THE SEMANTIC SATURATION OF LABOR STRIKES: INTERNAL ORGANIZING PROCESSES AND THE POLITICAL INFLUENCE OF PUBLIC SCHOOL TEACHERS ON STRIKE

by

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Dedicated to all public school teachers advocating and striking for the common good.
Solidarity forever.

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ABSTRACT

Work stoppages have had a recent upsurge in the American educational sector. Since 2018, teachers across the country have participated in record-breaking labor strikes using innovative communication technologies to skirt more traditional, offline organizing spaces in order to keep their organizing communication private and/or secret. This dissertation presents two studies that address the organizing communication done behind virtual closed doors as well as the public-facing strike communication intentionally meant for relevant stakeholders. In addition to this distinction between intended audiences, I also consider how differing legal contexts may influence the communication possibilities for teachers participating in a strike. Specifically, right-to-work (RTW) laws serve as a legal backdrop in both studies to examine how state-level policy helps or hinders workers organizing in the public sector by comparing one strike in a RTW state to another strike in a state without RTW laws.

The internal organizing communication was done in private Facebook groups for both teachers groups. I used the two spectra from the Collective Action Space theoretical framework (Flanagin et al., 2006) to plot the internal organizing communication according to the posts and comments in each Facebook group. The RTW teachers' internal organizing communication is near the personal and institutional ends of the mode of interaction and mode of engagement spectra, respectively. This placement indicates that the RTW teachers valued and utilized deliberative engagement in their channels of communication while also exhibiting communication patterns more indicative of top-down, hierarchical power structures. The unionized teachers' internal organizing communication is closer to the impersonal and entrepreneurial ends of the mode of interaction and mode of engagement spectra, respectively. This combination of placements on the two spectra indicate that the unionized teachers valued equitable channels of communication while devaluing conversation and back-and-forth deliberation.

The external organizing communication was observed and analyzed on Twitter. Building largely on network agenda-building theory (Guo & McCombs, 2011a, 2011b; Guo, 2012), I employed semantic saturation as a class of semantic network analyses to compare and contrast the public communication about each strike from each legal context. These techniques involve capturing the language structure used by various group to discuss the strike and analyzing and comparing how much of one group's messaging ends up in another group's messaging (Wiemer

& Scacco, 2018; Wiemer et al., 2021). In general, the teachers in the RTW legal context were more effective at getting their messaging into the local press's reporting about the strike. The teachers in both contexts also appeared to be communicating toward different audiences when specifically talking about one of their strike demands and that difference was also reflected in the local press's reporting on each strike.

Overall, this dissertation extends collective action and media effects theories by analyzing two strike events in two very different legal contexts that both used the same communication technology to organize their respective strikes. The findings presented here have important implications for organizing communication, interest group politics, and the role of local news media in labor actions.

INTRODUCTION

In 2018, the Bureau of Labor Statistics reported that there were 20 major work stoppages involving around 485,200 workers (Bureau of Labor Statistics, 2019). The number of workers involved in these work stoppages was the highest since 1986. Of those workers involved in work stoppages in 2018, 375,000 were in educational services or, more specifically, teachers. Teachers participated in numerous record-breaking strikes in 2018 and the wave of strikes firmly continued on into 2019. The threats of work stoppages have barely waned with many teacher unions across the globe expressing their intent to strike if the protections against the COVID-19 pandemic were deemed unsafe or inadequate (Berger, 2020; Goldstein & Shapiro, 2020). This uptick in labor actions from teachers comes with broad public support, with 78% of American public school parents indicating they would support their children's teacher if they went on strike (PDK Poll, 2018). The continuing prevalence of such labor movements, coupled with the recent influence of digital technologies on organizing, affords political communication scholars a unique opportunity to understand *why* these strikes happened, why they are continuing to happen, and what factors might have helped or hindered the success or failure of public school teacher strikes.

Central to this investigation is the notion of *power* and communication as a tool through which power is enacted. In particular, the structure of language that actors use when attempting to influence other actors is a promising way to observe, track, and measure power enacted through communication. My arguments here respond in part to recent calls for collective action scholars to focus less on how organizations enact collective action and who is mobilized as a result and focus more scholarly attention on the newly available *paths* to organizing (e.g., Bimber, 2017). Collective action scholarship can benefit from more concentration on how collective actions mobilize actors in a way that is facilitated in part by new digital communication technologies and why certain paths toward organizing are taken over others, given the circumstances.

In this dissertation, I extend collective action scholarship as it relates to modern labor strikes in America by focusing on the legal context within which collective action occurs and the communicative differences between collective action attempts that occur in different legal contexts. I also incorporate the intent of communication occurring during collective action and analyze internal and external organizing communication. Using two public school teacher strikes that occurred in two different legal contexts as case studies (i.e., a unionized teacher organization

and a conglomerate of several non-unionized teacher organizations in a right-to-work [RTW] state), I extend research concerned with power enacted through communication, how communication between actors about a labor struggle co-constructs reality about that labor struggle, what implications that co-construction of reality has for organizing a strike, and semantic network analysis techniques that provide innovative methods to operationalize such expressions of power and influence among actors.

Contributing to an update of collective action theories into the digital world, this project centers communication patterns as representations of group cohesion and use of modern communication technologies. Organizing continues to shape and be shaped by communication technology. Of utmost interest to this project are the various ways in which organizers utilize abundant and ubiquitous technology in an effort to help them achieve their goals. It is no longer novel enough to differentiate organizations by whether or not they use technology in their organizing. Rather, the use of technology is taken as a given among organizing populations and scholarly attention must shift towards how various communication technologies are utilized by different organizations and why they use technology the way they do (Bimber et al., 2012).

The theorizing and analysis in this dissertation have several important implications for democracy in America. Democracy as a system of government inherently concerns collective action among its people. With an eye toward social movements and collective action, democracy can be thought of as a regime that is formed through relationships of "relatively broad, equal, categorical, mutually binding consultation and protection" between the government and its participants (Tilly & Wood, 2016, p. 4). The relationship between government and participants is co-constructed through the actions and behaviors of the government towards the participants and the participants toward the government.

Therefore, a functioning democracy relies on trust among the participants that people are overall competent (i.e., put effort into their jobs or roles in society) and will make good decisions about how to perform those jobs and roles properly (Schattschneider, 1960). In this way, people count on each other to collectively participate in a societal system that works, such as democracy. This notion is of course relevant to the act of organizing people in order to conduct a collective action. People enduring a shared struggle therefore count on one another to act collectively and help make change. People are not simply at the mercy of their government, but rather play a role in constructing, changing, and maintaining that government through democratization. Because of

this, participating and organizing in collective action is inherent to the work of maintaining a functioning democracy.

A democracy also thrives with a news media that communicates information accurately and allows for deliberation and accountability when discussing the country's affairs (Jamieson & Hardy, 2011). The press often gives competing or alternative narratives to those offered by political elites or interest groups (Chong & Druckman, 2011). While this exchange of various perspectives on an issue aids in the democratic process by offering counterarguments and deliberation, such a plethora of information sources also allows for power and influence to help or hinder the strive toward those democratic ideals. For these reasons, a wave of collective actions in a functioning democracy, such as the teacher strikes in America, puts into focus the role of interest group politics and their fight for change towards meeting these democratic ideals.

LITERATURE REVIEW

Organizing Communication as Power and Influence

Inherent to the process of communication, particularly when attempting to influence another actor, is the nature of power (Castells, 2009). *Power* as defined by Castells (2009) is "the relational capacity that enables a social actor to influence asymmetrically the decisions of other social actor(s) in ways that favor the empowered actor's will, interests, and values" (p. 10). This definition of power highlights both the relational nature of power and the inclusion of the possibility for influence. Given the core role of power being both relational and influence-based, and given that social relationships are constituted, maintained, and destroyed by and through communication (Weick, 1979), power can and should be understood as enacted *through* communication.

Communication as an exercise of power requires an understanding of language construction and implementation as a process of meaning-making. Communication does not exist in a vacuum. The choices a communicator makes about what words to use when attempting to influence another actor are steeped in the relational nature of power between both actors involved. Therefore, power enacted through communication is conceptualized here as the goal-driven choices made regarding how to structure the language of a message coupled with the relationship between the communicator and the audience of a message.

In addition to communication, politics are steeped in dynamics of power as well. Put simply, *politics* is the authoritative process of allocating power, values, and scarce resources (Castells, 2009; Easton, 1965). When understood in the context of communication as power described above, politics can be seen as the allocation of power through the act of communication as meaning-making between relevant groups of actors. Most relevant to this dissertation is *political communication*, defined as "making sense of symbolic exchanges about the shared exercise of power and the presentation and interpretation of information, messages or signals with potential consequences for the exercise of shared power" (Jamieson & Kenski, 2017, p. 5). If politics is concerned with the allocation of power, and political communication makes sense of the shared exercise of power through language, the ability to exercise power through communication in a political context becomes clear.

A useful context to understand such dimensions of power in both communication and politics is through the process of collective action within a labor force, the subject of this dissertation. Collective action, discussed in more detail in a subsequent section, is an action that a member of a group takes as a "representative of the group and where the action is directed at improving the conditions of the group as a whole" (Wright, 2009, p. 860; Wright et al., 1990), usually with the goal of attaining some public good (e.g., democratic reforms) that are perceived to be more attainable through a group effort (Bennett & Segerberg, 2012). The baked-in assumption that collective action often strives to achieve some public good makes collective action as a body of scholarship especially relevant to the issue of public school teacher strikes fighting for more funding for their schools (Bimber et al., 2012). The process of negotiating for power and resources happens through communication and messaging about improving the conditions of the group for which actors are advocating.

How, then, is power actually exercised through communication and *where* can that power be seen exercised through communication? Since the early 1900s, research has been dedicated to understanding the processing of text and discourse as a means to understanding a phenomenon or event (e.g., Bartlett, 1932; Jones, 1994). Processing events through reading text about them or hearing speech about them is not a simple transfer of information from text to reader (van Dijk, 1988). Instead, experiencing an event by seeing it, reading about it, or hearing about it is an opportunity for the communicator to shape the reality surrounding that event and for the audience to reconstruct the event for themselves (Bartlett, 1932; van Dijk, 1988). This process from reading text to cognitively reconstructing an event has to do with knowledge representation in the brain (van Dijk, 1988, 2002). When new information is obtained, it often interacts and reshapes itself according to the base of knowledge that already exists in an individual's brain about topics that are relevant to the new information.

As an example, if a person is the child of a public school teacher, they may already have some idea about what it entails to be a teacher based on what they have heard from their own parent, what they have heard from their own teachers, or what they have observed about education. When that person is exposed to more communication and information about a teacher strike and the demands being asked by striking teachers, that new additional information interacts in that person's mind with their preexisting knowledge base relevant to the experience of being a public school teacher. This idea follows with other bodies of research that posit there is a schema present

in the brain that links relevant information together (e.g., Axelrod, 1973) and there is a cognitive map through which associations between blocks of information are formed, activated, or disassociated (e.g., Doerfel & Marsh, 2003).

Continuing with this example, it also matters from where information about the experience of being a teacher is coming. Following van Dijk's (1988, 2002) argument about new information reshaping itself to fit into the pre-existing cognitive map of the audience, coupled with Castells' (2009) definition of power as an asymmetrical influence enacted through communication, one can see how power is a part of the information consumption process. If power is enacted through communication, and communication involves the process through which people take new information and organize it among their pre-existing mental map, power can be seen as a factor in cognition and information processing. Using the same scenario as above, the child of a public school teacher may hear from their parent about the experience of being a teacher. If then another authority in that child's life (e.g., the principal at the child's school) gives a competing picture of what the experience of being a teacher is like, that child's cognitive processing of such competing information is influenced by the power dynamic between the child and the two sources of competing information. Thus, the general public consuming information about teachers' struggles in their own community might be shaped depending on the power dynamics between the sources of information and its audience. To determine how both examples of new information are to be reshaped into the preexisting mental map related to the experiences of teachers, the potential influence from both sources matters.

Thus, there is an interaction between the way an event is communicated and the representations that develop in people's minds about the event (Chilton, 2004; Sarkar, 2016). The premise that information is often consumed then subsequently reshaped in the mind of the consumer to align with the consumer's preexisting mental map further supports the notion that communication is inherently understood with a consideration of power. New information is processed in the context of the power-laden structure of language used by the messenger as well as the context of the consumer's pre-existing mental map about that topic. The cognitive map that exists around an object or issue manifests through language and communication construction (Doerfel & Marsh, 2003). Therefore, the ways in which words are associated with one another regarding a particular object or issue presents an avenue for meaning transference between actors.

There is structure to language and the particulars of said structure are where the meaning of language is held and transferred.

One metric in which to observe communicative influence is to track an actor's messaging (i.e., an actor's language structures) and evaluate how and to what extent such language structures are used by other relevant groups of actors (Wiemer & Scacco, 2018). If a communication source's language structure is modeled by other relevant actors' language structures (e.g. journalists in news accounts or individuals discussing politics over dinner), that language echoing can be an indication that said communicator has exercised some influence (Edelman, 1985). This is especially important to note given that political power can be infused into language.

In the next section, I turn to a more detailed look into language structure as an avenue for investigating power and influence and then place power as language structure in the context of modern theorizing about collective action. The goal of this dissertation is to engage with and push to expand collective action theory to better incorporate contemporary examples of political power and the language used to express that power intent on influence.

The Structure of Language

Language and Reality

Crafting a message has potential for the infusion of power and influence. Choices made in the formulation of a message are a vehicle for the construction of reality about an object or event. Within the text mining and natural language processing (NLP) literature, there are theoretical approaches to understanding meaning communicated through human language with a focus on uncovering the relationship between *language* and *reality*. One such approach, originally appearing in Ogden and Richards's (1923) book, states that people use symbols (e.g., a drawing of a couch) to represent physical objects (e.g., an actual couch that exists in the real world) and we use thought and communication to *connect* such symbols with their material referents (Sarkar, 2016). Words and communication function as connective symbols of real life material objects. When we talk about an object or event, we are working to connect ideas one has about that object or event with the physical manifestations of that object or event in the real world. The choices one makes about the words to use when communicating about material objects is how reality about said material objects is constructed.

The function of language in humans' understanding of the world around them is relevant to the previous discussion of the infusion of power into language. Language is a tool that can be used to shape the reality around an object or event. The opportunity for influence and the exercise of power can occur when crafting a message about an object or event and also when consuming and processing a message about an object or event. The road to enacting power through language is paved with the framing techniques used when communicating. For example, if public school teachers want to explain to the public that their demands for a pay raise are necessary, they must use their platform to craft a message that *frames* the issue of a pay raise in a way that shapes the reality of the situation in the teachers' favor. The group of actors that frames the reality of a situation quickest and most effectively will have an advantage in establishing the reality of the situation for the audience (Edelman, 1985). This ability to set the frame of an issue, and thus shape the reality of that issue, is an exercise of power that has the ability to lead to persuasion and influence. Largely, the burden is on the communicator to frame an issue in a way that fits coherently with the audience's pre-existing mental map about that issue since that is a necessary element for influence. However, language and communication behaviors participate in the *co-construction* of meaning about an object or event, a discussion of which I turn to next.

Language and Organizational Voice

Humans' conception of meaning and reality are expressed, changed, reinforced, and destroyed through communication (Blumer, 1969; Sarkar, 2016; Weick, 1979). The process of meaning-making through communication also includes a dynamic of power in that meaning-making. Power is enacted through communication and communication shapes how humans come to understand the world around them. The evidence of this process is in the *organizational voice* used to communicate understanding about an object or event. An organization's voice as a collective body of actors is the language structure that an organization uses to construct reality about an object or event. More specifically, the language structure that makes up the organizational voice consists of the words that are chosen when communicating about an object or event, the order in which those words are communicated, the frequency with which certain words are used, and the length of time those words appear in an organization's voice.

Relevant to the role of language in reality construction are semantics and the process through which shared meaning about an object or event is created among more than one actor.

Notably, symbolic interactionism states that a person's behavior toward an object or actor is informed by the meaning that object or actor has for that person, that meaning is informed by social interactions with other people, and meaning is dealt with and changed through "an interpretive process" between that person, other people, and objects or actors (Blumer, 1969, p. 2). These premises are one example of the relationship between humans as actors, objects, and the shared meanings between the two. There is a co-construction of meaning about an object or event among people using communication to bridge the gap between people's differing mental images and thoughts (Peters, 1999). Communication is the tool through which people can participate in sense-making even though people can never see the exact image or formulation of a thought that exists within someone else's mind (Cancho & Solé, 2001; Peters, 1999). Peters (1999) states that knowledge does not entail an "accurate duplication of the world, but the ability to make our way through with the best aids we can get" and that "'communication' is the name for those practices that compensate for the fact that we can never be each other" (p. 266-268). These quotations highlight the role of communication in meaning making between entities, how semantic network analysis and NLP theory can aid in measuring these "aids" (Peters, 1999, p. 266), and the effect they have on compensating for humans' inability to read each other's minds.

In sum, NLP scholarship provides a theoretical framework within which communication and the meaning of language can be understood. Given that democracy operates through collective action among its participants, it is important to first understand where organizations develop their collective voice in how they shape the reality around the issues most concerning to them. With a grasp on the role of political power and language construction in the framing and shaping of reality, I relate this line of thinking to collective action as a political organizing behavior that lends itself to opportunities for such exercises of political power through communication.

Collective Action Space in the Current Media Environment

Political organizing, particularly in the context of teacher strikes, is a collective action. Political organizing as a collective action can arise out of "shared grievances and generalized beliefs" (McCarthy & Zald, 1977, p. 1214) that bring a group of people together over the "need for shared resources" (Van Duyn, 2018, p. 969). Collective action as a political behavior is informed and influenced by the dynamics of power. As stated previously, political power is the ability for an actor or group of actors to authoritatively allocate values and resources (Castells,

2009; Easton, 1965). Thus, political organizing as collective action aims to exercise political power through a collectively agreed upon goal in order to authoritatively allocate scarce resources. In the example of teacher strikes, public school teachers have attempted collective actions to allocate scarce state budgetary resources to increase funding for public school systems.

In order to capture a rapidly changing organizing environment, Flanagin and colleagues (2006) proposed the concept of a *collective action space* (CAS) that offers a theoretically compelling framework to expand on in order to understand modern examples of labor strikes. The CAS was proposed as a framework where organizations could be categorized and differentiated from one another based on the communicative experiences of its members. Within the CAS conceptualization, collective action is thought to be "a set of communication practices" that "entails efforts by people to cross boundaries by expression or action on an individual (i.e., private) interest in a way that is observable to others (i.e., public)" (Flanagin et al., 2006, p. 32). The creation and explication of the CAS was in part to account for a newly diverse technological landscape. Collective action has become more complex with the advance of digital communication technologies. Moreover, communication scholars have attempted to accommodate the increasingly fluid boundaries around what is known as an organization (e.g., Bimber et al., 2012). Largely speaking, more recent collective action efforts have been hindered less by individual barriers around people's personal interests, beliefs, and values. Inherent to collective action is overcoming the normal boundaries that exist around people's personal interests. Prior to the rise of the digital media environment, it was easier for people to keep their interests to themselves, thus hindering the ability for larger groups of people to connect around shared interests. It is very difficult to know who is supportive of a collective action if there is no easy and accessible way to know the interests among the workforce (Della Porta, 2014). The primary assumption of the CAS was to account for the increasingly complex ways in which organizations and groups of actors participate in collective actions (Bimber et al., 2012).

