

Movement Grievances: A Content and Sentiment Analysis

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December 12, 2022

Introduction

Throughout the years, instances of peaceful and nonviolent mobilization have taken place. The Suffrage Parade observed, over five-thousand women marched for their right to equal political participation (Werft & Ngalle, 2016). In 1930, Mahatma Gandhi and his peaceful demonstrations against British rule of law hindered Indian civil liberties. In 1986, millions of Filipinos peacefully expressed their dissent against their tyrannical ruler. In each case, peaceful and nonviolent civilian resistance has achieved tangible and radical social, economic, and political reforms (Chenoweth, 2020; Chenoweth Orion, 2013; Stephan J. Chenoweth, 2008). These narratives and so much more like them, provide interesting opportunities for empirical research (see Abrahms 2006; Brooks and Stanley 2007; Chenoweth and Stephan 2011; Jaafar and Stephan 2009; Johnson and Tierney 2006; Merom 2003; Stephan and Chenoweth 2008; Subedi and Bhattarai 2017).

Digital infrastructure empowers activism, protests, and social movements in a multitude of ways, and recent global movements and uprisings have illustrated this power. More recently, in 2011, Egyptian, Libyan, Tunisian, and Lebanese activists participated in their squares, protesting against electoral overreach, corruption, and tyranny and instigating the rise of collective action through the online world. Grievances are the main drivers of protest participation (Klandermans, 1997). Such attitudes and opinions cannot - and in fact are not - expressed through official channels (Klandermans, 1997). Social movements and protests are more likely to occur when there is a poor fit between people's grievances and the state's institutional capacity to address and resolve said grievances (McVeigh, 1995). Concurrently, social media has proven to be a useful tool for advancing political, social, and economic change (Bursztyn et al., 2020; Draege & Draege, 2017). These connective platforms must

be considered when studying how citizens' expressions of discontent are articulated and manifested. In effect, many scholars have acknowledged social media mediums as having "opened up innovative avenues for people to challenge existing configurations of power" (Biekart Fowler, 2013:529). This connectivity within social media influences the protest process in many ways, such as capturing public attention and evading censorship, and allow for the organization, coordination, and mobilization of direct-action events. In other words, citizen-driven information dispersion captures the public's attention more easily and effectively (Aaron Franklin Brantly & Brantly, 2019).

This research endeavor focuses on the Southwest and North African (SWANA) region, where states have experienced their fair share of protests, uprisings, and social movements. With the age of social media, and its increasing popularity and usage within the region, we as researchers; can closely monitor citizen participation, grievance expression and resurgence. This project specifically asks whether civil grievances resurface post initial-protest campaign success? This question stems from protest – both violent and nonviolent – and grievance literature, where we examine what the issues the citizenry publicly dissents against, and the manners utilized to make their dissent known to the state and its governing body. Studies have shown a great interest in social media and content analysis; particularly, sentiment analysis. Platforms such as Twitter are primarily utilized for this form of analysis because they are viewed as fairly more accessible than their Facebook and WhatsApp counterparts, particularly in terms of information dispersal and access. With sentiment analysis specifically, we can determine the kind of grievances being most-expressed by way of the social platform, and attribute as well as identify the specific emotions that are attached to each grievance. Thus, yielding inferences regarding the forms of sentiment attached to the grievances expressed. This project will look at the trending topics in Lebanon, a state that is ripe with repetitive demonstrations and public grievance expression, and a particularly heavy utilizer of Twitter during times of social uprising. I will specifically examine two particular social movements within the state: the Arab Spring movement of 2011 and the most recent October Revolution of 2019. The reasoning behind these two movement selections, is purely comparative. Specifically, I want to examine whether the same issues and forms of grievances expressed from the 2011 movement are resurfacing in the years moving forward. With the subsequent analysis, we can determine what political, economic, and social issues resurface, the frequency of their resurfacing, the importance that the citizenry holds with regard to each issue, and what factors can have an effect on the sentiment behind each grievance expressed.

