homophily, as unions initiate their representation efforts, it is expected that social media users with strong ties to a union, rather than those with weaker ties, will be more inclined to rally around a union's representation campaign from its onset. These users are likely to engage more frequently with the union in the early stages of the representation process due to their familiarity with the labor movement. Strong ties are expected to be critical on the momentum and visibility of union campaigns in their formative stages. Building upon these insights, this study posits the following hypothesis:

H2: The relationship between the dissemination of CAF and strength of union tie is moderated by the stage of the union organizing process, such that the relation between strong ties and the dissemination of CAFs is stronger at the early stages of a unionization process compared to that observed for weak ties.

Finally, the concept of network density, defined as the ratio of actual connections to all possible connections within a network (Golbeck, 2013), plays a crucial role in the transmission of information. Kadushin (2012) notes that smaller networks typically exhibit higher density, facilitating more intimate and direct information exchange. In contrast, larger networks, due to their lower density, may rely on weak ties to connect distant parts of the network, as elucidated by Granovetter (1983).

At the early stages of a representation process, it is reasonable to expect engagement of users more familiar with the labor movement with the union's CAFs. Thus, this initial network is likely to be small, with a consequently high network density, meaning a high ratio of actual connections to all possible connections. However, as a unionization campaign progresses and attracts more public attention, including nodes less familiar with unions, the social network surrounding the campaign expands, potentially leading to a decrease in network density. This expansion introduces a greater number of ties that, while less intimate, increase the network's capacity for information dissemination through weak ties.

Importantly, there is evidence that the perception of a large amount of information shared by a large amount of users is more likely to evoke positive emotions in male microblog users,

eventually leading to information sharing (Wang *et al.*, 2017). This suggests that network characteristics, such as density, have a moderating effect on the relationship between tie strength and information dissemination.

Based on this understanding, this study proposes the following hypothesis:

H3: The relationship between the dissemination of a union's CAF and the strength of a union tie is moderated by network density. Specifically, the relation between weak ties and the dissemination of CAFs is stronger in networks with low density compared to those with high density.

Background

As in the first chapter, this second study is conducted using Twitter data from the Retail, Wholesale and Department Store Union's (RWDSU) first effort to represent Amazon warehouse workers in Alabama (See Chapter One: Background).

Method

Data

In this study, I maintain my focus on the 97 collective action frames (i.e., original Tweets) deployed by the Retail, Wholesale and Department Store Union (RWDSU) during their initial union representation campaign in Alabama. This selection is grounded in the premise that these frames more precisely represent the union's strategic and customized efforts to engage with the Twitter audience.

Sample

Gathering network data is challenging and requires close attention to potential issues of validity, reliability, and ethics (Carrington & Scott, 2014). The initial step is to define the nodes for the network analysis, for which it is necessary to specify boundaries (i.e. position-based, event-based, relation-based), followed by an identification of the relations between them (Marin & Wellman, 2014).

The sample for this study is relation-based. As discussed in chapter one, a total of 6,769 Twitter users engaged with the RWDSU's collective action frames (CAFs), specifically their original Tweets or posts. Engagement with the union's CAFs is defined as users 'Retweeting' the union's original Tweets; on Twitter, 'Retweeting' refers to the action of reposting another user's Tweet. Using the Twitter Application Programming Interface (API), data for 2,125 (31%) of these Twitter users were retrieved. From this subset, I identified user accounts with available

network data, resulting in a total of 1,974 (29%) Twitter users. Network information on Twitter includes lists of 'Followers' and 'Following' for each user. Additionally, the tweets or posts of each user were collected for analysis. Consequently, the dataset comprises the list of followers and the list of users followed by each of the 1,974 Twitter users, along with a total of 7,896 observations (i.e., tweets or posts).

The analysis faced a notable limitation due to the smaller subsample of 1,974 users, as compared to the initially identified 6,769 individuals who retweeted the RWDSU's collective action frames (CAFs). This reduction raises concerns about the representativeness of the sample, as the excluded users might exhibit different behaviors or characteristics. The absence of data for a significant portion of the population, possibly due to account inactivity, privacy settings, or other restrictions, limits the ability to fully understand the broader engagement patterns and behaviors within the larger group of social media users. This gap necessitates caution in generalizing findings, as the behaviors and attributes of the unobserved users remain unknown.

The analysis adopts an egocentric network approach, focusing on the constellation of relationships centered around the RWDSU's Twitter account. This method places the social media users engaging with this central node at the forefront of the study, examining their digital connections to better understand the dissemination of the union's messaging on Twitter.

Measures

Dissemination of collective action frames: This process involves individuals on platforms like Twitter, who retweet or repost the RWDSU's collective action frames during various stages of the representation process. The operationalization of this variable is informed by Borgatti et al. (2014), who define engagement or interactions as discrete events facilitating information exchange. The act of retweeting, in particular, is highlighted as a key indicator of engagement with the union's messages, serving as a direct measure of public support for and collaboration in the dissemination of union-related content. Given Twitter's functionalities, retweeting effectively broadens the reach of these frames, introducing them to the wider networks of individuals who follow the retweeter. This action not only raises awareness about the union's messages but also has the potential to increase understanding and support for the labor movement among a broader audience. Accordingly, in this study, the dissemination of collective action frames is quantitatively analyzed by tracking the frequency with which each Twitter user retweets the

union's CAFs, across different stages of the representation process. This approach provides a nuanced understanding of how collective action frames propagate through social networks.

Union ties' strength: In analyzing the network data collected from Twitter, this study delineates two distinct measures of tie strength: connection-based, and familiarity-based.

On Twitter, a social media user A can choose to 'follow' user B's account. This action ensures that user A receives updates on any activity (e.g., Tweets, Retweets) from user B directly on their timeline or through notifications. In this study, *connection-based strength* (CS) arises from examining the 'Following' reciprocity, or the absence thereof, between RWDSU and members of the public who have engaged with the union's collective action frames on Twitter. The variable representing connection-based tie strength is operationalized through dummy coding: a value of 0 is assigned to represent strong ties, denoted by social media users who actively 'follow' the RWDSU account on Twitter, indicating a direct connection. Conversely, a value of 1 signifies weak ties, attributed to social media users who do not 'follow' the RWDSU account, suggesting an absence of a direct link on the platform. This dichotomous coding facilitates the distinction between strong and weak network connections in the context of the study, allowing for a nuanced examination of their respective impacts on the dissemination of collective action frames.

Familiar-based strength (FS) within this analysis is derived from an examination of account descriptions for 1,974 Twitter users available at the time of data collection. Users on Twitter often include in their account bios details that can signal affiliations, identities, or preferences, providing insights into their personal or professional backgrounds. In this study, an in-depth review of these user descriptions was conducted to ascertain familiar-based strength, categorizing it based on the extent to which members of the general public indicated a familiarity with unions. This ranged from explicit mentions of being part of union staff, membership in a specific union or branch, to no stated familiarity with unions at all. This method offers a nuanced understanding of how individual identities and affiliations, as publicly declared on Twitter, relate to the dissemination of the RWDSU's collective action frames. The variable representing familiar-based tie strength is operationalized through dummy coding: a value of 0 is assigned to represent strong ties, denoted by social media users who denoted familiarity with unions, indicating a direct connection. Conversely, a value of 1 signifies weak ties, attributed to social

media users who do not state any relationship with unions, suggesting an absence of a direct link on the platform.

Stages of the representation process: This study delineates the unionization process into four distinct stages, aligning with the RWDSU's campaign activities: the card drive, the filing of a representation petition, the issuance of an election notice, and the election period itself. The tallying of ballots stage is omitted due to the absence of CAFs during this phase. The initial stage, organizing a card drive, spans 30 days, during which there is documented evidence on Twitter of concerted efforts to gather at least 30% of signed cards from Bessemer warehouse workers expressing their desire for union representation. Following this, a 59-day period begins with the RWDSU filing the representation petition and concludes with the National Labor Relations Board's (NLRB) decision to hold an election. The third stage, lasting 19 days, stretches from the NLRB's election notice until the election date. The final stage, covering a 49-day period, encompasses the election process, which was conducted via mail-in ballots in response to the pandemic conditions. The variable stages of the representation process are therefore measured by the number of days within each period, providing a more precise differentiation of the stages within this process.

Network density: In this study, the concept of density within egocentric networks is applied to the social media users engaging with the RWDSU's Twitter account, considering both their existing connections and the potential for additional ties among them. To capture the density of these networks at each stage of the representation process, I identified the actual ties between the 1,974 Twitter users engaged with RWDSU's collective action frames. This involved determining whether these users followed or were followed by other users in the sample. Consequently, connections between users were identified irrespective of direction; for a connection to be counted, it was sufficient to establish that either user A followed user B or user B followed user A.

Additionally, potential ties were estimated by identifying the possible number of connections that could materialize among these social media users, using Equation 2.1, where n equals the number of Twitter users retweeting the union's CAF at a given stage. Consequently, network density was measured as the ratio of actual to potential ties within RWDSU's social network at specific stages of the representation process, following Golbeck's (2013) methodology for undirected network density.

$$\text{Possible connections} = (n \times (n-1)) / 2 \quad (2.1)$$

Collective action frames: In this study, the messages or Tweets generated by the RWDSU throughout the union representation process are classified as CAFs, representing the union's deliberate attempts to craft and disseminate specific meanings to social media users. Conversely, retweets or reposts of RWDSU content during this period are excluded from analysis on the grounds that they do not constitute direct efforts by the union to construct meanings for its audience.

Control variables

Type of account: Similar to other social media platforms, Twitter enables both individuals and organizations to establish accounts, facilitating a broad spectrum of voices ranging from personal to institutional. Consequently, Twitter accounts can be categorized into two distinct types: those belonging to individual users and those maintained by organizations, regardless of their profit orientation. It is critical to note that actions taken by individual accounts typically reflect the views of their owners, whereas those from organizational accounts are likely to embody the perspectives of the institutions they represent, which may not always align with the sentiments of the individuals within these entities. In this analysis, a distinction is made between individual and organizational accounts to account for their potential differential impact on the dissemination of CAFs, recognizing that the nature of the account could significantly influence the reach and effect of disseminated content. The variable corresponding to type of account is operationalized through dummy coding: a value of 0 is assigned to represent organizational accounts, and a value of 1 is assigned to represent individual accounts.

Retweeting pattern: Social media users often exhibit retweeting behaviors that may reflect social desirability biases. To mitigate the influence of such biases, this study incorporates the frequency of retweets across different stages of the representation process as a control variable. This approach allows for an adjustment based on users' general retweeting habits, ensuring that the analysis accounts for varied retweeting patterns and provides a more accurate reflection of engagement levels.

Analytical approach

Social network analysis is the study of social interactions; its focus on links between individuals makes it a structural approach that allows it to cut across numerous disciplines (Freeman, 2004). Social network analysis is a social science paradigm built on theories, methods, and empirical

research (Carrington and Scott, 2014). It is founded on three principal assumptions regarding structural relations and their implications: firstly, that these relations offer a more insightful explanation of behavior than the attributes of individual or collective actors; secondly, that entities' perceptions, beliefs, and behaviors are shaped by the social structures they inhabit, either positively or negatively; and thirdly, that these structural relations are inherently dynamic, evolving alongside the changing interactions among actors (Knoke and Yang, 2020).

To further explore the dynamics of both weak and strong ties and their impact on information flow, one effective approach is the analysis of egocentric networks. Egocentric networks focus on examining the relationships revolving around a central node or core-node, providing a detailed view of individual social connections (Marin and Wellman, 2014; Brass, 2022). This method involves analyzing the members or nodes surrounding the core-node, considering them as the primary unit of study (Wellman and Frank, 2017). Understanding the dynamics of egocentric networks offers valuable insights into how information is disseminated through social connections within a network.

In this study, the focus is on the dissemination of collective action frames (CAF-diss) as the primary variable of interest. The model 2.2 is constructed to predict CAF-diss by incorporating two distinct measures of tie strength: connection-based and familiarity-based. The model integrates the stages of the representation process and network density as moderating variables, both operationalized through interaction terms with the main predictors. Furthermore, the model controls for variations in the type of social media account and retweeting patterns.

$$\begin{aligned}
 \text{CAF-diss} = & \beta_0 \\
 & + \beta_1 \text{ connection-based strength (CS)} \\
 & + \beta_2 \text{ familiar-based strength (FS)} \\
 & + \beta_3 \text{ stages} \\
 & + \beta_4 \text{ CS x stages} \\
 & + \beta_5 \text{ FS x stages} \\
 & + \beta_6 \text{ network density} \\
 & + \beta_7 \text{ CS x network density} \\
 & + \beta_8 \text{ FS x network density} \\
 & + \beta_9 \text{ Type of account} \\
 & + \beta_{10} \text{ Retweeting pattern} \\
 & + e
 \end{aligned}
 \tag{2.2}$$

Given that the dependent variable in the model is count data representing the number of disseminations of CAFs, data dispersion was examined to determine the appropriateness of the Poisson or negative binomial regression models [3]. A Poisson regression analysis was

conducted to examine the relationship between the strength of union ties and the dissemination of collective action frames. Additionally, the analysis assessed the moderating effects of the unionization process stages and network density. However, the goodness-of-fit statistics, including the deviance/degrees of freedom ratio and Pearson Chi-square/degrees of freedom ratio, indicated that the model did not adequately capture the variability in the outcome variable. Given the limitations of the Poisson model in handling over dispersed count data, a negative binomial regression analysis was conducted as an alternative approach. The negative binomial regression model demonstrated good fit to the data, as indicated by the Akaike's Information Criterion (AIC), and Bayesian Information Criterion (BIC) values (Table 2.1). The model adequately captured the variability in the outcome variable and provided a better fit than the traditional Poisson regression model.

The quantity of collective action frames of each stage of the representation process was considered as an offset variable in the negative binomial regression analysis to account for an uneven exposure to the union's messaging throughout the stages. SPSS was used for the analysis, where offset variables are integrated into the model to standardize the rate of occurrence per unit of exposure without directly estimating their coefficients. Despite their invisibility in the output, the influence of offset variables on the regression coefficients remains substantive, as they effectively calibrate the analysis to reflect the true relationship between the independent variables and the dependent count variable, controlling for the effect of exposure size (*Generalized Linear Models Predictors*, 2024).

Importantly, the negative binomial regression model is interpreted in terms of the incidence rate ratio (IRR), which describes the effect of predictor variables on the rate of occurrence of an event. The IRR is a valuable tool as it indicates how the incidence rate changes with a one-unit increase in the predictor variable (Hilbe, 2007). For dummy-coded variables, an IRR greater than 1 suggests that the event rate is higher for the category represented by the dummy variable compared to the reference category, while an IRR less than 1 indicates the opposite. An IRR equal to 1 indicates no difference in the event rate between the categories. For continuous variables, an IRR greater than 1 suggests an increase in the incidence rate, while an IRR less than 1 indicates a decrease. An IRR of exactly 1 signifies no change in the incidence rate with changes in the predictor variable.

Results

Means, standard deviations, and correlations for study variables appear in Table 2.2. These statistics provide an overview of the sample characteristics and the distribution of the variables of interest. Overdispersion of the dependent variable was evident from the descriptive statistics (Table 2.2) and graphical analysis (Figure 2.1), supporting the use of a negative binomial model to appropriately handle this issue.

Figure 2.1 displays the frequencies of dissemination of RWDSU's collective action frames during the representation process. The majority of CAFs (74) were created during the union election and most dissemination (75%) was during that stage. The stage between the notice of election and the election comprised 14 CAFs, which were spread 637 times (22% from total retweets). The first two stages had much less CAFs, 5 during the card drive and 4 between the filing of the representation petition and the Board's decision for an election. Retweets during these stages represented 2% and 1% respectively out of the total amount of retweets. Table 2.3 details those CAFs that were disseminated more times during the representation process. This distribution pattern underscores a pronounced concentration of CAFs towards the campaign's culmination, thereby indicating an uneven exposure to the union's messaging throughout the stages.