Technology plays a role in the *physical* boundaries between discovering shared interests among a workforce. There are also *communication* boundaries that influence people's behavior and separate "what is private from what is public, what is 'here' from what is 'there,' what is personal from what is social, what is 'mine' from what is 'yours and what is 'ours,'" and "who interacts with whom and who is able to engage with which social or organizational processes" (Bimber et al., 2012, p. 63). There is the physical structure of technology that creates barriers and

also the possible communication and information flows that create barriers. The available technology for a group of actors participating in a collective action should be treated as the context within which the organizing is taking place (Obregón & Tufte, 2017; Theocharis et al., 2017). Communication technologies *facilitate* many interactions that organization members have with one another, rather than *determine* the type of communication in which organization members participate, and the implementation and use of such technologies is often the choice of the members themselves.

The increasingly blurred lines of formal organizational boundaries and the shift in barriers to information access during a collective action effort highlight the need to investigate the implications of such newfound opportunities for collective action. Collective action is influenced heavily by the existence of resources for collective actors to use for mobilization (Della Porta, 2014). It is not satisfactory to establish a conceptual dichotomy between traditional bureaucratic organizations and more fluid, technology-enabled organizations (e.g., Bennett et al., 2018). Most modern organizations are a heavy mix of traditional bureaucratic structure and technology-ridden operations, and collective action scholars must recognize that new normal in future research.

Bimber and colleagues (2012) point out that in more classical views of collective action, scholars often relied on crude metrics such as organization membership size to measure the likelihood of a collective action. By centering the communication behaviors of organization members, the CAS helps establish a set of criteria by which organizations can be measured based on the experiences of its members, not simply by size alone. Explicitly, the ability to cross boundaries and interactions among organizational actors are the defining features of collective action (Bimber et al., 2012). In this way, the CAS reckons with the role of digital communication technologies in modern collective actions without conflating changes in communication technology with changes in types of organization structures (Flanagin et al., 2006). The mere presence of digital communication technologies is no longer a sufficient metric to differentiate between organizations. Given the ubiquity of digital communication technologies, the CAS treats technology use as a given and focuses instead on the ways in which an organization implements and uses communication technology. Therefore, the fundamental assumptions of modern collective action within the CAS framework are understood as the following: fluid personal and organizational boundaries, actors' experiences most saliently define what an organization is, and digital communication technologies help facilitate boundary crossing and actor experiences.

Shortcomings of Connective Action

Another attempt to incorporate the modern media landscape into collective action scholarship was done by Bennett and Segerberg (2011, 2012) through a process they call *connective action*. This update more heavily incorporates the role of social media to conceptualize public action as "an act of personal expression and recognition or self-validation achieved by sharing ideas and actions in trusted relationships" facilitated by digital platforms and online social networks (p. 752-753). Here, Bennett and Segerberg (2012) focus on the preceding attitudes and beliefs that lead to an action in the first place. The initial decision for any one person to act is seen as a self-motivated act of expression through digital and/or networked means to convey attitudes and beliefs one already holds. In this way, connective action allows for a more fluid understanding of collective action that is rooted in an individual's motivation towards some greater good rather than a formal organizational structure partaking in a public action.

Although connective action is useful to think about the individual motivations of actors who choose to participate in a collective action to begin with, it is less relevant to the modern collective action events of interest in this dissertation. It is certainly important to incorporate the individual motivations for why one might participate in a collective action, as the connective action literature suggests (Bennett & Segerberg, 2012). However, connective action relies too heavily on the impact of communication technologies and how such technologies influence the way people organize.

Instead, the CAS is better positioned to treat digital communication technologies as part of the context within which organizing is happening. Connective action was theorized in part to understand examples of collective action without any formal organizational structure, such as the Occupy Wall Street movement and the Arab Spring (Bennett & Segerberg, 2012). While these examples of fluid organizations are worth incorporating into theorizing about collective action, it is also important to still consider the role of technology in an organization regardless of the formal or informal structure of the organization. Furthermore, the teacher organizations that are the main focus of this dissertation have more formal structure in place than the examples of Occupy Wall Street and the Arab Spring. The teacher organizations have institutional support and infrastructure from preexisting unions and associations, such as the American Federation of Teachers and the National Education Association (Blanc, 2019). Overall, the way that CAS handles the role of technology in organizing largely follows with organizational communication scholars' call to

understand organizational change and technological change as a mutually constitutive process within an organization (Leonardi, 2009). Technological advancement had an influence on the increasing fluidity of organizational structures, but such technological advancement should not be treated as a deterministic factor in making organizations more structurally fluid. Therefore, the CAS will be the primary theoretical framework upon which to build further understanding of labor strikes in America more generally and the recent wave of public school teacher strikes more specifically.

CAS Spectra

The CAS framework provides parameters within which examples of organizing and collective action fit somewhere along two spectra of interaction and engagement. The first spectrum refers to the *mode of interaction* within the group, ranging from *personal*, direct interaction among actors/members, to *impersonal*, little direct interaction among actors/members (Flanagin et al., 2006). A visualization of the two spectra and their relationship to one another can be seen in Figure 1.

Given the influence of networks and power in communication, I argue that an organization that leans more toward the personal end of this spectrum would have a participant body that consists of many strong ties among actors, whereas the impersonal end of this spectrum consists of weak-to-nonexistent relationship ties among the actors in an organization. The strength of relationship ties is based on the amount of communication that occurs between actors; the more actors communicate with one another, the stronger the relational tie between them (Granovetter, 1973). In evaluating the strength of relationship ties as it relates to the mode of interaction spectrum, I move beyond mere frequency of communication as an indicator of strong ties and focus more on particular *types* of communication overlap seen among organization members. It matters how often members talk to one another in addition to the actual language that members use when communicating with each other.

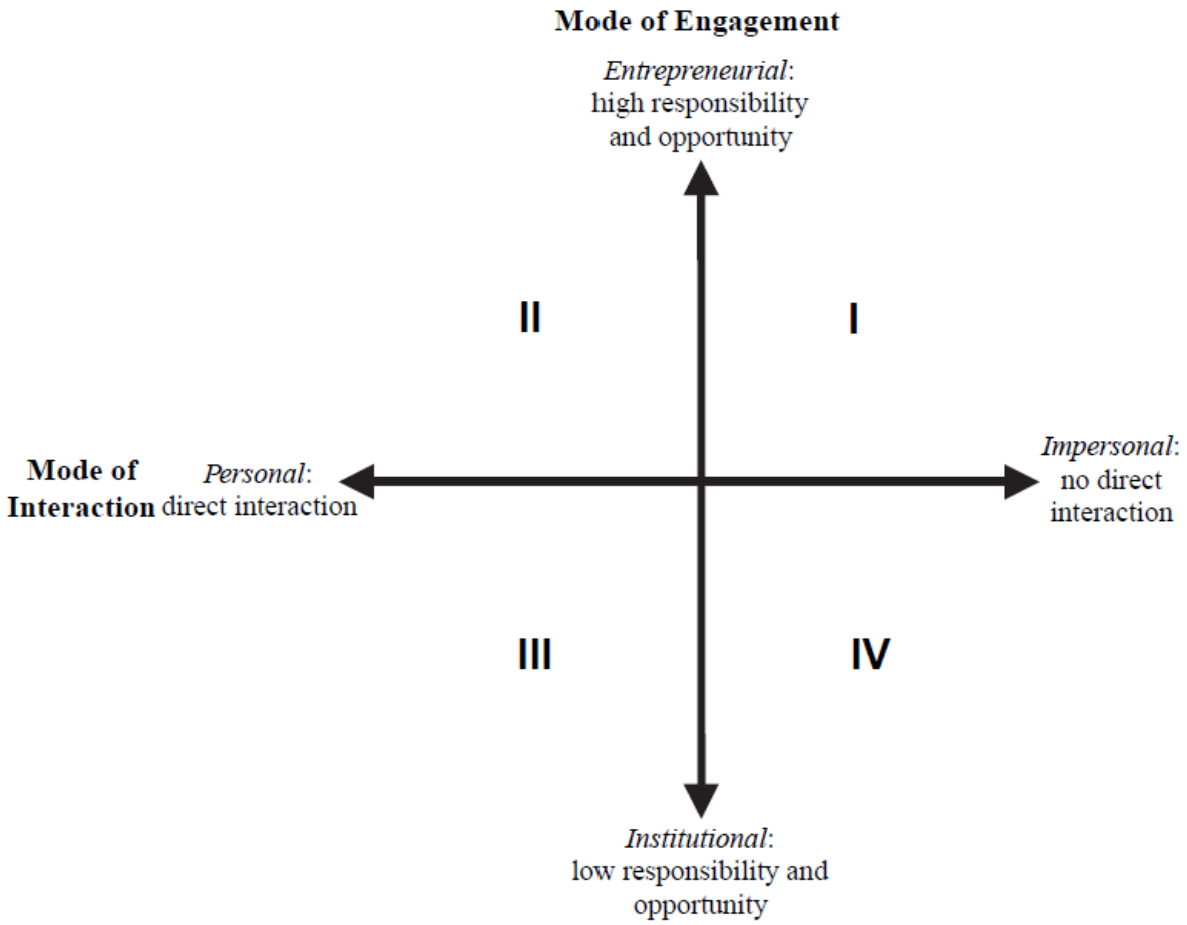

Figure 1. The Collective Action Space as conceptualized by Flanagin et al. (2006)

The second spectrum refers to the *mode of engagement*, ranging from *entrepreneurial*, high responsibility and opportunity for actors/members, to *institutional*, low responsibility and opportunity for actors/members (Flanagin et al., 2006). This spectrum assesses the ability for an organization's members to implement their own agenda or not. Organizations closer in structure to the entrepreneurial end of the spectrum decentralize control both because members are physically able to communicate to the organization through ubiquitous communication technologies and because the organization encourages feedback, deliberation, and contributions from its members. The mode of engagement spectrum measures the extent to which organizational leadership is dictating actions or the members themselves are dictating actions. In sum, these two spectra capture the degree to which organization members *interact* with their fellow members and *engage* with the organization (Bimber et al., 2012).

In order to understand whether and how political organizing is able to happen along these two spectra, it is important to distinguish between the contextual mechanisms that might help or hinder organizing, such as communication intent and state-level policy. In the next section, I move to a discussion of the information environment within which such collective actions have occurred and the constraints that organizers face getting their message across to relevant bodies of actors. I then review the policy parameters that influence public school teachers' ability to participate in collective action for political power and how the existence of such statewide policies is a way for the state to communicate its own political power.

Building on CAS: Public or Private Intent

Whether communication is intended to be public or private is particularly important because a main motivation for conceptualizing the CAS was to prioritize communication in research on organizations and collective organizing in the modern media environment (Bimber et al., 2012; Flanagin et al., 2006). Yet, the CAS falls short of considering communicative intent and the implications it has for understanding modern collective action. Therefore, consideration of members' communication requires a more detailed look into *why* communication is happening among members as well as the intended audience of that communication. Specifically, the two spectra of CAS are better served to classify the structure of an organization based on whether communication is meant for an internal or external audience.

Collective action and political organizing, particularly when the ultimate result is a labor strike, often happens for an unspecified amount of time prior to going public with pressure on relevant groups of actors, such as elected political elites and policy makers (e.g., Blanc, 2019). An actor participating in a collective action may have a wildly different experience and perception of their role in the action depending on the context in which such communication is happening (i.e., internal organizing or external organizing). As a result, this dissertation focuses on this preceding internal organizing behavior and the political power dynamics within the organization in addition to the subsequent, public-facing external organizing meant to exercise political power to affect change. I extend CAS by acknowledging and testing how it would benefit from more concentration on the internal organizing processes as an antecedent to the external organizational communication. Thus, the CAS and its spectra lend themselves much more to the internal organizing processes based on CAS's concern with the communication experiences of an

organization's members. I turn now to a breakdown of how these two processes of organizing, internal and external, may manifest in the context of an organized labor strike.

Internal Organizing Processes

Internal organizing concerns the intraorganizational deliberations about the plan for organizing and what purpose a collective action would serve. Internal organizing is also concerned with negotiating and managing the collective action as it is occurring. Overall, internal organizing processes encompass communication among organization members that is specifically intended to be out of the view of any non-members, journalists, elected officials, or members of the general public. It is here that the organizational voice is developed among the members. In the teacher strike cases discussed here, internal organizing often consists of the communication among rank-and-file teachers and union or organization leadership that occurs when deciding whether to call a strike or not. Internal organizing can also consist of the communication among rank-and-file teachers excluding the organization leadership.

During internal organizing processes, an organization's members deliberate about how to best exercise their political power through a cohesive organizational voice. In addition to considering political power in the external messaging from the organization, members also encounter and navigate political power dynamics internal to the organization itself that influence the terms and conditions of such deliberation (i.e., who gets to speak, whose ideas are implemented, etc.). In this way, internal organizing communication can first be understood through the degree of deliberation in which an organization's members engage.

Largely, deliberation is an ideal that actors seek rather than execute perfectly (Gastil, 2000). Deliberation is the attempt to reason through a solution with other actors that includes good-faith consideration of others' viewpoints in order to infuse reason into the eventual solution (Gastil & Black, 2008). Deliberation happens frequently in everyday life from ordinary people making decisions with their friends to legislative bodies making decisions about the language of a policy proposal (Gastil, 2006). The amount of deliberation that takes place during internal organizing processes provides a look into the communicative nature of the organization's membership. The amount of deliberation that occurs internally and the specific elements of deliberation that are present can signify the cohesiveness of an organization and the role each member sees themselves playing in an organization. Measuring the deliberation within an organization that is only intended

to be shared internally among organization members allows researchers to clue into the experience of being a member of an organization in the manner that CAS suggests.

Through deliberation, the organizational voice is cultivated. By participating in deliberation about what will make up an organization's voice, internal organizing processes involve the planning and staging of a collective action and consideration of how actors want the collective action to be perceived by relevant groups. Deliberation considers the equality and the engagement of participants involved in deliberative communication (Stromer-Galley, 2007). Equality is seen as essential to the process of deliberation because equitable channels of communication encourage and invite diverse perspectives and dissenting opinions. I argue here that equality as a central component of deliberation relates directly to the mode of engagement spectrum in CAS. Equitable channels of communication within an organization influence the degree to which an organization's members feel welcome to participate and contribute their own thoughts and ideas to the internal organizing processes. The more equitable the deliberation is within an organization, the more likely that organization is to be closer to the entrepreneurial end of the mode of engagement spectrum.

Engagement is valued in deliberation to ensure people are listening and responding to one another rather than the conversation consisting of a series of monologues (Stromer-Galley, 2007). In this way, I argue that the amount of engagement seen in internal deliberations among organization members relates to the mode of interaction spectrum in CAS. Engagement captures how organization members interact with one another and the more engaged members feel when communicating with fellow members, the higher the likelihood that organization is closer to the personal end of the mode of interaction spectrum. These tenants of deliberation highlight the markers that organization members may use to inform their perceptions of the structure of their organization. An organization is made up of and constituted by the communication of its affiliates (Flanagin et al., 2006). I extend CAS to study the language and interactions of these internal deliberations. Both the choice of words, as well as the structure of language, used by each teacher organization help to place the organizations on each CAS spectrum.

Mode of Engagement: Language and Word Choice

The choice to use particular words during deliberation can potentially speak to collective actors' experiences with their organization. The words people choose to use reflect the situational

and social reality of the context within which communication occurs (Pennebacker & King, 1999; Pennebacker et al., 2003). Organizations have traditionally consisted of top-down, formal, and one-way communication from leadership to membership (Bimber, 2017). Contemporary organizations have the potential for more participatory two-way communication between leadership and membership (Flanagin et al., 2006). That said, this shift does not necessarily mean that all modern organizations follow that trajectory. Using the CAS to understand modern organizations means to prioritize the experiences of the members of an organization when classifying the structure and communication of that organization.

Most relevant to this dissertation, the choices made by organization members to use particular words points to where on the mode of engagement spectrum those communicators' organizations fall. The use of more egalitarian pronouns (e.g., first-person plural pronouns: we, us, all) has been found to be a signal of high status while the use of more first-person personal pronouns (e.g., I, me) have been found to be used by those with lower status (Pennebacker, 2011; Tausczik & Pennebacker, 2010). Similarly, the ways that an organization's members refer to the organization itself can be signifiers for how members view their role in the organization. For example, in the context of teacher strikes, internal discussions about a collective action that refer to the organization through second person or third person plural pronouns, such as *you* or *them*, rather than using first person plural pronouns, such as *we* or *us*, would suggest that the organization is seen by its members as closer to the *institutional* end of the mode of engagement spectrum. According to CAS, the institutional end of the mode of engagement spectrum indicates a more top-down organizational structure with little-to-no room for individual members to enact their personal issue agendas or contribute to the deliberation taking place during collective action organizing (Bimber et al., 2012). The language separation between an individual member and the organization as an outside entity is one promising avenue to track and assess the perceptions that members have about their role in the organization.

Conversely, if members overwhelmingly use inclusive language and pronouns, such as *we* and *us*, when discussing their organization's participation in a collective action, that choice would suggest that members' experiences point to the organization falling closer to the *entrepreneurial* end of the mode of engagement spectrum. CAS states that the entrepreneurial end of the mode of engagement spectrum indicates that the members of an organization feel willing and able to contribute to the planning and organizing of a collective action and it is possible to incorporate

individual members' issue agendas into the organization's organizing actions (Bimber et al., 2012). Therefore, the use of certain pronouns over others by an organization's members when discussing their perceived role in the organization can be a fruitful tool to systematically place the internal organizing processes of that organization on the mode of engagement spectrum.

A general prediction is that teacher organizations that do not have the legal right to unionize, or teachers that work in a state with legislation preventing teachers from organizing a collective action, will rely much less on egalitarian, plural pronouns when referring to their organization. Instead, it is likely that teachers in a more fragmented organization will rely more heavily on second person and third person plural pronouns instead of using first person plural pronouns when participating in internal organizing processes. This will likely be the result of lacking relationship ties among the fragmented organization members. Perhaps, the communicative ground work has not yet been laid for members to rely on egalitarian pronouns when referring to fellow organization members. Any interpersonal cohesiveness felt by members may not yet be reflected in the communication used amongst themselves.

Mode of Interaction: Language Structure

It also is necessary to consider the interactions of organization members and where internal organizing processes fall on the mode of interaction spectrum. *Language style matching* (LSM) can serve as an indicator for the nature of intraorganizational communication (Pennebacker, 2011; Pennebacker & King, 1999). The degree to which people's language structures match one another's when discussing the same issue has been shown to reflect group cohesion that persists over time (Pennebacker, 2011; Pennebacker & King, 1999). An organization's members who use similar language structures would indicate that membership falls closer to the personal end of the mode of interaction spectrum. Evidence of LSM would mean members are often talking with one another about the goals and strategies within their organization and therefore align with the personal end of that spectrum. I predict that evidence of LSM will be more likely among teacher organizations that are formally unionized.

A lack of evidence for LSM among an organization's members would indicate that organization's internal organizing processes fall closer to the impersonal end of the mode of interaction spectrum. If an organization's members discuss the same issue but show no signs of adapting their language structures to match those of their fellow members, it points to a lack of

priority towards member interaction when communicating about issues relevant to the organization. Following this, the absence of LSM among an organization's members is most likely to happen when the organization is less established and cohesive, such as organizations in states with constraints around employees' ability to organize a collective action.

In sum, during internal organizing processes, communication can take many forms. It is important to track and analyze the ways in which organizations communicate internally in order to make more holistic sense of the way they then communicate externally as an organizational entity. Depending on the organization, internal organizing processes will likely allow for more space to communicate about issues, concerns, and suggestions among members of the organization, including both leadership and rank-and-file members. Internal organizing communication is also likely to be heavily informed by the context in which the communication is occurring. Looking at the language and word choice as well as the structure of the language used during internal organizing processes is a promising approach to track and classify where deliberative internal organizing communication within a group of actors falls on each CAS spectrum.