Literature Review

Grievances and Political Participation

Within the grievances and protest discourse, Shadmehr (2014) and Weiper-Fenner & Wolff (2022) offer insight into the interaction between dissidents, the state, and the grievance-based theories of protest and social movement creation and participation. Specifically, their frameworks interpret the relationship between grievance magnitude and the likelihood of expression as non-monotone. That is, there is an interplay between the magnitude of grievances, the likelihood of grievance expression, and the manners and forms of mobilization and direct-action organization. There is unanimity within the literature that collective action and social protest participation and activity is most often if not primarily driven and motivated by grievances; political, social, and economic (Zayani, 2019; Skika, 2020; Ronn, 2020; Ash, 2015). Originating in conflict literature, *grievance* refers to when individuals rebel or protest over issues that they hold dear such as ethnicity, religion, and social class (Collier and Hoeffler, 2000). However, this term has been continuously extended over the years, to apply to other phenomena beyond that of conflict, such as the application of individual grievances and their effect on protest (Baylouny, 2020; LeFebvre & Armstrong, 2018; Opp, 1988; Shadmehr, 2014), social movements (Antonio Zama & Ruxandra Dumitru, 2020; Bursztyn et al., 2020; Earl et al., 2022; Jenzen et al., 2021; LeFebvre & Armstrong, 2018; Opp, 1988), and more generally; political behavior (Chenoweth & Stephan, 2011, 2012; Jenkins, 2022; Sika, 2020).

Literature has also comprehensively studied the interplay between protest and hardship; whether it be political, social, or economic. Portos (2021) addressed the implications of the Spanish experience and illustrated how grievances contributed to protest and mobilization; but note how political participation also helped shape the citizenry's grievances. In his book, Portos (2021) how perceptions of grievances shape protest dynamics, examines the interplay between the political and economic dimensions of grievances, and whether grievances remain constant across different protest participation frequencies. De Juan & Wegner (2019) closely examine social inequality, state-centered grievances, and protest within South Africa. The authors find that public social service provisions are an important driver of state perceptions; when a state fails to secure and provide such provisions, state institutions erode, leading to the formation of socially-driven grievances that make protests and public mobilization more likely to occur. On a similar track, Moseley (2018) questions why social grievances and subsequent protests are routine in certain Latin American democracies but not others. In focusing on recent trends in the quality of socio-economic development

and governance within the Latin American region, Moseley (2018) argues that economic growth, technological advances coupled with dysfunctional political institutions propagates economic and political grievances that drive radical modes of participation in countries like Brazil, Argentina, and Peru. In summation, the literature has – and continues to – argue that grievances are integral to the motivation behind political participation. Such participation can manifest itself through numerous avenues, the interest of this paper focuses on protest and mass mobilization through the avenues of the online world.

Social Movements, Protests, and Social Media

In 2011, young tech-engaged civilians led uprisings in a dozen states across the Middle East and North African region. These uprisings – later on termed as the Arab Spring - was unique in that it not only overturned dictators and autocratic elites, but it also brought hope for the ending of authoritarian rule in the region. The Arab Spring and the uprisings proceeding it, were primarily carried out with the aid of the digital age (Howard & Hussain, 2011); specifically, social media. Rooted in economic and political grievances, social discontent, and marginalization, the protests of the Arab Spring were facilitated, organized, and conducted with the support of social media platforms such as Facebook and Twitter (Zayani, 2009; Zama & Dumitru, 2020; LeFevre & Armstrong, 2018). Providing the necessary structure for collective action, these platforms delivered the required structure to carry out movement objectives, recruitment, and assembly. In the years post-Arab Spring, social media has continued to play a key and critical role in the creation and execution of key social movements and protest campaigns (Aaron Franklin Brantly & Brantly, 2019; Antonio Zama & Ruxandra Dumitru, 2020; Brown et al., 2012; Carty, 2014; Hasan, 2019; Herrera, 2014; Iran Media Group, 2014; Jaidka & Jaidka, 2021; Jenzen et al., 2021; Khazraee & Novak, 2018). Some central examples would be; but are not limited to, the Gezi Park protests of 2013, the Tunisian electoral protests of 2019, the October Revolution of 2019, and numerous #MeToo movements throughout the region.