Considering the two distinct measures of tie strength, the composition was as follows: connection-based ties showed a distribution of 46.7% weak ties to 53.3% strong ties; and familiar-based ties were skewed with 82.3% weak ties compared to 17.7% strong ties. These distributions highlight a relatively balanced mix of weak and strong ties in connection-based strength (CS), and an overrepresentation of weak ties in familiar-based strength (FS).

Table 2.4 reveals that the egocentric network density across all stages of the representation process was high in comparison to similar sizes of networks studied on Twitter [4], signifying close connections among the nodes orbiting the core node throughout the campaign. A comparative analysis of the stages indicates that the representation petition stage exhibited the highest network density (.081), succeeded by the card drive stage (.059), with the notice of election (.016) and the election stage (.010) displaying even lower densities.

Additionally, within the sample, social media users were predominantly represented by individual accounts, constituting 86.8%, while organizational accounts made up 13.2%.

Before conducting the negative binomial regression analysis, multicollinearity among the predictor variables was assessed using the Variance Inflation Factor (VIF). VIF values were calculated for each predictor to identify potential issues with multicollinearity, which occurs when independent variables are highly correlated. Given evidence of multicollinearity, the variables were centered by subtracting their means to reduce correlation among the predictors. Once the variables were centered, the data was ready for the negative binomial regression analysis. By examining the VIF values post-centering, we ensured that the predictor variables no longer exhibited problematic levels of multicollinearity, thereby validating the reliability of the subsequent negative binomial regression analysis (See Table 2.5).

Table 2.6 presents the estimated coefficients, standard errors, confidence intervals, significance levels, and incidence rate ratios for each predictor variable included in the negative binomial regression model. Model 1 illustrates the main effects, while Model 5 depicts the complete model with interaction terms. Appendix 2A contains the intermediate models, demonstrating the step-by-step inclusion of the variables of analysis.

The first hypothesis predicted that the dissemination of a union's CAF is inversely related with the strength of a union tie, such that the relation between weak ties and the dissemination of CAFs is stronger compared to that observed for strong ties. Table 2.6 shows that the main effect of the connection-based strength (CS) on the dissemination of CAFs exhibits a significant positive relationship ($\beta = .504$, $p < .01$) and an incidence rate ratio (IRR) greater than one, suggesting social media users who do not follow the union account (i.e., weak ties) demonstrated higher dissemination of CAFs compared to those social media users who follow the union account (i.e., strong ties; the reference group). The regression coefficient for the main effect of familiar-based strength (FS) on the dissemination of CAFs is negative and statistically significant ($\beta = -.376$, $p < .01$) and an incidence rate ratio (IRR) smaller than one, suggesting social media users who do not state any relationship with unions (i.e., weak ties) demonstrated less dissemination of CAFs compared to those social media users who denoted familiarity with unions (i.e., strong ties; the reference group)

While the coefficient for connection-based strength (CS) demonstrated a positive and statistically significant effect, familiar-based strength (FS) demonstrated a negative and statistically significant effect compared to strong ties.. Consequently, Hypothesis 1 received partial support through the analysis.

The second hypothesis predicted that the dissemination of a union's collective action frames and strength of union tie is moderated by the stage of the union organizing process, such that the relation between strong ties and the dissemination of CAFs is stronger at the early stages of a unionization process compared to that observed for weak ties. Conversely, the relation between weak ties and the dissemination of CAFs is stronger at the late stages of a unionization process compared to that observed for strong ties. The main effect of stages of the representation process on the dissemination of CAFs exhibits a negative and significant relationship ($\beta = -.015$, $p < .01$), suggesting that as RWDSU moved forward in the representation process, the dissemination of CAFs decreased. Moreover, an IRR smaller than one (.985) indicates that for every increase in the stages of the campaign, there is a .015% decrease in the rate of the dissemination of CAFs, after accounting for other predictors in the model.

The results revealed a negative and non-significant interaction effect between connection-based strength (CS) and the stages of the representation process on the dissemination of CAFs ($\beta = -.004$, $p = .333$). The interaction effect between familiar-based strength (FS) and the stages of the representation process on the dissemination of CAFs was positive and non-significant ($\beta = .003$, $p = .539$). Hypothesis 2 was therefore not supported.

The third hypothesis predicted that the relationship between the dissemination of a union's CAF and the strength of a union tie is moderated by network density. Specifically, decreases in network density (i.e., lower ratio of actual connections to potential connections among nodes surrounding the core-node) will correspond with a stronger relationship between weak ties and the dissemination of CAFs. In other words, as network density decreases, the influence exerted by weak ties on the dissemination of CAFs within the union's network is expected to intensify, thus, the effect of weak ties on the dissemination of CAFs will be more pronounced than in denser social networks. The main effect of network density on the dissemination of CAFs exhibits a negative and significant relationship ($\beta = -18.996$, $p < .01$). An IRR much smaller than one ($IRR < .001$) indicates that for every one-unit increase in network density, the expected count of the dissemination of CAFs decreases dramatically, almost to the point of being negligible, when all other variables are held constant. The relationship implied by the IRR is multiplicative and symmetric, thus it is appropriate to assume that decreases in network density have the opposite effect. Specifically, for every one-unit decrease in network density, the expected count of the dissemination of CAFs increases dramatically.

The main effect of the interaction between connection-based strength (CS) and network density on the dissemination of CAFs evidences a positive and non-significant relationship ($\beta = 3.057, p = .456$). The results showed a negative and significant interaction effect between familiar-based strength (FS) and network density on the dissemination of CAFs ($\beta = -9.042, p < .05$). An IRR much smaller than one ($IRR < .001$) indicates that for every one-unit increase in the interaction between familiar-based strength (FS) and network density, the expected count of the dissemination of CAFs decreases dramatically, almost to the point of being negligible, when all other variables are held constant. Conversely, for every one-unit decrease in the interaction between familiar-based strength (FS) and network density, the expected count of the dissemination of CAFs increases dramatically. Hypothesis 3 was therefore partially supported.

Finally, the results showed a negative and significant effect of type of account on the dissemination of CAFs ($\beta = -.261, p < .001$). An IRR smaller than one ($IRR = .77$) suggests that, relative to organizational accounts, the expected count of CAF dissemination by individual social media accounts is lower, which underscores the differential influence of account type on the dissemination of union messages on social media platforms. The retweeting pattern showed a positive and significant effect on the dissemination of CAFs ($\beta = .002, p < .001$). An IRR of 1.002 indicates a very slight increase in the event rate for each one-unit increase in the independent variable, holding all other variables constant. Specifically, this IRR suggests that for every one-unit change in the retweeting pattern, the expected count of the dissemination of CAFs increases by a factor of 1.002, or 0.2%. This change is minimal, implying that the retweeting pattern has a very small positive effect on the likelihood or rate of the observed outcome and close to be negligible, indicating that while there is a statistically detectable effect, its magnitude might not be substantial or meaningful.

Discussion and conclusion

The results from testing the hypotheses in this study provide important insights into the dynamics of weak ties, strong ties, stages of the representation process, and network density in the context of disseminating CAFs. The analysis shows that connection-based weak ties play a more crucial role in the dissemination of CAFs compared to familiar-based weak ties. This suggests that social media users who do not ‘follow’ RWDSU’s account are effective in spreading union-related messages within social media, highlighting the importance of weak ties in union campaigns.

Advancements through the stages of the representation process are associated with a decrease in the dissemination of CAFs. Moreover, increases in network density significantly amplify this reduction, leading to a more pronounced decrease in the spread of CAFs. This suggests that the early stages of the representation process are more crucial for the effective dissemination of CAFs than the later stages, and that the context or timing within the campaign process can reduce the spread of CAFs. Additionally, it highlights the importance of maintaining a network with low density—a characteristic of large networks—for the optimal spread of CAFs.

The capability of weak ties to disseminate information corroborates Granovetter's (1973) TWT and aligns with empirical evidence that has found support for the theory (e.g. Bakshy et al., 2012; Shi et al., 2014; Zhao et al., 2010). In the realm of social media, one might question how these connection-based weak ties initially encounter the union's CAFs. On a platform like Twitter, members of the general public or users not following the union's account typically discover CAFs through their connection-based strong ties—users they 'follow'. For instance, if User A, who 'follows' the RWDSU account (i.e., a strong tie), retweets a CAF from RWDSU, this action appears in the feed of User B, who 'follows' User A but does not 'follow' RWDSU directly. User B, representing a weak tie, may then choose to retweet these CAFs, but the exposure originates from their connection to A, a strong tie. While this study validates the significant role of weak ties in spreading information on social media, it underscores that the initiation of this dissemination process largely hinges on strong ties.

Additionally, the results indicate that networks with lower density, as opposed to tightly knit social structures, are more conducive to the spread of CAFs. This suggests that while connection-based strong ties act as crucial conduits to reach weak ties, who in turn amplify the dissemination of CAFs, merely increasing the number of strong ties could be harmful for spreading information. Therefore, for the RWDSU or similar core nodes, the focus should be on maintaining and nurturing existing strong ties rather than expanding them. This strategic approach may maximize the potential for information dissemination through the intricate interplay of strong and weak ties within less dense networks.

Heckscher and Mccarthy's (2014) analysis offers insightful guidance on maintaining current ties, portraying the internet-facilitated contemporary relationship structure as a multifaceted web where individuals harbor multiple, independent loyalties. This complexity signifies that individuals can identify with and commit to various groups, which may not

necessarily share aligned objectives. On social media platforms, users tend to value relationships that are “fluid, diverse, expressive, participative, decentralized. They seem to reject all formal organization and leadership [...]” (Heckscher & Mccarthy, 2014, p. 644). According to Heckscher and Mccarthy’s (2014) this environment suggests that the core node should engage not from a hierarchical stance but as an equal participant, where its centrality is derived from the relevance and meaningfulness of the information it provides. This approach is exemplified in Brescia’s (2020) study of school teachers who utilized Facebook to disseminate information to public employees, subsequently mobilizing them for collective actions. In this scenario, the Facebook account became a pivotal information hub not because of an imposed hierarchy, but because it became a valuable resource for Virginia's public employees, thus positioning it at the core of the network.

One limitation of this analysis is the reduced subsample of 1,974 users, in contrast to the initially identified 6,769 individuals who retweeted the union's CAFs. This reduction raises concerns regarding the representativeness of the sample, as it is possible that the excluded users could display different behaviors or characteristics. The inability to obtain data for a substantial portion of the population limits our capacity to fully comprehend the broader engagement patterns and behaviors among the larger cohort of social media users. Consequently, caution must be exercised when generalizing the findings, as the behaviors and attributes of the unobserved users remain undetermined.

Social media and social movements

While the primary emphasis of this chapter is directed towards examining the social structures inherent within social media platforms through which unions, akin to other social movements, propagate information, it is pertinent to acknowledge the existing body of evidence concerning the utility of social media for social movements. This consideration is crucial for situating the current study within the broader discourse on digital activism, thereby illuminating the multifaceted ways in which online platforms serve as vehicles for information dissemination, mobilization, and the fostering of collective identities among social movements.

The discourse surrounding the impact and significance of social media within social movements has elicited a wide range of scholarly perspectives, ranging from optimistic to pessimistic interpretations (Kidd & McIntosh, 2016 provide a detailed discussion). Despite the

breadth of theoretical positions, there remains a noticeable opportunity for empirical research to substantiate these views.

Social media can foster a more engaged and informed youth demographic, capable of bridging disparate social groups and catalyzing collective action through the nuanced dissemination and reception of critical, diverse content. For example, Hwang and Kim (2015) found that intention of social movement participation was enhanced among Korean young adults using social media. This enhancement was higher among users who were also performing as bridges of social capital (i.e., weak ties) through the exchange of information and opinions, learning from diverse perspectives, understanding important societal issues, and accessing specialized information.

The social structures we see within social media, characterized by a high regard for diversity, expression, participation, and decentralization, demand a reimagined approach to union organizing that aligns with the values and expectations of contemporary social networks.

To further understand the complexities of social media's role in union campaigns and social movements, future research should consider combining qualitative and quantitative data. Quantitative data can provide insights into patterns and trends in the dissemination of collective action frames, while qualitative data can offer a deeper understanding of the contextual and experiential aspects of these processes. For instance, interviews or focus groups with social media users and union members could reveal nuanced motivations and perceptions that drive engagement and support. Combining these methods would enrich the analysis, offering a more comprehensive view of how and why certain messages resonate within digital networks. This mixed-methods approach can help uncover the underlying mechanisms of digital mobilization and provide actionable insights for designing more effective union campaigns.

Tables

Table 2.1

Model Comparison for Goodness of Fit

Model	Deviance	Pearson chi-square	Log Likelihood	Akaike's Information Criterion (AIC)	Bayesian Information Criterion (BIC)	Deviance/ df	Pearson chi- square/ df
1 Poisson	3,861.79	9,856.31	-4,149.42	8,320.84	8,397.56	.49	1.250
2 Negative Binomial	2,645.60	8,046.68	-4,441.29	8,904.58	8,981.30	.34	1.021

Table 2.2
Means, Standard Deviations, and Correlations

Variables	n	Mean	SD	1	2	3	4	5	6
1 Dissemination of CAF's	7,896	.34	.82						
2 Connection-based strength (CS)	7,896	.47	.50	.09**					
3 Familiar-based strength (FS)	7,896	.82	.38	-.05**	-.17**				
4 Stages	7,895	39.25	15.66	.09**	.00	.00			
5 Network density	7,896	.04	.03	-.39**	.00	.00	.45**		
6 Type of account	7,896	.87	.34	-.07**	-.12**	.32**	.00	.00	
7 Retweeting pattern	7,896	72.15	100.75	.12**	-.06**	.06**	.22**	.06**	.06**

Note. ** $p < .01$.

Table 2.3
Most Disseminated Collective Action Frames

N.	Stage	Collective action frame	Retweets
97	4	<p>Thank you to everyone around the country and the world who has stood in solidarity with us! 🙏</p> <p>You have given us hope, strength, and the courage to fight for our union — and for racial and economic justice #UnionYes</p>	341
58	4	<p>https://t.co/GJiOZhfTmf [An image of a giant ship stopped by a pile of soil gathered by a tractor. The giant ship is described as "The power of workers organizing for a Bamazon union." The tractor is described as "The boss's tweets."]</p>	256
11	3	<p>Our fight to build power and unionize our facility began with workers talking to workers. Today, the @nytimes shared the critical story of how our fight to form a #union came to be. https://t.co/WzMGXn43Yq #1U #UnionStrong</p>	195
88	4	<p>Good morning to everyone in Bessemer, Alabama who is ready to make history!</p> <p>Today is the cut-off for mail ballots to be received by the NLRB for the count 🙏💧 #UnionYes</p>	191
19	3	<p>Today, we witnessed the incredible #solidarity of the #labor movement! In the pouring rain, #unions & the public came together to show support for our fight. We're making history, and we have the support of millions all over the world. #BAmazonUnion VOTE #UnionYES! #1U https://t.co/XackxjYIVZ</p>	135
18	3	<p>Thank you @BernieSanders for sending some piping hot #pizza to our rally in the pouring rain! Your team made us feel empowered today, thanks for having our and @RWDSU's back! #BAmazonUnion VOTE #UnionYES this week, the world stands with us! #1U #Union https://t.co/lnYwtzfgnJ</p>	132

Table 2.3 (cont'd)

N.	Stage	Collective action frame	Retweets
34	4	Our neighbors in Birmingham have a lot of ❤️ for the #BAmazonUnion. This fight is about strengthening our whole community! #UnionYes https://t.co/jpIAUkenei	117
28	4	Just now, @POTUS shared his support for our fight! He is with us, and supports our fight for a union at @Amazon! #BAmazonUnion #Union #1U https://t.co/kX5173CWb1	104
27	4	BREAKING: @mrdannyglover came to the @amazon BHM1 gate today to urge us to VOTE UNION YES! WATCH NOW! #1U #unionyes #BAmazonUnion #union https://t.co/w4Q9jOgCbG	70

Table 2.4
Network Density

Stage	Nodes	Potential connections	Actual connections	Density
1. Card drive	17	136	8	.059
2. Representation petition	46	1,540	125	.081
3. Notice of election	488	118,828	1,947	.016
4. Election	1,536	1,178,880	11,898	.010

Table 2.5
Variance Inflation Factors (VIFs) Pre- and Post-Centering

Predictor	VIFs pre-centering	VIFs post-centering
Connection-based strength (CS)	7.602	1.033
Familiar-based strength (FS)	7.602	1.033
Stages of representation process	9.225	1.249
CS x Stages	10.482	1.285
FS x Stages	15.335	1.285
Network density	9.224	1.249
CS x Network density	4.960	1.288
FS x Network density	9.813	1.289

Note.