External Organizing Processes

The *external* organizing is the public-facing messaging about the workers' demands, the intent to strike, and attempts to frame the reality of the workers' demands in a persuasive way for the public, the news media, and the relevant legislative agents. Inherently, collective action strategically relies on media and communication in order to bolster public support for a cause and to pressure governments to incorporate workers' demands into legislation (Obregón & Tufte, 2017). The external organizing is when an organization's voice goes public with the goal of enacting change. The motivation for communication during external organizing processes is the desire for coherence as an organization. Slight variations in messaging are inevitable and perhaps welcomed, but the overarching purpose of messaging from organization members and participants is to influence relevant groups in a unified manner.

All of this being said, even though I am differentiating between two types of organizing practices, there is no clear-cut line from when organizing turns from internal to external. These practices often happen simultaneously and influence one another (Flanagin et al., 2006). The two CAS spectra are best fit to specifically test the internal organizing processes during which the

organization's voice is honed and crafted; external organizing processes are more concerned with an organization's unified public voice and its influence and interaction with others' messaging about the same topic. Thus, internal and external organizing processes are understood here to delineate organizing-relevant communication that is purposefully kept private and organizing-relevant communication that is purposefully meant for public consumption.

With an understanding of the importance of differentiating between communication intents when using the CAS, I move to a discussion of *semantic saturation* (Wiemer & Scacco, 2018; Wiemer et al., 2021) as the indicator of external organizing communication through the lens of agenda-building theory. The theory seeks to explain the ways that messages from other groups end up in the news media. I will review this literature and subsequently speak to how it informs the power-infused language structures used in external organizing communication by striking workers who are attempting to assert influence over elected political elites and the news media**.**

Network Agenda-Building as External Organizing Processes

Pertinent to the external organizing processes of workers is the actual act of getting a message to the relevant bodies of actors. The concept of agenda-building is an attempt at answering the question of how public policy agendas are created (Cobb & Elder, 1972). At the heart of the traditional agenda-building phenomenon is the role of the press, among other information sources, in constructing messages about newsworthy events. Agenda-building research often investigates the extent to which the news media serve as a "mirror" for reality or does the job of a reality "filter" for the public (Weaver & Elliott, 1985, p. 88). Scheufele (1999, 2000) places agenda-building as a precedent to agenda-setting where the news media and influencers of the news media, such as political elites, interest groups, and news organization norms, co-construct messages for the public. Often, agenda-setting research takes the media's agenda for granted and is only interested in its relationship with the public's agenda (Scheufele, 2000). On the contrary, the production of news information is a complex process involving several avenues of potential influence (Lang & Lang, 1981). Agenda-building takes the same fundamental premises of agenda-setting and applies them to influencers and the media agenda as opposed to the media agenda and the public agenda. For example, journalists are not simply regurgitating information from their sources when reporting the news. Journalists and news media outlets are both defining what issues are worth illuminating and crafting messages informed by certain sources, often picking and choosing what information

to use and include and what information is not vital for the public's understanding of the issue at hand (Brüggemann, 2014).

The most recent advancement in this line of theorizing, network agenda-building (NAB), provides a fruitful avenue for political communication research moving forward. Guo and McCombs (2011a, 2011b) introduced the idea of network agenda-setting (NAS), and eventually NAB, as a more developed way to measure the transfer of salience about a network of both issues and attributes from the press to the public (Guo, 2012). This is the third-level of agenda-setting and agenda-building and is meant to better represent the relationship between objects (i.e., the main concern of first-level agenda-building) and their attributes (i.e., the main concern of second-level agenda-building) by moving away from a rank order of objects and attributes as a measure of similarity. A network representation of objects and attributes gives the opportunity for a better representation of the interconnectedness of objects and attributes, how often objects and attributes are associated with one another, and the way objects and attributes are often associated with other objects and attributes. NAB adds a spatial dimension to measuring the transfer of salience from outside influences (e.g., interest groups or politicians) to the press.

NAB allows for a more nuanced examination of how various internal and external factors may influence the way the press reports about an issue. However, critiques have been raised in NAB research about a tendency to equate simple mention frequency with influence (Parmelee, 2014). For example, NAB studies have often coded communication about issues to higher order categories, similar to a content analysis, which are then represented in a network (e.g., Guo, 2013; Kiousis et al., 2016). In this project, I took a semantic network approach which entails measuring similarities and differences in the actual language that entities use to discuss objects and attributes. What is missing from extant NAB scholarship is more effort in preserving the semantic context in which political communication takes place. By semantic context, I mean the components that make up the organizational voice, such as the words that are chosen when communicating about an object or event, the order in which those words are communicated, the frequency with which certain words are used, and the length of time those words appear in an organization's voice. The examination of similarities between groups in political communication using broader categories of speech is useful to get an aggregate sense of similarity between the communication of two entities. However, research would also benefit from a more nuanced look at the actual messaging

as it exists when it is communicated and how that contextualized communication is seen echoed or rejected by other entities.

Such abstract cognitive ideas about language representation and the co-construction of meaning can serve as the theoretical backbone for understanding the role that communication from influential sources has on the news media and its reporting. It is equally as important to not only understand how text is interpreted by its audience, but also where that text is coming from and how it might be influenced by various groups and gatekeepers. Where agenda-building as a research area has lacked sufficient consideration by agenda-setting scholars, semantic network analysis can fill in the blanks about *how* the media's agenda comes to be and eventually trickles down into the public's agenda.

Semantic Saturation as an External Organizing Indicator

A semantic technique particularly well-suited to address extant gaps in NAB scholarship involves text mining and natural language processing called *semantic saturation*. Semantic saturation is a measure of communication overlap between two or more entities that have engaged in discussions about the same issue or issues over the same period of time (Wiemer & Scacco, 2018). Taking the organizational voice of a teacher association as the external organizing communication for that association, semantic saturation can be used to see the extent to which a teacher association's public messaging resonates with other relevant groups of actors, including elected political elites, the news media, or the residents of a state.

Treating external organizing processes as a singular, unified voice is important for tracking organizational messaging in a crowded information environment. For example, a state's teacher association might send public messages about their labor strike; meanwhile, the state's elected political elites are offering competing public communication about the strike. The amount of the teachers' messaging and language structure seen included in the political elites' messaging and language structure would indicate the amount of semantic saturation occurring from the teachers' communication into the communication of their political opponents. If the structure of a teacher association's public messaging is seen replicated by a state elected politician's public messaging, that amount of replication (i.e., saturation) can be used as an indicator for the extent of influence the teacher association's communication had on the politicians' communication (Edelman, 1985). The process of semantic saturation in this example shows how organizations can infuse their power

and influence into their public messaging. The choice for someone to share one group's messaging or language structure over another group's messaging is a key factor in the process of communicative influence (Freelon et al., 2016) and can be tracked and measured using the semantic saturation technique.

Looking forward, semantic network analysis affords NAB scholars a comparison of cognitive maps and mental structures related to issues and attributes of those issues. If communication is seen as the physical manifestation of thought regarding a particular issue (Sarkar, 2016), comparing and contrasting the communication used by various groups about such an issue can be used as an influence metric (Wiemer & Scacco, 2018). Thus far, NAB research has relied too heavily on categorical objects and attributes instead of preserving the natural communication through which said objects and attributes are actually discussed by various entities. Pivoting to dedicate more attention to preserving political communication as it exists semantically is a potentially fruitful avenue for researchers to consider and a goal I strive towards in this dissertation.

In addition to the conceptual separation between internal and external organizing processes, another context worth considering is the function of policy in political organizing. One place to consider is whether the particular political organizing under scholarly investigation is legal or illegal within the context it is happening. The decision to partake in collective action often spawns from a realization that the status quo is no longer legitimate, and change must be put into place to fix it (Kelly, 1998; McAdam, 1988). It is not simple dissatisfaction that enacts change for workers, but also requires a strong sense of injustice harbored against social or legal values (Kelly, 1998; Kelly & Badigannavar, 2004). In order to garner support from fellow workers and organizational outsiders, one must convince them of the present injustice and offer collective action as the most fitting strategy to enact change. Workers' ability to participate in collective action, however, varies state-by-state depending on the legal constraints in place that may help or hinder political organizing and communicating about such organizing.

Building on CAS: Legal Contexts

The assumptions that inform the CAS can benefit from consideration of the *context* in which communication among and between collective actors occurs. One relevant context not included in the CAS framework is the legal context in which organizing happens. The CAS needs

to do more to incorporate the legal possibilities and constraints of organizing-relevant communication. For example, the CAS does not adequately account for secret organizations, the reasons why an organization might remain secret, and how that secrecy influences the communication patterns and behaviors of the organizers (Stohl & Stohl, 2011; Van Duyn, 2018). There is even variance in the type of secrecy groups choose to use. For example, private Facebook groups can either be set to "hidden," where the group cannot be found by searching for it and none of the members or posts are public, or "visible," where the group can be found through a search, but the posts and members are still not public. Groups set to both private and hidden embody the highest level of secrecy capable on Facebook. The constraints around what an organization such as a teacher association or union is legally allowed and able to talk about, both privately and publicly, must be considered in order to fully capture *why* an organization's members have the experiences they do when communicating with other members. If the CAS framework privileges member experience and communication to differentiate one organization from another, the communication possibilities even afforded to each organization to begin with is a vital piece of that puzzle.

Statewide policy is a way for elected political elites and governments to communicate the norms, values, and practices available to constituents. Often, workers interested in participating in a collective action are helped and hindered by the legal parameters of such policies in interesting and unique ways. For instance, perhaps teachers work in a state that legally allows for unions to form and advocate for their rights through collective bargaining with their administration. That ability should have an influence on the way teachers would communicate, act, and organize when demanding better working conditions. Having legal freedom to discuss the potential enactment of a labor strike allows workers to infuse their communication about their working conditions with credible power and expectations about possible actions. Access to political power influences teachers' communication by gearing messaging towards exercising that political power instead of obtaining it in the first place.

Conversely, perhaps teachers work in a state that has policies in place to hinder the ability for unions and associations to organize and collectively advocate for their demands. That situation should also have consequences for what those teachers are able to achieve in their organizing, both internally and externally. Not having the legal freedom to obtain and exercise political power through their communication, teacher organizations are left to work within the set legal parameters

already in place, advocate to change those legal parameters, or work outside the current legal parameters to get their demands met. A specific state policy worth focusing on primarily to illustrate the role of policy in organizing is right-to-work legislation.

Right-to-Work Legislation

Legislation often dictates what is possible for, and the constraints around, the people governed by its policies. State policy is descriptive in that it is crafted in order to reflect the rights and desires of its constituents, but it is also prescriptive in that it dictates the boundaries around actions taken in the future after the policy is enacted. Legislation is communicative in a democracy because, theoretically, politicians and constituents deliberate about policies that represent the beliefs and values of people living in that county, district, state, etc. Following arguments I have made previously, the physical act of drafting and implementing legislation is rife with opportunity to infuse said legislation's language with political power. Right-to-work legislation serves as a good example to work through the deliberation and communication that happens when deciding to adopt a particular policy or not.

The implementation of right-to-work (RTW) laws began in the early 20th century in order for workers to not "be required to become a union member or, conversely, be required to abstain from union membership as a condition of obtaining or retaining employment" (Lumsden & Petersen, 1975, p. 1237). Most often, these laws remove any requirement for employees in a unionized workforce to pay membership dues to said union while still being able to utilize union resources. Labor rights advocates and union organizations claim that RTW laws are put in place to hinder the power of unions and worry that not requiring union membership dues from employees will increase the number of workers who benefit from union resources and infrastructure without paying into funding such resources (Kasperkevic, 2017). The American Federation of Labor & Congress of Industrial Organizations (AFL-CIO), the largest representative body for unions in the U.S., states that RTW laws "tilt the balance toward big corporations and further rig the system at the expense of working families. These laws make it harder for working people to form unions and collectively bargain for better wages" (AFL-CIO, 2021). In fact, there is currently legislation approved by the House of Representatives and backed by President Biden called Protecting the Right to Organize Act, or PRO Act, that would effectively end all RTW laws across America (Gonyea, 2021).

RTW policy is partially notable because as of 2020, 28 states have implemented RTW laws, some as recently as 2017 (National Conference of State Legislatures, 2020). A key example of situations where RTW laws were *not* supported among businesses and corporations were under circumstances where employers recognized that unions and workforces had some credible pathway to retaliation that could be hurled against their employers (Canak & Miller, 1990). The flip side of this finding is that businesses and corporations tended to support RTW laws when there was inter-union conflict present in their workforces (Canak & Miller, 1990). These two explanations for perceptions of RTW laws from businesses and corporations point to the role of communication at the heart of employer opposition to unions and support of RTW legislation. If unions, as political organizations, are able to effectively communicate their ability to retaliate against perceived anti-worker policies from their employer (e.g., by going on strike), employers are less likely to support implementing legislation such as RTW laws. This is an important dimension of the legal context in which organizing occurs. Just because a group of actors does or does not have the legal ability to organize in the way they would prefer does not automatically mean that organization will abide by that rule or law. Similarly, focusing on communication, if there appears to be a splinter in the internal communication among union members, employers are more likely to exploit that discontent and implement policies that hinder workers' ability to organize effectively. Here, communication is a key concern for workers' organizations and associations attempting to increase and maintain their ability to organize their membership.

Teacher Strikes as Case Studies

I focus on two teacher strikes as case studies in this dissertation. The similarity between the two cases is the use of private and public social media tools by both teacher organizations as a prominent communication medium for their organizing. Specifically, private Facebook groups were heavily used by both teacher organizations to conduct their internal organizing and Twitter pages were used by both groups to implement their external organizing communication (Weiner, 2018). The privacy of these Facebook groups is determined by the fact that the posts and the members in the group are not visible to anyone who isn't already in the group, Facebook user or otherwise. The use of digital communication platforms for the purposes of keeping organizing private is often politically motivated and is increasingly possible due to the affordances of digital platforms, such as Facebook (Stohl & Stohl, 2011; Van Duyn, 2018). Teachers perceived the

affordances of private Facebook groups as a way to skirt anti-organizing labor laws and protect their identities against any potential legal action (e.g., McAlevey, 2018; Weiner, 2018).

Given the private nature of these Facebook groups used to organize strikes, I kept the locations and identities of the strikes completely anonymous. For the sake of clarity, I prescribed pseudonyms to each case that indicate the legal context of the case study. The first case study represents a strike that took place among a non-unionized teacher organization made of several smaller teacher organizations in a state with RTW laws who all came together to form one singular Facebook group for the strike. That case study is largely referred to as the RTW context. The second case study represents a strike among a unionized teacher organization in a state without RTW laws. This case is referred to as the unionized context. The goal here is to capture the stark contrast between what was legally allowable for both strikes from both a communication and an organizing perspective. By focusing on one particular labor-relevant policy that exists in one context and does not in the other, I draw comparisons between the observed communication among both groups while subject to drastically different legal constraints. The names of the two case studies serve as good reminders for what is different about each of the two cases when comparing data across contexts.

In order to accurately compare the organizing communication across both case studies, the two cases were chosen to be as close to a direct one-to-one comparison as possible. A large portion of the analyses described below deal with the teachers themselves, the local elected political elites in each strike context, and the local news media in each strike context. Each strike case occurred under different organizing conditions yet share enough in common to make them comparable. For example, the entire designated media area (DMA) for the RTW context consisted of around 2.3 million homes containing a television (Nielsen, 2019). For the unionized context, the entire DMA represented nearly 2.5 million TV homes. Also, the actors that make up the local political elites were as similar as possible across cases to control for the political authority represented in the language of each group of local elected political elites.

Hypotheses and Research Questions

Using the two case studies described above, this dissertation seeks to extend the CAS framework by further considering the role of technology in the organization of labor strikes, incorporating the legal context within which such labor strikes occur, and separating organizing

communication by the intent of the communication (i.e., internal organizing or external organizing).

Internal Organizing

The first set of hypotheses addresses the internal organizing processes of striking teachers. These hypotheses are driven by the question: *Based on the observed internal organizing communication, where on each CAS spectrum are the two teacher organizations placed?* According to the deliberation scholarship and CAS literature referenced previously, I hypothesize the placements of the internal organizing processes of each teacher strike on each spectrum of the CAS with a consideration of each organization's legal environment. A visualization of these hypothesized placements can be seen in Figure 2.

H1: When participating in internal organizing communication, the RTW public school teachers will be placed closer to the *impersonal* end than the *personal* end of the *mode of interaction* spectrum when compared to the unionized teachers.

H2: When participating in internal organizing communication, the RTW public school teachers will be placed closer to the *institutional* end than the *entrepreneurial* end of the *mode of engagement* spectrum when compared to the unionized teachers.

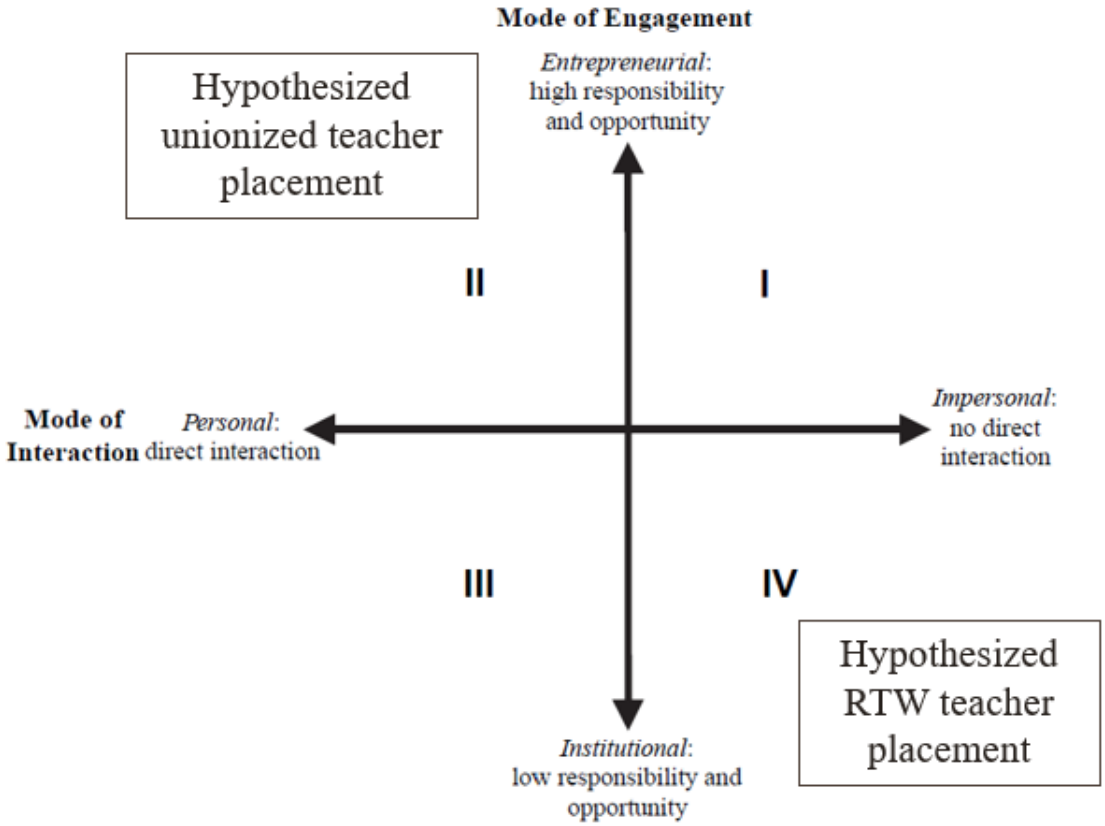

Figure 2. Hypothesized Placement of Teachers' Internal Organizing Communication on the CAS Spectra

External Organizing

The first set of research questions addresses the external organizing processes of striking teachers. Of concern during external organizing processes is the ability for a teacher organization to get their message to the relevant actor bodies. Following the relationship between elites and the press outlined by NAB theory, I ask the following research questions:

RQ1: When communicating about the strike, what differences are there in the relationship between the teacher organizations' external communication and the elected political elites' communication when compared across legal contexts?