This leads to the obvious question of, why are social media – and the digital world in its entirety – so pivotal in the organization and deployment of modern-day protests and movements? Well, the consensus is that online platforms make it easier to organize and mobilize movements and protest campaigns (Aaron Franklin Brantly, 2019; Anselm Hager et al., 2021; Jaidka, 2021). Social media platforms have the capacity to mobilize participants and allows the reach of new audiences. Social media use during the Arab Spring not only revolutionized the spread of information and increased protest engagement both online and in-person, platforms were also able to get information out to areas that were previously

too remote and removed for traditional mobilization methods such as the passing of flyers and word-of-mouth (Anselm Hager et al., 2021; Brown et al., 2012; Carty, 2014; Herrera, 2014). Additionally, many movements and campaigns face fierce resistance in the form of counter-movements and state-sponsored repression, social media is used to dissuade further participation and make others aware of certain locations that experience instances of state-initiated political violence (Anselm Hager et al., 2021). Scholars have long questioned why participation in political movements continues even when the participants are faced with anti-movement measures such as state-sponsored repression (Carey, 2006; Chenoweth et al., 2017; Davenport, 1995; Francisco, 2009; Opp & Roehl, 1990); and with the help of social media, we can now deduce mechanisms through which people choose to sustain and continue with participation (Bursztyn et al., 2020). An increasingly explored avenue that has been identified by scholars as a less-costly and more accessible is social media. The online modality of grievance expression has aided in turning individualized, community-specific, and localized grievances and dissent into structured social movements and protest campaigns that possessed collective objectives regarding common grievances and prospects for action. With no indication of the digital media involvement in protest campaigns decelerating, an innumerable number of cases and situations can be studied, examined, and analyzed for the subsequent years ahead.

Theory and Hypotheses

Grievances are regarded as the main drivers for protest participation. Here, I adopt Klandermans' (1997) definition of grievance, where an individual or a group of individuals perceives the experience(s) of inequality, injustice, or possess general moral indignation regarding state affairs (Klandermans, 1997). Such attitudes and opinions cannot – and in fact are not – expressed through official channels. Social movements and protest campaigns are most likely to occur when there is a poor fit between peoples' grievances and the state's institutional capacity to address and resolve said grievances (McVeigh, 1995). Concurrently, social media has proven to be a useful tool in the advancement of political, economic, and social movements. Accordingly, their connective platforms must be considered when studying how citizens express discontent. In effect, many scholars have acknowledged that digital media mediums such as Twitter and Facebook have “opened up innovative avenues for people to challenge existing configuration of power” (Biekart & Fowler, 2013: page 529). This connectivity within social media impacts the protest process in three ways: online discontent

content (a) eludes censorship ¹; (b) captures the attention of the public; and (c) allows for the organization, coordination, and mobilization of protest events (Tufekci, 2017). Simply put, citizen driven information dispersion captures the public’s attention more easily. To concretely comprehend the connection between digital media, online content of discontent and grievance expression, and offline protest campaign and movement mobilization, we must build on the body of understanding regarding social media and the role it plays in public mobilization and behavior. To do so, we must capitalize on the substantive quantity of digital information that are provided by social media platforms.

Accordingly, my research utilizes the case study of Lebanon, a country that has supplied a large body of Twitter information generated throughout numerous online and offline protest movements. I theorize that not only will the established scholarship on social movements and protest campaigns be observed in the case study, but will additionally supply new evidence into how grievances and their resurgence can impact the recurrence of political movements and public dissent. As the evaluation of existing literature has revealed, there is a lack of discussion and study of grievance resurfacing. By that, I refer to the resurgence and reappearance of grievance-related topics throughout time. There is substantial examination of grievances, and their manifestation in online social media platforms. There is additionally much work on the adaptation and evolution of grievances over time, my research will attempt to fill this literary gap by observing grievances in a particular country that has experienced numerous instances of protests and political movements overtime, and examine whether the same grievances that surfaced in the first protest, resurface in the protests that take place in the years ahead. For this iteration, I will examine Lebanon through two spaces in time, the Arab Spring of 2011, and the October Revolution of 2019 – I will first analyze and determine the grievances that are originally expressed in the 2011 movement, and whether said grievances resurface when examined years later on. Second, I will conduct a content and sentiment analysis of the grievances that are expressed via Tweets, to determine whether and how emotions have progressed and whether they have evolved throughout the temporal scopes. I hypothesize that there will be a (1) resurgence of grievances from the 2011 movement in the 2019 movement, (2) grievances will have increased over time to encompass more protest issues – specifically economic and security issues; and (3) more negative sentiment will be detected in the latter temporal scope when compared to the 2011 movement.