1 < VIF < 5: Indicates moderate correlation but is usually not enough to warrant concern.

VIF > 5: Suggests significant correlation, and multicollinearity may be a problem.

Table 2.6
Negative Binomial Regression Analysis Predicting Dissemination of CAFs

Variable	Model 1			Model 5		
	β	SE	IRR	β	SE	IRR
Intercept	-4.631	.086	.010**	-4.667	.088	.009**
Connection-based strength (CS)	.423	.053	1.527**	.504	.114	1.655**
Familiar-based strength (FS)	-.160	.069	.852*	-.376	.122	.687**
Stages of representation process	-.016	.002	.984**	-.015	.002	.985**
CS x Stages				-.004	.004	.996
FS x Stages				.003	.005	1.003
Network density	-17.915	1.944	<.001**	-18.996	2.0921	<.001**
CS x Network density				3.057	4.102	21.259
FS x Network density				-9.042	4.317	<.001*
Type of account	-.265	.075	.767**	-.261	.074	.770**
Retweeting pattern	.002	.000	1.002**	.002	.000	1.002**

Note. N = 1,859. Observations = 11,154. ** $p < .01$; * $p < .05$.

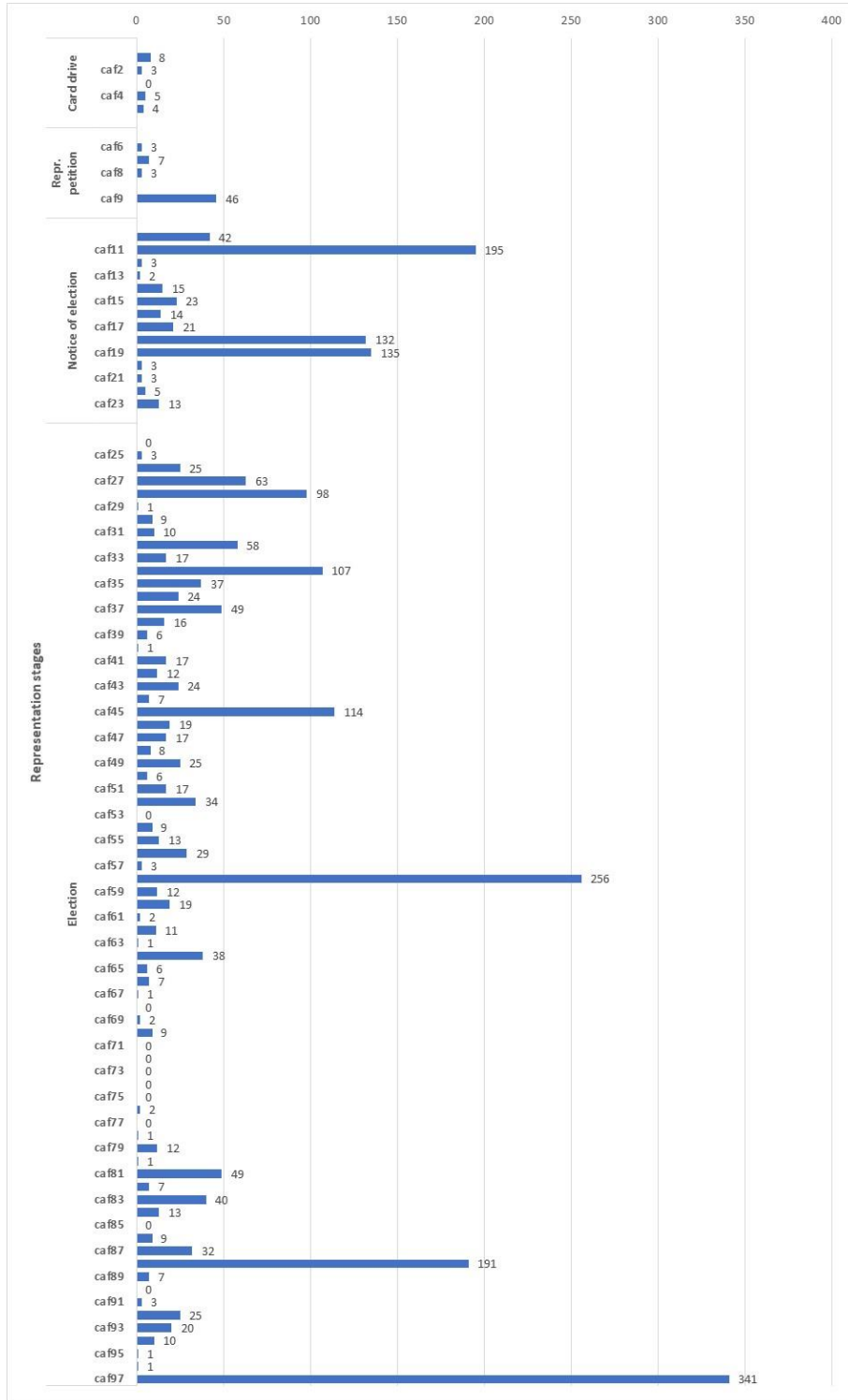
CS, where 0 = user ‘follows’ the union account (strong tie) and 1 = user does not ‘follow’ the union account (weak tie).

FS, where 0 = expressed union affiliation (strong tie) and 1 = non-expressed union affiliation (weak tie).

Type of account is 0 for organizational and 1 for individuals. SE = Standard error. CI = confidence interval. IRR = Incidence Rate Ratio.

**Figure
Figure 2.1**

Frequencies of Disseminated Collective Action Frames



CHAPTER 3: FROM MARGINALIZATION TO LABOR ORGANIZING: INDEPENDENT UNIONIZATION IN NORTH CAROLINA

Abstract

The pandemic has exposed society's critical reliance on workers in certain sectors while simultaneously highlighting the vulnerabilities these workers face. Often lacking economic alternatives, these workers must continue working under conditions that pose significant health risks. Notably, a significant surge in labor activism has emerged among workers. Surprisingly, efforts to establish a collective voice have arisen in industries previously avoided by the labor movement, as well as against powerful and notoriously anti-union employers. Furthermore, this resurgence of the labor movement is occurring in the US South, a region historically characterized by low union density and minimal union organizing activity. This paper is a critical case study as it examines the emergence of an independent union among Amazon warehouse workers in North Carolina. Employing the political context framework and the life-history method, this study examines the emergence of a grassroots independent union in a right-to-work state, challenging the second largest employer in the country. Specifically, I find that once an opportunity to change the status quo is perceived, the emergence and strategic capacity of an independent union rely heavily on its worker-leaders, whose backgrounds are marked by systemic discrimination and shared experiences of workplace exploitation. This process is driven by the interplay of context, a window of opportunity, cognitive liberation, and relational mechanisms.

Introduction

Labor movements in the US South have been shaped by its historical, economic, and racial dynamics. North Carolina, characterized by systemic inequalities and a growing immigrant workforce, becomes then an important context to examine any potential labor activity. Specifically, as Amazon established its operations in this right-to-work state, it became increasingly relevant to the labor movement initiatives. This chapter examines the independent organizing efforts at an Amazon facility in North Carolina, highlighting the interplay of context, a window of opportunity, cognitive liberation, and relational mechanisms. This study is particularly valuable as it provides rare insights into the organizing efforts of workers against a major and resourceful employer, Amazon. Typically, researchers have limited access to such phenomena while they are unfolding, as organizing activities are often kept clandestine to avoid

employer retaliation. Consequently, most analyses occur post-factum, when the details are less immediate and harder to verify. By capturing data during the active phase of union emergence, this study offers a unique and timely perspective on the dynamics of labor organizing in real-time, contributing significantly to the understanding of labor movements within powerful corporate environments.

The analysis is grounded in the political context framework (Kriesi, 2007, 2011), balancing both external and internal dynamics of Carolina Amazonians United for Solidarity and Empowerment – CAUSE while taking into account the structural inequities rooted in historical discrimination. This analysis is conducted through workers' narratives about their life experiences, their work experiences at Amazon, and their motivations for leading an independent union. The concepts of windows of opportunity (Kriesi, 2007, 2011), cognitive liberation (Kriesi, 2007, 2011), strategic capacity (Ganz, 2000), and structural racism and systems of oppression (Lee and Tapia, 2021) are central to this discussion, which aid in the understanding of the emergence of an independent union in the South. This study seeks to understand: How can we explain the emergence of a grassroots independent union in a right-to-work state against the second largest employer in the country? How do internal dynamics within this Amazon facility in North Carolina, influenced by broader structures, contribute to the emergence of an independent union?

The findings reveal that once an opportunity to change the status quo is perceived, the set of workers-leaders at CAUSE, shaped by personal histories of systemic-discrimination, determination, and collective experiences of exploitation in the workplace, is critical to the emergence of the organization, and the later development of strategic capacity.

This study contributes to the literature of labor movements by underscoring the unique interplay of race, economic disparities and corporate labor control in the South. The significance of this study lies in its documentation of the emergence of organizing efforts in the South, an area marked by challenging economic and political conditions. Despite these adversities, the formation of an independent union at an Amazon facility indicates the potential for a trickle-down effect, signaling windows of opportunity for other Amazon workers interested in improving their working conditions. These efforts demonstrate that, even in disadvantageous environments, meaningful change is possible. By providing evidence of these organizing seeds taking root, this study illustrates how labor organizing initiatives can inspire other workers to

resist political and corporate structures that often prioritize economic interests over human welfare. Furthermore, it highlights the importance of leadership in shaping the trajectory of independent unions, offering insights into the challenges they must navigate to achieve their goals. This study underscores the potential for broader labor movements to gain momentum, offering hope and a blueprint for similar initiatives across the region and beyond.

Literature review

A theoretical framework to understand the emergence of movements

The study of the social movements, such as the labor movement, is multidisciplinary, with scholars developing and refining various theoretical approaches to better understand these social phenomena. When researching social movements, scholars often examine a group of people engaged in conflict with an opponent employing a repertoire of collective actions (Kriesi, 2011). Thus, similarly, analyses of the labor movement might focus on workers who are in conflict with their employers; these conflicts typically manifest through a range of collective actions, including shop floor activities, petitions, rallies, strikes and unionization. Among the theoretical approaches to studying movements, the political process model is particularly noteworthy. This model emphasizes the importance of context as a key factor in understanding the emergence of movements (Kriesi, 2011). Within this model, 'context' encompasses the political, economic, cultural, and legal environments that shape movements (McAdam and Tarrow, 2018). Notably, the political process model posits that individuals undergo a significant shift in awareness and consciousness, recognizing their situations as unjust and understanding that collective action can bring about change (Kriesi, 2011). McAdam and Tarrow (2018) describe this awakening as cognitive liberation. The understanding of these two main elements of the political process model, context and cognitive liberation, allows us to explore the detailed components of a key framework for analyzing social movements: the political context framework.

In this paper, I build on the framework introduced by Kriesi (2007, 2011) for analyzing the political context of social movements, which encompasses structures, power configurations, and interaction contexts. This framework is particularly relevant in the study of labor movements, as it helps to understand how the interplay of structural variables shape the configuration of political actors such as unions and collectives of workers. These actors are then linked to agency and subsequent action through interaction contexts (Kriesi, 2011).

A crucial element within the structures is the political opportunity structure. This concept describes how a system either facilitates or restricts the development of social movements (Kriesi *et al.*, 1995), and their subsequent ability to interact with the political system and influence decision-making (Kriesi, 2011). The system's openness to social movements, and consequently their potential success, depends primarily on the availability of access points or windows of opportunity for influencing decision-making, as well as on the dominant cultural models or strategies, which range from repressive to collaborative, used to handle challengers (Kriesi, 2007, 2011).

Power configurations, which are more dynamic than structural elements, encompass protagonists or challengers, antagonists or repressive agents. These configurations, shaped by the political structures, are notably more adaptable than the structures themselves. A configuration merely outlines potential conflict; it considers the capabilities of these actors, their perceptions of achievable goals, and the degree to which their interests align with those of others (Kriesi, 2011). According to McAdam, Tarrow and Tilly (2001) and Tarrow (2011), individuals engage in collective action when they perceive opportunities that suggest a likelihood of success in achieving desired outcomes, or when they encounter perceived threats, such as the costs and risks associated with both taking action and remaining inactive. Importantly, McAdam and Tarrow (2019) identify two main sources that shape the perception of opportunities and threats: changes in the composition or alignment of institutional actors, and destabilizing events. The former encompasses social actors either entering or exiting the system, shifts in how movements are repressed, and influential allies or supporters from both within and outside the system. The latter includes economic crises.

The interaction contexts encompass mechanisms that connect structures and configurations with agency and subsequent strategic behavior, which evaluates the costs and benefits of collective action (Kriesi, 2007). McAdam, Tarrow and Tilly (2001) suggest that these mechanisms include environmental influences, cognitive shifts, and relational changes. Environmental mechanisms relate to external forces that influence social life and function within the context of challengers (McAdam, Tarrow and Tilly, 2001; Tarrow, 2014). Environmental mechanisms within the political context framework are closely aligned with the element of *context* identified in the political process model by Kriesi (2011). For instance, an economic downturn impacting people's ability to participate in collective action. Cognitive mechanisms

entail shifts in both individual and collective perceptions of a specific situation, precipitating action and operating internally within individuals (McAdam, Tarrow and Tilly, 2001; Tarrow, 2014). Cognitive mechanisms within the political context framework correspond to the concept of *cognitive liberation* as outlined in Kriesi's (2011) political process model. For example, workers viewing their wages as unfairly low and becoming aware of what could change via collective action. Relational mechanisms involve changes or increases in interactions between individuals and groups, thereby shaping their relationships (McAdam, Tarrow and Tilly, 2001; Tarrow, 2014). For instance, alliances between different labor unions or between unions and other social justice organizations given their shared interests. Moreover, McAdam and colleagues (2001) assert that these mechanisms operate when "we see interactions among the elements in question altering the established connections among them" (p. 26).

Scholars have employed the political context framework to analyze labor-related social phenomena by focusing on understanding the emergence of social movements, explaining a movement's mobilization, and studying the outcomes of movements. For example, Mello (2007) examined the emergence of labor militancy in Turkey. This study illustrates the interplay of environmental, cognitive, and relational mechanisms. Mello (2007) identified how the confluence of historical and structural changes, emerging political opportunities from legislative reforms, perceptions of these opportunities by labor activists, and the expansion of labor organizations together provide a comprehensive explanation for the rise in labor militancy. Using the case of labor protests in China, Yang (2015) also applies the political context framework to identify the conditions conducive to the success of widespread labor protests. Their analysis highlights four critical elements within that specific political context: individual motivations for participating in protests, the perception of the protests as low threat by the ruling party (i.e., cognitive mechanism), the network of connections among potential protesters (i.e., relational mechanism), and the effectiveness of collective action framing. Similarly, Tapia, Elfström and Roca-Servat (2018) examine a campaign in the United States led by immigrant workers in the carwash industry. The study highlights the relational mechanism through the formation of a coalitional network among workers, community, labor, environmental organizations, and immigrant groups. This coalition was instrumental in compelling employers to adhere to safe working standards, engage in negotiations, and sign collective bargaining agreements.