RQ2: When communicating about the strike, what differences are there in the relationship between the elected political elites' external communication and the local press's communication when compared across legal contexts?

RQ3: When communicating about the strike, what differences are there in the relationship between the teacher organizations' external communication and the local press's communication when compared across legal contexts?

For the second set of research questions, I focus on a more specific singular demand for which teachers in both case studies advocated. In the two cases discussed here, and prevalent in almost all teacher strike cases in recent history, is the issue of low teacher pay and a desire for higher salaries (Vlamis, 2019). Since the issue of pay was a central issue in both case studies, this pay increase demand can be used to compare the organizing communication between the RTW teachers and the unionized teachers at a more granular level. By zooming in on one single issue, the external communication from each group-of-interest can be compared to one another to evaluate the levels of influence for just one issue and not the idea of the strike as a whole. It is worth investigating the extent to which the teacher organizations influenced other groups' messaging when communicating about their main demand rather than more general strike-relevant communication.

RQ4: When communicating about the issue of teacher pay in relation to the strike, what are the similarities and differences in external communication between the teacher organizations and the elected political elites?

RQ5: During each strike, does the local press's reporting on the issue of teacher pay relate more to the teacher organization's communication or the elected political elites' communication?

RQ6: During each strike, what differences are there in the relationship between the local press's reporting on the issue of pay, the teacher organizations' external communication about the issue of pay, and the elected political elites' communication about the issue of pay when compared across legal contexts?

The remaining chapters of this dissertation will be split into two main sections to represent the two main studies in this project. Study 1 and Study 2 will each outline the procedures and analyses specific to each type of organizing communication: internal and external, respectively.

METHODS

Study 1: H1 and H2

The internal organizing communication was collected exclusively from two private Facebook groups. Each group was created by teachers for the purpose of organizing a teacher strike. I contacted the administrators of each group via Facebook Messenger, the built-in messaging service for Facebook. I explained the nature of my study, how I would collect data, and what I would do with the data. I ensured all information that was collected would be immediately anonymized before any analyses were conducted. These procedures were followed under the guidance of my university's Institutional Review Board who approved the ethical nature of this data collection plan (Institutional Review Board Protocol #IRB-2021-562). I was granted permission to join the groups and collect posts and comments from the month period leading up to the actual strike.

Facebook's terms of service as a platform forbid any automated scraping of data that exists on Facebook. Because of that, I pulled all posts and comments from each of the two Facebook groups by hand. By posts, I mean any initial original posting by a group member to the Facebook group, and by comments, I mean all the direct replies to a post. The posts and comments for each group were organized into a spreadsheet that linked the posts and comments together by the dates of the original posts. Each individual post made in the group is classified as one unit of analysis and all comments directly responding to that post are combined into one text and are also classified as one unit of analysis. The comment text is compiled into one block of text with line breaks separating each comment. Comments responding to the same post are all combined in order to capture the language used in response to a message. These two units of analysis, posts and comments, constitute the call-and-response nature of communicating asynchronously online.

Linguistic Classifications

To begin addressing the first two hypotheses, the first part of the internal organizing analyses involves a systematic evaluation of linguistic categories and pronoun usage among the posts and comments. Linguistic Inquiry and Word Count (LIWC) is a text analysis software that

categorizes large amounts of text according to several grammatical parameters (Pennebacker et al., 2015; Tausczik & Pennebacker, 2010). Of interest to this project is the evaluation of *function words* and *personal pronouns* in the text of these Facebook group posts and comments. LIWC treats all words in a text as either a function word or a content word (Pennebacker et al., 2015). Where content words are the substance of communication and convey the primary nouns and verbs in a message, function words fill in the linguistic gaps and encompass the less-central linguistic categories such as prepositions, conjunctions, and auxiliary verbs, among others (Tausczik & Pennebacker, 2010). Despite function words making up a very small fraction of the total words people have in their ordinary vocabulary, they tend to make up more than half of the volume of words we use and encounter in our communication (Tausczik & Pennebacker, 2010). There is also evidence that content words and function words are processed differently in brain (e.g., Miller, 1995), further warranting an explicit conceptual difference between the two types of words. This understanding of the role of function words in communication is the first step toward connecting the language teachers used to organize a strike and the teacher organization's placement on each CAS spectrum.

Function words encompass the broad category within which pronouns exist. However, pronouns themselves serve unique roles in language and thus also require a deeper examination. All pronoun classifications relevant to the hypotheses and research questions were included and considered. These pronoun classifications include *first person singular* (e.g., I, me, my), *first person plural* (e.g., we, us, our), *second person* (e.g., you, your, yourself), *third person singular* (e.g., he, she, her), and *third person plural* (e.g., they, them, their). LIWC uses these same pronoun classifications and produces the percentage of each type of pronoun that exists in each text corpus. Ultimately, LIWC can be used to compare the percentage of each pronoun used in a post with the percentage of those same pronouns in the direct comments on that post. The use of percentages also standardizes these metrics and makes them comparable between posts and comments because it is adjusted to account for the grand total of words in a post or comment.

Language of Posts and Comments

Text mining techniques were employed to clean the data in a way that aligns with my understanding of the data and the context. Very little cleaning was done in this initial analysis to preserve as much of the natural communication style of the original posts and comments as

possible. Preprocessing was done using AutoMap, a text mining software (Carley, 2001; Carley et al., 2010). The bulk of these preprocessing techniques involve implementing custom thesauri to remove metadata commonly found in the text of Facebook posts, as well as reconciling common noun phrases. For example, one custom thesaurus I will call the *strike thesaurus* allows me to combine all instances of the words "teacher" and "strike" appearing next to each other in the text into one singular concept "teacherstrike." This process of reconciling several-word phrases that represent a single construct provides a more externally valid understanding of the words used to communicate about the strike. Continuing this example, I am more concerned with examining how teachers use words in relation to the *concept* of the teacher strike, rather than the words associated simply with "teacher" and with "strike" as separate concepts (for a full review of text mining and text preprocessing techniques see Lambert, 2017). Custom thesauri are also useful to deidentify the textual data and replace all identifying information with pseudonyms and placeholders while still maintaining the initial language structure.

After the strike thesaurus was applied to the text corpora, the rest of the extraneous text was filtered out. Mainly, aspects of the text least important to preserve in this stage of analysis were punctuation, symbols, and numbers, so all were removed. Lastly, all contractions were expanded to their original grammatical function. Since these analyses will deal with pronouns, it is important to formalize use of contractions to make sure all the pronouns are being captured. Here, "let's" is expanded out to "let us" to ensure the pronoun "us" is classified as a first person plural pronoun.

Preprocessing text for natural language processing methods is an iterative process and often unique to each research project and each set of data. Text is preprocessed, examined, adjusted, and preprocessed again until the techniques are altering and fixing the text in an appropriate and justified manner. The development of the two custom thesauri used in these analyses was unique to all the data examined in the project. The first custom thesaurus is the strike thesaurus described above that reconciles noun phrases and standardizes proper noun usage. The second custom thesaurus I will call the *parts of speech thesaurus* and was constructed to convert all examples of each category of pronoun to be represented by their pronoun category. For example, this converts a sentence such as, "We went to the park to see what you were doing" into "third_person_plural went to the park to see what second_person were doing." Following the same logic as the noun phrase reconciliation in the first custom thesaurus, this second thesaurus is used in the second set

of internal organizing analyses to standardize pronoun use across all text corpora. For this second set of analyses, I am concerned with how teachers use these pronouns when discussing the strike and, crucially, what *other* words teachers use *along with* these pronouns and how similar or different those words are than the words used by other teachers.

Once all the text from each Facebook group was cleaned and preprocessed, the data was organized in a way that accurately represents the units of analysis. Each individual post in the Facebook group during the time frame of interest is exported as an individual plain text file. Similarly, all subsequent comments on a post during the time frame of interest are grouped and put in a single plain text file for each post. For example, if there are 600 posts in the Facebook group, there will be 600 plain text files that each house one individual post and 600 plain text files that house each set of comments directly responding to each of the 600 individual posts. The data is arranged in this way to establish the units of analysis for the posts and the comments. One individual post is one unit of analysis and all the comments responding to one individual post is one unit of analysis. The grouping of all comments replying to the same post into one unit of analysis helps to evaluate how the language in the response comments may be influenced by the language in the original post.

Right-to-Work Internal Organizing

The strike that took place in a RTW state was organized in a private Facebook group that contained approximately 22,000 members. All members were required to be approved by the administrators of the Facebook group before they could join in order to avoid non-teacher affiliated actors into the group. Upon requesting to join the group, users are prompted to answer a question about the school at which they work before being approved to join the group. The Facebook group itself is set to private, meaning only members of the group can see other members in the group and the posts in the group. This Facebook group is also set to hidden, so that the group cannot be found by searching the name on Facebook. Given the privacy settings of this group, all quotations are anonymized and paraphrased where necessary to protect the identity of the group's members. The posts were collected for the two week period leading up to the strike in order to capture the organizing communication used in private. During this period, 1,910 posts were made with 14,224 total comments on those posts.

Unionized Internal Organizing

The strike that took place among a unionized work force was also organized in a private Facebook group with around 1,600 members. Similar to the other group, all members required approval by the group's administrators to join. Also, upon requesting to join the group, users are prompted to answer a question about the school at which they work before being approved to join the group. This Facebook group is set to private, meaning only members of the group can see other members in the group and the posts in the group. However, this Facebook group is set to visible instead of hidden, meaning the group can be found by anyone who searches for it or similar groups on Facebook. Similar to the RTW group, quotations presented from this group are anonymized and paraphrased where necessary. The posts from this group were all collected from the two week period before the strike began to capture the private organizing communication leading up to the strike. There were 74 posts and 225 total comments on those posts during this data collection period.

LIWC Procedures

The first analysis deals with LIWC and the classification of function words and individual pronoun categories in the posts and comments. For this examination, the text data was only preprocessed using the strike thesaurus and removing the extraneous text elements mentioned previously (i.e., punctuation, symbols, and numbers). The parts of speech thesaurus was not used here to preserve each individual instance of a pronoun so that LIWC could recognize and count it. The data was entered into LIWC as individual text files so that the unit of analysis for LIWC is each individual post and the grouped direct replies to each of those individual posts. LIWC combs through the text corpora and produces parts of speech percentages for each unit of analysis. This provides a standardized metric to compare across posts and comments. Importantly, this levels the differences seen in the raw number of posts, comments, and group members between the RTW and unionized groups. The output of the LIWC analysis provides a decimal for each unit of analysis ranging from 0 to 1 that indicates the percentage of total words in that particular unit of analysis classified as functions words and pronouns. This leaves the output file with two sets of columns, one set for the posts and one set for the comments, where each row represents each individual post and all grouped direct replies to each individual post. There are then six columns per set for the

posts and the comments that each represent a part of speech category: function words, first person singular pronouns, first person plural pronouns, second person pronouns, third person singular pronouns, and third person plural pronouns.

Semantic Network Procedures

Next, in addition to the LIWC analyses, semantic networks were constructed for the posts text corpora from each context. These semantic networks can further demonstrate how pronoun use, when contextualized within the broader communication system, can provide insight into a group's perception of cohesiveness. To prepare the data for semantic networks, in addition to the preprocessing already mentioned, I used the parts of speech custom thesaurus. This thesaurus converts all variations of all pronoun categories into their higher-order pronoun categories. Transforming pronouns to be represented by their pronoun category allows for a deeper look into how the teachers' use of certain pronouns contributes to the structure of language they use when internally organizing.

Word co-occurrence lists were then produced for each text corpus. Word co-occurrence lists consist of words that appear together within a window of words, the size of which is set by the researcher. For example, if the words *teacher* and *pay* appear together in a corpus of text within the prescribed window size of words, those two words are identified as a word co-occurrence, and the number of times those two words appear together throughout the whole corpus is tallied. The word co-occurrence lists are used to construct semantic networks for each entity being analyzed. However, given the large amount of data and even larger amount of words in the data, word co-occurrences were standardized relative to the raw number of total word co-occurrences in each corpus. The large amount of data also accounts for all the word co-occurrences that only occurred once in the corpus. These onetime word co-occurrences do not accurately represent the internal organizing communication and were therefore dropped. In order for a word co-occurrence to be included, it needs to have occurred at least twice within the corpus in an effort to reduce the influence of linguistic anomalies or outliers. In addition to excluding onetime word co-occurrences, the weight assigned to each word co-occurrence, or *edge*, is standardized to accurately represent each individual text corpus. The raw frequency of co-occurrences two words have with each other, referred to here as *edge weights*, is first divided by half of the total number of word co-occurrences in the corpus. It is divided by half of total number of co-occurrences

because the co-occurrences are bidirectional, so each one is counted twice despite both accounting for the same linguistic relationship. If the word *teacher* co-occurs with the word *pay* 12 times in a corpus, the word *pay* and the word *teacher* will also be counted as having co-occurred 12 times. Often, this division of the edge weights will make the percentages a very small decimal. For interpretability, I then multiplied the edge weights by 1,000.

Word co-occurrence lists were imported into a network analysis software, NodeXL (Smith et al., 2012). Here, words are represented by nodes and connections between those nodes (i.e., edges) exist if two nodes were identified as having co-occurred in their original corpus of text. The edge weights for all the connections are also imported to represent not only the words as nodes and the connections as edges but also the amount of connections that occurred between words. These analyses are more concerned with the original posts themselves, and less so the comments responding to those posts. So, there are two semantic networks total, one for the unionized teachers' posts and one for the RTW teachers' posts.

For each semantic network, two network metrics, betweenness centrality and eigenvector centrality, were calculated and standardized. Betweenness centrality is a metric in network science that measures the amount of influence any given node has on information moving around the network. Betweenness centrality assesses the structural importance of a node in a network by measuring the number of shortest paths on which that node exists between every other node in the network (Freeman, 1979). In the context of the semantic networks in this study, a node with a high betweenness centrality score is one that other nodes frequently must pass through in order to reach other nodes in the network. Betweenness centrality can be thought of here as importance in the network regarding language structure. A node with a high betweenness centrality represents a word that plays a crucial role in the structure of language represented by the network. The betweenness centrality scores of each network were standardized here to compare them across contexts. The standardization divides all betweenness centrality scores by ((*n* - 1) * (*n* - 2) / 2), where *n* is the total number of nodes in the network (Bonacich et al., 1998). This calculation makes all betweenness centrality scores range from 0 to 1, with 1 being the highest betweenness centrality a node can achieve.

Eigenvector centrality is a network metric that assesses a node's importance in a network based on the amount of connections it has with other nodes in addition to how connected *those* nodes are with other nodes in the network (Bonacich, 1972). Essentially, a node with a high

eigenvector centrality means that node is connected to a lot of other well-connected nodes in the network. Eigenvector centrality also ranges from 0 to 1, with 1 being the highest eigenvector centrality a node can reach. There is often a high correlation between network metrics such as betweenness centrality and eigenvector centrality (Ronqui & Travieso, 2015), but they measure different phenomena and consider different aspects of the semantic network. For that reason, the two metrics are examined in tandem in an attempt to fully capture the importance of the pronoun usage in each semantic network.

Study 2: RQ1 through RQ6

Study 2 is concerned with the external organizing processes and answering research questions 1-6. Techniques for Study 2 largely overlap with procedures used in Study 1 with some notable differences. The techniques reused here will be referred to using the section headers from the Study 1 Methods section. Any deviations from the Study 1 Methods are noted and explained.

Data Collection

The external organizing communication takes place in a public forum for the intentional purpose of spreading a message. Therefore, for the purposes of this study, Twitter was used as the space in which to analyze such discourse. Twitter has been found to feature heavily in people's information seeking about current political events, including journalists (McGregor & Molyneux, 2020), political elites (Kreiss, 2016), activists (Himelboim et al., 2013), and the public (Bode & Dalrymple, 2016). Using Twitter to measure the external organizing processes also standardizes the constraints around the nature of such communication across all the groups (e.g., tweets are only able to include maximum 280 characters of text). The tweets sent by specific Twitter accounts were collected using a package for the programming language python 3.7.1 called *twint* (Twint, 2018). The advantage of using the package *twint* is that it can pull tweets from a specific account during specific timeframes while bypassing the traditional limitations of the Twitter Application Programming Interface (Twint, 2018).

There are three groups of interest as they exist on Twitter that are involved in the analyses of both case studies: elected political elites, the teacher organization, and the local news media. All collected tweets from all groups of interest were sent during the time frame of each respective

strike with one extra day at the beginning and the end of each strike. In the case of the RTW teacher strike, tweets that make up part of the political elites' corpus of strike-related messaging (n = 73 tweets) were extracted from the Twitter accounts of the governor, the Attorney General, the State Department of Education, the State House of Representatives Majority Speaker, the State Chair of the Senate Education Committee, and a State Senator. These specific accounts were included inductively based on their relevance to the strike and the frequency with which these names are brought up by both the teacher organizations and the local press. The tweets making up the teacher organizations' corpus of strike-related messaging (n = 306 tweets) were extracted from the Twitter accounts of the state chapter of the American Federation of Teachers (AFT), the state's Education Association, the National Education Association, and the Twitter account created by the teachers specifically to spread the word about the strike. The local news media's corpus of text (n = 271 tweets) about the strike were collected from the Twitter accounts of local outlets deemed major newspapers according to circulation in the state as well as the local affiliates of all major news broadcast networks. Local news is used for these analyses because of the frequency with which these outlets report on local issues compared to national news outlets that focus on national issues.

These same procedures were followed for the unionized teacher strike. All the tweets collected for the unionized strike were sent during the time period of the strike itself. The political elites' messaging (n = 32 tweets) was collected from the Twitter accounts of the Governor, the City Council President, the City Council Board of Education Vice President, an Assembly Member of the State Senate District in which the strike took place, and a State Senator. These accounts were selected iteratively, as in the RTW strike, and also with consideration towards making the authorities of the political elites across strikes as similar as possible. As mentioned earlier, I tried to achieve as close to a direct one-to-one comparison of political elite authority when analyzing their public-facing communication about the strike. This was limited by what political elites operate active Twitter accounts and, of those, which sent tweets relevant to the strike at all. The tweets from the voice of the unionized teachers (n = 257 tweets) were constructed from the Twitter accounts of the city's Education Association, the state teachers association, the school district's account for news about the district, the local union chapter for the teachers, the state chapter of the union, the State School Employees Association, and the County Labor Council. Lastly, the voice of the news media reporting on the unionized strike (n = 293 tweets) was similarly made up of the Twitter accounts from the top local newspapers as well as the local broadcast news affiliates.

Semantic Saturation Data Analysis

Using the text preprocessing procedures from the Semantic Network Procedures section of the Study 1 Methods, I cleaned the tweet corpora using only the strike thesaurus and removing common metadata and punctuation. The similarities in the preprocessing end with importing the word co-occurrence lists into NodeXL. Once the word co-occurrences and their corresponding edge weights were imported into NodeXL to construct a semantic network, the semantic network is transformed into a co-occurrence network matrix.