1. Some states heavily censor online content, particularly autocratic regimes such as China and Saudi Arabia.)

Research Design

My analysis will encompass two comparative temporal scopes, the Arab Spring of 2011 and the October Revolution of 2019. My variable of interest is protest-related expressed grievances (text). I will first analyze and determine the grievances that are originally expressed online in the 2011 movement, and whether said grievances resurface online during the 2019 Revolution. Next, I will conduct a content and sentiment analysis of the grievances that are expressed via Tweets, to determine whether and how emotions have progressed and whether they have evolved throughout the temporal scopes. For example, do the tweets expressed in the second temporal scope possess more aggressive undertones? Is there more angry sentiment attached with tweets as the years go on? Such sentiments would yield strong inferences into whether digital grievances emotionally evolve, and whether the same grievances being expressed continuously throughout the years lends insight into potential protest movement formation. Additionally, it would provide insight into what topics drive people to participate in demonstrations, what terms are usually associated with specific movements of direct action, and what people feel comfortable expressing on an online and monitored platform.²

Twitter and Sentiment Analysis

Present scholarship has used; twitter to predict political opinion and attitude inversion (Matalon et al., 2021), sentiment analysis to define twitter political users and their projected scope of online influence (Caetano et al., 2018), twitter to conduct general analysis of political sentiment orientations (Ansari et al., 2020), sentiment analysis and political approval ratings (Shaghaghi et al., 2021), analysis of online political speech in regard to specific issue policies such as gun control (M'Bareck, 2019), and substantially more. Concurrently, we ask why social media? In the past few years, there has been a dramatic increase in social media users leading to the increased generation and abundance of unstructured texts that are manifested in the forms of chats, blogs, messages, tweets, and captions (Ansari et al., 2020). Exchanging information aside, social media is an incredibly convenient medium for individuals to express their opinions, ideas, and grievances. With regard to one platform specifically, the utilization of “political” Twitter accounts has “skyrocketed” (Grubbs, 2020) over the past decade. It is especially interesting to consider, when these days every political leader has and uses a Twitter account to disperse information and opinions in political discourse. This online

2. The Lebanese case does not experience instances of social media censorship by the state; however, regime members and elites do monitor social media trends and topic frequencies.

expression can gain popularity when *liked*³ by a substantial set of platform users. Said popularity reflects peoples’ sentiment and stance towards the content of the dispersed insight or information, and can allow for the analysis and even prediction of future opinions and attitudes. This paper will utilize twitter analysis and will allow us to comprehend grievance-based political protests and social movements found online.