McAdam and Tarrow (2019) emphasized that achieving an analytical balance between the external and internal dynamics of a movement is critical. While external dynamics become apparent when analyzing the political opportunity structure and context within the political context framework, internal dynamics are more evident in the examination of power configurations, cognitive mechanisms, and the agency of actors. Internal dynamics within a movement are primarily driven by a set of engaged individuals, a resource that is crucial for the movement's development (McCarthy and Zald, 1973; DeCesare, 2013). Therefore, leadership, as a key internal resource of the movement, warrants attention. However, despite the importance of leaders and leadership in social movements, scholars have highlighted that leadership within social movements remains unexplored and undertheorized (Morris and Staggenborg, 2004; DeCesare, 2013; Ganz and McKenna, 2018; Tapia, Elfström and Roca-Servat, 2018). Ganz (2000) highlights the significance of leadership by comparing the performance of two labor unions involved in organizing farm workers. He argues that variations in unions' outcomes are more effectively explained by their strategic capacity. This capacity, according to Ganz, results from "differences in leaders' life experiences, networks, and repertoires of collective action and the deliberative processes, resource flows, and accountability structures of their organizations" (p. 1005). Therefore, the interaction between leadership and organizational structure plays a crucial role.

Importantly, DeCesare (2013) argues that it is problematic that scholars have limited the analysis of leadership to individuals already integrated within social movement organizations, to those holding a formal or official position within an organization, and to those designated as leaders by scholars. According to DeCesare (2013), this approach significantly limits our understanding of the leadership and the dynamics of interaction and collaboration that contribute to the development and success of emerging social movements.

Significantly, scholars have highlighted a broad and cross sectional issue in social movement research, the need to integrate an understanding of structural forces, such as racism and oppression. Leaders lives are "deeply embedded in community institutions" (Morris and Staggenborg, 2004, p. 184). Lee and Tapia (2023) emphasize the importance of addressing a critical factor in the study of social movements in the United States: the impact of structural racism and systems of oppression. They argue that a deeper understanding of these forces is essential for a comprehensive analysis of social movements. These structures and systems not

only impede endeavors to alter the existing state of affairs but also influence the identity, history, strategies, and ultimately the ability of those leading a social movement to successfully accomplish their goals. Moreover, solidarity-based labor movements and their leaders have often arisen not only in favorable circumstances but also in unlikely settings, such as the Deep South where racial oppression persists (Goldfield, 2006).

In the following empirical analysis, I apply the main concepts of the political context framework to understand the emergence of a social movement, addressing the leadership gap emphasized by scholars, and considering how societal factors contribute to racial discrimination. Specifically, this analysis examines the formation of an independent union at an Amazon facility in North Carolina. I begin describing the context, and then focus on the ‘window of opportunity’ presented by the pandemic and Amazon’s repressive cultural models. Additionally, I explore the power configurations of the new union, its leadership shaped by the political structure, and how environmental (i.e., context), cognitive (i.e., cognitive liberation), and relational mechanisms transform these configurations into collective action. Leadership is examined through the life histories of workers spearheading unionization efforts. Throughout the analysis, I highlight instances where structural discrimination is often overlooked. By incorporating an internal analysis of leaders’ life experiences and examining structural issues, the political context framework is enriched to better explain the emergence of a labor movement in the Deep South.

Method

Analytical approach

This study employs the life-history method, which is a “variation on traditional depth interviewing” (Berg, 2009). In this approach, participants share all or part of their lives, focusing on specific events experienced by the study’s participants that are carefully explored (Labaree, 2006; Olive, 2014). Through life history research, we understand social phenomena at the collective level by delving into the experiences and challenges of a few individuals (Cole and Knowles, 2001). The life history interviews require flexibility, given that each participant’s lived experiences differ from one another (Labaree, 2006).

Capturing life histories attempts to give “voice to the experienced life, particularly for those whose voices may be unheard or deliberately ignored or suppressed” (Labaree, 2006, p. 123). To develop a contextualized understanding, the researcher makes questions that can be intrusive, personal or touch sensitive cords in the interviewee, which requires “developing and

operating from an ethic of care for research participants and relationships established as part of a research endeavor” (Cole and Knowles, 2001, p. 30). This ethical consideration mirrors the approach recommended by Gioia, Corley and Hamilton (2013), where researchers act as knowledgeable agents and prioritize the participants' interpretations and experiences.

Importantly, the interview process in the life history method reflects a circular pattern of fieldwork and literature exploration (Hagemaster, 1992). The research approach involved interviewing worker-leaders of an emerging independent union to learn about their life experiences and understand the emergence of their labor organization. Following these interviews, I engaged with the literature and theoretical frameworks to interpret the observed phenomena. Next, the integration of theoretical considerations was undertaken to address the research questions initially defined for this study. This critical analysis revealed that the framework overlooked key elements, such as the role of leadership and systemic issues impacting the emergence of the union. This process aligns with the perspective of Ann Langley, as cited in Gehman et al. (2018), who acknowledges that qualitative research often involves cycles of both deduction and induction, namely abduction, linking empirical findings with theory to further enhance the latter. As stated by Alvesson and Kärreman (2007) “this approach includes an interest in problematizing and rethinking dominating ideas and theory, when empirical impressions encourage such need for novel thinking.” This approach highlights the importance of revisiting and refining theoretical frameworks to capture the complexity of social phenomena accurately.

Data

For this study, I consider a) data collected from semi-structured interviews with workers leading unionization efforts in North Carolina (NC hereafter) and b) secondary data.

Researchers can often assume a range of roles within the data collection process, positioning themselves on a continuum from full participation to full observation (Merriam and Tisdell, 2016). As part of another nation-wide research project, I was able to be in NC for two weeks in October 2022. While serving as a research assistant for that project, I had the opportunity to meet and observe the workers leading the organizing efforts among Amazon warehouse workers. These workers are part of Carolina Amazonians United for Solidarity and Empowerment (CAUSE). Initially, my role was that of an observer-as-participant, where participation in the group is secondary to data gathering (Gold, 1958; Merriam and Tisdell,

2016). This initial contact allowed me to participate in some zoom meetings in the weeks following my stay in NC and conduct remote observation. However, my role quickly evolved to that of a participant-as-observer, in which I spent more time actively participating and informally observing these workers-leaders (Gold, 1958). From the relationship I developed with one of CAUSE's leaders, the idea of a practitioner-researcher collaboration for this study emerged. Consequently, a second one-week field trip was possible in May 2023, which allowed me to continue nurturing these relationships while also learning from and observing the challenges of organizing in NC. From June 2023 to date, I have held biweekly online meetings with the collaborative partner at CAUSE to gain insights into their organizational achievements, challenges, and activities, assuming again the role of observer-as-participant. Furthermore, as an activist scholar, I employed a non-extractive research approach in this study. This collaborative approach involved facilitating knowledge transfer in navigating grant applications and fostering networking opportunities between CAUSE leaders and other labor and academic organizations when possible. Importantly, this collaboration aims to ensure a research process that is mutually beneficial while maintaining the researcher's focus on the primary objectives of the study.

A total of nine semi-structured interview sessions were conducted between March and August of 2023, for which the contact-leader has collaborated and participated as co-interviewer. The degree of collaboration and participation of interviewees as co-researchers increases first the usefulness of the findings and second "participants' sense of being in control of, deliberative about, and reflective on their own lives and situations" (Patton, 2002, p. 269). A set of questions were used to explore the interviewees' identities, key life events in forming these identities, and the context of such key life events (Appendix 3A). Interviewees were asked to share their understanding of leadership and to self-assess their role as leaders in their workplace. Interviews were done individually and lasted between 1 to 4 hours in total, three interviewees required more than one session to cover the planned topics. Once transcriptions of these initial interviews were ready, coding and theme identification followed.

Secondary data included social media posts, 41 semi-structured interviews with Amazon workers in Alabama and NC, media outlet publications, public interviews, institutional reports, social media, as well as informal communications with other NC leaders.

Sample

I collaborated with the contact leader to inform the leading members of the CAUSE about the goal of the study. All of them agreed to participate. In this study, participants are addressed with pseudonyms to protect their identities. Isaac, a 40-year-old Black male, plays a central leadership role. Debbie, a 70-year-old Black female, leads the inspirational aspect of the movement, focusing its energy on their primary goal. Chris, a 27-year-old Black female, leads strategic networking and fundraising initiatives. Luis, a 28-year-old Latino male, is responsible for strategic organizing design. Lastly, Latasha, a 53-year-old Black female, is a leader supporting unionizing efforts at the periphery. Together, these diverse voices contribute to a comprehensive understanding of the internal and external dynamics at CAUSE.

Background and results

Challenges and Dynamics of Labor in North Carolina

Labor movements in North Carolina, deeply intertwined with racial dynamics, trace their origins to historical exploitation of African Americans (Goldfield, 2006) and ongoing economic disparities affecting both the Black community and other minority groups, including Latinos. The history of labor in the state reflects a legacy of systemic racism, with organizations like the Knights of Labor initiating chapters as early as 1884 (NC State AFL-CIO, no date) and significant movements like the sit-in movements of the 1960s establishing the groundwork for future activism (Morris and Clawson, 2006; Dillahunt-Holloway, 2023).

Contemporary labor challenges in North Carolina are characterized by persistent economic disparities, as evidenced by a poverty rate higher than the national average and a minimum wage that falls significantly below the living wage (Henderson, 2023; Glasmeier, 2024). North Carolina is ranked 52nd in the Best States to Work Index 2023, making it the lowest-ranked state with an overall score of 7.57. The state scores poorly across three policy dimensions, with a wages-score of 5.39, a worker protections score of 15.48, and a rights to organize score of 0 (Henderson, 2023). This consistent bottom ranking over the past five years highlights the state's lack of supportive policies for wages, worker protections, and labor rights. North Carolina's hostile environment for unionization and collective bargaining, inadequate minimum wage policies, and minimal worker protections underscore the significant barriers that labor organizations face in their efforts to improve working conditions.

This economic and political backdrop sets the stage for the emergence of independent unions in the South, a region characterized by states' pro-corporate stances, marked by generous tax exemptions and lax enforcement of labor laws that favor corporate interests over workers' rights (e.g., Todd, 2021).

Significant immigration, particularly from Latin American countries (For further details, see Gutiérrez, 2016), has reshaped the workforce, introducing new dynamics between Black and Latino workers and further complicating labor relations. The influx of low-wage labor, especially undocumented immigrants, contributes to these tensions, influencing labor market competition and perceptions within the community (McClain *et al.*, 2007).

Efforts to unionize, such as those by Smithfield workers who successfully organized after 16 years of effort (Fulmore and Gaus, 2008), highlight the resilience and ongoing struggles for collective representation in a state with low union density and high industry appeal due to unorganized, low-wage labor forces. These challenges underscore the critical role of unions and labor organizations in advocating for labor rights and addressing structural inequalities.

A new employer: Amazon in town

Amazon has extensively utilized incentives from state and local governments across the U.S. to establish its facilities, receiving over six billion dollars in subsidies nationwide since 2000, including approximately \$31 million in North Carolina since 2017 (Good Jobs First, 2023). By the end of 2021, Amazon operated 1,237 facilities, including fulfillment centers and delivery stations, with nearly 10% benefiting from these subsidies (Good Jobs First, 2021). In North Carolina alone, Amazon has 35 such facilities. These large facilities attract many workers, not only from local counties but also from surrounding areas where jobs are fewer, and pay is lower.

The facility that is the focus of this study (AMZ hereafter), operational since 2020 in North Carolina, encompasses 640,000 square feet and employs between 3,000 to 6,000 workers, predominantly Black and Latino, reflecting the demographic trends of Amazon facilities in the Southern U.S. Amazon claims its investments stimulate job creation and reduce poverty (Pathania and Netessine, 2022); however, there has also been some resistance in the U.S. to hosting Amazon facilities (e.g., Nieto-Munoz, 2022). In NC, the announcement of AMZ was met with significant interest and hope from job seekers. Amidst a pandemic, the facility offered a starting wage of \$15 per hour, well above the state minimum, positioning it as a prime

opportunity for financial stability in a region where many have multiple jobs to meet living expenses:

“But they were only paying \$13 an hour every two weeks, which is still not enough money. So I did that until I got a full-time at Amazon. One check, one job. That was my, I was so tired of having two pieces, trying to make a whole. It was driving me crazy.” (Debbie)

These elements underscore the complex interplay of racial history, economic conditions, and immigration in shaping the labor landscape in NC, providing a context for understanding the emergence and challenges of labor movements within the state. Moreover, AMZ as the incoming main employer in the state was initially perceived positively by the community as a significant economic opportunity, especially given NC's weak economic performance, potentially influencing the perceptions of both opportunities and threats.

In the belly of the beast

Scholars and social organizations have documented Amazon's working conditions to raise awareness of the company's detrimental impact on its workforce (e.g., Alimahomed-Wilson & Reese, 2021; Gutelius & Pinto, 2024; OXFAM, 2024; Strategic Organizing Center, 2022; Tung et al., 2021; Vallas et al., 2022). Once operational, workers soon realized that the reality of working at Amazon differed significantly from their expectations:

“Oh my God, I was so happy. Because I started in 20 [2020], everything was shut down, everything. Amazon was the only place you could go. Still getting groceries, still get clothes, still get whatever you need it, right to your door. I was so happy to be a part of that process. And I was there for a minute and found out what was really going on. You know, once you're in the belly of the beast and you get to see how the beast really operates.” (Debbie)

In sharing their experiences, workers at AMZ revealed that despite meeting career advancement requirements, promotional positions were predominantly reserved for white workers. This exposed a pattern of racial and gender disparities in promotion practices. Additionally, workers felt exploited for the benefit of others, as noted by Latasha:

“And even with, I mean, even with, how can I say, like even when it comes to promoting there at Amazon, you're seeing a lot of the Black Americans. They're using us, you know, to train other people. But we get, how can I put it, how can I

say, we will not get to that next level, like say level five, level six; they end up giving it to a Caucasian woman or man. So the minorities there, we have no chance of really stepping up. Only time they wanted to step up is if they don't have someone else of another race interested in that position at that time.”

Importantly, AMZ’s working conditions are a hard and painful reminder of segregation of the Black community:

“Yes, I’ve seen this racist, discriminatory demon before when I was growing up in the Jim Crow South. We have to do something” (Debbie).

Workers have denounced Amazon's strict control practices over 'time-off-task', periods primarily used for restroom breaks or brief rests aside from the mandated lunch break (Hamilton, 2021).

Similarly, workers at AMZ have raised this issue:

“Managers ask ‘why didn’t you go to the bathroom while you were on a break?’ Well, look, my kidneys don’t know what time break is. You know what I’m saying? And if I’ve been drinking a lot of water or a lot of Gatorade to keep from being dehydrated so I don’t pass out [...] I’m near the back of the building. Guess what? There’s only four stalls. Most of the time one of them is out of order. The other day I was number six in line. I might have had to stand in line for 15 minutes waiting to use the bathroom.” (Debbie)

The statement of Debbie underscores another critical issue at AMZ: extreme heat, which becomes particularly severe during the summer months. Workers report that complaints about high temperatures and other issues, shared internally on the 'Voice of the Associate' board (VOA board), fail to result in solutions. AMZ’s complaints become public when workers share them on social media. These working conditions have garnered media attention due to the alarming frequency with which ambulance services have been called to AMZ for workers who were unconscious or had fainted (Gordon, 2023). Furthermore, vulnerable workers often face limited access to accommodations, as exemplified by a pregnant woman at AMZ:

“I am currently seven months pregnant and have been waiting for my medical accommodation since March 29th of 2022. I have expressed to my managers and HR the pain I have experienced, and no one has offered to help me. There were days were I was at my working station, and I should be balling my eyes out due to said pain and not one manager asked if I was okay or offered any assistance. The

only time I was approached was about my rates and accuracy and no questions as to if I'm okay." (@amazoncause, 2022).

