VENEZUELA: ILLUMINATING A VULNERABLE STATE

by

Warren R. Lally and Jeffrey S. Owen

December 2018

Thesis Advisor: Sean F. Everton
Co-Advisor: Doowan Lee
Second Reader: Daniel T. Cunningham

Approved for public release. Distribution is unlimited.
Academics, journalists, and researchers have conducted extensive qualitative research on the causality of the socialist-leftist movement in Venezuela; however, little quantitative research has been conducted on how and why opposition reform efforts have been largely ineffective. By using exploratory methods in the fields of social network analysis, social movement theory, and statistical analysis, this work develops an alternative quantitative model and applies it to traditional qualitative methods of analysis in these fields.

Using temporal social network analysis, this thesis illuminates changes in the relationships of political parties, alliances, and ideology during the Chávez-Maduro era. Additionally, using temporal protest data and key events, it analyses the ebb and flow of social movements in relation to political opportunity. Finally, it analyzes the effects of the country’s destabilization factors and opposition’s protests on voting patterns at the municipal level to determine if social movements in Venezuela are affecting opposition reform efforts. This thesis contributes to the ongoing research on the destabilization in the region and supports the formulation of a strategy in the SOCSOUTH Area of Responsibility.
Approved for public release. Distribution is unlimited.

VENEZUELA: ILLUMINATING A VULNERABLE STATE

Warren R. Lally
Major, United States Army
BS, U.S. Military Academy, 2007

Jeffrey S. Owen
Major, United States Army
BBA, Sam Houston State University, 2007

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS
(IRREGULAR WARFARE)

from the

NAVAL POSTGRADUATE SCHOOL
December 2018

Approved by: Sean F. Everton
Advisor

Doowan Lee
Co-Advisor

Daniel T. Cunningham
Second Reader

John J. Arquilla
Chair, Department of Defense Analysis
ABSTRACT

Academics, journalists, and researchers have conducted extensive qualitative research on the causality of the socialist-leftist movement in Venezuela; however, little quantitative research has been conducted on how and why opposition reform efforts have been largely ineffective. By using exploratory methods in the fields of social network analysis, social movement theory, and statistical analysis, this work develops an alternative quantitative model and applies it to traditional qualitative methods of analysis in these fields.

Using temporal social network analysis, this thesis illuminates changes in the relationships of political parties, alliances, and ideology during the Chávez-Maduro era. Additionally, using temporal protest data and key events, it analyses the ebb and flow of social movements in relation to political opportunity. Finally, it analyzes the effects of the country’s destabilization factors and opposition’s protests on voting patterns at the municipal level to determine if social movements in Venezuela are affecting opposition reform efforts. This thesis contributes to the ongoing research on the destabilization in the region and supports the formulation of a strategy in the SOCSOUTH Area of Responsibility.
THIS PAGE INTENTIONALLY LEFT BLANK
# TABLE OF CONTENTS

I. INTRODUCTION AND RESEARCH METHODOLOGY ........................................1  
A. BACKGROUND ......................................................................................................1  
B. PURPOSE AND OBJECTIVES OF THE RESEARCH ..................................1  
C. RESEARCH QUESTION .................................................................................2  
D. METHODOLOGY .............................................................................................2  
E. THESIS PLAN .................................................................................................4  

II. LITERATURE REVIEW .........................................................................................5  
A. INTRODUCTION .............................................................................................5  
B. POLITICAL DYNAMICS OF VENEZUELA ...............................................5  
C. SOCIAL MOVEMENT THEORY: POLITICAL PROCESS MODEL IN VENEZUELA .........................................................8  
D. FACTORS CONTRIBUTING TO REFORM FAILURES OF THE OPPOSITION ..................................................11  

III. SOCIAL NETWORK ANALYSIS OF THE VENEZUELAN POLITICAL NETWORKS ..............................................15  
A. INTRODUCTION .........................................................................................15  
B. ANALYSIS OF VENEZUELAN POLITICAL NETWORKS .....................17  
1. 2000–2006 Analysis ..............................................................................19  
2. 2006–2012 Analysis ..............................................................................22  
3. 2013 Analysis .........................................................................................24  
4. 2018 Analysis .........................................................................................25  

IV. THE STUDY OF THE VENEZUELAN OPPOSITION SOCIAL MOVEMENT ..........................................................29  
A. INTRODUCTION ..........................................................................................29  
B. DATA COLLECTION ..................................................................................29  
C. DATA VALIDATION ................................................................................29  
D. THE BEGINNING OF THE OPPOSITION SOCIAL MOVEMENT IN VENEZUELA ...............................................31  
E. THE EBB AND FLOW OF PROTESTS ......................................................33  
1. The Elitist Movement ...........................................................................35  
2. The Political Opposition Movement ....................................................37  
3. Mass Movement .....................................................................................38  
F. GEOSPATIAL ANALYSIS OF PROTEST ...............................................41
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.</td>
<td>Venezuelan Political Networks per Election Cycle</td>
<td>17</td>
</tr>
<tr>
<td>Figure 2.</td>
<td>Venezuelan Political Party Networks by Newman Groups per Election Cycle</td>
<td>21</td>
</tr>
<tr>
<td>Figure 3.</td>
<td>Political Networks Ideology per Election Cycle</td>
<td>22</td>
</tr>
<tr>
<td>Figure 4.</td>
<td>2018 Political Network, Color-Coded by Election Participation</td>
<td>26</td>
</tr>
<tr>
<td>Figure 5.</td>
<td>Comparison of ICEWS Protest Data and Provea Protest Data</td>
<td>30</td>
</tr>
<tr>
<td>Figure 6.</td>
<td>Timeline of Key Events in Venezuela</td>
<td>32</td>
</tr>
<tr>
<td>Figure 7.</td>
<td>Ebb and Flow of Protests over Time with Key Events</td>
<td>34</td>
</tr>
<tr>
<td>Figure 8.</td>
<td>Venezuelan Political Networks from the Political Opposition Movement</td>
<td>37</td>
</tr>
<tr>
<td>Figure 9.</td>
<td>The Relationship of Protests, Terrain, and Population in Venezuela from 2000–2018</td>
<td>42</td>
</tr>
<tr>
<td>Figure 10.</td>
<td>Venezuela’s Social Media Platforms by Percentage 2011–2018 with Protest by Date</td>
<td>49</td>
</tr>
<tr>
<td>Figure 11.</td>
<td>Poisson Regression Models Comparing Social Media Platforms against Protests</td>
<td>50</td>
</tr>
<tr>
<td>Figure 12.</td>
<td>Annual Protest Count between 1998 and 2017, Trending Upward over Time</td>
<td>53</td>
</tr>
<tr>
<td>Figure 13.</td>
<td>Presidential Election Results by Municipality Overlaid with Protest</td>
<td>54</td>
</tr>
<tr>
<td>Figure 14.</td>
<td>Change in Presidential Election Results by Municipality Overlaid with Protest</td>
<td>55</td>
</tr>
<tr>
<td>Figure 15.</td>
<td>Linear Regression Model</td>
<td>56</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Topographic Measurements of Venezuela’s Political Networks ............... 19
# LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Acción Democrática (Democratic Action)</td>
</tr>
<tr>
<td>AOR</td>
<td>Area of Responsibility</td>
</tr>
<tr>
<td>AP</td>
<td>Avanzada Progresista (Advanced Progress)</td>
</tr>
<tr>
<td>COPEI</td>
<td>Comité de Organización Política Electoral Independiente (Christian Democratic Party)</td>
</tr>
<tr>
<td>EC</td>
<td>Eigenvector Centrality</td>
</tr>
<tr>
<td>GDELT</td>
<td>Global Data on Events Language and Tone</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GPP</td>
<td>Gran Polo Patriotico (The Great Patriotic Pole)</td>
</tr>
<tr>
<td>ICEWS</td>
<td>Integrated Crisis Early Warning System</td>
</tr>
<tr>
<td>LCR</td>
<td>La Causa Radical (The Radical Cause)</td>
</tr>
<tr>
<td>MAS</td>
<td>Movimiento al Socialismo (Movement to Socialist)</td>
</tr>
<tr>
<td>MUD</td>
<td>Mesa de la Unidad Democratica (Democratic Round Table)</td>
</tr>
<tr>
<td>MVR</td>
<td>Movimiento V Republica (Fifth Republic Movement)</td>
</tr>
<tr>
<td>OAS</td>
<td>Organizacion de Estados Americanos (Organization of American States)</td>
</tr>
<tr>
<td>PDVSA</td>
<td>Petroleos de Venezuela Sociedad Anonimo (Venezuelan Oil, S.A.)</td>
</tr>
<tr>
<td>PODEMOS</td>
<td>Por La Democracia Social (For Social Democracy)</td>
</tr>
<tr>
<td>PROVEA</td>
<td>El Programa Venezolano de Educacion Acciòn (Venezuelan Education Program)</td>
</tr>
<tr>
<td>PSUV</td>
<td>Partido Socialista Unido de Venezuela (United Socialist Party of Venezuela)</td>
</tr>
<tr>
<td>SNA</td>
<td>Social Network Analysis</td>
</tr>
<tr>
<td>SOCSOUTH</td>
<td>Special Operations Command–South</td>
</tr>
<tr>
<td>UNT</td>
<td>Un Nuevo Tiempo (A New Era)</td>
</tr>
<tr>
<td>USG</td>
<td>United States Government</td>
</tr>
</tbody>
</table>
THIS PAGE INTENTIONALLY LEFT BLANK
ACKNOWLEDGEMENTS