The use of correlated co-occurrence matrices is already a familiar technique in NAB-related research (e.g., Guo, 2012). The notable difference here is instead of constructing co-occurrence matrices of topics and attributes, the matrices here consist of words and noun phrases used by each entity when communicating about an issue. The first row of the matrix is transposed from the first column of the matrix, both of which are populated by all the words used by that entity. Each cell in the matrix is filled in using that word co-occurrences edge weight, or frequency with which two words were identified as having co-occurred. For example, to show the computation of edge weights in the co-occurrence matrices starting with a word co-occurrence list, there are 12,800 total word co-occurrences in the corpus of text and the words *teacher* and *pay* co-occurred 12 times within that corpus. The edge weight calculation is done to standardize all the edge weights that end up in the co-occurrence matrix. The cell in the co-occurrence matrix that aligns with the *teacher* cell in the first column and the *pay* cell in the first row is populated with the number 12 divided by 6,400 (which is half of 12,800) then multiplied by 1000 to equal 1.875.

Once all individual co-occurrence matrices were constructed for the political elites, the local press, and the teachers in both strike contexts, the matrices need the same parameters in order to correlate them together. The matrices need to be setup so that all the same words are included in both matrices being correlated. Since there will naturally be discrepancies in what word co-occurrences appear in each matrix. To reconcile this, I expanded out each matrix to account for all the word co-occurrences that appear in the other matrix with which it is being correlated. All word co-occurrences that do not appear in the original matrix but are added to standardize the parameters of the correlated matrices are given a 0 for their edge weight since those co-occurrences did not actually occur in the original corpus. There will also presumably be overlap in the word co-occurrences that appear in two matrices. In fact, this overlap is exactly what this semantic saturation analysis technique is meant to measure. Therefore, the edge weights of those

overlapping word co-occurrences are maintained from their initial co-occurrence matrix. All matrices then had three versions of themselves. For example, the matrix representing the RTW teachers' voice regarding their strike has one version where all the word co-occurrences from the local press matrix are included, one version where all the word co-occurrences from the political elites are included, and one where all word co-occurrences from all three groups are included. The reason this process needs to be done for all sets of matrices is to maintain the edge weights from the original semantic networks. The teachers' matrix correlated with the local press's matrix will ultimately be a correlation between 1) the teachers' word co-occurrences, their edge weights, and the remaining co-occurrences from the local press's matrix not already present, and 2) the local press's word co-occurrences, their edge weights, and the remaining co-occurrences from the teachers' matrix not already present.

The use of co-occurrence matrices is to capture the transfer of salience among objects and attributes that appear *together* in communication from one entity (Kiousis et al., 2015). Effectively, such correlations between co-occurrence matrices measure the similarity with which several entities discuss the same issues, use the same or similar attributes when discussing those same issues, and discuss the same issues in tandem with the same other issues. The mental maps and schema about issues are represented by semantic networks and ultimately word co-occurrence matrices. The semantic network of word co-occurrences for one news outlet, as an example, can be thought of as a physical representation of the mental map and schema that news outlet chose to highlight when reporting. NAB research also states that journalists and news outlets are co-creators of news information with other entities of influence, such as political elites, interest groups, and norms of the news outlet (D'Angelo, 2002; Scheufele, 1999). Capturing the co-construction of news information that is present in the media's agenda is possible using semantic saturation by comparing the similarities and differences in words used by sources relevant to the agenda-building process over time.

Word2Vec Analysis

The second analysis meant to address the second set of research questions (i.e., RQ4 through RQ6) deals with one primary semantic network analysis technique, Word2Vec, to examine how each entity talked about the issue of pay in their public communication. For this

examination, the text data was preprocessed in AutoMap using only the strike thesaurus, as well as removing the same extraneous text elements as before.

Word2Vec is a natural language processing package for python 3.7.1 and is employed here to expand the analysis and understanding of the role of particular words in each entity's external communication about the strike. Word2Vec is a technique that uses a sliding window to assess the distances of every word in a corpus of text from every other word in that same corpus (Sieg, 2018). Word distances are measured using Term Frequency-Inverse Document Frequency (TF-IDF), a process that assigns vectors to the words in a corpus based on each word's frequency in relation to the frequency of posts or comments that appear in the entire corpus that are similar to the posts or comments that contain each word (Gupta, 2018). The words are then visualized based on those vectors around a central word to show the words that appear closest and most frequently to the central word in the text corpus (van der Maaten & Hinton, 2008). This technique is a way to give words a systematic weight, or an evaluation of meaningfulness, to assess what words are often used in the same context as other words (Gupta, 2018; Sieg, 2018). The results of the "pay" Word2Vec analyses help illuminate the linguistic context within which each entity talked about the issue of pay, as well as what other words were most associated with this particular strike demand.[1]

A fruitful example of what Word2Vec is capable of analyzing is next word predictive text in most modern smartphone text messaging apps. It is now commonplace that when texting, words will be suggested as you type to predict what you are trying to say next. Word2Vec can achieve this same process by analyzing enormous amounts of natural language, assigning vectors to each word, then using TF-IDF to categorize the placement of each individual word embedded within phrases, sentences, paragraphs, and whole corpora of text. The patterned placement of words embedded in a body of text is then used as a metric for Word2Vec to determine what words are most commonly associated with, or most commonly come after, the word that was just typed into a text message draft.

[1] A validity check was conducted to select the word or term best representative of the pay raise strike demand. Other words tested in addition to "pay" were "salary" and "raise." Across both cases, "pay" demonstrated the highest betweenness centrality (Wasserman & Faust, 1994) compared to the other words, indicating that "pay" plays a more central or important role in the language structure of both teacher organizations. Since I am interested in analyzing the organizing communication that actually occurred, "pay" was chosen to represent the higher salary strike demand in both contexts.

In this study, Word2Vec was employed to quantitatively assess the embeddedness of any given word in the tweets about the strike from all groups. Word2Vec adds additional clarity on word embeddings by utilizing TF-IDF to determine frequencies of certain language structures instead of the word co-occurrence calculations utilized in the other semantic saturation techniques.

RESULTS & DISCUSSION

Study 1: H1 and H2

Given the interconnected nature and cross-comparison in these first analyses, I group the results and discussion together separated by legal context. Hypothesis 1 predicted that the internal organizing communication of the RTW teachers would be placed closer to the *impersonal* end of the mode of interaction spectrum compared to the unionized teachers. Hypothesis 2 predicted that the internal organizing communication of the RTW teachers would be placed closer to the *institutional* end of the mode of engagement spectrum. In order to address this first hypothesis, I compared the posts to the comments in their respective use of function words and pronouns. Since time order is built into this internal organization communication, in that comments will always follow posts, I used both ordinary least squares regression and multivariate multiple regression to measure the influence that post communication might have on comment communication. The main analysis was to regress the classification percentages for each linguistic category from the comments onto the posts to which they responded while controlling for the influence of all other linguistic categories. The goal here was to evaluate which linguistic categories present in the posts were significantly influencing linguistic categories in the comments above and beyond the influence of the other linguistic categories.

There are two primary tests that each represent the linguistic categories being analyzed. Since the individual pronoun categories are nested within the higher-order *function word* category, two regression tests were first used for the higher-order category (i.e., function words), one for each legal context. Then, a separate model for the disaggregated individual pronoun categories (i.e., first person singular, first person plural, second person, third person singular, and third person plural). The function words model initially established the more general relationships between the communication patterns seen in the posts compared to the comments in order to address the first hypothesis. The second, more specific model then disaggregates the results from the first model to examine the relationships between individual pronoun categories in the posts and the comments in order to address the second hypothesis. Since I am interested in differences between individual pronoun categories, particularly to address the second hypothesis, it is important to dig deeper into how each individual pronoun category relates to one another. Function words, the main

operationalized construct to test the first hypothesis, includes all pronoun categories. This provides a solid evaluation of the overall language style matching seen between posts and comments

RTW Context

The first hypothesis is concerned with the mode of interaction CAS spectrum and predicts that teachers in the RTW context will fall closer to the impersonal end of that spectrum based on a lack of observed language style matching. Language style matching is operationalized here to be understood as a strong relationship between function word usage in the posts and function word usage in the comments. Evaluations of placement on this spectrum rely mostly on the teachers' use of function words in their internal organizing communication, particularly in their use of function words in the posts compared to function words in the comments. Evidence of language style matching places teachers closer to the personal end of the mode of interaction spectrum where a lack of compelling evidence for language style matching places teachers closer to the impersonal end of this spectrum. The results of the regression test in the RTW context show that function word use in Facebook group posts statistically significantly predict function word use in the comments on those posts ($b = 0.04$, $SE = 0.01$, $p < 0.01$). These findings suggest that teachers in the RTW context were participating in language style matching. Commenters in the Facebook group seem to mimic or echo the pronouns used in the original posts to which they are replying.

Based on these initial results, the first hypothesis does not have full support. An organization's members who use similar language structures, as seen among the RTW teachers, would indicate that membership falls closer to the *personal* end of the mode of interaction spectrum instead. Evidence of language style matching would mean members are often talking with one another about the goals and strategies within their organization and therefore align with the personal end of that spectrum. Given the significant relationship between the posts and the comments in this broader function word category, it is worthwhile to dig deeper and see what particular pronoun categories within the function word category had meaningful relationships with one another.

The second hypothesis dealt with the mode of engagement CAS spectrum and predicted that teachers in the RTW context would fall closer to the institutional end of that spectrum. To address this second hypothesis, the multivariate multiple regression results for the disaggregated individual pronoun categories can be seen in Table 1.

The posts made in the RTW group had a significant effect on the comments regarding several individual pronoun categories. The use of first person plural pronouns (i.e., we, us) in posts had a significant influence on the use of first person plural pronouns in the comments. Using second person pronouns (i.e., you, your) in the posts had a significant influence on the use of second person pronouns in the comments, as did using third person plural pronouns in the posts (i.e., they, them). The presence of third person singular (i.e., he, she) and third person plural pronouns in the posts had a significant influence on the presence of third person singular and plural pronouns in the comments, respectively. With the exception of first person singular pronouns, which did not have a significant influence, and second person and third person plural pronouns in the posts predicting second person pronouns in the comments, the pronoun categories in the posts overwhelmingly influenced the corresponding pronoun categories in the comments.

The regression models have so far shown the RTW teachers as situated closer to the personal end of the mode of interaction spectrum and closer to the institutional end of the mode of engagement spectrum. Regression models show the aggregate relationships that pronoun categories have with one another. However, to place each strike more accurately on the CAS spectra, more specific investigation into what role these pronouns serve in each semantic network is required. To do this, betweenness centrality and eigenvector centrality were calculated for each pronoun category in each of the two semantic networks. The betweenness centrality and eigenvector centrality results demonstrate the same conclusion, so they will be discussed in tandem using the term *joint centrality* to refer to both metrics at the same time. The results of the joint centrality metrics for the RTW semantic network can be seen in Table 2.

Table 1. Multivariate Multiple Regression Statistics for Disaggregated Personal Pronoun Categories Between RTW Posts and Comments

	Comment First Person Singular			Comment First Person Plural			Comment Second Person			Comment Third Person Singular			Comment Third Person Plural		
	b	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value
RTW Teachers															
Post First Person Singular	0.04	0.02	0.076	0.01	0.01	0.823	-0.01	0.03	0.811	-0.01	0.01	0.798	0.01	0.01	0.731
Post First Person Plural	-0.03	0.02	0.205	**0.03**	0.02	0.032	0.05	0.04	0.132	-0.01	0.01	0.669	0.01	0.01	0.659
Post Second Person	0.03	0.03	0.261	-0.01	0.02	0.720	**0.12**	0.04	0.004	-0.02	0.02	0.315	0.01	0.01	0.377
Post Third Person Singular	0.03	0.06	0.585	0.01	0.04	0.935	-0.06	0.08	0.492	**0.29**	0.03	0.001	-0.04	0.03	0.110
Post Third Person Plural	-0.01	0.04	0.926	0.04	0.03	0.119	**-0.15**	0.07	0.023	-0.03	0.02	0.300	**0.15**	0.02	0.001

Note: Coefficients in bold indicate statistical significance at the $p < 0.05$ level

Table 2. Joint Centrality Metrics of Pronoun Categories in RTW Posts During Internal Organizing

	RTW	
	Standardized Betweenness Centrality	Eigenvector Centrality
First Person Singular	0.375	0.042
First Person Plural	0.283	0.031
Second Person	0.070	0.015
Third Person Singular	0.021	0.010
Third Person Plural	0.112	0.018

Overall, the RTW teachers' Facebook group posts possessed joint centrality in several key pronoun categories. For the posts, RTW teachers' pronoun use had a higher joint centrality than all the pronoun categories except second person pronouns in the unionized context. This means that across legal contexts, teachers in this RTW context generally utilized pronouns as more important linguistic tools in their posts while organizing internally.

The second hypothesis predicted that the RTW teachers would fall closer to the institutional end of the mode of engagement spectrum. In order to reach a conclusion about this hypothesis, I examined the full picture of how teachers used pronouns, particularly second person, third person singular, and third person plural pronouns, when posting in their respective Facebook groups. Starting with the multivariate multiple regression results seen in Table 1, the RTW teachers overall demonstrated a strong relationship between pronoun usage in the posts and the comments. The strong relationship between second person, third person singular, and third person plural pronouns used in the posts and comments of the RTW Facebook group indicate that the RTW teachers demonstrated communication patterns more indicative of the institutional end of the mode of engagement spectrum. According to CAS, the institutional end of the mode of engagement spectrum indicates a more top-down organizational structure with little-to-no room for individual members to enact their personal issue agendas or contribute to the deliberation taking place during collective action organizing (Bimber et al., 2012). Therefore, partial support for the second hypothesis was found initially.

Ultimately, the goal of these analyses is to be able to place each teacher group on the two CAS spectra. To give a more complete picture of where the RTW group falls on each spectrum, I next consider the unionized context followed by a comparison between the two contexts in relation to the two CAS spectra.

Unionized Context

Starting with the first hypothesis in the unionized context, function word use was employed to assess if the unionized group's internal organizing communication fell closer to the *personal* end on the mode of interaction spectrum as hypothesized. Using the same regression analysis as the RTW context, the posts in the unionized group did not demonstrate a significant influence on function word use in the comments (b = 0.007, SE = 0.12, p = 0.95). This lack of significance points to the unionized teachers falling closer to the impersonal end of the mode of interaction. Lack of substantial language style matching seen between the posts and their replies indicates that individual group members may feel more autonomy and self-assuredness when internally organizing. There may be less urgency in attempts to linguistically mirror the language of the posts when commenting in the group. Teachers in the unionized group may feel more comfortable to speak their mind and voice their opinion without fear of disintegrating group unity or ostracizing themselves from the group. Also worth considering for the unionized teachers, it may be that individual pronoun categories do have a meaningful relationship but are getting drowned out by the insignificance of this higher-order function word category.

To explore the more granular individual pronoun categories and address the second hypothesis more explicitly, the results of the multivariate multiple regression analyses can be seen in Table 3. The unionized context had less significant relationships between pronoun use in the posts and the comments, similar to the higher-order analysis. Only first person plural (e.g., we, us) and third person singular (e.g., he, she) pronouns had significant influence from the posts to the comments. These findings illuminate some explanation for why the higher-order function word analysis in the unionized context was not significantly related to one another. There was not a substantial enough relationship between the posts pronoun use and the comments pronoun use to be captured by the function word regression analysis in the unionized context. Upon further investigation, only two of the five pronoun categories showed any meaningful relationship between the posts and the comments.

Table 3. Multivariate Multiple Regression Statistics for Disaggregated Personal Pronoun Categories Between Unionized Posts and Comments

	Comment First Person Singular			Comment First Person Plural			Comment Second Person			Comment Third Person Singular			Comment Third Person Plural		
	b	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value	*b*	*SE*	p-value
Unionized Teachers															
Post First Person Singular	0.36	0.23	0.124	**0.27**	0.11	0.024	-0.16	0.18	0.381	-0.01	0.03	0.703	-0.02	0.04	0.598
Post First Person Plural	-0.16	0.22	0.473	0.03	0.11	0.804	-0.04	0.17	0.815	0.04	0.03	0.201	-0.01	0.04	0.930
Post Second Person	0.19	0.19	0.325	-0.05	0.10	0.574	0.05	0.15	0.710	-0.01	0.03	0.971	-0.03	0.03	0.395
Post Third Person Singular	0.28	0.77	0.716	-0.18	0.39	0.649	-0.32	0.60	0.596	**0.53**	0.11	0.001	0.18	0.13	0.163
Post Third Person Plural	0.31	0.33	0.348	0.02	0.17	0.898	-0.28	0.26	0.286	-0.02	0.05	0.743	-0.01	0.05	0.904

Note: Coefficients in bold indicate statistical significance at the $p < 0.05$ level

When considering the joint centrality results in the unionized context seen in Table 4, the teachers interestingly used second person pronouns as more effective messaging tools than did RTW teachers in their posts. The more embedded use of second person pronouns in the unionized teachers' posts can be partial explanation for placing the unionized teachers toward the institutional end of the mode of engagement spectrum in CAS. Teachers in the unionized context achieved much less success in demonstrating a solid relationship between pronoun usage in the posts and comments.

Table 4. Joint Centrality Metrics of Pronoun Categories in Unionized Posts During Internal Organizing

	Unionized	
	Standardized Betweenness Centrality	Eigenvector Centrality
First Person Singular	0.060	0.001
First Person Plural	0.065	0.023
Second Person	0.127	0.025
Third Person Singular	0.000	0.001
Third Person Plural	0.016	0.005

However, when considering the multivariate multiple regression along with the joint centrality metrics, there is justification for the unionized teachers to instead exist closer to the entrepreneurial end of the mode of engagement spectrum, but not firmly at the very edge of that spectrum. Rather, the unionized teachers' placement on this spectrum favors the entrepreneurial end but is moved slightly toward the institutional end. This is one advantage of theorizing around spectra. The fuzzy, nonlinear nature of communicative relationships is represented well by a sliding scale rather than a strict binary.

Taken together, between the regression analyses and the joint centrality metrics, there is convincing evidence that the unionized teachers are closer to the *entrepreneurial* end of the mode of engagement spectrum, but not all the way. CAS states that the entrepreneurial end of the mode of engagement spectrum indicates that the members of an organization feel willing and able to

contribute to the planning and organizing of a collective action and it is possible to incorporate individual members' issue agendas into the organization's organizing actions (Bimber et al., 2012). First, the lack of significant relationships between third person plural pronouns in the posts and comments of the unionized group, and mixed results between second person pronoun use in the posts and comments, places the unionized teachers closer to the entrepreneurial end of the mode of engagement spectrum.

Also, the results showed that in the unionized group, first person singular pronouns in the posts significantly predicted first person plural pronouns in the comments. Importantly, commenters in the unionized group steer first person singular pronouns back toward egalitarian, first person plural pronouns. As a communicative signal, unionized teachers use egalitarian pronouns to speak about organizing issues collectively, placing them even more close to the entrepreneurial end of the mode of engagement spectrum.

Overall Discussion

Study 1 established the communication patterns present during the internal organizing processes of both strikes. Using the private Facebook groups for both teacher organizations, I focused on the use of function words and pronouns as a way to evaluate the linguistic perceptions of group cohesiveness among the Facebook group's members across legal contexts.

Taken together, the various analyses coalesce into a more clear picture about how internal organizing communication represents and is influenced by the legal context within which the organizing takes place. A visualization of the two teacher groups plotted on both CAS spectra can be seen in Figure 3. The benefits of placing these communication phenomena on spectra rather than a strict dichotomy come into full view.