Similarly, once hired, workers with disabilities are held to performance standards that fail to accommodate their physical or mental impairments:

“There are blind associates right now who arrive on campus. There's no manager available for them. They have to figure out how to get in the building, and it takes individuals like me who have compassion for these individuals to take them where they need to go. If we don't get back to our stations on time or clock in on time, we will be reprimanded. We had a blind Black sister in our department, completely blind, and these jerks, what are you trying to tell me, because she wasn't hitting the hourly quota or rate.” (Anonymous worker at AMZ)

Thus, within the structures component of the political context framework (Kriesi, 2007, 2011), AMZ's regime appears to enforce a racial ceiling that restricts Black workers' access to decision-making roles. This regime also manifests itself as authoritarian and heavily monitored, allowing no opportunity for workers to influence changes in policies, procedures, or performance goals.

The destabilizing pandemic

Amazon's labor practices were challenged during the pandemic at facilities in Bessemer, Alabama, in November 2020, and in Staten Island, New York, in December 2021. The campaigns at these locations varied significantly: in Alabama, a predominantly Black workforce sought representation through the Retail Wholesale and Department Store Union (RWDSU), while in New York, a diverse workforce including Black and Latino workers formed the Amazon Labor Union (ALU). The latter became the first unionized Amazon warehouse in the U.S. in April 2022, though Amazon has not engaged in bargaining, while ALU is facing internal disputes (Press, 2023). The National Labor Relations Board (NLRB) noted Amazon's interference in the Alabama elections, with the first election in April 2021 being compromised by Amazon's tactics such as installing a monitored mailbox for ballots. The second vote in March 2022 faced delays with contested ballots and ongoing hearings.

Importantly, McAdam and Tarrow (2019) note that “authoritarian rulers regard organized contention as especially dangerous because it can spread” (p. 24) thereby often prompting repression. Reflecting this, Amazon actively countered unionization efforts in both Alabama and New York. Amazon's tactics to suppress organized labor have employed traditional methods,

including hiring anti-union consultants and holding captive meetings. However, Amazon's approach to repression is distinct in its use of surveillance, technology, and internal intelligence gathered by former law enforcement and Federal Bureau of Investigation agents (Fang, 2022).

While the pandemic crisis alone does not fully account for collective actions of Amazon workers in Alabama and New York, it undeniably served as a disruptive and destabilizing force, an environmental mechanism (McAdam, Tarrow and Tilly, 2001; Tarrow, 2014), altering the status quo. The sudden increase in contagious risks in the workplace due to the pandemic affected workers' capacity to engage in collective action, thereby serving as an environmental mechanism that precipitated societal changes. In addition, the presence of these new collective actors or new power configurations (Kriesi, 2011), along with their campaigns and current outcomes, combined with Amazon's anti-union tactics or cultural models to repress organized labor, had the potential to catalyze cognitive mechanisms, and consequently, cognitive liberation among other Amazon workers. As stated by McAdam and Tarrow (2018), a regime's openness to new actors and movements shape perceptions of both threats and opportunities to collective action. The cognitive mechanism is explored in the following section, which focuses on the configuration of workers in North Carolina.

You are going to tell me that I have no choice?

The pandemic made more evident AMZ's priorities, especially as management failed to provide transparent information regarding new Covid-19 cases. Areas where the virus spread was rampant or "hot spots" were particularly marked by a lack of clear communication from the facility's leadership. These conditions became a breaking point for Isaac because, despite not having any personal medical condition that increased their risk of Covid-19, he had family members at home who were vulnerable. Isaac needed to steer clear of these high-risk work areas to protect his family but AMZ's management insisted on assigning him to work at these hot spots:

“ [...] you're going to tell me that I have no other choice? Now there's a million-and-one jobs in this place that you could send me, but you want to send me to this place where everybody's dropping like flies, because of COVID, and I refuse to go.”

Isaac and Debbie at AMZ found that being forced to work in a highly contagious area became unbearable. Taking these working conditions as threats to their well-being, they concluded that the costs of inaction were greater than those of acting collectively to advocate for change:

“[we] put our heads together and decided that we were sick and tired of being sick and tired, and we decided that something needed to change” (Debbie) [5].

Hence, Isaac and Debbie, who are workers from the lowest organizational levels at AMZ and are Black, emerged as the leading challengers in NC. Thinking on whether other workers might have initiated an organizing campaign at AMZ, Debbie emphasizes her determination to see this endeavor through to completion:

“I don't think nobody else would have come up with it. Because having, doing this work and trying to organize, I see how many people are fearful. How many people, they'll grine, they'll complain to each other, but they're scared. Remember what I told you about fear? It can go one of two ways, is either gonna paralyze you to just accept whatever is being thrown at you. Or it's going to motivate you to take some kind of action. And most people, that actually means, I just quit this job and go get another one. And I've never been a quitter.”

The statements above illustrate a cognitive mechanism, the cognitive liberation (McAdam and Tarrow, 2018), in which Isaac and Debbie experience a shift in their awareness of what they could change if they act collectively at AMZ. Workers deemed the costs of remaining inactive too high, and consider finding a job elsewhere not a viable solution.

Importantly, the notorious labor activity among Amazon workers in Alabama and New York proved to be critical in the cognitive mechanism initiated above. With these campaigns, specifically with ALU's victory, workers at AMZ identified a 'window of opportunity' (Kriesi, 2007, 2011) to organize and bargain with AMZ to improve their wages and working conditions. This is illustrated by Isaac in two different instances:

“RWDSU, Jennifer Bates [worker, organizer, and leader], they have been a strong encouragement and inspiration at the beginning of our organizing efforts”

“The inspiration from Smalls [ALU president] and ALU was that you can actually do it. you can actually beat these guys. you can actually win.”

The initiatives of RWDSU and ALU, as new actors in Amazon's arena, along with the interplay between their contention and Amazon's repression, and the perception of working conditions as

threats, all contributed to the perception of an opportunity to change AMZ's working conditions and with it, the emergence of CAUSE, Carolina Amazonians United for Solidarity and Empowerment in January 2022.

Building bridges for knowledge and resource acquisition

The inexperience of CAUSE leaders in union formation led them to forge ties and gather resources from local unions and labor organizations, including the Southern Workers Assembly (SWA), Black Workers for Justice (BWJ; detailed in Dillahunt-Holloway, 2023), Democratic Socialists of America (DSA), and Socialist Alternative. These connections enabled CAUSE leadership to participate in the 2022 Labor Notes Conference, a significant gathering for grassroots labor activists in the U.S. At the conference, CAUSE strengthened ties with RWDSU and ALU leaders, gaining valuable insights into their experiences of contention against Amazon.

The relationships between CAUSE and various labor organizations, both locally and nationally, have evolved dynamically. Initially, CAUSE had strong connections with the SWA during its foundational phase, though these ties have since weakened but still exist. Conversely, early interactions with the ALU were limited, as ALU's efforts were concentrated on securing bargaining rights with Amazon, but these relationships have recently strengthened. This evolving network demonstrates the relational mechanisms of the political context framework (Kriesi, 2011; McAdam and Tarrow, 2018) and underscores CAUSE's proactive role and agency in broadening its alliances within labor.

CAUSE's ties illustrate a shift in the composition of its allies or supporters, which has, in turn, shaped their strategic capacity (Ganz, 2000) and repertoires of collective action (Kriesi, 2011). The initial experiences and collaborations with some of local labor organizations led them to halt their efforts to start a card drive immediately after forming CAUSE. In retrospect, Isaac would consider this decision a missed opportunity to exercise their agency more fully.

At an early stage of its foundation, CAUSE leadership carefully weighed the benefits and drawbacks of maintaining their status as an independent union or affiliating to an established union. Due to the knowledge gap and limited resources to organize AMZ, they decided to collaborate with an established union (UN1 hereafter), while still maintaining their independence and relying on external volunteers for leafleting, and gaining union supporters.

UN1 provided training and resources to enhance the organizing skills of CAUSE leaders but showed fragility when CAUSE began collaborating with ALU. UN1 revealed its preference

for exclusive alliances, contrasting with broader labor movement collaborations. Subsequently, another prominent union, UN2, attempted to absorb CAUSE and similar independent unions, offering financial support with the stipulation of exclusivity and alignment with their agenda. This approach by traditional unions, seen as gatekeeping within the labor movement, was perceived by CAUSE leadership as counterproductive to true labor solidarity and contrary to the movement's principles.

These experiences demonstrate a learning process in selecting the most effective approaches for contention against AMZ. They also highlight a relational mechanism that shapes forms of collective action. Consequently, CAUSE's actions have been shaped by the relationships they have established over time. Notably, the leaders' prior life histories serve as vital internal resources that also guide their strategic decisions.

Internal resources and dynamics, shaping an independent union

CAUSE's strategic capacity is derived from its leadership, which includes five worker-leaders whose life histories not only illuminate the internal resources of the organization but also form the foundation of their strategic capabilities. Their narratives not only recount their personal experiences but also highlight the systemic discrimination they have faced, enriching our understanding of their agency in founding an independent union in the South. Here, I highlight the main elements of their identities and life histories, as these best represent their backgrounds and motivations for their leadership roles.

Being a Black woman in the South

Debbie invoked James Brown's song "It's a Man's World" to elucidate the experience of being a woman in the segregated South during the 1960s and 70s. She outlined that a woman typically faced two primary life paths: pursuing a college education to become a teacher or a nurse, or marrying and conforming to the traditional role of being "barefoot, pregnant, and in the kitchen." Debbie noted that the latter often came with the risk of domestic violence, a fate she was determined to avoid for herself despite being pregnant out of wedlock at a young age. Reflecting on her work experiences, Debbie realized that "my jobs have been jobs predominately for men", where she had to face gender-based bullying. These experiences have fueled her determination to succeed in any endeavor she undertakes:

“They used to do that to me a lot [bullying]. I didn’t let that deter me, though. I guess that’s why I’m such a fighter today. I never let anything stop me. It pissed

me off, but it didn't discourage me. They were trying to make me quit, but I'm not a quitter, never have been. That made me more determined to show them that I could do just as good a job, if not better, than what they were doing [...] You know how they say, never let them see you sweat? I didn't let them see me sweat, and I worked my way up, and I got to be a journeyman right under my boss."

Debbie's philosophy of perseverance has significantly influenced CAUSE, as illustrated in their motto 'Don't quit. Organize', a philosophy shaped by the gender-based challenges she has encountered throughout her life.

Latasha's employment experience illustrates a particularly challenging working climate for women. Like Debbie, Latasha also worked for a number of years in a job that was predominantly dominated by men. Latasha encountered the additional challenge of enduring sexual harassment from her coworkers, which went without any consequences but that later created respect from her counterparts. Latasha was compelled to resign when management hired a white female with the specific purpose of falsely accusing Latasha of aggression. After more than twenty years of enduring these working conditions and facing the prospect of being transferred to another location, Latasha decided:

"I got fed up with and I was like, you know, I don't have to do this [...] they were going to transfer me to another part of the city [...] I had refused to go down there because it was a bunch of older men, and they were perverts [...] I said I'm not about this all over again when I got these guys here, you know, finally respecting me, so I just ended up resigning."

Raised in the North, Latasha identified her mother as a main influence and role model, "So she taught us, you know, she taught us how to be very strong women and, you know, make sure we voiced our opinions." Latasha acknowledges that coworkers respect her and recognize her for her outspoken nature, noting that "they come to me because they know I have no problem speaking my mind, asking questions that they're not going to ask." Indeed, Latasha has also been vocal with her fellow CAUSE leaders regarding what she perceives as a slow pace of organizing. Despite this, she serves as an outlier leader, fostering connections with other workers on the shop floor. Latasha supports unionization at AMZ and is prepared to collaborate during the signing of representation cards due to her extensive network. However, she prefers to remain on the

periphery of committees. Latasha's strength and determination, cultivated through her prior work and life experiences, translate into her leading role in the pursuit of an equitable workplace.

The challenges faced by women in the sample illustrate systemic issues for women in the South. Their stories revealed experiences of sexual harassment in the workplace linked to being Black women, bullying due to being a woman in a gendered job, and sexual abuse that went unpunished of the aggressors, highlighting a pattern of injustice and gender discrimination. Thus, the determination of women in CAUSE leadership, stems from their experiences of relegation and discrimination. They are compelled to change their working conditions not only for themselves but also for future generations of women.

Being a man, a Black man

Chris highlighted the systemic challenges and discrimination faced by Black men from a young age. Chris recalled the class divided between those who wanted to learn sitting at the front, and those who did not at the back, noting that it was no coincidence that Black boys were always relegated to the back. These observations point to biases and structural inequalities that begin in childhood and extend into adult life. Isaac referred to these biases at AMZ, after complaining about allocation of workers in Covid-19 hot spots:

“Came back [to AMZ] the next day, and he [manager] called me in his office immediately for a private audience. Now I guess looking at me, I may fall into very serial types, what you think about a Black male. That’s fine, but you don’t know me, and you’re feeding me a bunch of bullshit. I left that place incomplete, and I got back on that floor, and I was so disturbed by that conversation that I went home early.”

The stereotypical treatment of Black men has been shown similarly towards the Black union leader of ALU when management referred to him as “not smart or articulate” (Blest, 2020), which is indicative of a bias that may be pervasive throughout the corporation. The treatment and racism Isaac experienced profoundly affected him:

“ I feel in my heart, and I know in my heart that this is my calling [opportunity to serve others]. While I did not seek leadership or try to mobilize workers at Amazon, the calling sought me out.”

Notably, Isaac draws inspiration from Martin Luther King Jr., Malcolm X, and Marcus Garvey, all of whom advocated for Black empowerment, opposed racial oppression, and championed self-determination.

Educational paths and choices

CAUSE leaders described their educational experiences as essential to understanding the individuals they have become. They highlighted their choices of schools and courses of study, which included navigating traditional education paths, such as attending college, or opting for vocational training, such as cosmetology or mechanical drafting. The educational institutions they attended and the choices they made reflect the historical racially segregated context of the US South, specifically referencing Historically Black Colleges and Universities (HBCUs) attended by individuals such as Chris and Debbie. Notably, this educational background may play a significant role in the activism that Chris and Debbie now exert. Importantly, Black education, particularly at HBCUs, plays a pivotal role in fostering significant activism among their students (Holt, 2018). Educational contexts in which racism and oppression are addressed during formative years have been associated with increased activism among young people (Bañales *et al.*, 2021).

Isaac's educational choices were influenced by his parents' religious beliefs, which led them to enroll him in a “conservative white institution.” In subsequent years, Isaac developed a critical perspective on the educational doctrine he was exposed to, demonstrating his critical consciousness, “all I was doing was the chapel, the professors, the assignments, the reading, it was all looking at the world for a white supremacist point of view.” This critical awareness is reflected in his understanding of AMZ’s career advancement practices:

“They’re young [managers]. They have the education, and I can’t just help looking and noticing that every time we get a new manager, you see a new manager coming in, it was always, for the most part, a white male that had just graduated college. You’ve got all these people that are around you that are both Black and Hispanic, which makes up the majority of that warehouse, that are college-educated people, and they’re young. Why do you still have them on the floor?”

Luis and Chris described their resistance to pursuing certain careers due to family pressures. Luis ultimately embraced these pressures as an alternative path to addressing the injustices he had

observed in his earlier work experiences, once he achieved his degree. In contrast, Chris chose to abandon graduate education to organize workers and actively contribute to change on the shop floor. Their educational paths suggest that their identities as activists persisted and strengthened during their higher education, as they both returned to fight injustices and oppression after initially complying with family expectations.

These experiences highlight the complex interplay between individual choices and societal structures in shaping educational trajectories. They evidence the resilience and commitment to follow own beliefs and advocate for justice, breaking racial, familial, and ideological structures.

Faith roots

The stories of workers from the US South showed a deep connection with specific religions, which later evolved into a broader spirituality and a different interpretation of faith beyond traditional religious groups. Isaac's experience is emblematic of this process. Raised in the Baptist church, with Black Muslim ancestry, he was propelled into pastoral life at an early age due to community expectations and pressures. Over time, these pressures led him to resign because "Then I became too progressive for my church. I was accused of not being Christian." Notably, Isaac highlights the influence of the Black church tradition by employing pastoral principles for organizing purposes. His pastoral-organizing approach demonstrates his ability to listen and show genuine concern for his fellow coworkers. This is exemplified by Chris, who noted that "people stop by [Isaac's workstation] to talk to him throughout the day." Thus, Isaac's leadership role strongly reflects his pastoral roots and commitment to caring for the community.