MAJ Lally: I would like to thank my family and friends for their love and support throughout my time in graduate school and my career. Thanks to the entire Defense Analysis Department, especially our advisors, Dr. Sean Everton, Professor Doowan Lee, and Professor Dan Cunningham. Your patience, guidance, and wealth of knowledge have greatly contributed to the ideas generated to create this work, and we could not have done it without you.

MAJ Owen: First, I would like to thank my family, who constantly supported my efforts in our thesis, graduate school, and my career. Second, I would like to thank the Defense Analysis Department, especially our advisors, Dr. Sean Everton, Professor Doowan Lee, and Professor Dan Cunningham, for their invaluable guidance throughout this process. The amount of knowledge granted generated critical concepts to this work, and we could not have done it without you.
I. INTRODUCTION AND RESEARCH METHODOLOGY

A. BACKGROUND

In 1998, Hugo Chàvez, a former colonel in Venezuela’s army who was previously arrested for inciting a coup d’état in 1992, was elected president of Venezuela, marking the beginning of the socialist-leftist movement in Venezuela. Under his direction, the movement diffused to much of Latin America, and was later dubbed the Pink Tide. By 2010, 11 countries had left-leaning governments, and “between 1998 and 2014, the left won 23 elections in nine different countries.” However, while many countries have ebbed and flowed in and out of the Pink Tide, the Venezuelan opposition has been unable to achieve political reform as did Argentina, Brazil, and Chile, all of which escaped the grasp of the socialist-leftist regimes.

Under President Maduro, an authoritarian regime has dominated Venezuela, which economically destabilized and socially repressed its people. Many academics, journalists, and policy experts have expounded on the Venezuelan crisis, largely in narrative for him, quantitative ways of explaining the crisis and the political process have been neglected. We have developed a quantitative model to analyze the political, social, and economic dynamics in Venezuela, insights from which may apply to future interventionism by the United States or future efforts of the Venezuelan opposition.

B. PURPOSE AND OBJECTIVES OF THE RESEARCH

This thesis’s purpose is to provide a quantitative analysis of the Venezuelan political, social, and economic factors and conditions that contribute to the opposition’s

---

1 This thesis includes some of our work previously published by Taylor and Francis. We were granted non-exclusive world rights by the publisher. Specifically, some excerpts, figures and tables used in this thesis were derived from the following publication: Jeffrey Owen and Warren Lally, “Illuminating Venezuelan Opposition: Network Analytics for Phase Zero Planning,” Special Operations Journal 4, no. 2 (July 3, 2018): 213–31, https://doi.org/10.1080/23296151.2018.1525661. The Journal’s web site is https://www.tandfonline.com

inability to gain political reform. Its objective is to identify and analyze the factors that are inhibiting the success of social movements and political reform in Venezuela, with the belief that our findings can apply to other states affected by the Pink Tide. The result of our analysis is a model that the U.S. government (USG) should use to formulate a strategy that will address factors that undermine the opposition’s efforts to counter the Pink Tide in the Special Operations Command–South (SOCSOUTH) Area of Responsibility (AOR). Explicitly, through political reform in Venezuela, the USG can reestablish positive ties with Venezuela and sever Venezuela’s ties to nefarious state and non-state actors identified by Matthew Bauer, Andrew Maggard, and Robert Murray in their work *Convergence in Latin America: Illuminating the Pink Tide and Iranian Nexus Through Social Network Analysis*.

C. RESEARCH QUESTION

How are the political, social, and economic conditions inhibiting the Venezuelan opposition from creating political reform in the Chávez and Maduro era?

D. METHODOLOGY

Due to the scope and complexity of the research question, this research uses quantitative methods of analysis and combines them with qualitative research to assess our findings. We conducted the research in three phases spanning three different academic disciplines: social network analysis (SNA) of the political parties in Venezuela, analysis of protest and social movements, and statistical models of economic and social factors and their effects on elections. This section focuses on conceptually explaining the broad framework of the methodology, while the details of the methodology are contained within each of the chapters.

The first phase uses SNA to understand the dynamics of the political landscape in attempt to identify the shortfalls of the opposition’s ability to exploit political

---

3 This work identified Venezuela as the central node in the Pink Tide network, serving as the basis to suggest that targeting Venezuela would achieve the greatest effects of disrupting the Pink Tide network. Matthew S. Bauer, Andrew J. Maggard, and Robert L. Murray, “Convergence in Latin America: Illuminating the Pink Tide and Iranian Nexus through Social Network Analysis” (master’s thesis, Naval Postgraduate School, 2017), https://calhoun.nps.edu/handle/10945/56860.
opportunities. Following the work of Bauer, Maggard, and Murray, using existing open-source materials, we created an edge list of the Venezuelan political parties cooperative and affiliate relationships during the 2000, 2006, 2012, 2013, and 2018 presidential elections. The resulting analysis illustrates the network changes and political opportunities through empirical tools. Additionally, it includes attributes that complement the structural analysis of the network. By analyzing the network’s “topography, centrality, clustering, and brokerage,” four areas commonly analyzed in SNA to determine the key nodes in the network, we identified the impacts on political opportunities.

The second phase analyzes the evolution of social movements in Venezuela by observing changes in protest cycles from 2000–2017. By overlaying a timeline of key events and protest, we observed changes and trends that provide insight into changes in the political structure and when political opportunities emerged. This proves useful for identifying opportunities to exploit by the opposition, the Venezuelan government, or external actors.

The final phase focuses on using statistical models of economic, social, and political factors to determine their effects on protest mobilization and voting patterns. First, it uses social media usage data via platforms and protest data to determine if there is a statistically significant correlation between specific social media platforms usage, such as Twitter and Facebook, and protest. The results provide insight into the social media platforms used by the opposition to mobilize the population. This regression model can apply to future situations to determine if a change in social media platform usage could result in increased protest. Next, the study uses the resulting data for the 2000, 2006, 2012, and 2013 presidential elections, protest data, and political and economic data (i.e., gross domestic product [GDP], corruption levels, inflation) to determine what factors exhibit

---

4 Social movement scholars use the term, political opportunities, in a very specific way. We explain this and other related terms (e.g., mobilizing structures, framing processes) in the second chapter, beginning on page 8.


statistically significant impacts on changes in the voting patterns at the municipal level (equivalent to U.S. county level). It provides empirical results that can strengthen qualitative research.

E. THESIS PLAN

The thesis begins with a literature review that explores and evaluates the research and existing literature previously conducted on the Venezuelan crisis. It includes work from academics, regional experts, journalists, and political analysts. Once we provide a foundational understanding of the Venezuelan crisis, we delve into the political landscape of Venezuela by using SNA to analyze how changes in the political networks can account for changes in political opportunity. We then build upon the notion of creating political opportunity by exploring how protest data can help understand where political opportunities emerged via social movements. Next, the study of social movements and protest data prompted us to explore the correlation between social media platform usage and protest mobilization by using statistical regression. Finally, we attempt to translate the effects of social, political, and economic factors into changes in voting patterns by using statistical regression, before concluding with a summary of findings, implications of the research, and recommendations for future research.
II. LITERATURE REVIEW

A. INTRODUCTION

This research builds on the qualitative knowledge and theories surrounding the turn to the left in Venezuela and the social, political, and economic factors that have contributed to the failures of the opposition to create political reform. The extensive repository of knowledge and theories on the various social, political, and economic dynamics of the Venezuelan crisis lack quantitative and empirical evidence to support and strengthen their arguments. In this chapter, we critically evaluate previously conducted research on these topics and identify gaps that remain unexplored or expounded upon. We hope that experts in the fields of social movements and political science can build upon the methods used here, as well as the results, to assess their theories and future research.