Data Collection and Processing

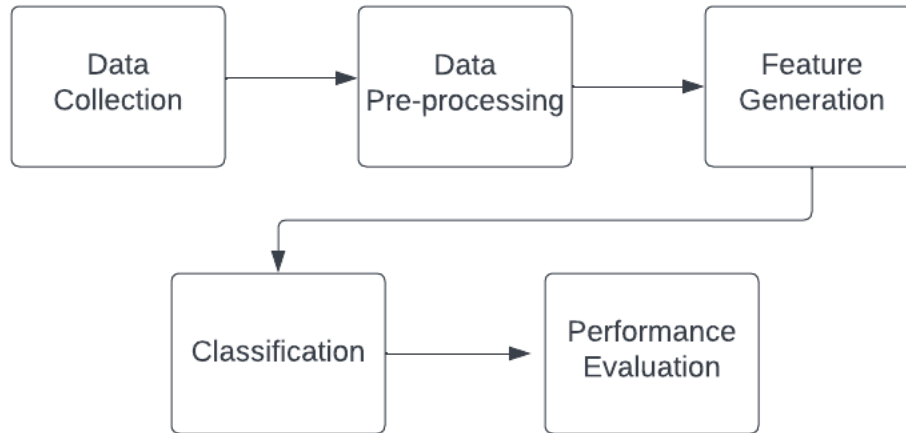


Figure 1: Diagram inspired by Ishrat et al., (2020)

As *Figure 1* shows, the process of content and sentiment analysis itself involves five basic steps: the gathering and scraping of the relevant twitter data of interest (i.e., filtering using specific movement hashtags); the pre-processing and cleaning of the data; the creation of a sentiment machine learning model to then; analyze the data using said model; and finally visualizing the results of the scraped content and ascribed sentiment analysis to derive relevant inferences. The collected data will be English tweets⁴. The reasoning for selecting Twitter as the social media avenue for the content analysis is because the platform is an extremely popular communication tool in the SWANA region (Abdelrahman, 2011; Antonio Zama Ruxandra Dumitru, 2020; Boots, 2016; Brian Mello Mark Stein, 2022; Brown et al., 2012; Isani, 2020), primarily because it allows the sharing of opinions on different aspects

3. Posts can be “liked” in the case of Facebook or “retweeted” and “liked” in the case of Twitter

4. Tweets from Lebanon are manifested in the English, French, and Arabic languages; however, due to the lack of conclusive lexicon availability for French and Arabic, this project will focus on the English-oriented data

of life is also utilized for a similar purpose; however, this platform deals with and undergoes strenuous censorship efforts and not all published grievances make their way out to the public.

Using both Python and R packages for Twitter scraping ⁵, I will specifically cull for tweets that are specifically protest-related (meaning protest related hashtags accompany the tweets) ⁶. Once data is collected, I will pre-process the collection to remove extra features from the tweets such as unnecessary hashtags, usernames or tagged individuals, slang terminology ⁷, and retweets. Then, I will extract twitter-specific features such length of words, number of question marks, emoticons, parts of speech, noun-based features, and lexicon-based features (positive and negative term percentages) (Nazeer et al., 2020). Following this, I will classify whether expressed tweets are negative, neutral, or positive in sentiment; to do so, I will utilize the lexicon-based approach.⁸ Finally, I will evaluate the accuracy of the lexicon classifier to determine the accuracy of the sentiment behind the tweets. It must be noted that there are challenges with twitter-carried sentiment analysis. Most notably, the use of slang terms, sarcasm, subjective words, use of acronyms and abbreviations, and the use of highly unstructured or non-grammatical language. Accordingly, collected tweets will also be manually re-coded and re-checked for validity and accuracy.

Reliability and Validity

Content analysis is primarily utilized to: identify the intentions or focus trends of an individual or group, to describe the attitudinal and behavioral responses to a catalyst, to determine the emotional state of an individual or group, and to analyze the patterns in communication regarding specific topics (Columbia University, 2019). As mentioned previously, there are potential coding issues that could arise with the collected data, and to address such an issue manual coding would need to be conducted. With content analysis, one must turn to the validity and reliability of the data collection. Regarding validity, there are three general criteria: (i) the closeness of categories, (ii) conclusions and implications; and (iii) generalizability. The closeness of categories can be achieved by way of using multiple classifiers for the tweets, this is done to broaden an explicit variable to include synonyms or implicit variables.

5. Python's Twint package and Twitter's Application Programming Interface (API) will be used

6. An example would be #lebanonuprising or #lebanonprotests

7. Slang words will be replaced with terms of equivalent meaning

8. There exists three approaches to the classification of sentiment: the Lexicon-based approach, the machine learning approach, and the deep learning approach. All three approaches determine the polarity of the tweet with varying levels of accuracy.