Debbie underwent a similar process that also influences her current role at CAUSE. During her upbringing in the South, Debbie recalled a punitive doctrine consisting of "the preaches and old southern churches. All they preached about was hell. You are going to hell; you're going to burn forever and ever. And that was it". Later in her life, during rehabilitation, Debbie learned about "a God of your understanding," which allowed her to envision a God with the qualities she needed, rather than one imposed by a specific religion. This renewed spirituality from her recovery is evident in her leadership, as she emphasizes the importance of being a good servant: "Being a good servant, that, that's a must. Because if you don't know how to serve and how to follow, can you lead somebody? [...] it's being willing to get out of your comfort zone and to do what's needed at that particular time to another one of God's children."

Chris had grown up in the Pentecostal church, in the prosperity gospel, which she rejected as a young teenager: “I saw it as a capitalist modern corruption of the Bible”. Later, Chris joined a majority white reformed church, with the goal of being a missionary. She came to realize that “they were not designing their church structure for actual discipleship, for actual community, for actual loving. It was church growth. There is just a church growth model [...] I realized it was kind of colonial”. However, her approach to organizing is deeply connected to her faith and view of the kingdom of God: “I will always, you know, love mercy, do justice, and walk with God, right? But I just don’t always do it in church [...] when God gave dominion to man in the Garden, he didn’t give them a sector. He told them the garden. He told them to work. Right now, I see God giving dominion to workers [...] And that’s what I see as restoring in like organizing. And I really do believe that.”

Overall, the transition from institutionalized religious groups to a more personal spiritual life reflects an awareness of long-established and imposed belief systems. Individual decisions to break away from these structures are later mirrored in the collective formation of CAUSE as an independent organization, rejecting coopted relationships with other labor organizations. Importantly, spirituality is deeply connected to these leaders’ approach to organizing and caring for other workers.

Migrating to the US South

Luis migrated to the U.S. with his family to escape political persecution in their home country. They settled in a remote area of North Carolina, which provided a safe hideout. As Luis says, “what better place than nowhere in North Carolina.” From a young age, Luis experienced a transition from a life of abundance in his home country to hardship in the US South, where he and his family worked as farm laborers. He recalled his experiences in the fields receiving help from the Farm Labor Organizing Committee (FLOC), and elaborated on his motivation for organizing workers:

“I wouldn’t be where I am right now if it weren’t for just other people reaching out and helping out. A big part of that was the labor movement [...] being kind of like a new immigrant in the United States, that the only way really that I was able to move forward was through the service of other people [...] I am a product of the service of other people. So I feel like in order to pay it back, I have to, you know,

I will not I have to, I want to pay that back in a way by dedicating my life to the service of other people.”

Describing his relationship with FLOC reveals the profound impact this labor organization had on his approach to organizing:

“FLOC has been organizing in North Carolina since the 90s. So they, what they essentially do is they go around labor camps, especially labor camps that can’t organize by law. And they provide essentially education services to see like what legal rights you actually have, connections to lawyers. You know, they make sure that hygiene standards and safety standards on the worksites, that people aren't being worked illegally, stuff like that. [...] I was a little kid, all I saw was a group of people that were coming around and like giving us sandwiches and reading us our rights [...] to me it was sort of like a community or a family [...] So to me that's what stuck with me about FLOC. Just their ability to be able to seamlessly do their job as labor organizers by essentially building what is, what is a family.”

Thus, Luis's experiences as a farm laborer and a beneficiary of the labor movement guide his vocation to help workers attain dignified working conditions.

The configuration of these five worker-leaders has been instrumental in sustaining CAUSE and facilitating its growth as an independent union. Leadership is exercised contingently, with Isaac at the front, while others step up as needed.

Discussion and conclusions

North Carolina’s right-to-work laws and pro-corporate policies demonstrates a regime that can hinder, rather catalyze labor organizing. However, the historical roots of labor movements in North Carolina, grounded in the exploitation of African Americans, combined with the rich history of civil rights movements, create a fertile ground for labor activism, especially given the persistent economic disparities that continue to affect minority communities. Although union density levels are currently low compared to other states in the U.S., the historical and ongoing struggle for rights provides the structures upon which contemporary labor movements can draw. In addition, the important immigration from Latin American countries is reshaping relations within the workforce and potentially providing both opportunities and challenges for union organizing and solidarity.

Amazon's use of government incentives to establish in NC confirms a landscape that favors corporate interests, which also underscores the systemic challenges for labor movements advocating for labor rights. The large labor pool from which AMZ can pull human resources reflects the economic depression in the area, which was exacerbated by the pandemic. A workforce composition that resembles state demographics provide opportunities for labor organizing that intersect race, ethnicity and economic status.

Workers at AMZ experienced workplace discrimination, strict work control, extreme heat, limited accommodations, and other challenging conditions. These factors raised individual awareness of AMZ's oppressive structure but did not initially trigger collective action. However, the pandemic served as an environmental mechanism, altering the dynamics between employers and their labor force. It forced employers to address labor conditions that could jeopardize their operations and changed how workers responded to management's orders. Thus, the pandemic acted as a destabilizing event, highlighting the need for changes in practices. For Amazon, the focus was on mitigating financial risks, while for the workforce, the emphasis was on health and workplace safety. As individual approaches proved ineffective, collective action became the next viable alternative for workers. At the same time, Amazon's cultural models or tactics to control the unionization efforts, and the restrictive environments that intensified during the pandemic, reflects how authoritarian regimes perceive organized contention as dangerous.

A cognitive mechanism developed among Amazon workers in Alabama and New York, who exhibited different responses based on their regional contexts and demographic compositions. However, the victory of ALU in New York became a landmark achievement, signaling to workers at AMZ a window of opportunity for organized labor. The narrative of workers like Isaac and Debbie, illustrates the process of cognitive liberation. Their realization that collective action could lead to substantive changes in their working conditions encouraged them to challenge the status quo. This shift in consciousness is a pivotal element of the political context framework, as it signifies the transition from personal dissatisfaction to organized activism, from an individual to a collective awareness.

CAUSE's lack of experience in forming an independent union initially reflects a low strategic capacity. Over time, however, this capacity is strengthened through networking with local and national labor organizations. These connections enhanced their organizational capacity as they learned from others and learned from their own pitfalls in the process of establishing their

labor organization. The participation of CAUSE leadership in labor gatherings indicates a proactive engagement with the broader labor movement. The relationship between CAUSE and other organizations illustrates the complex landscape of labor politics, which lead to changes in strategies and approaches that have been critical for the development of CAUSE. This also underscores the importance of relational mechanisms in the labor movement. The effectiveness of their efforts sheds light on CAUSE leaders' ability to navigate this landscape and effectively challenge prevailing power structures within organized labor and advocate for worker rights.

The life histories of CAUSE leaders, marked by systemic discrimination and societal norms, exemplify the structural challenges that have shaped their perspectives and approaches to organizing. Family, educational experiences, and religious backgrounds have clearly developed resilience and a commitment to justice among these leaders. The leaders' personal stories serve as a powerful catalyst for recognizing injustices and envisioning the possibility of change. Notably, leaders' religious background has shaped CAUSE approach to organizing, providing a basis for the strategic capacity that has been evolving since its beginnings.

In summary, the political context framework aids in understanding social movements, particularly the emergence of an independent union. However, a comprehensive analysis requires balancing the examination of internal dynamics, such as leadership, with the recognition of structural racism. This approach enhances the understanding of the complex interdependencies between structures, power configurations, and interaction contexts in the emergence of CAUSE. I emphasize that perceived windows of opportunity and cognitive liberation can be crucial in the transition from inaction to action in highly controlled and monitored regimes such as AMZ.

In terms of theoretical implications, this study contributes to the examination of labor movements. Specifically, it provides insight into the emergence of independent unions, which can go unexplored because of the accessibility to such data. This study builds on prior political context literature by examining organizing efforts within the systemic oppression of minority groups. This approach offers a deeper understanding of how the interplay of structures, leader configurations, and interaction contexts shapes the emergence of social movements.

As for implications for empirical work, life history, as a participatory research method, highlights the importance of providing a voice to those individuals who are the subjects of research inquiries. This is particularly relevant in contexts in which there is evidence of an imbalance of power and systematic oppression. Thus, this study provides evidence of a

collaborative research endeavor in the labor arena that not only enhances our understanding and scholarship on social movements but also provides these individuals the opportunity to exert influence over what is written about them (Patton, 2002).

In terms of practical implications, this study provides evidence of the importance of leadership in challenging corporations such as Amazon. Conditions such as high turnover, work designs that limit interactions among workers, and a resourceful employer that resists unionization can be discouraging to workers who aspire to take the first steps towards establishing a collective voice. This study illustrates how initially isolated efforts in places like Alabama and New York created a window of opportunity for workers and inspired contention and cognitive liberation in oppressed regions, such as North Carolina, who are likely to signal a similar opportunity for others. Unionization efforts in North Carolina have the potential to trigger cognitive liberation in a region with a strong tradition of activism and social movements. Importantly, the experiences of CAUSE underscore the need for spaces where leaders can develop the strategic capacity to pursue their goals. As one leader stated, “We have a very diverse culture in here. From, say 18 up to maybe even 70. A lot of people don't know what a union is, never heard of it. So, a large part of what we do is educating, telling them about a union, what a union does, how would it benefit us as employees. So, it's not a sprint. It's a marathon" (Price, 2022).

NOTES

[1] In the United States, in order to hold an election to decide if workers choose to be represented for collective bargaining purposes, a representation petition must be filed with the National Labor Relations Board (the Board hereafter). To be able to file a petition, the union interested on representing workers of a given unit, must collect at least 30% of sign cards stating the workers want a union. A representation petition showing supporting evidence is then filed by the union with the Board. Shortly after the petition is filed, the employer must post and communicate a Notice of Petition for Election to employees. The Board assess whether there is lack of jurisdiction, that the union is not qualified, or that there are labor contracts or recent elections that can restrain an election, which leads to a decision of election. Without any objections, the Board decides that a union election is held. Election date, time, place of balloting, ballot languages, the device, and a system to identify who may vote are specified either by agreement of the parties or by decision of the Board. The election is normally held as soon as possible, and the employer must replace the Notice of Petition for Election with a Notice of Election; elections may be delayed if either party claims that workers' votes are endangered or affected in any way. Next, elections take place in accordance with the Board's specifications, followed by the tally of ballots, the duration of which varies by election. If a majority of workers vote to be represented, the union is certified or recognized. If required, the Board holds a hearing after the election for the parties to present any election-related issues (National Labor Relations Board, no date c).

[2] "RWDSU" and "the union" will be used interchangeably hereafter.

[3] Upon analyzing the data structure, I assessed the potential for nesting, specifically examining how the dissemination of collective action frames could be nested within individual Twitter users. However, the intercept only model revealed no significant clustering effect, as indicated by the ratio of second-level variance to total variance being negligible. Consequently, this lack of evidence for clustering precluded the applicability of a two-level random intercept model for the data analysis.

[4] Ahn and Park (2015) analyzed a random sample of Twitter users at two points in time: September 2013 (1,498 users) and March 2014 (2,438 users). The undirected network density for both datasets was 0.001. For subsamples of weak ties consisting of 675 and 1,759 users, respectively, network density increased to 0.003 and 0.002. This comparison between the

network density of the main sample and its subsamples shows that a decrease in the number of nodes is associated with an increase in network density.

According to Iqbal (2024) Twitter had 218 million and 271 million monthly active users in 2013 and 2014, respectively. By 2022, during the representation process, Twitter had approximately 401 million monthly active users. This suggests that the population from which Ahn and Park (2015) sampled nodes (with a small network density) is about half the size of the current population of monthly active users on Twitter. As the number of nodes increases, one could expect even smaller network densities. However, the undirected network densities in this study are larger, suggesting that RWDSU's campaign attracted the attention of a tightly knit group of Twitter users.

[5] Debbie quoted Fannie Lou Hamer, an American activist and leader of the civil rights movement. Hamer, a Mississippi sharecropper, had attempted to register to vote and was brutally beaten by police for her efforts. While delivering a speech with Malcolm X at a rally at the Williams Institutional CME Church, Harlem, New York, Hamer stated: “What I'm trying to point out now is when you take a very close look at this American society, it's time to question these things. We have made an appeal for the president of the United States and the attorney general to please protect us in Mississippi. And I can't understand how it's out of their power to protect people in Mississippi. They can't do that, but when a white man is killed in the Congo, they send people there. And you can always hear this long sob story: ‘You know it takes time.’ For three hundred years, we've given them time. And I've been tired so long, now I am sick and tired of being sick and tired, and we want a change. We want a change in this society in America because, you see, we can no longer ignore the facts and getting our children to sing, “Oh say can you see, by the dawn's early light, what so proudly we hailed.” What do we have to hail here? The truth is the only thing going to free us. And you know this whole society is sick. And to prove just how sick it was when we was in Atlantic City challenging the National Convention, when I was testifying before the Credentials Committee, I was cut off because they hate to see what they been knowing all the time and that's the truth.” (*Fannie Lou, Hamer, “I'm Sick and Tired of Being Sick and Tired”*, 1964).

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APPENDIX 1A: CAMPAIGN TWEETS

Table 1A

RWDSU Tweets Through @BAmazonunion

N. Stage	Stage	Begins	Ends	Number of weeks	Posting Dates	Number of Tweets	Total Number of Tweets	Number of Original Tweets	Total Number/ Collective Action Frames
1	Organizing a card drive	October 20, 2020	November 19, 2020	5	10/20/2020	1	5	1	5
					10/26/2020	1		1	
					10/29/2020	1		1	
					11/5/2020	1		1	
					11/16/2020	1		1	
2	Representation petition	November 20, 2020	January 18, 2021	10	11/20/2020	1	5	1	4
					12/3/2020	1		1	
					12/18/2020	1		1	
					1/15/2021	1		1	
					1/16/2021	1		0	
3	Notice of election	January 19, 2021	February 7, 2021	4	1/25/2021	7	35	4	14
					1/26/2021	2		1	
					1/27/2021	1		0	
					1/28/2021	1		1	
					2/2/2021	3		2	
					2/3/2021	1		0	
					2/4/2021	1		0	
					2/5/2021	2		0	
					2/6/2021	4		0	
					2/7/2021	13		6	

Table 1A (cont'd)

N. Stage	Stage	Begins	Ends	Number of weeks	Posting Dates	Number of Tweets	Total Number of Tweets	Number of Original Tweets	Total Number/ Collective Action Frames
4	Elections	February 8, 2021	March 29, 2021	8	2/8/2021	10	263	0	74
					2/9/2021	37		0	
					2/10/2021	7		1	
					2/11/2021	3		1	
					2/12/2021	1		0	
					2/17/2021	2		1	
					2/18/2021	1		0	
					2/19/2021	1		0	
					2/21/2021	1		0	
					2/23/2021	3		1	
					2/24/2021	4		0	
					2/25/2021	3		0	
					2/26/2021	1		0	
					2/27/2021	3		0	
					3/1/2021	6		1	
					3/2/2021	2		1	
					3/4/2021	5		0	
3/5/2021	26	3							
3/6/2021	2	0							
3/7/2021	1	0							

Table 1A (cont'd)

N. Stage	Stage	Begins	Ends	Number of weeks	Posting Dates	Number of Tweets	Total Number of Tweets	Number of Original Tweets	Total Number/Collective Action Frames
					3/9/2021	2		2	
					3/10/2021	6		0	
					3/11/2021	2		0	
					3/12/2021	1		0	
					3/14/2021	1		1	
					3/17/2021	6		0	
					3/18/2021	1		1	
					3/19/2021	2		1	
					3/22/2021	12		7	
					3/23/2021	10		5	
					3/24/2021	8		5	
					3/25/2021	11		6	
					3/26/2021	46		22	
					3/27/2021	11		4	
					3/28/2021	4		1	
					3/29/2021	21		10	
5	Tally of ballots	March 30, 2021	April 4, 2021	2	4/2/2021	2	2	0	0
			TOTAL	29		310	310	97	97