B. POLITICAL DYNAMICS OF VENEZUELA

There are many qualitative efforts made by academics, journalists, and researchers to analyze the political dynamics of Venezuela over the past 20 years without the quantitative means to test or support their assertions. A valuable method to examine these assertions within the political dynamics of Venezuela from 1998–2018 is through empirical data and visualizations produced by SNA tools. In their book, *Understanding Dark Networks: A Strategic Framework for the Use of Social Network Analysis*, Cunningham, Everton, and Murphy assert that “as humans our working memory is limited, and this restricts our ability to process and identify network patterns of more than a few people.”7 As a result, the amount of data involved in the changing dynamics of the political system in Venezuela limits one’s ability to analyze certain phenomena qualitatively.

Steve Ellner conveys the shortfall by providing extensive detail on the evolution of the shifting political party system over time in his book, *Rethinking Venezuelan Politics: Class, Conflict, and the Chávez Phenomenon*.8 Unfortunately, his analysis lacks the detail

---

7 Cunningham, Everton, and Murphy, 4.
and data to back its assertions. Additionally, he defines the movement of political parties as “top-down” and “grassroots” movements, while speaking to the changes in structure, which are “horizontally” and “vertically” connected. The shortfall comes with his inability to articulate the changes he attempts to describe visually. Though he provides an in-depth analysis of the shifting political system, his assertions would be strengthened and provide detail, if he used formal methods, such as SNA, to examine the network’s structure to better understand their behavior over time.

Maryjane Osa exemplifies how SNA supports understanding political dynamics in her work, Solidarity and Contention: Polish Opposition Network. Her work illustrates and describes the Polish opposition’s network over time and, backed by data, identifies key opportunities of the opposition. Her example expresses and supports many other authors’ qualitative research and analysis.

To further this notion that SNA can illustrate the fracturing of political systems, Frances Hagopian and Scott Mainwaring note in their work, The Third Wave of Democratization in Latin America, that “party system polarization has an important impact on the rate of democratic and semi-democratic breakdowns in Latin America.” They found that the most statistically significant factor in whether or not democracy in Latin America would endure after 1978 was the “party system polarization,” which lends support to Luna and Kaltwasser’s idea that the fragmented opposition in Venezuela unite around “ideological tenets” and is the great cause to failure.

Juan Pablo Luna and Rovira Kaltwasser qualitatively expound upon several essential reasons the opposition failed, highlighting that “fragmentation across the opposition is an obstacle to electoral success and the creation of a viable alternative to

---

9 Ellner, 175.
12 Hagopian and Mainwaring, 43.
13 Hagopian and Mainwaring, 43.
Before Chávez became President in 1998, the “pre-collapse” era of the political parties, there were only two main parties: Acción Democrática (Democratic Action, or AD) and the Comité de Organización Política Electoral Independiente (Christian Democratic Party, or COPEI). The fragmentation of the two-party system took place in a setting they describe as the “post-collapse” where the parties splintered, challenging each other with a common goal of creating political opportunities through changing ideologies. Splinters and fractions among political parties became the norm in solving ideological issues between political parties.

The preceding experts allude that polarization, fragmentation, and splintering of political parties over time led to the failure of the opposition at each election cycle. They could be right, but the use of SNA further supports their analysis by visualizing and quantitatively analyzing the data of political parties, and more importantly, their relationships and interactions to other parties in the Venezuelan political landscape. Additionally, further examining the parties’ ideological background and their political spectrum from left to right over time allows for further analysis.

In Chapter III, SNA fills the gap between qualitative and quantitative analysis. We use visualizations and structural analysis to identify missed opportunities by the opposition’s political parties to create political reform in Venezuela. As Cunningham, Everton, and Murphy note, “even in its simplest form (i.e., sociograms or visualized networks), SNA can offer powerful new perspectives for those who already hold a great deal of knowledge about a particular group or organization.” We also SNA to examine the network at each election cycle in order to identify additional evidence. It goes without saying that analysts can apply this thesis’s methods to understanding the dynamics of a political landscape in other countries.

---

15 Luna and Kaltwasser, 183.
16 Luna and Kaltwasser.
17 Cunningham, Everton, and Murphy, *Understanding Dark Networks*, 2016, 4.
C. SOCIAL MOVEMENT THEORY: POLITICAL PROCESS MODEL IN VENEZUELA

Extensive research exists in the field of social movement theory, and even some on social movements in Venezuela, but to the best of our knowledge, limited systemic and quantitative research exists on social movements, specifically protests that occurred in Venezuela between 2000 and 2018.

Social movement theorist Doug McAdam presents, in his 'political process model,' three factors that account for “emergence and development of social movements.” These are “political opportunities, mobilizing structures, and framing processes.” Political opportunity factors focus on explaining how the emergence of a social movement stems from “changes in the institutional structure or informal power relations of a given national political system.” In other words, social movements are “shaped by the broader set of political constraints and opportunities” that exist in the political system and environment. Mobilizing structures are the resources, means, and methods used by groups to organize for collective action. Mobilizing structures, both formal and informal, are the ways social movements “recruit like-minded individuals, socialize new participants…and mobilize contention.” Finally, framing processes are factors used to give a shared meaning and definition to the problems individuals bring to

---

21 McAdam, 3.
22 McAdam, 3.
the situation that allow for collective action. Think of the bumper-sticker slogan or idea that attracts individuals or that a movement uses to rally behind.

McAdam, along with Sidney Tarrow, another pioneer in the field of social movement theory, find that the political process model “firmly establish[es] the link between institutionalized politics and social movements.” This link is critical to analyze the changes in the Venezuelan political structures and the evolution of social movements, which created political opportunities for the opposition.

McAdam has identified “the temporal location in the cycle of protest” as being an important dimension of political opportunity that requires additional study. He posits that by temporally analyzing protest, one can begin to observe where spin-off protest takes root as well as other changes in movements that create political opportunity. Tarrow, too, finds that “different phases of a protest cycle increase, reduce, or produce changes in opportunities.” However, McAdam does point out the challenge of analyzing protest cycles because they rapidly change and produce few records or data points for analysis. This challenge, in part, explains the scarcity of such studies in the social movement literature.

The challenge of acquiring protest data is slowly diminishing with the emergence of new data-mining technologies. Though they currently come with issues, data-mining programs such as Global Data on Events Language and Tone (GDELT) and Integrated Crisis Early Warning System (ICEWS) are creating new opportunities to obtain big data.
that is often difficult to collect, such as protest data. By using these tools, we can begin to gain further insight into the evolution of social movements in Venezuela and their effects on political opportunity.

Long before this technology emerged, Margarita López Maya, considered by many scholars as the pioneer on social movements and protest in Venezuela, focused on the evolution of social movements in Venezuela throughout the 1980s and 1990s. Her work serves as the foundation for explaining how social movements in Venezuela evolved into what they are today. She found actors on the margins or those who opposed the sociopolitical order conducted protests during the democratic era of the 1980s and 1990s. However, the erosion of the political system throughout the 1990s broke down the communication channels between social organizations (unions) and political parties that could “channel protest through less disruptive means.” As democracy continued to deteriorate during this era, weakened social actors that felt left-out of the political system began to organize and mobilize to gain the attention of those in power. This was not necessarily a new phenomenon; however, the change in frequency and the forms of social movements differed from previous decades.

López Maya’s findings provide the background for the Chavista-era social movements, which Daniel Hellinger analyzed in his work *Venezuela: Movements for Rent?* Hellinger uses annual protest data for the era of 2000–2008 from the human rights group El Programa Venezolano de Educacion Acción (PROVEA) and loosely categorizes social movements in Venezuela in a non-temporal manner. He identifies the role of the elites, mass base, opposition, and Bolivarian Circles in the social movements he studies, but he fails to define when they begin. His focus is less on the social movements themselves and more on the mechanisms behind the movements. Unlike McAdam, he misses some of the

---

32 López-Maya.
finer details of the movements by observing them from the macro level and not analyzing them through the lens of political opportunities. Hellinger articulates the broader evolution of protest and some of the underlying causation and emergence of movements, but he does so without any data to support the events.\[^{34}\] His argument applies to the data and model we use in Chapter IV, which not only would strengthen his arguments, but also, perhaps, further develop his theories.