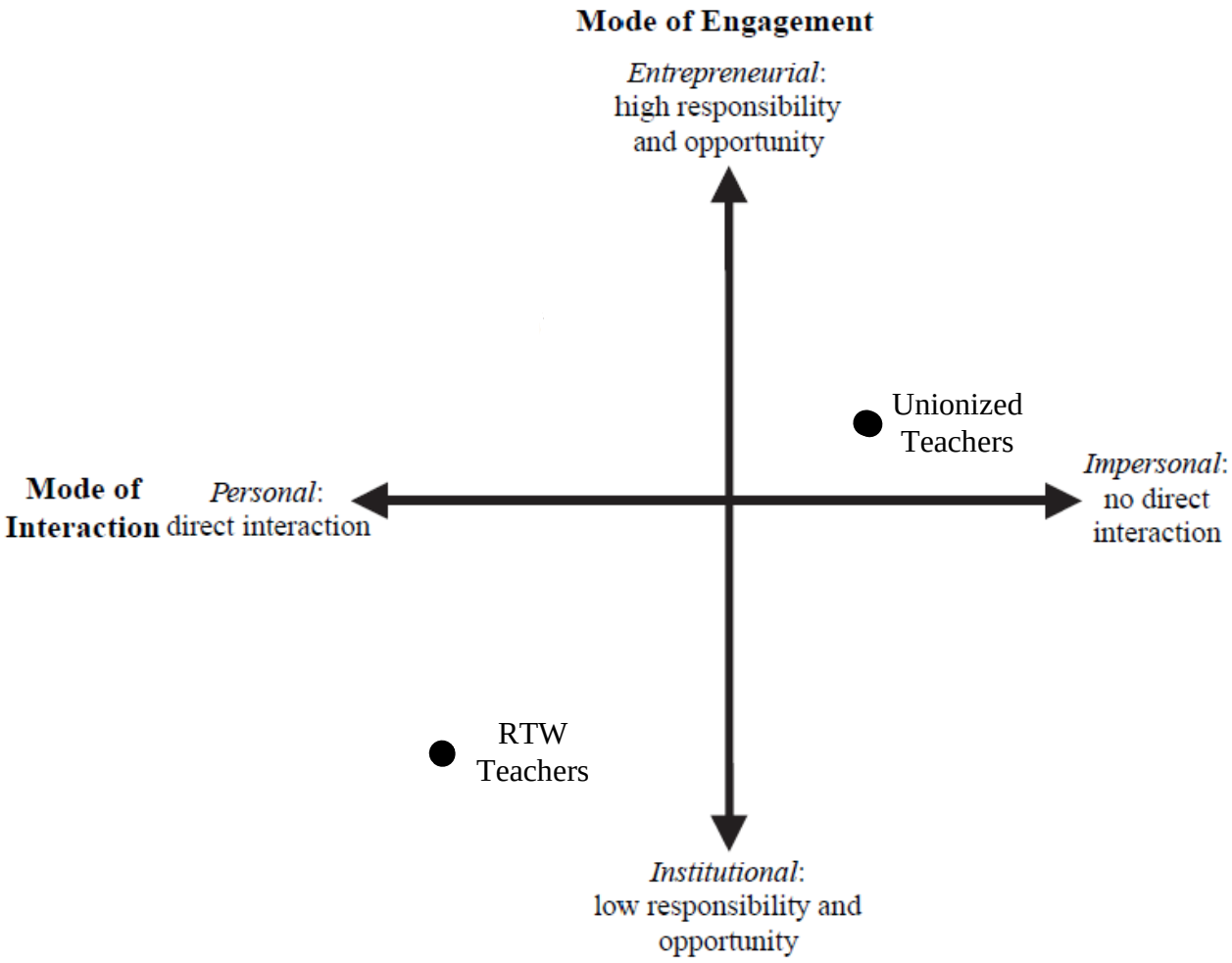

Figure 3. Observed Internal Organizing Communication of Teachers Plotted on CAS Spectra

As one compelling explanation for these placements, there is already more inherent organizational foundation among the unionized teachers through the pre-existing offline existence of their organization and the affordances of their more labor-friendly legal context. Whether or not it is utilized effectively, there does exist a more centralized group (i.e., the union) that inherently connects these teachers who are organizing that does not readily exist among the RTW teachers. This may largely explain the lack of complimentary pronoun use in private dialogues among the unionized teachers. There is less communication work that needs to be done to enforce group cohesion. It may be that the identity marker of the union gives enough of a social safety net to feel as though the teachers organizing are (largely) on the same page regarding the strike and its demands. On the other hand, the RTW teachers did not yet possess a collective cohesion and

needed to do much more work communicatively to express everyone's shared struggle and shared goals of the labor action while organizing. The RTW teacher group is an amalgamation of several teacher groups coming together to act as one unified force. As a result, the unionized teachers felt free and comfortable to suggest and implement their ideas for organizing their strike while RTW teachers employed a more disciplined and follow-the-leader style of communication, reminiscent of a more top-down, hierarchical organization. This evaluation is supported by extant organizational communication research (i.e., Wiemer et al., 2021) about the communication consequences of more diffuse organizational structures reminiscent of this RTW teacher group.

The unionized teachers showed clear preferences for in-group and out-group language. The only two pronoun categories that had a significant relationship between the posts and the comments in the unionized context were first person singular pronouns (i.e., I, me) in the posts predicting first person plural pronouns (i.e., we, us) in the comments and third person singular pronouns in the posts predicting third person singular pronouns in the comments (i.e., he, she). The heavy reliance on us vs. them language, especially when compared to the RTW context, highlights the influence that legal constraints can have on the language groups use to organize internally. The identity markers may have already been established more concretely for the unionized teachers. The organization gives some explicit legitimacy to the relationships the teachers perceive themselves as having with their fellow teachers (i.e., us) and the administration and political elites (i.e., them).

In the RTW context, these communicative dynamics were being negotiated, established, and normed in real time. The fragmentation of the RTW teacher organizations likely contributed to the intentional language style matching occurring among the teachers while internally organizing. There are more incentives for the RTW teachers to linguistically signal compatibility with other group members in fighting for their shared cause. The RTW teachers incur the struggle of having to wrangle and organize all the teachers together to begin with, a luxury the unionized teachers have largely already established through formally unionizing.

Between the two teacher groups, the RTW teachers demonstrated the most clear language style matching in their internal organizing communication on Facebook. The unionized teachers did not have a significant relationship between overall function word usage in the posts and the comments in their Facebook group. Language style matching present among the RTW teachers places that group closer to the personal end of the mode of interaction spectrum. Therefore, support

for the second hypothesis was not found. RTW teachers utilized strong language style matching in their use of function words when replying to posts in their Facebook group indicative of the personal end of the mode of interaction spectrum. Similarly, a lack of robust language style matching among the unionized teachers places their internal organizing communication closer to the impersonal end of the mode of interaction spectrum.

Adding to these interpretations of the results so far, the joint centrality metrics for the individual pronoun categories in the posts of each Facebook group help to tell a more complete story. RTW teachers' pronoun use displayed higher joint centrality than the pronoun categories for the unionized teachers except second person pronouns. Therefore, the RTW teachers utilized pronouns while internally organizing as important linguistic tools in their posts. The unionized teachers used second person pronouns as more effective messaging tools than did RTW teachers in their Facebook group posts.

The CAS mode of engagement spectrum can guide the interpretation of these results. For instance, second person pronouns served as the most important pronoun through which information passed in the posts and indicates that the unionized teachers and pulled toward the institutional end of the mode of engagement spectrum. Teachers often chose to linguistically separate themselves from the rest of the teachers, and the union itself, when posting in the Facebook group during the internal organizing process. Teachers who are more embedded in the union leadership itself also choose to make a linguistic distinction between rank-and-file teachers and members of the union administration.

Pulling out exemplar posts helps to clarify and validate the role of these pronoun categories. In the RTW group, a teacher posted, "They've laughed at us the past 2 Fridays and yesterday … They can't fire us all if we stay united … They don't have the space in the jails to arrest us all." As a direct reply to this post, another teacher commented with support by echoing the original post's sentiment, pointing out "And when we get to jail the correction officers will know we are fighting for them too lol." This example of a back-and-forth conversation the RTW teachers were having during internal organizing shows the teachers employing intentional language style matching as a form of solidarity. The original post uses "they" pronouns to refer to the local political elites and "we" and "us" to refer to the teachers themselves. Then, in the comments, a teacher mimics those same pronoun designations to further solidify the use of first person plural pronouns (e.g., we, us) when referring to all the teachers. This initial use of pronouns in the post, followed by that same

pronoun use in the comments, demonstrates the communicative effort being made by all the teachers in the RTW group to stand together and remind each other who supports them (i.e., their fellow teachers) and who is standing in their way (i.e., the local political elites).

Showing exemplars from the unionized context displays the differences in function word and pronoun usage between the two groups. One teacher posted in the unionized Facebook group,

> We bargained last night until 3am. Pushing very hard on all four of our core bargaining demands: a living wage, smaller class size, more student supports and no school closures. We can feel your strength!

In this exemplar, a teacher in a position of union leadership gives a bargaining update. From a communication standpoint, this teacher uses the *we* pronoun to refer to the union leadership and the *your* pronoun to refer directly to the rank-and-file teachers in the group. These results then paint a picture that a formalized organization like a union is communicatively susceptible to more formalized, top-down hierarchies which is reflected in the word choices used by teachers in various places along that hierarchy. The institutional end of the mode of engagement spectrum represents this top-down organizational structure occasionally seen reflected in the teachers' private organizing communication.

The other common use of second person pronouns in the posts of the unionized group were expressions of thanks and love. Often, teachers expressed gratitude to the other teachers by explicitly saying thank you or I love you. One teacher wrote an update to say:

> I love you all! You are powerful! Let's stay united against the billionaires and let's settle this contract that will start us on the road to ending the teacher retention crisis and providing better services for our kids. Over 95% of teachers are striking and less than 3% of students are in schools according to our #'s. We are winning! We are winning! We are winning!

Here, a teacher uses the "you" pronoun to several times to communicate a message of support and unity with their colleagues. In this context, the second person pronoun is to recognize teachers for their achievements while still linguistically signaling that they are all in this fight together and supporting one another is a key component to getting their demands met. In contrast to the earlier exemplar, this quote uses the *we* pronoun to refer to *all* teachers and their shared struggle as well as their shared victory.

With an understanding of how both of these teacher groups communication internally, I now turn to an examination of the external communication employed by both groups of teachers while the strike is ongoing.

Study 2: RQ1 through RQ6

For the first three research questions, the co-occurrence matrices were compared and contrasted as a measure of the relationships between each group's communication about the strike. A network analysis software, UCINet (Borgatti et al., 2002), can conduct an analysis called Quadratic Assignment Procedure (QAP). QAP is a network analysis technique that correlates two network matrices together and compares the statistical significance of their relationship against 5,000 random permutations of networks that contain the same boundaries. QAP produces a Pearson's *r* correlation coefficient. The statistical significance of that coefficient is determined by comparing the observed relationship between the two observed matrices to the random permutations of the observed matrices and determines if the observed correlation is significantly different than what would be expected by chance. The correlation coefficients will be compared using two standard deviations of difference between two coefficients as a significant difference. Evaluations of magnitude will follow traditional benchmarks for small, medium, and large correlation coefficients

For example, if the correlation between the word co-occurrences used by the unionized teachers and the local press is at least two standard deviations higher that the correlation between the word co-occurrences used by the elected political elites and the local press, it can be concluded that the teacher-press relationship is stronger than the politician-press relationship when discussing the strike. A stronger relationship indicates a larger amount of communication overlap, or semantic saturation, between two voices talking about the same issue at the same time.

Similar to Study 1, I separate out the results and discussion by legal context. After discussing each context separately, I conclude with an overall Study 2 discussion that compares the analyses across legal contexts.

RTW Strike

To begin to address RQ1 through RQ3 together, I used QAP to correlate the co-occurrence matrices for each pairwise comparison of voices communicating about the RTW teacher strike. These co-occurrence matrices were constructed according to the process described in the Semantic Saturation Data Analysis section above. The results of these QAP correlations can be seen in Figure 4. There was large and significant overlap in the word co-occurrences that appeared in the semantic networks of both the teachers and the local press (r = 0.371, SD = 0.004, p < .001), as well as the correlation between word co-occurrences that appeared in both the political elites' and the local press's semantic networks (r = 0.399, SD = 0.003, p < .001). The teachers' and political elites' semantic networks also had a medium and significant amount of communicative overlap (r = 0.218, SD = 0.008, p < .001) but had the least amount of overlap in their communication across the three comparisons. Each of the correlation coefficients were more than two standard deviations from one another, indicating each of the correlations are significantly different from one another. Therefore, the political elite-press relationship has the strongest overlap in the words they used to discuss the strike.

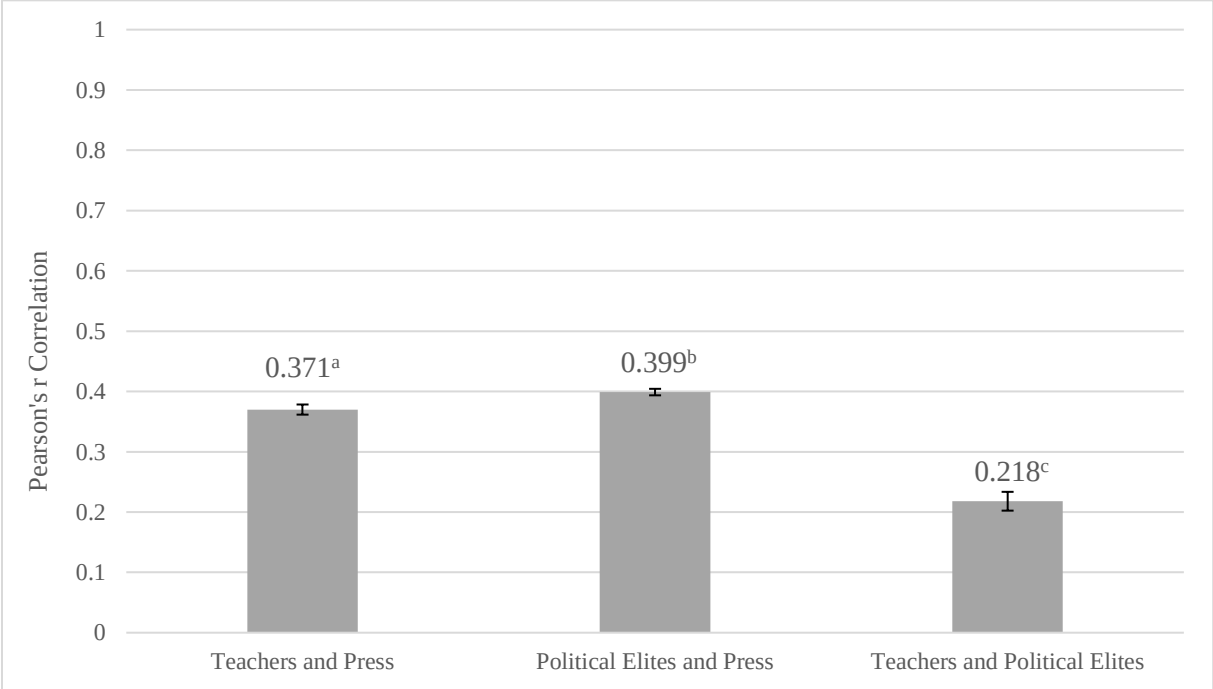

Figure 4. QAP Pairwise Correlations of Semantic Networks in RTW Strike Context

Note: Differences in superscript letters attached to coefficients indicate a statistically significant difference. Significance between two correlation coefficients is determined by a confidence interval representing 2 standard deviations in either direction of the coefficient.

Next, to move beyond mere correlation in semantic saturation, I turned to Multiple Regression QAP (MR-QAP) to see if the teachers or the political elites have *influence* over the messaging that ends up in the local press. MR-QAP employs the same statistical test of comparing the statistical uniqueness of relationship between the matrices in question to 5,000 random permutations of networks that contain the same parameters. The advantage here is that both the teacher and the political elite matrices can be entered as independent variables with the press matrix as the dependent variable in the multiple regression equation. MR-QAP then computes the influence that one matrix has on the press matrix *above and beyond* the influence of the other matrix on the press matrix. The MR-QAP analyses will use the last of the three iterations of the matrices mentioned previously (i.e., versions of each matrix that includes all word co-occurrences from all three groups of interest) since the analysis requires all included matrices to have the same parameters.

In the RTW context, the MR-QAP results show both the influence that the political elites' communication had on the local press's reporting on the strike above and beyond the influence that the teachers' communication had on the reporting as well as the influence that teachers' communication had on the reporting above and beyond the influence of the political elites' communication on the reporting. Both the teachers ($b = 0.46$, $SE = 0.03$, $p < .001$) and the political elites ($b = 0.34$, $SE = 0.01$, $p < .001$) had significant influence on the communication used in the local media's reporting on the strike. Accounting for the influence of the political elite's communication on the press's reporting, the teachers had a more substantial influence on the language used in the local press's reporting on the strike. These results will later be compared to the unionized teachers strike to compare and contrast the relationships between the teachers, the political elites, and the local press in different legal contexts.

The final set of research questions, RQ4 through RQ6, deal with a more granular analysis about a particular word's position (i.e., the word "pay") among the various groups' public communication about their respective strikes. I utilized Word2Vec to calculate the TF-IDF of the word "pay" in each text corpus and plotted the central word along with the ten words that were most similar to that word in the text corpus and around ten words that were least similar.

The first two research questions in this set focused on within-context analyses between the teachers and the local political elites in both legal contexts (i.e., RQ4) and between the two influence groups on the local press in both legal contexts (i.e., RQ5). Starting with RQ4 in the

RTW context, the teachers' Word2Vec results seen in Figure 5 show that the words "raise" and the name of a specific political elite are among the top ten words most similar to the word "pay" when publicly discussing the strike. Perhaps, the presence of the word "raise" being linguistically one of the most common words associated with "pay" among the teachers comes as no surprise. In the RTW context, a pay raise was arguably the teachers' primary demand. It follows that teachers' public communication about the strike would heavily feature communication about their demand for a pay raise. The mention of specific political elites is also revealing of the teachers' strategy behind their public communication. Here, the teachers gave their supporters and followers a specific person or persons to demystify the legislative process behind giving the teachers the raise they were demanding. It makes it more difficult for elected political elites to hide behind a complicated bureaucratic process such as policy change. Instead, teachers specifically called out the political elites in charge of making these decisions and voiced their complaints about the lack of action.