APPENDIX 1B: CLASSIFIER

Table 1B

Pro-union and Anti-union Terms

N.	Union support hashtags	Value
1	#15andaunion	1
2	#1u	1
3	#1union	1
4	#aflcio	1
5	#bamazon	1
6	#bamazonunion	1
7	#gounion	1
8	#laborunion	1
9	#organizethesouth	1
10	#proact	1
11	#union	1
12	#uniondrive	1
13	#unionization	1
14	#unionize	1
15	#unionrights	1
16	#unions	1
17	#unionsforall	1
18	#unionstrong	1
19	#unionyes	1
20	#solidarity	1
21	#strike	1
N.	Union opposition hashtags	Value
22	#nounions	-1
23	#righttowork	-1
N.	Union support words	Value
24	act	1
25	acted	1
26	action	1
27	actions	1

Table 1B (cont'd)

N.	Union support words	Value
28	acts	1
29	ballot	1
30	ballots	1
31	bargain	1
32	bargained	1
33	bargaining	1
34	bargains	1
35	brother	1
36	brothers	1
37	build	1
38	building	1
39	builds	1
40	built	1
41	buster	1
42	busters	1
43	busting	1
44	campaign	1
45	campaigned	1
46	campaigning	1
47	campaigns	1
48	canvass	1
49	canvassing	1
50	card	1
51	certification	1
52	change	1
53	class	1
54	classes	1
55	collective	1
56	conscious	1
57	consciousness	1

Table 1B (cont'd)

N.	Union support words	Value
58	contract	1
59	deserve	1
60	deserved	1
61	deserves	1
62	elect	1
63	elected	1
64	election	1
65	employee	1
66	employees	1
67	employment	1
68	equal	1
69	equality	1
70	equally	1
71	fair	1
72	fairly	1
73	fairness	1
74	fellow	1
75	fellows	1
76	fight	1
77	fighting	1
78	fights	1
79	force	1
80	forced	1
81	form	1
82	forming	1
83	forms	1
84	fought	1
85	help	1
86	helping	1
87	helps	1
88	hope	1

Table 1B (cont'd)

N.	Union support words	Value
89	hopes	1
90	hoping	1
91	impact	1
92	impacting	1
93	impacts	1
94	job	1
95	jobs	1
96	join	1
97	joined	1
98	joining	1
99	joins	1
100	labor	1
101	launch	1
102	launches	1
103	launching	1
104	leaflet	1
105	leafletting	1
106	local	1
107	member	1
108	members	1
109	membership	1
110	movement	1
111	negotiation	1
112	organize	1
113	organized	1
114	organizer	1
115	organizers	1
116	organizes	1
117	organizing	1
118	picket	1
119	pro	1

Table 1B (cont'd)

N.	Union support words	Value
120	proud	1
121	provide	1
122	provides	1
123	providing	1
124	push	1
125	pushes	1
126	pushing	1
127	rally	1
128	ratifies	1
129	ratify	1
130	recognition	1
131	recognize	1
132	recognized	1
133	recognizes	1
134	represent	1
135	representation	1
136	represented	1
137	representing	1
138	represents	1
139	right	1
140	rights	1
141	rolling	1
142	share	1
143	shared	1
144	shares	1
145	sharing	1
146	sign	1
147	sister	1
148	sisters	1
149	solidarity	1
150	stand	1

Table 1B (cont'd)

N.	Union support words	Value
151	standing	1
152	stands	1
153	stood	1
154	strength	1
155	strike	1
156	striker	1
157	strikers	1
158	strikes	1
159	striking	1
160	strong	1
161	stronger	1
162	struggle	1
163	struggles	1
164	support	1
165	supported	1
166	supporters	1
167	supporting	1
168	supports	1
169	union	1
170	unionization	1
171	unionize	1
172	unionizes	1
173	unionizing	1
174	unions	1
175	unite	1
176	uniting	1
177	urge	1
178	urges	1
179	urging	1
180	voice	1
181	voices	1

Table 1B (cont'd)

N.	Union support words	Value
182	vote	1
183	voted	1
184	votes	1
185	voting	1
186	win	1
187	wins	1
188	won	1
189	work	1
190	worked	1
191	worker	1
192	workers	1
193	working	1
194	workplace	1
195	works	1
N.	Union opposition words	Value
196	decertification	-1
197	decertifies	-1
198	decertify	-1

APPENDIX 1C: PROPORTIONAL STRATIFIED SAMPLING

Table 1C

Stratified Sample

		Available original Tweets		Random Sample
		n	%	n
Pre campaign	Focal users	273,151	9	36
	Others in focal users' network	577,053	18	17
Stage 1	Focal users	138,102	4	9
	Others in focal users' network	82,804	3	5
Stage 2	Focal users	313,994	10	20
	Others in focal users' network	173,157	5	11
Stage 3	Focal users	180,664	6	11
	Others in focal users' network	78,554	2	5
Stage 4	Focal users	458,629	14	29
	Others in focal users' network	205,342	6	13
Stage 5	Focal users	51,557	2	3
	Others in focal users' network	25,184	1	2
Post campaign	Focal users	654,442	20	41
Total		3,212,633	100	200

APPENDIX 1D: CORE FRAMING TASKS PER COLLECTIVE ACTION FRAME

Table 1D

Assigned Values for Core Framing Tasks per Collective Action Frame

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
1	1	We, the workers at Amazon in Bessemer, Alabama are fighting to join a #union. Join our fight visit https://t.co/84efy18UFQ now #Bamazonunion #1U #unionstrong https://t.co/V9DGik8KyO	0	0	1	1	2
2	1	Our number one ask this week is that you share this video with your co-workers on why signing a Union Authorization Card is the first step workers need to take to make change at our workplace: https://t.co/9yWGyrBZF6	1	1	1	1	4
3	1	#Halloween is just around the corner, and we cannot fall for @Amazon’s tricks! The raise we received is thanks to your efforts & all of us coming together for change. RT now & urge our co-workers to sign a union authorization card today at https://t.co/QAeSFotMPL! #1U #union https://t.co/XtYkNpCfkt	1	0	1	1	3
4	1	We’re gaining momentum, we are uniting in strength to make real change at Amazon, and it’s incredible! We need your help to keep spreading the word. Please share this latest campaign update video with fellow workers and urge them to sign a card today at https://t.co/QAeSFotMPL! https://t.co/WawckSMn9B	1	1	1	1	4
5	1	When workers stand together we win together! Coming together to fight for change at Amazon will result in a brighter future for all of us. #unionstrong https://t.co/5h14xjYhxx	0	1	0	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
6	2	It's more important than ever that we have a say in our future. Next #Thanksgiving we will be thankful for the actions we took this year so we can have a #Union voice at work. That only happens if we say #UnionYES and sign a card now: https://t.co/hewROAM1R0 https://t.co/AyWLFCfWZa	1	1	0	1	3
7	2	We've filed for our #union election!!! This is an exciting step on our path to bringing a union voice to our workplace. Share this video with a co-worker today and tell them it's more important now than ever to sign a union authorization card: https://t.co/mR2sRQ4w7H	0	1	1	1	3
8	2	BAamazon Union Update: We're a step closer to our union election, watch our new video letter to Santa calling for a vote ASAP! More news and updates here: https://t.co/rbt6FzFgLH #unionstrong https://t.co/zHsowisINQ	0	0	0	1	1
9	2	Congratulations everyone, we're thrilled to share we have a date for our #union election to begin. More details are coming soon but we wanted to share this incredible news! #1U #BamazonUnion #UnionStrong https://t.co/T9cEmchmmo	0	0	0	1	1
10	3	Support for our @BamazonUnion is rolling in! The @NFLPA is standing in solidarity with us and urging us to vote #unionYES! Check out messages of support from @JCTretter, @Michael31Thomas and @onemangang97, below, and full update here: https://t.co/SQxfwDxrK #1U #Union https://t.co/DCv0ZjBjCP	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
11	3	Our fight to build power and unionize our facility began with workers talking to workers. Today, the @nytimes shared the critical story of how our fight to form a #union came to be. https://t.co/WzMGXn43Yq #1U #UnionStrong	0	1	0	1	2
12	3	The worker-organizers who have supported our organizing committee are @RWDSU members from across the State of Alabama, essential workers just like us. They know the critical difference of what bringing a union to their workplaces has made.	0	0	0	1	1
13	3	From improving their lives, to their families to our community as a whole they know what a #union difference can mean. Mona, Michael and so many other @RWDSU members have stood with us every day at the gates to the BHM1 facility, getting to know us, our work, and our concerns.	0	0	0	1	1
14	3	#ICYMI The story of OUR FIGHT is in print in today's @nytimes. Take a look and hear how it all began at https://t.co/sCKBiYphBF #1u #UnionStrong #unionYES #UNION https://t.co/GTUswm9LXX	0	0	0	1	1
15	3	Just Sunday, the @NFLPA shared a video of support for our #union where @NFL players urged us to come together and vote #UnionYES. If they have a union, so should we! Today, they're sharing video from their Exec. Dir. @demauresmith on what voting #UnionYES could mean for us! #1U https://t.co/OZteoM6keD	1	0	0	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
16	3	“They say, ‘Darryl, can’t you give us a chance to fix it?’ ” Darryl Richardson, [@Amazon worker] said. He said he replied: “I’ve been here 10 months. How much chance do you need?” Darryl came forward in @greene's @washingtonpost story. #workerpower #1U! https://t.co/Hi9anYMy5r	0	0	0	1	1
17	3	We can't get a break..."Another worker, the one who felt harassed by Amazon’s anti-union messaging in the bathroom, worries about safety. She contracted the coronavirus last fall, the same time a co-worker nearby also got the virus."...more from @greene in @washingtonpost: https://t.co/M6eZeIDVOs	0	0	0	1	1
18	3	Thank you @BernieSanders for sending some piping hot #pizza to our rally in the pouring rain! Your team made us feel empowered today, thanks for having our and @RWDSU's back! #BAmazonUnion VOTE #UnionYES this week, the world stands with us! #1U #Union https://t.co/lnYwtzfgnJ	0	0	0	1	1
19	3	Today, we witnessed the incredible #solidarity of the #labor movement! In the pouring rain, #unions & the public came together to show support for our fight. We're making history, and we have the support of millions all over the world. #BAmazonUnion VOTE #UnionYES! #1U https://t.co/XackxjYIVZ	0	0	0	1	1
20	3	More #Solidarity photos!!! https://t.co/iJSAEDHWKI	0	0	0	1	1
21	3	Oh and even more #Solidarity photos!!! https://t.co/vdhq6nWJ4O	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
22	3	And EVEN MORE #Solidarity! Special shout out to @Teamsters @Teamsters25 for bringing out their truck today!!! The #labor movement is united for change @Amazon and it was incredible to see everyone out today. #BAmazonUnion VOTE #UnionYES! https://t.co/noWZvZJX9T	0	0	0	1	1
23	3	What a week! From our rally w/ labor and community yesterday, to @POTUS sharing support on Twitter, to both houses of Congress sending letters to @amazon in support of our fight it it has never been clearer you have our back! #1U #Union See the highlights: https://t.co/U3684SgOrC	0	0	0	1	1
24	4	@NoaSoderberg Please reach out to cconnor@rwdsu.org	0	0	0	1	1
25	4	Thank you @AFGENational! The solidarity we keep seeing builds power and strength among workers @amazon. #1U #unionstrong https://t.co/inAxZq9XT2	0	0	0	1	1
26	4	Thanks @JobsMoveAmerica #AlabamaCoalitionForCommunityBenefits for your #Solidarity and to everyone in the labor movement who has also come together to support from the @AlabamaAFLCIO @AFLCIO and beyond! #1U #UnionYES #UnionStrong #Alabama https://t.co/egCNcbAI8q	0	0	0	1	1
27	4	BREAKING: @mrdannyglover came to the @amazon BHM1 gate today to urge us to VOTE UNION YES! WATCH NOW! #1U #unionyes #BAmazonUnion #union https://t.co/w4Q9jOgCbG	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
28	4	Just now, @POTUS shared his support for our fight! He is with us, and supports our fight for a union at @Amazon! #BAmazonUnion #Union #1U https://t.co/kX5173CWb1	0	0	0	1	1
29	4	@VP @POTUS Thank you for your support!	0	0	0	1	1
30	4	Thank you @JamaalBowmanNY @RepCori @RepAndyLevin @RepTerriSewell & @NikemaWilliams for joining our fight here in Bessemer, Alabama. We know we can count on your support in our effort to bring the first union to an @amazon warehouse! #1U #BAmazonUnion https://t.co/I9GCuVeExe	0	0	0	1	1
31	4	The members of Congress are at the gates of the BHM1 facility, they hear us, they stand with us, and they are in our fight with us. @JamaalBowmanNY @CoriBush @Andy_Levin @RepTerriSewell & @NikemaWilliams are all out here! #1U #UnionYES #BAmazonUnion https://t.co/c3XfZ60wzb	0	0	0	1	1
32	4	Congress was cool, but @KillerMike gets the last word tonight. VOTE UNION YES! Watch and share NOW: https://t.co/mR2sRQ4w7H #1U #UnionYES https://t.co/pEgqZrcj8b	0	0	0	1	1
33	4	Join us for a caravan Saturday, March 13 at 4:30PM. BLM Birmingham will kick off the #BlackLivesMatter caravan alongside movement elders. Community groups and unions from the surrounding area will also join @RWDSU organizers for the caravan, and you can too! #1U #UnionYES https://t.co/HvXd3hgEDe	0	0	1	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
34	4	Our neighbors in Birmingham have a lot of ❤️ for the #BAmazonUnion. This fight is about strengthening our whole community! #UnionYes https://t.co/jpIAUkenei	0	0	0	1	1
35	4	The @Blklivesmatter caravan showed us that we are strong in our fight for positive change! Yesterday, @OfficialBLMBham kicked off a 100+ car caravan in support of us! Watch and share this incredible video recapping the day! #BlackLivesMatter #1U #UnionYES https://t.co/8C3GhuD6TI	0	0	0	1	1
36	4	.@FlyingWithSara joined us on the ground yesterday, and "rained solidarity" over all of us! We're thrilled to have the support of union members in so many industries and all over the country. Thanks @afa_cwa for standing with us "now and always"! #1U #Solidarity #UnionYES https://t.co/ijReTiQpXz	0	0	0	1	1
37	4	WATCH: Behind the scenes with Emmit - an Amazon worker at BHM1 - @FlyingWithSara and @tevitauhatafe. Dare you not to cry. #BAmazonUnion https://t.co/gr28092Wmj	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
38	4	THANK YOU @RevDrBarber and the #PoorPeoplesCampaign for bringing righteous 🕯️ to Jeff Bezos today: "85% of the workers at this plant are Black... You say you care about Black folks? Let them have labor rights." 🙏🙏 #BAmazonUnion #MoralMonday https://t.co/SN1QogUKhh	0	0	0	1	1
39	4	Amazon workers 🤝 @APWUnational USPS workers All essential workers deserve a union 📦 🗣️ https://t.co/gEI8j6OASy	0	0	0	1	1
40	4	.@RevDrBarber isn't the only one giving sermons. Talking to @GrimKim, Jennifer Bates - an Amazon worker and leader - says: "When Spirit gives you a task, once you start on that task, ain't no turning around." Read on. @Jennife67173021 https://t.co/zIIdm9VAsN	0	0	0	1	1
41	4	.@ninaturner turned up the heat this weekend check it out! During her visit she joined @RWDSU on the ground and encouraged us to vote #UnionYES! At the community canvass she spoke w/ workers about our fight to form the first union at an Amazon warehouse in the US. #1U #UnionYES https://t.co/QQeu890PYb	0	0	1	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
42	4	Just one of many beautiful shows of solidarity this weekend with #BAmazonUnion – this one in Philly, with others in California, Texas, Italy (!), and more! Thank you to all! Amazon: the whole world is watching. It's our union, our vote, and our choice. #UnionYes https://t.co/m6ixLqUruH	0	0	0	1	1
43	4	Shout-outs to Seattle, Toronto (Canada!), NYC, Chicago, Boston, Pittsburgh, Minnesota, Arkansas, Tucson, Colorado, Atlanta, Florida, Idaho, Michigan, and too many places to fit in one tweet...many events were organized by @SocialistAlt! That's what #solidarity looks like.	0	0	0	1	1
44	4	While nationwide solidarity events took place this weekend, incredible volunteers knocked EVERY DOOR in Bessemer. 📍 Now, you'll see a sign supporting #BAmazonUnion on every block. This community is full of union families, and that's only gonna keep growing. https://t.co/xqqPsmIOtx	0	0	0	1	1
45	4	.@ninaturner came all the way to Bessemer, Alabama, to say "HELLO, SOMEBODY!" to the workers voting for a #BAmazonUnion and we couldn't be more fired up 📍 🗳️ https://t.co/o5yFFO2ACe	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
46	4	"Southern Black women have been leading unionizing efforts like the one at Amazon for more than fifty years, often well outside the media spotlight." Thank you Dr. @LaneWindham for highlighting how history informs our #BAmazonUnion fight! 🙏 🙏 https://t.co/EqtcqKqIY8	0	0	0	1	1
47	4	"I'm fighting for everybody, not just me" - Linda, who works at BHM1, Amazon's facility in Bessemer, AL. Let's do this! #BAmazonUnion https://t.co/aRasWzbCEN	0	0	0	1	1
48	4	"Being a union member, I know that I'm not alone. Especially during rough times like these, I'm 100% sure I have a union not only to back me up -- but to support me and uplift me. I can not only work safer but dream bigger." Thank you Ricki and all @Teamsters 🙏 #BAmazonUnion https://t.co/p2YdmrtMSK	0	0	0	1	1
49	4	BHM1 workers, YOU are the union. Forming a union means you and your coworkers have a seat at the table with Amazon about your pay, your safety, and your working conditions. Unionizing is your right. And in Alabama – it's your legacy. Vote YES. #BAmazonUnion https://t.co/eA2eAobGk2	0	1	1	1	3
50	4	Wow this is beautiful! Thank you @lizar_tistry! It's incredible to see how this campaign has inspired people all over #BAmazonUnion https://t.co/mAkLO9VZsr	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
51	4	Yuge news 🙏 Thank you @BernieSanders for standing with the #BAmazonUnion https://t.co/F1vObpC30b	0	0	0	1	1
52	4	What a beautiful tribute to the power of the #BAmazonUnion campaign. So many powerful workers and supporters in here. Thank you @lizar_tistry. ❤️ https://t.co/RgcQPc9CNk	0	0	0	1	1
53	4	A closer look at this incredible #BAmazonUnion art by @lizar_tistry You can find more of her work on Instagram: https://t.co/8yZhg4Jil2 https://t.co/WPHI4GFmkX	0	0	0	1	1
54	4	Dream team, assemble! Thank you @SenSanders @KillerMike @mrdannyglover for always standing for worker power and the #BAmazonUnion 💧 https://t.co/InCcfG3Ylq	0	0	0	1	1
55	4	A huge thank you to the United Farm Workers @UFWupdates for your solidarity. ¡El pueblo unido jamás será vencido! https://t.co/CHJVDxXawm	0	0	0	1	1
56	4	Wow! Powerful global solidarity. #1U https://t.co/aQRuhR1ClS	0	0	0	1	1
57	4	That's our @RWDSU union President 🙌 https://t.co/xC8irl9Sfk	0	0	0	1	1
58	4	https://t.co/GJiOZhfTmf	0	0	0	1	1
59	4	Love to see these signs all over Bessemer and Birmingham. We fight for a #BAmazonUnion not just for ourselves but for our whole communities 🙏 https://t.co/vN7yT4S03I	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
60	4	Amazon put a ballot dropbox on their warehouse premises even though the @NLRB said no. ☹️ https://t.co/EGZJTPi2Gm	0	0	0	1	1
61	4	Thinking of our neighbors impacted by severe weather and tornadoes here in Alabama. Stay safe, and let's keeping take care of each other.	0	0	0	1	1
62	4	FRIDAY: @BernieSanders, @KillerMike and Amazon workers fighting to unionize in Alabama will be rallying at BHM1. Join us virtually at https://t.co/Eq85NkX92U at 3pm CT / 4pm ET 📍 #BAmazonUnion https://t.co/fEV5moO9iG	0	0	1	1	2
63	4	“The parallels between the fight in Bessemer and the fights of the civil rights movement are striking. While there aren't poll taxes this time around, Amazon is instituting time taxes.” We need a #BAmazonUnion. https://t.co/YQyICcAnwm	1	1	0	1	3
64	4	Today is the Book Workers Day of Solidarity for the #BAmazonUnion. 📖 Thank you to all the publishing professionals & booksellers across the country who are supporting our fight! Follow the hashtag today and see more of your favorite presses and bookstores participating https://t.co/eTo1r6HH4a	0	0	1	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
65	4	<p>“We work for a billionaire, but we can’t live comfortable, not struggling to pay bills. Am I gonna buy groceries? Or am I gonna pay for my medicine?” - Perry, a 58 year old Amazon worker.</p> <p>The #BAmazonUnion ballot deadline is Monday.</p> <p>https://t.co/2rbteDdENI</p>	1	0	0	1	2
66	4	<p>Set your reminders now to tune in TODAY at 3pm CT / 4pm ET to @BernieSanders and @KillerMike rallying with #BAmazonUnion workers LIVE from Bessemer, Alabama 📍 https://t.co/fEV5moO9iG</p>	0	0	1	1	2
67	4	<p>@MarkRuffalo Thank you for your solidarity @MarkRuffalo! Just a few days left til the votes are all in... let’s do this 🙌 #BAmazonUnion</p>	0	0	0	1	1
68	4	<p>@GP_IUPAT Thank you @GP_IUPAT! 🙌</p>	0	0	0	1	1
69	4	<p>This whole thread 📍 Don't forget to tune in to @BernieSanders and @KillerMike live in Alabama today at 3pm CT / 4pm ET: https://t.co/Eq85NkX92U https://t.co/JJQCvu5lvz</p>	0	0	0	1	1
70	4	<p>LIVE now! Join @BernieSanders @KillerMike and #BAmazonUnion workers and organizers, as we rally together in Alabama for our right to form a union and have a real seat at the table. 🙌 🙌 https://t.co/0gJJsnDGyz</p>	0	0	1	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
71	4	Kicking it off with the amazing and fiery organizer @BigMikeUnion1: "These people are billionaires. Why do they say \$15 is enough? Shame on them!..We're going to get a seat at the table, do you hear me? There's no more overworking us for pennies." 💧 #BAmazonUnion	1	0	0	1	2
72	4	Next, Amazon worker Linda Burns: "They say they have 'good' insurance. Why am I still getting bills in the mail for my injury? I'm tired but I'm going to keep on pushing. I need America to know: we are in this together." #BAmazonUnion	1	0	0	1	2
73	4	.@KillerMike speaking now about the history of the South: "As proud as I am to be part of the legacy of Alabama, I am ashamed of what this company is doing to Alabamians." #BAmazonUnion	0	0	0	1	1
74	4	.@KillerMike shares that the working conditions his grandmother experienced as a sharecropper are still present in Alabama today at Amazon. He hears it from workers: Extreme heat. Overwork. Working while injured. This is why we need a union. #BAmazonUnion	1	1	0	1	3
75	4	.@KillerMike: "Everyone who works here should absolutely vote YES for that union. There's no way pay at a warehouse should be less than \$20/hour. Don't tell me you want to invest in my community and then pay me fast food wages for warehouse work!" #BAmazonUnion	1	1	0	1	3