One of the shortcomings of Hellinger’s work is that his research ends in 2008, just when social movements and protests begin to rise at unprecedented rates, a rise mostly due to the increased political turmoil caused by the global economic recession. To the best of our knowledge, no other published work that examines the social movements and protests in Venezuela during the Maduro era (beginning in 2013). By using protest data obtained through data-mining technologies and analyzing them through the lens of McAdam’s work, we build upon the work of López Maya, Hellinger, and others to provide new and useful insights into the social movements in Venezuela from 2000–2018.

D. FACTORS CONTRIBUTING TO REFORM FAILURES OF THE OPPOSITION

Venezuela was one of the most stable democracies in Latin America from 1958–1989 and known as “a model for Latin American progressive democracy” by Arthur Schlesinger Jr., advisor to President Kennedy.\[^{35}\] During this same period, the rest of Latin America was in political turmoil, struggling between ideologies surrounding communism and democracy that often resulted in military coups. Political scientist Daniel Levine attributed Venezuela’s success during this time to its democratic institutions, political inclusiveness, and interparty alliances that channeled conflict instead of checking it.\[^{36}\] The success of Steve Ellner’s theory centers on its rich natural resource of oil. As a rentier state,
the oil economy enabled the government to allocate funds to employment and social programs that built up the middle class.\textsuperscript{37}

Though the perception was that democracy was working well for Venezuela, some Latin American experts such as Norman Gall thought otherwise. He argued that the Venezuelan government was squandering its oil revenue and ignoring the large disenfranchised peasant population.\textsuperscript{38} This trend continued beneath the surface of the success of democracy in Venezuela with corruption, election fraud, and human rights violations continuing to grow and fester until it came to a head in the 1990s. Ellner examines the underlying problems, explaining the rise to the political crisis in the 1990s and ultimately led to the rise of Ch\'avez and the Bolivarian movement.

In 1989, President Perez enacted political reform that sought to strengthen ties between political candidates and their local constituents by putting individual candidates on ballots instead of just the political party slates.\textsuperscript{39} As a result, the political parties weakened.\textsuperscript{40} Ellner and others believe these are the greatest contributing factors for the political crisis that led to the rise of Ch\'avez.\textsuperscript{41}

Contrary to popular belief, Ch\'avez’s rise to power did not begin in 1998 with his presidency, but rather it began in 1992 with his failed coup attempt. Though it failed, it set in motion a series of events that ultimately resulted in the removal of Perez from power. Additionally, the blame of the political and economic reform extended beyond Perez and extended to his political party, AD, as well. Ch\'avez, an outsider of the political party system that had existed since 1958, delegitimized the existing political system by characterizing it as corrupt and its neoliberal policies as ineffective. By 1998, the people spoke through a wave of mass protests (known as Caracazo) that they had had enough of

\begin{footnotesize}
\begin{enumerate}
\item Ellner, \textit{Rethinking Venezuelan Politics}, 55.
\item Ellner, 57.
\item Ellner, 93.
\item Ellner, 94.
\item Ellner, 94.
\end{enumerate}
\end{footnotesize}
the political party system and subsequently elected two antiparty presidential candidates, Hugo Chávez and Henrique Salas Romer.

From 1958–1998, several factors emerged that served as potential indicators that voters may shift their vote away from the traditional party system and more toward an outsider. In his book *Economic Crises and Electoral Responses in Latin America*, Fabian Echegaray examined 17 cases of Latin American presidential elections from 1982 to 1995, excluding those in Venezuela, to identify factors that contributed to the shift of voters to the political left. Using micro and macro frameworks and various quantitative methods of analysis, he developed models that tested potential contributing factors. He readily acknowledges the limitations in his models, such as the nature of the party system and political variables, but he found that economic factors account for approximately one-third of the change in votes, while the other two-thirds stem from other political factors.42

Echegaray’s work does an excellent job of quantitatively supporting the factors identified by Ellner and Gall in their qualitatively analysis. However, his macro- and micro-level analyses could not account for some of the finer and more specific nuances within a state such as Venezuela. In addition, although he loosely accounts for the social dynamic affecting voting patterns, he does not specifically test protest as a variable. One could argue that protests are merely an epiphenomenon of the political and economic factors that affect votes toward the left. However, protests can bring awareness about the political and economic factors to others in an infectious way that could spread a sentiment of discontent and thereby changing voting patterns. Therefore, protests are a testable variable. In addition, Echegaray’s analysis only covers the period from 1982–1995 and a more recent work needed to be examined.


---

he focuses on the ideological dimension affecting votes to the left. He uses a similar approach and methodology as Echegaray, but his data include Venezuela and span from 1985–2004, narrowing the missing gap of research on voting for the left in Venezuela. Queirolo’s shortcomings of accounting for the specific voting changes in Venezuela from 2000–2018 are similar to Echegaray’s. Queirolo’s focus is mostly on the analyzing the shift of the third wave of democratization in Latin America away from neoliberalism and toward the left. There is validity to both his and Echegaray’s models that apply to Venezuela up until 2006; however, after that period, due to the increasing social unrest, protest, economic decline, and political reform, an important element is still missing the effects of protest on voting left.

---

III. SOCIAL NETWORK ANALYSIS OF THE VENEZUELAN POLITICAL NETWORKS

A. INTRODUCTION

In this chapter, we draw on social network analysis (SNA) to help gain an understanding of the dynamics of the Venezuelan political landscape, with an eye toward identifying the shortcomings of the opposition’s ability to exploit political opportunities. Following the work of Bauer, Maggard, and Murray, we focused our efforts on Venezuela, quantitatively the most central node in their Pink Tide network analysis. This chapter illuminates the political landscape of the government and the opposition in Venezuela during the presidential elections of 2000, 2006, 2012, 2013, and 2018, in order to show network change and political opportunities with empirical tools.

We develop five political-party-based networks using data collected from existing open-source information. We used the official Venezuelan election website (CNE) as the basis for determining which political parties were active in each of the elections cycles, which created the boundaries for which political parties to include in our network. We used the ballots for each election year as the initial basis to determine which political parties had positive ties or relationships to other political parties. The ballots provided the necessary information (political party and candidate) to determine which parties had a positive relationship that connected them. For example, if a political party was on the ballot, and they had a picture of the same candidate of another party, then they had a relationship or tie because they supported the same candidate on the ballots. In some instances, there were political parties that supported their own candidate and did not have

---

44 This chapter includes our work previously published by Taylor and Francis. Specifically, the figures and tables as well as much of the content in Section B were derived from the following publication: Jeffrey Owen and Warren Lally, “Illuminating Venezuelan Opposition: Network Analytics for Phase Zero Planning,” Special Operations Journal 4, no. 2 (July 3, 2018): 213–31, https://doi.org/10.1080/23296151.2018.1525661.


46 Raab and Milward, “Dark Networks Problems,” 413.

any relationships or ties to other political parties, and therefore were isolated nodes and hidden from the network visualizations included in this thesis.

We conducted additional research using the official websites of the political parties, which provided more details about the political affiliation, identity, alliances, and historical connections to other parties, which accounted for the relationships not depicted on the ballots. For example, for COPEI, additional research revealed a split that occurred within COPEI in 1998, when some of the leadership left and created Proyecto Venezuela (PV), thereby creating a tie between COPEI and PV.48

The websites did not list all parties or all the necessary information for this analysis. In places that we had gaps in information, we conducted additional research using news articles and social media handles for the political parties. This approach became more useful and relevant in developing the political network for the 2018 election, because the election had yet to take place and there was no ballot to determine the official relationships. However, by visiting the social media websites, such as Twitter, we were able to determine and validate relationships by observing what other political parties they were following or liked. For example by visiting the UNIDAD Twitter account one can see that several other political organizations follow and like each other creating positive ties.49 In several instances, there were indicators of conflicting information of ties and relationships between political parties. In these instances, where the lines were blurred, we resorted to the resources to count the number of resources that, additional research provided greater fidelity to if the tie or relationship was positive or negative. If the research revealed there were more instances of positive relationship ties than negative, we counted that as a tie.