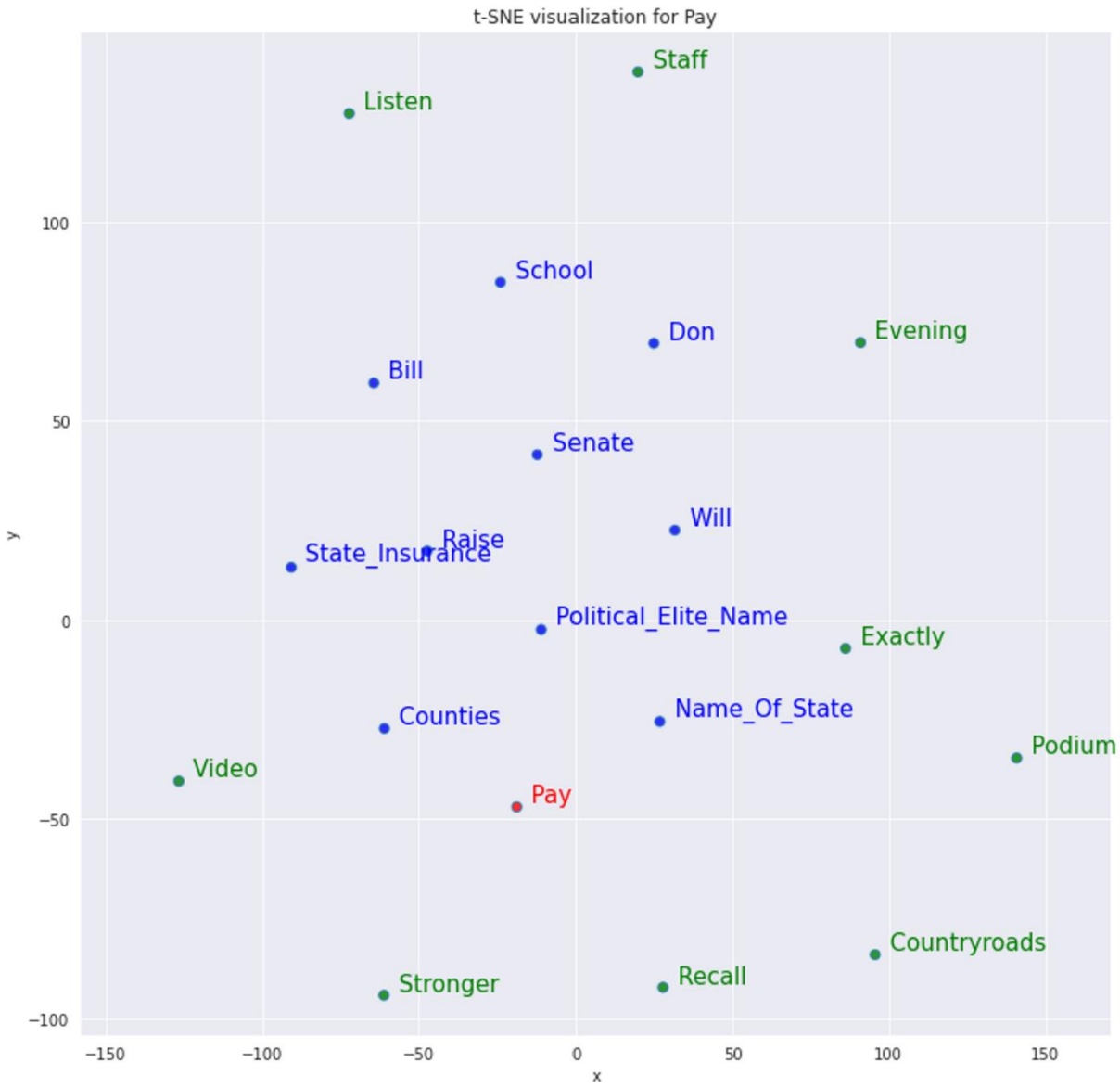

Figure 5. RTW Word2Vec Results for "Pay" Word in Teachers' Semantic Network

In the results for the political elites' semantic network in the RTW context seen in Figure 6, the words "force" and "fivepercent" are among the top ten words that are most linguistically similar to the word "pay." These relationships between the word "pay" and other words in the political elites' semantic network show the patterns in their public communication about the ongoing strike. In particular, the word "force" demonstrates the weight behind political elites' communication strategy to combat against paying the teachers a higher salary. Political elites may want to linguistically frame the teachers' demands as an unwanted imposition on their constituents.

One particular tweet from a member of the teacher organization specifically uses a politician's Twitter handle to ask why they cannot use an executive order to force the State Senate to pass a bill raising the teachers' pay. Examples like this demonstrate the potential fearlessness shown by the RTW teachers despite existing within a precarious legal situation.

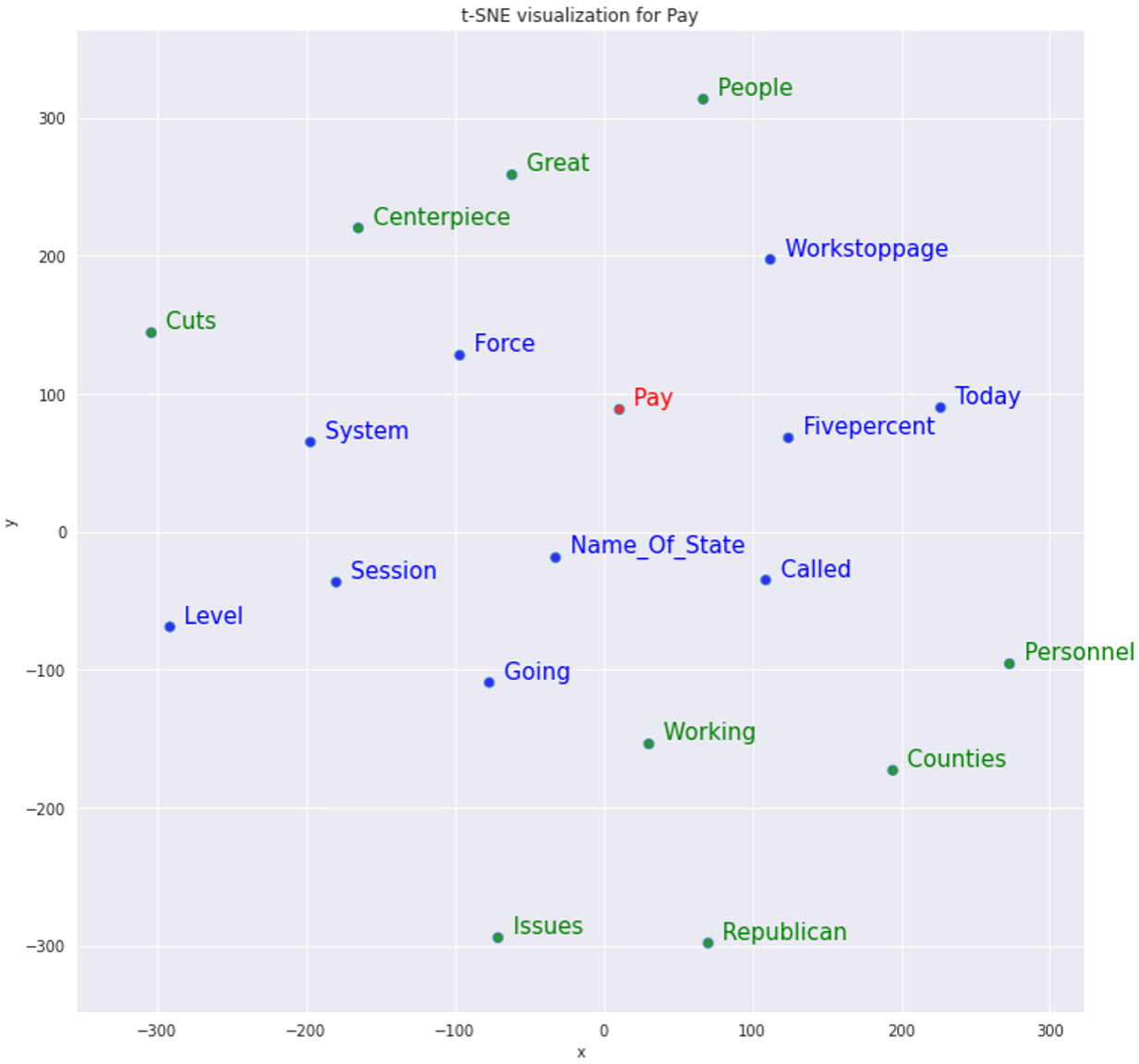

Figure 6. RTW Word2Vec Results for "Pay" Word in Political Elites' Semantic Network

To address RQ5 in the RTW context, the teachers' and political elites' use of the word "pay" was compared to the local press's reporting including the word "pay." The results for the local press's Word2Vec analysis on the word "pay" can be seen in Figure 7. Notably, the words "budget" and "students" are shown to be among the most linguistically similar to the word "pay" in the RTW context local press's public reporting on the strike. The press helps contextualize the strike for the public by providing information not as explicitly acknowledged by the teachers or the political elites. Reporting from the press situates calls for a pay increase from teachers, and the reluctance from elected officials to act on a pay increase, in terms of the statewide budget. Given the political nature of this conflict, and the fact that politics as a phenomenon is known as the authoritative process of allocating power, values, and *scarce resources* (Castells, 2009; Easton, 1965), the press puts this political tension regarding scarce resources at the center of their reporting. In addition, the press highlights the presence of students among this conflict. Again, the local press contextualizes this struggle between teachers and political elites as ultimately fighting for what is best for the students. This is similar to the communication seen from the unionized teachers who center the perspectives and voices of their students to highlight who is at the mercy of these decisions, an analysis of which I turn to next.

Figure 7. RTW Word2Vec Results for "Pay" Word in Local Press's Semantic Network

Unionized Strike

Returning to address the first three research questions, I again ran a QAP analysis to correlate the co-occurrence matrices for each pairwise comparison of voices communicating about the unionized strike. These co-occurrence matrices were also constructed using the Semantic Saturation Data Analysis section above. The results from these analyses can be seen in Figure 8. There was significant overlap in the communication used to discuss the strike between all three groups. The teachers' communication had significant and small-to-medium strength overlap with

the local press's communication (r = 0.210, SD = 0.004, p < .001), the political elites' communication significantly overlapped with the local press's communication with small strength (r = 0.155, SD = 0.008, p < .001), and the teachers' and political elites' communication overlap had the weakest strength yet was still significant (r = 0.117, SD = 0.007, p < .001). There were also significant differences between all three of the correlations because each correlation coefficient is at least two standard deviations from one another. Thus, the unionized teachers and the local press had the most substantially communication overlap when publicly talking about the strike online.

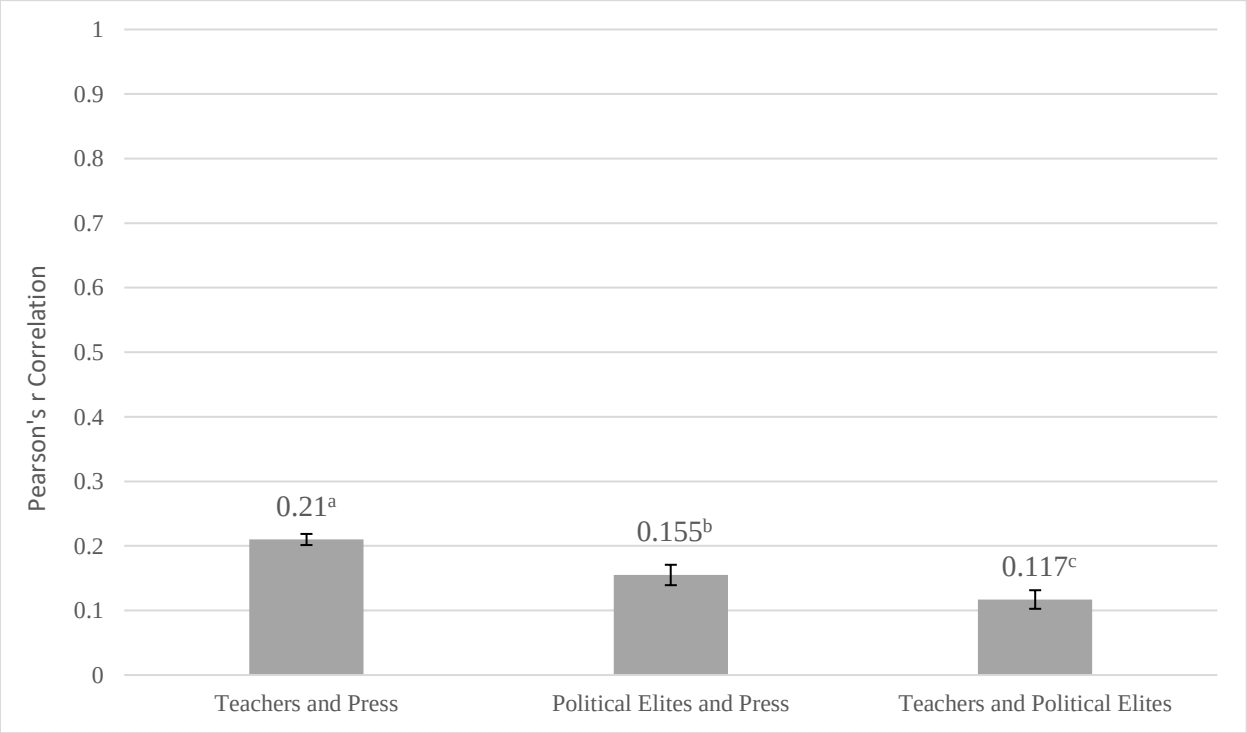

Figure 8. QAP Pairwise Correlations of Semantic Networks in Unionized Strike Context

Note: Differences in superscript letters attached to coefficients indicate a statistically significant difference. Significance between two correlation coefficients is determined by a confidence interval representing 2 standard deviations in either direction of the coefficient.

For the same reasons, I also ran a MR-QAP analysis to measure the extent to which the communication styles of teachers and political elites ended up in the reporting by local press. The teachers (b = 0.195, SE = 0.003, p < .001) and the political elites (b = 0.134, SE = 0.003, p < .001) both had significant influence over the local press's reporting on the strike above and beyond the

influence of one another. The teachers appeared to have more influence on the press's reporting of the strike compared to the political elites, but not a drastic difference. This does indicate that the teachers were more successful getting their messaging structure into the local press's reporting than the political elites were.

To address RQ4 in the unionized context, the results of the teachers' Word2Vec analysis can be seen in Figure 9. The words "students," "kids," and "community" are among the ten most linguistically similar words to "pay" in the unionized teachers' semantic network. The focus for the unionized teachers when publicly communicating about the strike was to center the voices and experiences of their students and fellow community members. The unionized teachers worked to linguistically situate their struggle for more pay and resources as a much needed benefit for the children and the community in general. Importantly, the unionized teachers possess more legal confidence to advocate for those less fortunate and position their demands as a large part of the community as a whole.

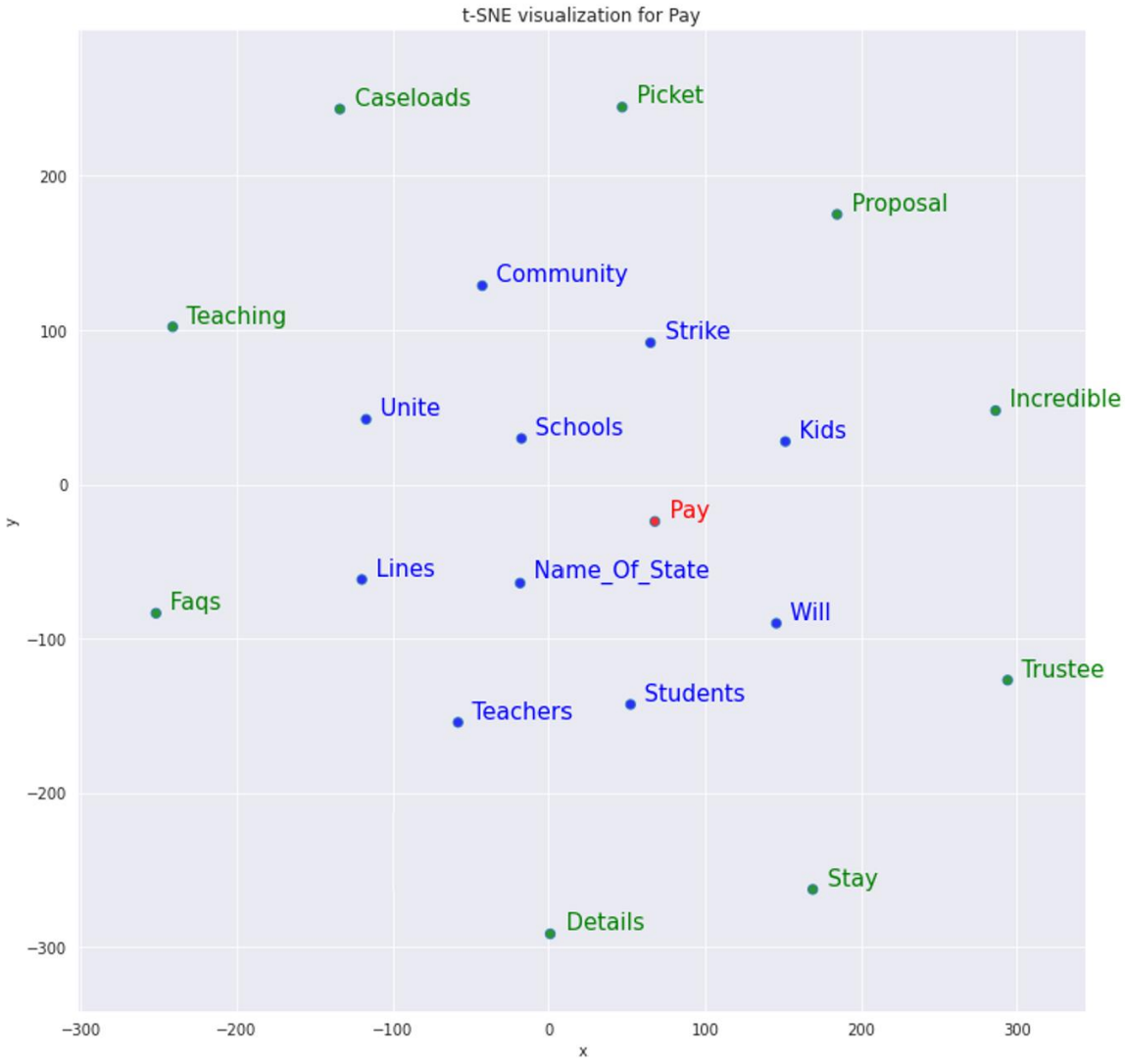

Figure 9. Unionized Word2Vec Results for "Pay" Word in Teachers' Semantic Network

Interestingly, unionized political elites did not even mention the word "pay" in any of their strike-related tweets while the strike was taking place. The lack of discussion around the issue of pay is very communicatively revealing. One convincing reason that political elites did not want to even touch the issue of pay may have been because they perceived it to be a losing battle. Around the time of this strike, the public's general perceptions about teacher pay were on board for higher teacher wages, with 71% of American adults expressing support for notion that teachers deserve higher salaries (PDK Poll, 2018). Since political elites rely on the support of the public to preserve their job and political power, arguing against an issue the public is generally in support of may have not been politically advantageous for political elites in the unionized legal context. This may

also explain the teachers' strategy to center students and community members in their public messaging. Strategic framing around vulnerable students and community members positions the political elites as the actors responsible for inadequate resources provided to the vulnerable.

The results of the local press's Word2Vec analysis can be seen in Figure 10. The words "smaller" "sizes" and "agreement" were found to be among the most linguistically similar to the word "pay" in the press's tweets about the strike. Here, the press is discussing the issue of teacher pay alongside the other demands being made by the teachers, including smaller class sizes. The appearance of the word "agreement" as highly similar to the word "pay" also indicates that the press is framing this labor struggle as one that ultimately needs to end with reaching an agreement between the union leadership and the elected political elites. This is additional context provided by the press that stresses the core of the disagreement between teachers and political elites and signals what needs to happen for the struggle to be over. The word agreement accurately communicates to readers the newsworthy updates regarding the strike which ultimately revolve around the presence or absence of an agreement between the teachers and political elites.