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
76	4	.@BernieSanders now LIVE: "Let me begin by telling you that it is a real honor to be with you today, and I mean that sincerely. What you are doing requires an enormous amount of courage. What you're doing is for workers all across this country." 💧 #BAmazonUnion	0	0	0	1	1
77	4	.@BernieSanders live from AL: "You are taking on not only one of the most powerful corporations in this country - you are taking on the wealthiest individual in the world. And you're doing it an anti-union state! From the bottom of my heart, I salute you." #BAmazonUnion	0	0	0	1	1
78	4	.@BernieSanders in AL: "Now the reason Amazon is putting so much energy into trying to defeat you: they know if you succeed here, it will spread all over this country. They know it's not only workers here who are sick & tired of these outrageous working conditions." #BAmazonUnion	1	0	0	1	2
79	4	.@BernieSanders: "I have had a chance to talk with some of you about the heat you work under, the 12 hour days, how when you have a break it takes 10 minutes to get there and 10 minutes back. It is time to sit down and negotiate better working conditions." #BAmazonUnion https://t.co/YXsHpj552T	1	1	0	1	3

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
80	4	.@BernieSanders: "If history teaches us anything, it's that big money interests do not GIVE you anything. You gotta stand up and FIGHT for it. There is no excuse for workers at Amazon to not have good wages, good benefits, and good working conditions." https://t.co/kOH7dTcc51	0	0	1	1	2
81	4	.@BernieSanders just now to BHM1 workers and organizers in Alabama: "What you are doing is HISTORICAL! This country belongs to all of us, not just a handful of billionaires." Thank you Bernie and @KillerMike for making history with us today in Bessemer. 🙌 🙌 https://t.co/hYGLur7IU6	0	0	0	1	1
82	4	In case you missed it live, you can still watch the powerful rally we held today in Alabama with @BernieSanders @KillerMike and Amazon workers. Warning: may make you extremely fired up to form a union 💧 https://t.co/0gJJsnDGyz	0	0	0	1	1
83	4	That's right. While Amazon tweets about how great their workplace is, we're on the streets talking to Amazon workers about how much better it could be with a union https://t.co/y8pToNHzQQ	0	0	0	1	1

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
84	4	Yesterday in Alabama @KillerMike said, eyes on the prize: “No way we should be seeing below 20 bucks [for warehouse work], don’t tell me you want to make an economic investment in my community & then you come pay me fast food wages.” https://t.co/dnExnPXZUi	1	0	0	1	2
85	4	Happy #Passover and Chag Sameach to all who celebrate! https://t.co/VXg2U16VaO	0	0	0	1	1
86	4	“The fight is fundamentally about control: both over the demands on workers’ time and efficiency that have turned Amazon into the digital behemoth it is today, and the workers’ say in negotiating what they get out of that labor that has fueled Amazon’s rise.” https://t.co/rzNWSOuYFO	1	0	0	1	2
87	4	Frances is amazing: “I don’t want just Bessemer workers to get their rights, I want all workers to get their rights.” #1u #unionyes https://t.co/C91kebQgRc	0	0	0	1	1
88	4	Good morning to everyone in Bessemer, Alabama who is ready to make history! Today is the cut-off for mail ballots to be received by the NLRB for the count 🗳️💧 #UnionYes	0	0	0	1	1
89	4	“Whether they win or lose, the folks in Alabama are showing the way.” That’s right! #UnionYes https://t.co/HhODdSvhu7	0	0	0	1	1
90	4	@SenMarkey Thank you @SenMarkey! 🗳️ #UnionYes	0	0	0	1	1

Table 1D (cont'd)


N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
91	4	On the edge of your seat? Follow @GrimKim this week for the latest reporting  https://t.co/rbN5jug11t	0	0	0	1	1
92	4	The first day of voting was February 8. 49 days later, we're at the finish line. Between a pandemic with mail-in ballots and taking on a multibillionaire, this ain't any old union election. But we ain't any old town. We're Bessemer, Alabama, and we're ready to win. https://t.co/zZfcNvermV	0	0	1	1	2
93	4	Today is the last day for mail-in ballots to make their way to the NLRB office, before the count starts. What has this #BAmazonUnion campaign meant to you?	0	0	0	1	1
94	4	Powerful interview with BHM1 worker and leader Jennifer Bates @Jennife67173021: "After five months, it's just now hitting me. We were just a few people in a small town just trying to organize a union in our facility, and now it's this big. It's shocking." https://t.co/p1K8RwNzWZ	0	0	0	1	1
95	4	Great interview with @JBrewerMe on faith and organizing: "I think Amazon's potentially disastrous mistake was to use \$15/hour and hang it over these folks' heads...they may be making \$2 more than where they came from, but their life feels the same as 10 years ago." https://t.co/v3Lpvbkliia	1	0	0	1	2

Table 1D (cont'd)

N.	STAGE	Collective action frame	FRAMING TASKS			Base value	Dimensionality of CAF
			Diag.	Prog.	Mot.		
96	4	Thank you @unionveterans! And check out @alinaselyukh's article for a comprehensive look at how the #BAmazonUnion vote count will unfold over the next few days https://t.co/cX6eBCKr8v	0	0	0	1	1
97	4	Thank you to everyone around the country and the world who has stood in solidarity with us! 🙏 You have given us hope, strength, and the courage to fight for our union — and for racial and economic justice #UnionYes	0	0	0	1	1

APPENDIX 2A: NEGATIVE BINOMIAL REGRESSION

Table 2A

Negative Binomial Regression Analysis Predicting Dissemination of CAFs

Variable	Model 2			Model 3			Model 4†		
	β	SE	IRR	β	SE	IRR	β	SE	IRR
Intercept	-4.633	.219	.010**	-4.635	.086	.010**	-4.651	.088	.010**
Connection-based strength (CS)	.428	.166	1.533**	.428	.534	1.534**	.540	.113	1.716**
Familiar-based strength (FS)	-.160	.197	.852*	-.161	.069	.852*	-.161	.069	.852*
Stages of representation process	-.015	.005	.985**	-.015	.002	.985**	-.015	.002	.985**
CS x Stages	-.005	.004	.995	-.004	.004	.996	-.004	.004	.996
FS x Stages				.004	.005	1.004	.004	.005	1.004
Network density	-17.879	1.944	<.001**	-17.879	1.944	<.001**	-18.456	2.043	<.001**
CS x Network density							4.583	4.019	97.796
FS x Network density									
Type of account	-.264	.075	.768**	-.263	.075	.769**	-.263	.075	.769**
Retweeting pattern	.002	.000	1.002**	.002	.000	1.002**	.002	.000	1.002**

Note. N = 1,974. Observations = 7,896.

CS, where 0 = user ‘follows’ the union account (strong tie) and 1 = user does not ‘follow’ the union account (weak tie).

FS, where 0 = expressed union affiliation (strong tie) and 1 = non-expressed union affiliation (weak tie).

Type of account is 0 for organizational and 1 for individuals. SE = Standard error. CI = confidence interval. IRR = Incidence Rate Ratio.

† The model encountered convergence issues. The log-likelihood value could not be further improved. The output for the last iteration is displayed, and subsequent results are based on this iteration. Therefore, the validity of the model fit is uncertain.

APPENDIX 3A: INTERVIEW GUIDE

- How would you describe yourself?
- What does it mean for you to be [identity(ies)]?
- How did you come to identify yourself as [identity(ies)]?
- Could you share specific events in your life that represent you being “identity”?
- What was occurring around each occurrence?
- How would you define leadership?
- What does someone have to do for you to think of them as a leader?
- Do you see yourself as a leader, why or why not?
- Could you tell me more about the time(s) that you have a leadership role? Were these roles taken by choice or where they assigned to you?
- How many years have you been a resident of North Carolina?
- How long have you been employed at this location?
- How would you describe the location? Its surroundings?
- When you began working at this location, what were your expectations of Amazon as an employee?
- How were these expectations met if they were met at all?
- How did you engage with CAUSE./the founders of CAUSE?
- How does CAUSE resonate with you?
- What is your role at CAUSE?