The compilation of this information enabled us to create a network of what the political parties looked like during each of the election years. Additionally, we include the attributes of political identity, ideology, National Assembly seats (the National Assembly is comparable to the U.S. House of Representatives), and election participation, which

allow for additional analysis of the network. We based the networks on relational approaches to understand the “behavior and social processes” amongst the political organizations in Venezuela.\textsuperscript{50} In doing so, we use centralization measurements, commonly used in SNA, and centrality measurements to determine the key nodes in the networks.\textsuperscript{51} By identifying key nodes, we can better determine implications for election candidates and shifts in the political systems.

B. ANALYSIS OF VENEZUELAN POLITICAL NETWORKS

Depicted in Figure 1 are the political networks by election cycle from 2000–2018 (see Appendix A). The Pro-Chàvez/Maduro cooperative actors and ties are colored red, the opposition’s cooperative actors and ties are colored blue, and the independent actors and ties are colored green. Moreover, node size reflects the number of National Assembly seats a political party attained within that election cycle. All topographical and centrality measurements are based on these networks.

![Venezuelan Political Networks per Election Cycle](image)

Isolates or Pendants are removed and nodes are sized by the number of electoral seats in Venezuela’s National Assembly.

Figure 1. Venezuelan Political Networks per Election Cycle


\textsuperscript{51} Cunningham, Everton, and Murphy, \textit{Understanding Dark Networks}. 

17
Analyzing a network’s topography is a basic, initial measurement that has insightful implications about the networks’ structure, and strategies to use for or against a network. Here, the actors are Venezuelan Political Organizations while the relationships among them define the actor’s affiliation over time. Once the structure is developed, the network’s structure provides empirical data to analyze. This data shows how these interactions between political parties have an effect on the political opposition’s inability to reform Venezuela during election cycles.

The statistics shown in Table 1 reflect topographic measurements such as size (number of nodes in the network), links (the number of ties between the nodes), and diameter (the longest number steps, as measured in path distance, from one end of the structure to the other). Additionally, centralization indices such as degree, betweenness, and eigenvector centralization show structural changes in the networks between each cycle (see Table 1). Conceptually, these centralization measures, as based on variation in actor centrality scores, indicate the extent to which one or several actors dominate the networks. Degree centralization reflects the distribution of ties among actors in the network, whereas betweenness centralization indicates how brokerage is spread throughout the network. Finally, eigenvector centralization measures how eigenvector centrality (i.e., indirect influence) varies among network actors. Ultimately, these measurements are useful to understand how centralized a network may be and if the network is operating efficiently.

52 Cunningham, Everton, and Murphy, 85.
54 Cunningham, Everton, and Murphy, 8.
55 Cunningham, Everton, and Murphy, 89.
56 Formally, the standard measure of centralization uses the variation in actor centrality to measure the level of network centralization; more variation yields higher centralization scores, while less yields lower scores. The output ranges from 0 to 1 in which ratios closer to 0 indicate a network is decentralized and ratios closer to 1 suggest a network is centralized. See Cunningham, Everton, and Murphy, 87.
By analyzing the topographic measurements of Venezuela’s political networks, we can understand if changes in these measurements coincide with the opposition’s ability to win elections. Additionally, these measurements should provide empirical data to identify events that transpired during the elections cycles that contributed to the opposition’s ability or inability to create political reform.

Table 1. Topographic Measurements of Venezuela’s Political Networks

<table>
<thead>
<tr>
<th>Political Networks</th>
<th>2000</th>
<th>2006</th>
<th>2012</th>
<th>2013</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Metrics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>23</td>
<td>61</td>
<td>71</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Links</td>
<td>107</td>
<td>139</td>
<td>157</td>
<td>170</td>
<td>94</td>
</tr>
<tr>
<td>Diameter</td>
<td>15</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td><strong>Centralization Metrics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>.034</td>
<td>.159</td>
<td>.036</td>
<td>.086</td>
<td>.270</td>
</tr>
<tr>
<td>Betweenness</td>
<td>.240</td>
<td>.367</td>
<td>.103</td>
<td>.403</td>
<td>.045</td>
</tr>
<tr>
<td>Eigenvector</td>
<td>.706</td>
<td>.559</td>
<td>.866</td>
<td>.824</td>
<td>.770</td>
</tr>
</tbody>
</table>

1. **2000–2006 Analysis**

In 2000, the political network was the smallest compared to other election years, with 23 parties (nodes) and the lowest degree centralization score of .034 (decentralized). This structure is indicative of the events that occurred prior to the 2000 election. In 1998, Hugo Chàvez, became a presidential candidate and won. The rise of Chàvez’s Movimiento V Republica (Fifth Republic Movement, or MVR) was largely due to corruption within traditional political parties such as AD, COPEI, and the La Causa Radical (the Radical Cause, or LCR). Here, the MVR acted as a rallying point for ideologically leftist parties to align and collectively gain power in the election. In contrast, the opposition suffered during the election from the lack of a unifying political party to rally against the

---

58 Cunningham, Everton, and Murphy, 85.
newly formed leftist movement, MVR. Notably, we find a trend between the top two political parties running for the presidency.

The results suggest a relationship between presidential candidates’ political organizations and their eigenvector centrality (EC) scores (see Appendix B for top 10 centrality measurement tables by election year). For example, in 2000, LCR had the highest EC score and was the opponent to Hugh Chávez’s MVR who ranked number two (see Appendix B). Moreover, these top two political parties gained the most votes. These trends continued into the 2006 election cycle, where additional political parties formed through the rise of the Bolivarian leftist movement.

Table 1 also shows that, by 2006, the number of political parties embedded in the network more than doubled to 61; the network’s diameter was cut in half from 15 to 7 (indicating that it is condensing); and the network’s degree centralization score quadrupled to .159. These measurements suggest that the political parties became more centralized, organized, and consolidated with political affiliation.

As indicated in Figure 2, the process of polarization within the network is also evident. The application of the Newman Group community detection algorithm, which helps identify relatively dense clusters of actors in social structures,\textsuperscript{60} indicates that informal coalitions began to emerge during this timeframe. This approach is useful in this context as political organizations begin to develop these cohesive groups to gain a more collective front to create political reform. Moreover, the number of clusters increases from two groups in 2000, to three polarized groups in 2006, and then fluctuates between three and four for the remainder of the years.

\textsuperscript{60} Cunningham, Everton, and Murphy, 111.
Figure 2. Venezuelan Political Party Networks by Newman Groups per Election Cycle

This topographic and structural change coincides with key events or behaviors leading up to the 2006 election cycle, which created distance between party affiliation (pro-Chávez vs. opposition).

In 2002, a coup d’état attempt, encouraged by the United States, took place due to changes in the nationalized Petroleos de Venezuela Sociedad Anonimo (Venezuelan Oil, S.A., or PDVSA) managers’ board, causing a more “us vs. them” stance between pro-Chávez and opposition organizations. At this time, opposition political parties severed ties with pro-Chávez organizations, creating minimal network brokers. This explains the dispersion of nodes in 2006 on the opposition side of the visualizations in Figures 1 and 3. For example, in 2006, A New Era (UNT) and LCR severed ties with pro-Chávez organizations due to the extreme ideological shifts by the Chávez administration and non-inclusive rhetoric against the opposing parties. This resulted in pro-Chávez organizations gaining a majority of National Assembly Seats (161 of 167) after a withdrawal of

61 BBC, “Venezuela Profile - Timeline.”
opposition parties vying for the same seats in 2005 and 2006. Ultimately, these severed ties caused structural changes within the political network (Figure 3).

Additionally, it is worth noting that a shift in political ideology occurred between election cycles. As Figure 3 illustrates, from the 2000 to 2006 election cycle, the centerist political organizations (yellow) shift towards the right. This trend is in response to the increasing socialist-leftist rhetoric and where we first began to see the development of ideological split between leftist and the opposition.

Color coded by political spectrum, No Isolates or Pendants, and nodes sized by the number of electoral seats in Venezuela’s National Assembly.

![Figure 3. Political Networks Ideology per Election Cycle](image)

2. **2006–2012 Analysis**

Between 2006 and 2012, the Chávez regime began to show authoritarian-like characteristics through its actions after reelection. In 2006, Chávez overwhelmingly won a third term which, in part, was due to the opposition’s flawed strategies. The opposition withdrew their candidates during legislative elections in 2005 from corruption issues and resulted in the Chávez regime owning 100% of congressional seats in the National
Assembly.\textsuperscript{63} The boycott prevented the opposition in brokering power within the National Assembly. Additionally, the opposition fractured, resulting in several political parties running against each other versus the incumbent’s party, the MVR representing other likened parties, causing the opposition issues of who to rally behind.\textsuperscript{64} However, the opposition attempted to rally behind the UNT political party who ranked highest in degree and eigenvector centrality (see Appendix B). Overall, this resulted in an opportunity for Chávez to consolidate power.