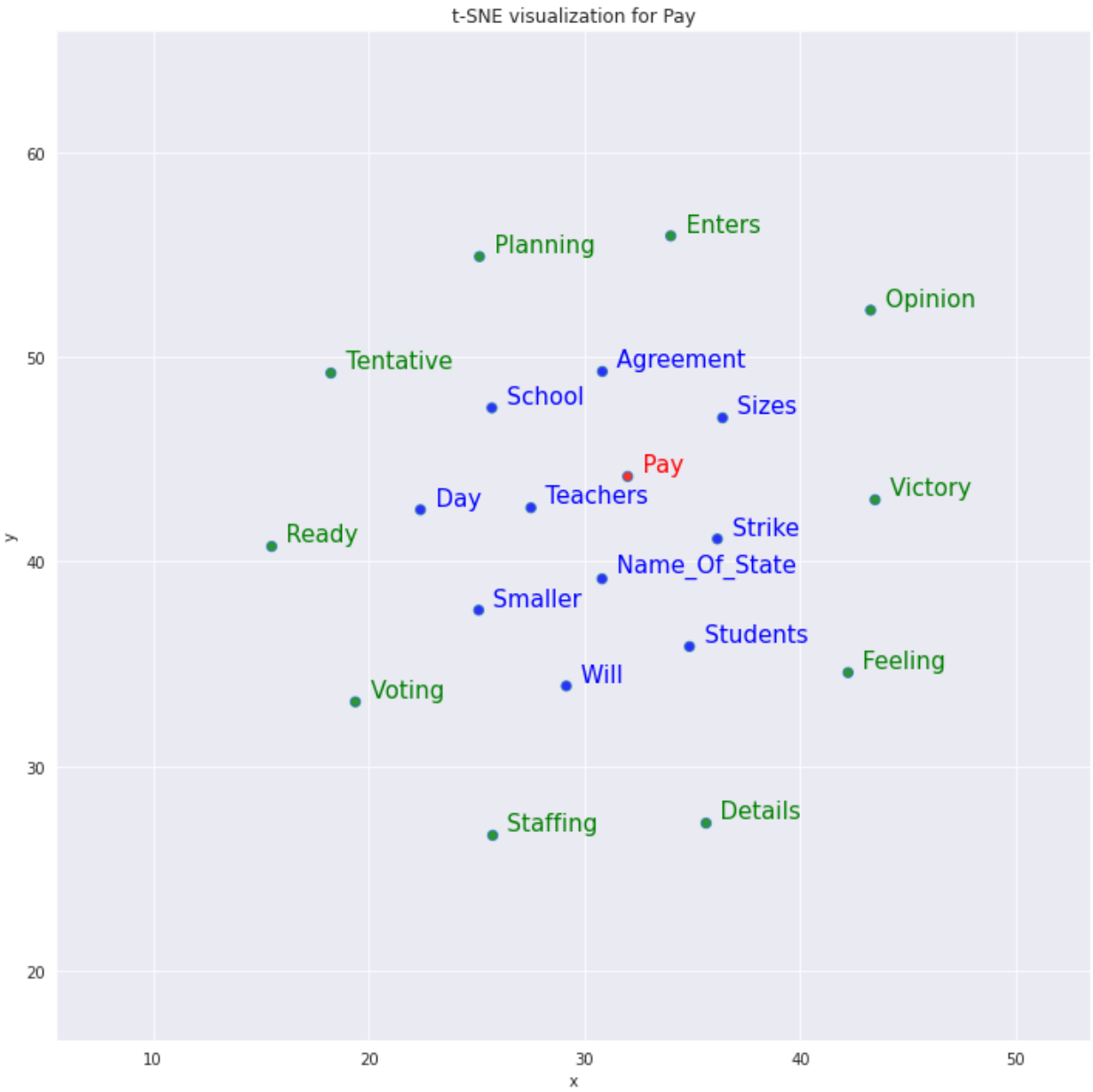

Figure 10. Unionized Word2Vec Results for "Pay" Word in Local Press's Semantic Network

Overall Results & Discussion

The first three research questions specifically asked about comparisons across legal contexts. I calculated Fisher's *r* to *z* conversions for all correlation coefficients in order to compare the statistical significance of the correlation coefficients across samples (Pearson & Wilks, 1933). Given differing sample sizes for each set of analyses were different, so converting the Pearson's *r*

coefficients to *z*-scores standardized the coefficients and allowed me to compare across legal contexts (Pearson & Wilks, 1933).

To address the first research question that asked about differences in teacher-press communication relationships, I used the z-score conversion for both correlations in the two legal contexts. The *z*-score for the difference between the RTW teacher-press correlation and unionized teacher-press correlation was significantly different at the $p < .05$ level ($z = 30.97$). This indicates that the relationship between communication used by RTW teachers and the local press ($r = 0.371$) is significantly stronger than the communication overlap between unionized teachers and their local press ($r = 0.210$). Comparing the two QAP correlations across samples showed that teachers and the local press's messaging more closely resembled each other when discussing the strike online compared to that same relationship in the unionized context.

To address the second research question, I then compared the z-scores for the political elite-press correlation in the RTW context with the political elite-press correlation in the unionized context. A Fisher's *r* to *z* conversion was calculated and the *z*-score for the difference between political elite-press relationships across legal contexts was significant at the $p < .05$ level ($z = 33.97$). This indicates that the political elite-press relationship ($r = 0.399$) is significantly stronger in the RTW context than in the unionized context ($r = 0.155$). The words and language structure the press used to report on a strike more closely resembled the messaging from the political elites in the RTW context than in the unionized context.

To address the third research question, I calculated a Fisher's *r* to *z* conversion for the teacher-political elite relationships in the RTW and unionized contexts. The z-score for the difference between teacher-political elite communication was significant at the $p < .05$ level ($z = 9.74$), meaning the political elite-teacher relationship in the RTW context ($r = 0.210$) is significantly more substantial than the teacher-political elite communication relationship in the unionized context ($r = 0.117$). This means that in all three instances, the communication relationships were substantially stronger in the RTW context than they were in the unionized context.

Lastly, RQ6 asked about the relationships between discussions of "pay" among all three groups of interest across both legal contexts. Comparing the teachers' semantic networks around the word "pay" across legal contexts shows that the RTW teachers focused on the structure through which a pay raise was to happen. It appears that the RTW teachers were hoping their audience

would be the elected political elites in charge of meeting the teachers' demands. Relying on words such as "bill" and "senate" reveal that RTW teachers were directing their public communication about the strike at the legislators and the legislative process. Several tweets sent by teacher accounts in the RTW context directly addressed the local political elites' unsatisfactory explanation for the area's inability to retain teachers. Tweets sent to local political elites stress that teachers are largely leaving because of the low salaries relative to neighboring areas with teaching opportunities. Tweets such as these directly identify the teachers' adversaries and attempt to publicly debunk and persuade the political elites to meet their demands.

The unionized teachers instead focused on *who* the strike and the strike demands were affecting (i.e., the students and community members). In this way, it appears as though the teachers in each context were communicating for different audiences. The RTW teachers needed to justify the legislative possibility of paying teachers more and what the local elected political elites were withholding from the teachers. Conversely, the unionized teachers needed to further win over the support of the public to pressure the local political elites to bargain with the union leadership in good faith. The unionized teachers benefitted from already having a seat at the decision-making table and therefore were able to use their resources to communicate with the community to garner support for their cause.

Comparing the local political elites' semantic networks of the word "pay" in their tweets about the strike across legal contexts is not a very fruitful exercise since the political elites in the unionized context did not tweet about the issue of pay. The lack of mention of pay is notable, however. This absence of mention of pay may very well have been intentional in the unionized context while the RTW political elites saw the issue of pay worth tackling in their public strike messaging.

The local press's use of the word "pay" across legal contexts accurately represent the role of the press in both situations. For the RTW context, the press discusses the issue of teacher pay in terms of what it will take policy-wise to achieve that demand. The local press in the unionized context situates the demand of teacher pay among the other demands being made by the teachers. It seems as though the teacher pay demand is much more central to the cause of the RTW teachers compared to the unionized teachers and the press are reporting on the strikes accordingly.

CONCLUSION

The process of organizing a strike is a large undertaking that requires persistent and strategic communication, both privately and publicly. The studies conducted and presented above demonstrate the complicated nature of organizing communication and some key differences that arise given the legal context within which a strike takes place.

This dissertation used two studies to assess the communication patterns of two groups of teachers embarking on respective labor strikes. Study 1 focused on the internal, behind closed doors communication that occurred among the teachers within private Facebook groups. Here, teachers planned, deliberated, and organized toward orchestrating a labor action. The legal context of each strike had important implications for their organizing methods and the technological affordances upon which each group relied. Study 2 then focused on the external, public-facing communication from the teachers, as well as local political elites and local news media, regarding the strike during the duration of the strike. This communication was captured using Twitter and the different legal contexts produced differently framed messaging from each teacher group.

Summary of Findings

The first two hypotheses predicted where the RTW teachers' internal organizing communication was most likely to fall on the two CAS spectra. Language style matching occurred in the RTW Facebook group between posts and comments. Conversely, the unionized Facebook group lacked substantial language style matching. This places the RTW group firmly at the *personal* end of the mode of interaction spectrum and places the unionized group closer, but not fully, toward the *impersonal* end. Individual pronoun categories worked to place each strike on the mode of engagement spectrum. Mainly, strategic use of second person pronouns (i.e., you, your) and third personal plural pronouns (i.e., they, their) places the RTW group closer to the *institutional* end of the mode of engagement spectrum and the unionized group closer to, but not firmly near, the *entrepreneurial* end.

The RTW teachers' internal organizing communication is near the personal and institutional ends of the mode of interaction and mode of engagement spectra, respectively. Relating these observed findings back to conceptualizations of these ends of the spectra indicates

that the RTW teachers valued and utilized deliberative engagement in their channels of communication. Important to deliberation is the feeling among deliberators that they are able to respond to others' comments and not simply perform a series of monologues. The large presence of language style matching seen in the internal organizing of the RTW teachers points to evidence of proliferating engagement among group members. Without the solid institutional cohesion that can come with a union, RTW teachers relied on their communication practices to ensure teachers felt comfortable engaging in dialogue about the strike. However, RTW teachers did not prioritize equitable channels of communication in the way deliberation encourages. It is clear that the RTW teachers had their sights set on the goal of getting their demands met (largely consisting of a salary increase) and all worked together towards that goal. In this way, the internal organizing communication of the RTW teachers was closer to the institutional end of the mode of engagement spectrum by perpetuating communication more resembling formal top-down organizational structure.

The unionized teachers' internal organizing communication is closer to the impersonal and entrepreneurial ends of the mode of interaction and mode of engagement spectra, respectively. This combination of placements on the two spectra indicate that the unionized teachers valued equitable channels of communication while devaluing conversation and back-and-forth deliberation. Unionized teachers are more emboldened to voice their opinions and feel heard because they are formally invested in the organization (e.g., they pay membership dues to the union). That also means unionized teachers may not feel as much urgency to make sure conversation is happening *between* teachers when internally organizing and rather prioritize voicing their singular opinion or concern.

The first set of research questions, RQ1-RQ3, asked about the level of communication overlap observed in the public messaging of each relevant group in each of the strikes. Within the RTW context, QAP and MR-QAP results showed that teachers had the strongest relationship with and influence over the local press's reporting compared to the political elite's influence over the press. Similarly within the unionized context, the teachers had a stronger relationship and influence over the local press's reporting than did the political elites. Across legal contexts and across all pairwise comparisons between teachers, political elites, and local press, the relationships within the RTW context were stronger and more substantial than those within the unionized context.

Research questions 4 through 6 lastly asked about the similarities and differences in how all the groups in both strike contexts discussed the specific issue of teacher pay. Here, it becomes clear how each teacher group framed their respective strikes for their respective audiences. Framing scholarship shows that actors who quickly and most effectively frame the reality of an issue or situation in their favor are more often the ones who ultimately successfully frame the reality for the audience (e.g., Edelman, 1985). In general, the RTW teachers were tweeting and messaging much more toward the political elites themselves as well as the local constituents of those political elites. In this way, the teachers' messaging framed the reality of the situation as a contentious one, with the political elites in charge bearing the blame for the teachers needing to strike.

Conversely, the unionized teachers were more clearly messaging toward the local community members and parents of public school students in order to garner support for their cause. The communication and framing differences seen across legal contexts points to a trend occurring in unionized collective actions. There has been a growing intent among unionized teachers to organize with the purpose of improving the *common good* (Givan & Lang, 2020; Uetricht, 2014). Teachers have recognized their positions as liaisons for community members and the lives and well-being of the community's children. Teachers with the power of a union have explicitly organized against what they see as austerity measures, such as making support services less available (e.g., in-school nurses, librarians, social workers; Uetricht, 2014). Even more recently, unionized teachers threatening a labor action have included demands for factors outside of the classroom that impact student education, such as secure and affordable housing for their students (Bellware, 2019; Givan & Lang, 2020).

These examples of militancy from organized teachers are emboldened by the power and protection afforded teachers in a union. Less organized groups of teachers, coupled with legal constraints that hinder or disincentivize organizing, do not reap the benefits of such power and protection a union may give them. As a result, the legal context within which teachers are able to organize themselves not only has implications for type of demands they are able to make, but also the communication through which they discuss such demands.

A blunt example of how the legal context made its way into each teacher group's organizing communication is to simply count the number of times legality is mentioned in each of the groups during their respective internal organizing periods before each strike took place. Across

the posts and the comments, the RTW group posted the word "legal" 40 times and "illegal" 17 times during the observed time period. This is compared to the unionized group, whose teachers mentioned the word "legal" 0 times and the word "illegal" only 1 time across all posts and comments. Regardless of how these instances were used in each group, it is plainly clear that one group had legality more on the mind, and it was therefore reflected much more in their organizing communication.

Implications of Findings

Taking all findings together, these studies extend CAS scholarship by not simply considering whether technology was used in the organizing process or not, but also *how* the groups chose to use technology in their organizing and the influence legal context may have had on those choices. The utilization of technology in organizing is informed by what actors perceive the technology will afford them (Norman, 1999). The teachers in both cases perceived specific features of Facebook groups as aiding in their organizing communication possibilities in differing ways. Uniquely, each teacher group relied on the affordances of their Facebook group to establish the communication boundaries around, as Bimber and colleagues put it, "what is private from what is public, what is 'here' from what is 'there,' what is personal from what is social, what is 'mine' from what is 'yours and what is 'ours,'" and "who interacts with whom and who is able to engage with which social or organizational processes" (2012, p. 63).

Following this, the studies presented here highlight some important implications for the role of social media in modern organizing. Study 1 utilized Facebook in both the contexts that were analyzed. For that reason, any platform effects from Facebook are leveled between the two contexts. If both groups use Facebook, it is hard to attribute communicative differences between the two groups as resulting from the platform itself.

That said, the two groups of teachers had very slight differences in how they actually used Facebook and large differences in their motivations for using Facebook. Both Facebook groups were set to private, meaning no one who is not a part of the group can see any of the posts in the group or any of the members in the group. The RTW group also had their group set to hidden, meaning people could not even use Facebook's search function to find the group. The unionized group was set to visible instead of hidden, meaning Facebook users can search for their group and

similar groups but still cannot see members or posts in the group. This is a revealing difference that can largely be explained by the difference in legal possibilities between the two contexts.

Given the constraints around what organizing was legally possible, the teachers sought out *privacy* in the unionized case and *secrecy* in the RTW case. There exists a joint motivation to keep internal organizing behind closed doors, but the extent to which those doors were closed and locked is a key difference between the groups. The actual substance of the deliberations happening in both groups is kept private, but the RTW group is perhaps more motivated to keep secret the mere existence of deliberations happening at all. The restrictions around labor organizing under RTW laws means employers can fire employees at will without the need for justification. This puts added pressure on the teachers to not do anything that might jeopardize their employment. Threat of termination or retaliation does not exist with the unionized teachers. Because of their union contract, the unionized teachers are afforded legal protections from employer intimidation and unjust termination.

Limitations & Future Directions

One potential rebuttal to the use of text as data employed in these studies is that relationships between language inherently have a high likelihood to be stronger than most other relationships. From a probability perspective, the chances that different groups will use the same words to talk about the same issue at the same time on the same platform are a lot higher than they may be under what would be considered more normal circumstances. That said, the techniques used to analyze the text as data push the levels of sophistication beyond mere frequency of words. Semantic saturation taps into the latent structure that language embodies when used by different groups of people who are under different communicative circumstances. Certainly, teachers on strike will very frequently use the word "strike" or words like it when communicating about their actions. Likewise, local press who are reporting on a teacher strike will very often use the word "strike" to describe the newsworthy event on which the press is reporting. What is most interesting then, and of most concern to the studies presented here, are the nuances and minutiae in language choices made by different groups when communicating about the strike.

In fact, it is this relationship that words inherently have with one another that makes the sophistication of the methods presented here all the more vital. Language is said to have a distributional structure where words that appear near each other possess similar meanings (Harris,

1954). Conventional wisdom among linguists regarding words and their meanings has largely followed the quote "words are defined by the company they keep" (Firth, 1957). Context is key when studying communication and I have worked to develop the semantic saturation class of analyses in a way that preserves and considers the context of words as much as possible.

The presence of stronger relationships in the public communication within the RTW context across all comparisons may be influenced by the stark difference in the amount of data for each case study. It may very well be that the RTW context had much more text, so finding relationships within the communication would automatically be more easy. In an effort to mitigate the influence of data imbalance, I worked to standardize all possible network analysis metrics so that comparisons across groups were as equitable as possible.

It also is notable that the RTW case had more data both internally and externally than the unionized case. Certainly, a large contributor to this discrepancy is the difference in the number of teachers participating in each strike. The RTW teachers accounted for more teachers in charge of more students overall compared to the unionized teachers who account for much fewer teachers and students. It follows, then, that the context with more overall actors would produce more overall communication. Even still, there may have been more deliberation among the RTW teachers to account for the legal hurdles and constraints under which they organized.

To extend and expand on the findings here, future scholarship should interrogate the platform effects more explicitly. The nature of the data I used in these studies leveled the communication landscape by looking at Facebook for both internal organizing samples and Twitter for both external organizing samples. It is difficult to tell the extent to which the communication observed in the private Facebook group may have been influence by the affordances of the platform. The difference between the RTW teachers choosing secrecy and the unionized teachers choosing privacy points to an interesting perception or expectation that the teachers had in each context.

Also, future research should factor in the presence of offline communication compared to what is observed online. Being granted access to in-person organizing meetings as well as the private online space for organizing could offer some comparison and more explanatory power for how online and offline organizing communication differs. Because the studies I conducted only represented online communication, it falls short of generalizing to intermedia influence on the observed communication patterns. In particular, using interviews and transcripts from in-person

organizing meetings could supplement the online textual data analyzed here to compare within and across legal contexts as well as within and across communication media (i.e., online and offline communication).

A final fruitful avenue for future research on this subject is to include more examples of strikes and strike organizing. In these studies, I only researched one strike example per legal context. This means I am not able to observe or account for anything unique about either of the strikes and therefore makes generalizing these findings more difficult and reserved. Coupled with the exclusion of offline organizing communication, research expanding on the findings here are encouraged to prioritize generalization to capture an even more holistic evaluation of organizing communication in our modern media environment.

Concluding Remarks

As an issue, teacher strikes touch on core vulnerabilities related to how we view education in society. Over the past several years, public school teachers have won victories related to salary, smaller class sizes, and more support services in their schools through various work stoppages and labor actions. However, RTW laws still preside over more than half of the states in America and have large consequences for the organizing possibilities of public sector workers. This legal obstacle, along with other anti-labor sentiments and policies in any given community, means that losses among organized teachers greatly outweigh the victories.

As stated previously, democracy as a regime hinges on collective action on the part of the government and its participants to co-construct an agreed upon society (Tilly & Wood, 2016). The research presented here works to evaluate the implications of collective action on that exact tension between government and its participants. Using various communication technologies, and across several legal contexts, teachers have worked to act on their role in society as active co-constructors of the reality within which they exist. Democracy is exercised and maintained through this tension between a government's participants and the policies that govern their lives.

The sheer ability for teachers, as well as any actor interested in participating in a collective action, to join a group, either public or private, for the purpose of deliberating and strategizing with fellow teachers is democracy in action. In particular, the freedom to join a private group and talk within that group outside of the public eye is consistent with the goals and aims of democracy. Identifying with a *private* organization and participating in organizing communication are very

important components that contribute to the necessary *public* performance of a functioning democracy. The two studies presented here demonstrate that the channels through which private organizing and communication occur are worth protecting in order to maintain the necessary public performance of democracy. Organizing and collective action, both private and public, must continue to be valued, encouraged, and analyzed. Our democracy depends on it.

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