The conclusions and implications derived from a specific tweet can be problematic; in that, the accurate count of a word's occurrence and frequency can be carried out, but the accurate meaning of a term is inherent to each particular context and usage. Manual revision and analysis would need to be carried out to make sure that the results and conclusions are not invalidated by this validity issue. Lastly, generalizability is reliant on the clear definitions of concept categories, how they are determined, and how reliable they are at quantifying the idea we are seeking to measure. Generalizability is a parallel to reliability in this instance, and for the case of Lebanon - we can utilize the implications from the collection to make inferences about other states with similar histories of protests and instances of direct action against economic, social, and political grievances.

Regarding reliability, it must be acknowledged that coding errors and the risk they bring can never been entirely eliminated. However, they can be minimized, and to do so; one must ensure that the content analysis is stable, accurate, and reproducible. Stable in that we do not re-code the same data in the same manner over a period of time. Accurate, referring to the extent to which the classification of tweets fits to a norm or standard statistically. Finally, reproducible in that we do not classify categories membership in the same manner (Columbia University, 2019). In summation, there are many disadvantages to carrying out content and sentiment analysis. It can be an extremely cumbersome and time-consuming feat, which is subject to increased error; especially regarding relational analysis. It is also inherently reductive (Krippendorff, 2004) and tends to disregard the context that produced the text as well as the state of things when the text was generated in the first place (Krippendorff, 2004). However, its advantages also are notable; such analysis can directly examine communication and perceptions of noteworthy events. It allows for the unobtrusive means of interaction analysis and provides insight into complex models of human language and thought. Content analysis is essentially a powerful, inexpensive, and readily-understood tool that could be useful in analyzing necessary trends and communications that would yield strong inferences and implications on vastly under-comprehended phenomena.

Expected Results

To reiterate my expected findings, I anticipate a: (1) resurgence of grievances from the 2011 movement in the 2019 movement, (2) grievances will have increased over time to encompass more protest issues – specifically economic and security issues; and (3) more negative sentiment will be detected in the latter temporal scope when compared to the 2011 movement. To test the substance of this research, I preformed an initial content analysis of Twitter data;

with scraped Lebanese tweets from the years 2021 and 2022⁹. When examining the scraped data from 2021, I deduce that there are three main themes that are tweeted, (i) *gas prices*; (ii) *government corruption/electoral overreach*; and (iii) *sectarianism/identity*. Contrastingly, figure 2 visualizes the terms most frequently found within the scraped tweets from 2022, with the bigger font terms representing the most-frequently tweeted terms and the smaller font terms representing the least-frequently tweeted terms. Initial inspection shows that a substantive majority of the tweets extracted primarily discussed four main themes or topics, (a) *protest*; (b) *Israel*; (c) *Lebanon*; and (d) *gas*.

Figure 2: Visualization of Term Frequency in Tweets, 2022

9. The reason for these two scopes being the Twitter data scraping limitation of 9 days. A limitation that will be overridden in this project's coming phases

to the ongoing dissents and outcries against the electoral overreach and economic crises that the country continues to battle.

Initial Conclusion

From the initial content analysis carried out, we can determine that this research project's line of questioning is on the right track. Where I expected a resurgence of grievances, we see that not only did old grievances from a year prior resurface in 2022 (economic concerns, electoral overreach and government corruption, identity crisis and sectarian divide), but new grievances also emerged – in the form of security issues. Although these findings are confined to only one year, I believe that there is much substance in this puzzle to expand the scope not only temporally, but also regionally and thematically. Specifically, this project will endeavor to explore the sentiment behind the expressed grievances, whether the grievances evolve and mature over time, and whether sentiment evolves or remains stagnant. This research can not only inform us on the importance of grievance expression during times of civil unrest and social movement revolutions; but, will also inform us on the importance of civilian participation in public dissent, whether grievances can and are resurfacing in the years post-initial campaign successes, and whether grievance resurgence is an issue that should be paid attention to when exploring and studying protests and social movements. With the open-accessability of social media, it is now easier than before to closely examine the issues that people hold dear, and determine the sentiment and importance behind them.

the Validity and Reliance subsection.

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