While in power, Chávez created a new ideologically left political coalition called the Partido Socialista Unido de Venezuela (United Socialist Party of Venezuela, or PSUV),\textsuperscript{65} increased term limits indefinitely for elected officials, and nationalized economic industries.\textsuperscript{66} This consolidation of power undermined the opposition’s efforts to win the election.

In response, the opposition created the Mesa de la Unidad Democrática (the Democratic Round Table, or MUD),\textsuperscript{67} which became the opposition’s representative body of 30 political parties that also collected large number of National Assembly seats (see Figures 1 and 3, as the node size is representative of National Assembly seats). This collective action was the first step in creating opportunities for the opposition after little momentum in previous election cycles. However, as the 2012 election approached, Chávez further consolidated power with another political coalition, the Gran Polo Patriótico (Great Patriotic Pole, or GPP). This led to structural change among pro-Chávez organizations and the network in 2012.

In 2012, the network increased to 71 organizations, while its degree centralization fell to .036 (second lowest of the five periods examined). These changes were due to


\textsuperscript{64} Alverez and Acosta.


\textsuperscript{67} Turner, \textit{Latin America}, 412.
consolidation by coalitions on both sides. Additionally, the betweenness centralization score fell to .103, which is the second lowest of all five periods. Moreover, the relationship between EC scores and presidential candidate’s organization appears again with the opposition’s MUD scoring high at .909. Although, there is no relationship between the EC scores and their ability to win the presidential elections, it indicates the gains made by the opposition to find a representative party for their efforts as opposed to the flawed strategies in 2006. This was a missed political opportunity for the opposition, but with Chávez’s death in April 2013 and his temporary replacement by Vice-President Nicholas Maduro,68 another opportunity for the opposition arose. An opportunity of which the opposition ultimately failed to capitalize.

Finally, as was the case in the 2000 and 2006 elections, a shift in the 2012 political ideology spectrum occurred. As Figure 3 illustrates, from the 2006 to 2012 election cycle, the development of the MUD was a great opportunity to consolidate voting power, but ideologically was divided between center and right ideologies. This was a lesson that the opposition took into consideration for the 2013 election cycle.

3. 2013 Analysis

By 2013, a snap election cycle provided an opportunity for the opposition, this time with acting president and presidential incumbent candidate, Nicholas Maduro.69 This opportunity highlights the overall network changes. The network became slightly more centralized, with a degree centralization score of .086 and a decrease in the number of political parties to 60, a decrease that reflect the consolidation of organizations in hopes of an even more collective opposition front. However, as the opposition co-opted organizations, independent parties arose.

Figure 1 reflects how independent political parties emerged from split parties, which solely represented their own party and not a coalition’s. This pattern reflects increasing discourse among the two opponent coalitions, MUD and PSUV. Unfortunately,

---

68 BBC, “Venezuela Profile – Timeline.”
69 Turner, Latin America, 414.
for the opposition, the creation of independent parties (highlighted in green in Figure 1) diminished its ability to capitalize on this opportunity, and Maduro emerged victorious.

Notably, we again see the relationship between EC and the opposition’s primary political party that attempted to defeat Maduro. The opposition used the same candidate through the same political organization, the MUD, and had an EC score of .887.

In the 2013 election, Maduro, who was running for election as the successor of Chàvez, beat the opposition by a slim 1.5% margin, showing that the socialist movement has waned since the earlier overwhelming socialist-leaning elections. Maduro won with the small margin of 50.61% of the popular vote, while the opposition candidate Henrique Caprilles lost with 49.12% of the popular vote. Additionally, the people of Venezuela proved they desired political change, but the creation of independent parties added to the perception of the opposition’s lack of unity of effort. The next opportunity for political reform did not come until May 2018. In the meantime, there were numerous political referendums, economic patch jobs and further consolidation of power through changes in the constitution as Maduro slid further into authoritarianism.

4. 2018 Analysis

In authoritarian systems of power like the Maduro regime, the opposition is increasingly limited in its capacity to create political reform. This process occurred in Venezuela in the lead-up to the 2018 elections. As Arnson and Torre note, “After 16 years of Chavismo, Venezuela has been polarized into starkly antagonistic camps that make democratic dialogue difficult.” Structurally, the polarization illustrated in Figure 1 shows the pro-Maduro networks consolidate power and the opposition struggles to form a cohesive network, preventing collective action. However, the opposition’s lack of consolidation is not the only cause. Maduro’s political exclusion of opposition parties in

---


response to the upcoming election is equally to blame (Figure 4). These key events shaped the upcoming election.

![Figure 4. 2018 Political Network, Color-Coded by Election Participation](image)

Color coded by N for not able to participate in elections and Y if able to participate.

Maduro aggressively reduced his competition to retain power for the upcoming election. One of the last acts of the socialist-dominated parliament was to name 13 new justices to the Supreme Court in an effort to ensure political security for Maduro.72 This action was critical for the self-coup when the supreme court temporarily took over the functions of the opposition-led Congress, granting Maduro increased power, which

---

72 Brodzinsky, “Political Showdown in Venezuela as Opposition Takes Control of Parliament.”
included the ability to suspend elections, imprison deputies of the parliament (who were normally granted immunity), and withdrawing from the OAS.\textsuperscript{73}

The first key event that led to the self-coup occurred in January 2016 when the Tribunal Supremo de Justicia (Supreme Court) coerced members of the MUD to give up their National Assembly seats, reducing its electoral power.\textsuperscript{74} Second, in March of 2017, President Maduro conducted a self-coup d’état by using a loophole that enabled him to use the Supreme Court to replace the 1999 constitution created by Chávez, which dissolved the National Assembly and created a new constituent assembly that only allowed members of his organization.\textsuperscript{75} In response, the opposition created an unofficial referendum that seven million Venezuelans supported, resulting in the decision to reverse it several days later.

These events help explain why the 2018 network became more centralized and polarized through both “camps” becoming highly centralized with few brokers due to Maduro’s actions and the consequential responses of the opposition, see Figure 2 (Newman Groups). The network remained the same size, but its degree centralization increased three times over, from .086 to .270. Compared to the previous networks, the change from 2013 to 2018 was the most, meaning that this could have been an opportunity for the opposition to compete in the election.

However, because Maduro limited his competition, that chance became less likely.\textsuperscript{76} The opposition refused to participate due to the high levels of corruption; still, it had a frontrunner willing to run for office, Henri Falcon of Advanzada Progresista (Advanced Progress, or AP), who did not receive the full backing of the opposition.\textsuperscript{77} Of note, Maduro’s actions against the opposition’s political parties and the participation of


\textsuperscript{74} BBC, “Venezuela Profile – Timeline.”

\textsuperscript{75} BBC.


\textsuperscript{77} BBC.
registered voter turnout is indicative of Maduro’s victory. The registered voter turnout in 2018 was 46% compared to nearly 80% turnout in the previous two elections.78

In short, the Chávez Bolivarian Revolution, coupled with Maduro’s authoritarian actions, ultimately prevented and undermined political reform and the political opportunities in Venezuela during this period. Topographically and structurally, we see the networks change at every snapshot of each election cycle, reacting to the dynamics of the political landscape. By using SNA, we have illuminated the variations of the political parties and the establishment of coalitions, highlighted in Newman Groups, between election years, which provides insight into the shift of the political power struggle in Venezuela.

---

IV. THE STUDY OF THE VENEZUELAN OPPOSITION SOCIAL MOVEMENT\textsuperscript{79}

A. INTRODUCTION

The failures of Venezuela’s opposition political parties to gain inclusiveness and adequate representation in the government, as illustrated in the previous section, resulted in a shift of their efforts away from the political contest and more toward mobilizing the population. Drawing on the tenants of social movement theory, we geographically and temporally illustrate the mobilization of the opposition in response to Venezuela’s leftist-socialist government.

This section focuses on the impact of Venezuelan protest on political opportunities during the period leading up to the presidential elections between 2000 and 2018. Additionally, the analysis includes elements of the mobilizing structures and framing processes to provide context to the temporal evolution of the social movements in Venezuela.

B. DATA COLLECTION

Comprehensive protest data was much harder to come by since there is no existing repository or database that captures the specifics of each protest, specifically one that includes the location, which is necessary for our analysis. It was for this reason that we used the Integrated Crisis Early Warning System (ICEWS) iData data-mining system to search and process millions of pieces of data from digitized news media, social media, and other sources to create a database on protest in Venezuela.\textsuperscript{80} We used search criteria for sources that included the words “protest” and “Venezuela” between January 2000 and March 2018. Additionally, we prompted the results to provide a breakdown of the event

\textsuperscript{79} This chapter includes our work previously published by Taylor and Francis. Specifically, the figures and tables as well as much of the content in sections B and F derived from the following publication: Owen and Lally, “Illuminating Venezuelan Opposition.”

date, source country, source (referenced person or group making the statement), source sector, event type, target country, target, target sectors, publisher, sentence number, and headline. This yielded 6,369 observations of protest. We scrubbed these data to the best of our ability to eliminate duplicate events or events from countries other than Venezuela, resulting in dataset with 4,669 observations.

C. DATA VALIDATION

Understanding that our data were gathered using ICEWS, and that there were potential limitations of the program to capture every protest event, we sought to ensure that it was representative of other data collected on protest. To accomplish this, we compared our data to annual protest data gathered from Provea and Observatorio de Conflictos studies (see Figure 5).81

![Figure 5. Comparison of ICEWS Protest Data and Provea Protest Data](image)

Due to the large difference in quantity of observations of protest between the two datasets, we normalized our data and graphed them for the analysis. This revealed some

---

inconsistencies in our dataset with a spike in 2002 and 2007 as well as an opposite trend from 2009 to 2013, though; the trends were very similar between 2013 and 2017. Overall, with a correlation value of .663, our assessment is that the data used in this study is a valid representative sample of the protest that occurred from 2000 to 2017.82

D. THE BEGINNING OF THE OPPOSITION SOCIAL MOVEMENT IN VENEZUELA

The opposition’s social movement in Venezuela did not emerge overnight, and people do not begin a social movement because things are going well. Social movements begin because a group of people wants some sort of change. The perceptual roots of collective action are, according to political scientist Murray Edelman, embedded in the “cueing’s among groups of people who jointly create the meanings they will read into current and anticipated events.”83 Edelman alludes to the fact that people develop a narrative to represent the perceived grievance to mobilize the population.84 In addition, social movements are not static; they morph and change over time in response to events and activities. This fluid behavior of social movements makes them difficult to codify and capture, which is why it is not necessarily clear when and where the social movements emerged in Venezuela.

In developing a timeline of key events in Venezuela, it became clear that certain actions and events created political opportunities for the emergence and evolution of the opposition’s social movement in Venezuela. The rise of a social movement opposed to the Chávez regime went largely unnoticed by most outside of the country due to the lack of media coverage. It was not until escalation of violence and protest in 2014, which drew the attention of international media, that people started paying attention to its emergence. The timeline presented in Figure 6 tells a different story, however; it highlights the fact that activities and events took place long before 2014, events that created political opportunities for the emergence of the social movement; it is just not exactly clear when it emerged.

82 2018 protest data is not represented on these graphs because it is an incomplete year.
84 Edelman.
Figure 6. Timeline of Key Events in Venezuela
Although the timeline proved useful, it still lacked the quantitative data of the movement (in these cases, protests) that accounts for what gave rise to the movement and how it reacted to the events and actions taken by the regime. To fill this gap, we compared our timeline with our protest data to determine when the movements emerged, when it evolved, and why it ebbed and flowed.

E. THE EBB AND FLOW OF PROTESTS

In their work on the emergence of social movements, Doug McAdam, John McCarthy, and Mayer Zald identify four dimensions of political systems to analyze for changes that “render the political system more receptive or vulnerable to challenge by [opposition] groups.” Changes in any one or more of these dimensions can provide the political opportunities necessary for the emergence or evolution of a social movement. These four dimensions are “the relative openness or closure of the political system, the stability of that broad set of elite alignments that typically undergird a polity, the presence of elite allies, and the state’s capacity and propensity of repression.” By applying these dimensional changes to the key events, one can determine where political opportunities exist for social movements to emerge. We illustrate this in Figure 7 by overlaying key events with monthly protest data to depict how dimensional changes related to emergence and evolutions of social movements.

---

85 McAdam, McCarthy, and Zald, Introduction, 10.
86 McAdam, McCarthy, and Zald, 10.
Figure 7. Ebb and Flow of Protests over Time with Key Events
The data suggest that the social movement emerged sometime in 2001 with a slight up-tick in protest leading into 2002. Three dimensions changed that gave rise to the emergence of this movement. First, the relative openness of the political system changed when President Chàvez conducted a constitutional referendum in 1999, extending the presidential term limits, increasing government involvement in the Central Bank of Venezuela, consolidating military power, and introducing 347 additional articles to the constitution. Seventy-one percent of the Venezuelan people voted to adopt the new constitution since it appealed to and benefited the poor. However, the elites, largely affected by it, disagreed. Second, constitutional reform along with land reform in 2001 “challenged the stability of the broad set of elite alignments that typically undergird the polity.” President Chàvez redistributed more than five million acres of land ranging from unused state land to farmer-owned land to family ranches that had more than $18 million invested. The third and final dimension was the presence of the elite allies. The elites, who owned much of the land, were the primary victims of Chàvez’s socialist ideals of land and wealth redistribution. As a result, the elites fled from his base and formed the foundation of the opposition social movement in Venezuela and its subsequent evolutions: the elitist movement, the political opposition movement, and the mass movement.

1. The Elitist Movement

During the first phase or period of the social movement, the elites led the dimensional changes in the political system that gave rise to the movement. As depicted at the top of Figure 6, we dubbed the time period of 2000–2005 the “elitist movement,” since the elites were the primary advocates of the social movement during this time due to Chàvez’s socialist reforms including the redistribution of land and wealth. They were not alone, however; labor unions, businesses, and political parties began to feel isolated during

---


this time as well.\textsuperscript{90} The elitist movement reached its peak with a coup attempt in April 2002, which prefaces the general strike organized by elites and the opposition. The coup resulted from growing elitist disapproval of the Chàvez regime combined with Chàvez’s appointment of new board members of the state oil monopoly PDVSA. The coup was temporarily successful due to the participation of the military high command, which gathered at the presidential palace and demanded Chàvez’s resignation. It did not last, however, because of the backlash from Chàvez supporters and a multitude of failures of the transitional government of Pedro Carmona, which ultimately led to loss of the military support.\textsuperscript{91} The result was that Chàvez was back in office within 48 hours.

In addition to the failures of the transitional government of Carmona, the opposition likely failed because of its inability to garner support from the vast majority of the population. The opposition acted prematurely without addressing the concerns of Chàvez supporters, most of whom were poor and benefited from his socialist programs. Absent of mass discontent with the Chàvez regime, the opposition was unable to capitalize on the political opportunity it gained through protests, strikes, and other means. The result was the reinstitution of Chàvez and his increased paranoia of the opposition. The elite movement ebbed and flowed until February 2004, when a radical sector of the opposition took to the streets in a demonstration dubbed the \textit{guarimba}. The Chàvez regime suppressed the demonstrators, leaving nine dead and 193 wounded. Furthermore, he criminalized the demonstrators and used the state-controlled media to sell the idea that they were merely rioters. Though there is no definitive period in which the elitist movement transitioned to the political opposition movement, there is a clear change in the dimensions of the political system between the spike in protests in August 2004, associated with a referendum that consolidated presidential power, and the spike in December 2005, associated with the opposition’s boycott of the parliamentary elections.


2. The Political Opposition Movement

During this transitional period from elitist to political opposition movement, two changes in the dimensions of political systems occurred. First, allegations of fraud surrounding the August 2004 referendum challenged the relative openness of the political system. Second, the state’s capacity and propensity of repression began to take form as was demonstrated in the guarimba protests. Additionally, in March 2005 Chàvez imposed “new media regulations [that] provided stiff fines and prison terms for slandering public figures.” These are just a few of the notable instances of changes in the dimension of the political system that created political opportunities for the opposition movement to emerge.

McAdam, McCarthy, and Zald also note that “for the movement to survive, [the opposition] must be able to create a more enduring organizational structure to sustain collective action.” Up to this point, the movement, led largely by elites and political leaders of the opposition, was disjointed and unorganized. Assuming that the larger social movement organization is representative of the opposition’s political organization (as depicted in blue in Figure 8), one can see that the opposition was far less organized in 2006 than 2012 (i.e., it appears more dispersed) and thus less effective.

Figure 8. Venezuelan Political Networks from the Political Opposition Movement

92 BBC, “Venezuela Profile – Timeline.”
93 McAdam, McCarthy, and Zald, Introduction, 13.
That said, the improved change from 2006 to 2012 enabled the opposition to improve its framing processes and ability to mobilize, as well as increase its support base. With the more organized structure, the opposition became better equipped to amass larger-scale protests and apply pressure, which created the political opportunity that resulted in significant gains in parliamentary elections in September 2010. With their inclusion in the political process via elections, the protest activity of the opposition was at an annual eight-year low up until the death of President Chávez and the election of President Maduro in April 2013. The latter event set the trajectory of the social movement on a new path toward the period of the social movement that we dubbed “mass movement” in Figure 7.

3. **Mass Movement**

The mass movement emerged due to the dimensional changes in the political system, and greatly compounded the increasing deterioration of the state’s economic situation. Both the aftereffects of the global financial crisis of 2007–2008 as well as President Maduro’s economic policies contributed to the deteriorating economic situation in the country. In addition to the economic situation, this period of the movement marked the greatest changes in the political party’s dimensions with the relative openness of the political system and the state’s capacity and propensity of repression.

First, the relative openness of the political system under the Maduro regime began to shift with the highly contested presidential elections of 2013 in which Maduro won by a small margin of 1.5%. Though the election polls showed Maduro leading prior to the election and the National Electoral Council found no discrepancy with the results, Caprilles refused to accept the results of the elections. In addition to the contested elections, in November 2013 the Venezuelan National Assembly granted President Maduro emergency powers for a year to help with the inflation issues, furthering the appearance of the denial of access of the opposition to the political process. The final event that propelled the social movement into the mass movement phase was the large victory of the Socialist Party and allies in the municipal elections, which was largely due to the disunity of the opposition.

---


38
coalition in presenting a single candidate in many of the municipal elections. It was also due to the Socialist Party’s “use [of] state resources to favor government candidates, harass opposition organizing and campaigning, and increase limits on media freedom that mean that elections in Venezuela are not truly fair or free.”

Second, the state’s capacity for and propensity to engage in repression, observed in the municipal elections, as well as in its repression of the large spike in the number of protests from February to March 2014 that left 28 people dead, increased the opposition’s ability to mobilize and increase its support base. Maduro’s repression did not end there. In December 2014, he charged opposition leader Maria Machado with conspiracy to assassinate him, and then in February 2015 he charged Antonio Ledezma, another opposition leader, with plotting a coup with U.S. support. Maduro attempted to disrupt the opposition’s organizational efforts by interfering with its mobilization and framing process efforts. He was, however, unable to achieve the desired effects. In December 2015, the opposition’s coalition won two-thirds majority in the parliamentary elections, ending 16 years of Socialist Party control. The victory was short-lived, however: the Supreme Court suspended three opposition deputies due to voting irregularities, leaving the opposition short of a super majority that would have enabled them to block legislation.

Maduro’s acts of blocking political opportunities gained by the opposition movement continued with the opposition’s mass movement mobilization response, resulting in a spike of protests in 2016. The next large protest spike came in April 2017.

---


which was a response to what the Organization of American States (OAS) and others called a “self-coup.”

These actions prompted a response by the opposition to organize and mobilize one of the largest nationwide protests to date, which they called the “mother of all protest” followed by 100 days of protest, and is depicted in Figure 7 by the spike in protests from April–August 2017. The violence of the protests during this period escalated on both sides, leaving more than 92 dead and 1,500 injured, and ultimately created little political opportunity for the opposition. However, their efforts did result in the release of wrongly imprisoned opposition leader Leopold Lopez. Some may call this a success, but varying opinions within the have left the opposition leadership fragmented with some wanting to continue to take to the streets and continue protesting while others wanting to try other ways to create political opportunity.

The last protest spike in Figure 7 occurred with Maduro’s latest attempt to repress the opposition by barring the main contending opposition parties from taking part in the 2018 elections. This resulted in most opposition parties boycotting the national assembly elections due to the belief that they would be unfair. Although some of the opposition took to the streets to protest, the majority of the opposition reverted to the failed boycott strategy used in the December 2005 parliamentary elections.

In the end, the protests have largely been ineffective to achieve political reform due to the Chávez and Maduro regimes’ ability and willingness to repress the opposition’s gains. McAdam, McCarthy, and Zald suggest that changes in any of the four dimensions of the political systems should “render the political system more receptive or vulnerable to challenge by [opposition] groups.”

---

101 McAdam, McCarthy, and Zald, Introduction, 10.
years of challenge by the opposition, the socialist regime has insulated and coup-proofed itself to ensure that it is not vulnerable to challenge, even when the dimensions of the political system change in favor of the opposition.

F. GEOSPATIAL ANALYSIS OF PROTEST

In addition to the importance of the timing of protests, it is also important to note where they are taking place. In his work *Spaces of Contention*, Charles Tilly argues that the spatial patterns that emerge are significant as they may have meanings or implications in the context of contentious politics.\(^{102}\) For example, if a protest occurs outside of a courthouse in the capital it may have more meaning or significance than if it occurs outside of a post office in a rural community.

Due to the limitations in the data-mining tools used to collect the protest data, we were unable to obtain or validate the specific geographical locations of protest, and the geospatial points were often only precise enough to plot at the center of the district or municipal level. For this reason, we are unable to plot the micro-level interactions Tilly describes. Instead, we applied his logic of the importance of the location as a means for analysis at the macro level. By overlaying the location of the protest data used in the temporal analysis, we can analyze the relationship between population densities, terrain, roads, and protests to understand how the opposition mobilized and challenges they faced. See Figure 9.

---

Figure 9. The Relationship of Protests, Terrain, and Population in Venezuela from 2000–2018

Figure 9 illustrates that, generally speaking, locations with higher population densities experience a higher concentration and density of protest. This is an intuitive finding, as one of the prerequisites for protest is people; however, it also validates Tilly’s assertion that protests take place at specific locations for a reason. The example of the capital versus the rural location helps to explain why, aside from the fact that there is a higher population density, that we observe more protests in densely populated cities. Additionally, as noted in the next chapter, when we overlay voting patterns and protest locations, there are certain municipalities that are either more pro-opposition or pro-Maduro/Chavez. In the cases where municipalities are more pro-opposition, we observe more protests. This is likely due to them outnumbering the pro-Maduro/Chavez populace that are less fearful of reprisals or counter protest.
In addition, one also can analyze the effects the terrain has on protest. By overlaying the roadways and elevation features, we can begin to understand the challenges associated with mobilizing the population in Venezuela. The data suggest that even though a population beltway exists in the northwestern part of the country, spanning from Tachira to Miranda, the mountainous terrain and scarcity of roadways plays a role in isolating movements. Likewise, the same is true for the movements taking place in the central and southeastern parts of the country, which separate the vast plains and dense jungle, respectively. The data suggest that mobilization in Venezuela has been most effective in populated areas that are less restricted by rough terrain and have access to other areas of mobilization via roadways, but the question remains: what other means are the opposition using for rapid and mass mobilization of protest? To answer this, we analyze social media in the next chapter.

In conclusion, the geospatial-temporal analysis of protest and social movement revealed that the opposition was able to capitalize on changes in the dimensions of the political system that rendered the government vulnerable to challenge. These changes capture events in the ebb and flow of protest spikes. The result was their inclusion into the political process; however, the Chávez and Maduro regimes undermined their gains through reforms and repressive actions.

By analyzing the relationship between terrain, population density, and protest, we were able to identify another means the opposition was using to mobilize the population in the highly censored state. Further analysis of social media and protest in the next chapter determine the statistical significance of the relationship between increases in select social media platforms and protest mobilization.
V. QUANTITATIVE ANALYSIS OF VENEZUELAN OPPOSITION EFFORTS

A. INTRODUCTION

The research conducted in the previous two chapters prompted a shift in analysis away from the political contest and more toward the mobilizing of the population. Using the political process model as the basis of this study, we geographically and temporally illustrate and describe the mobilization of the opposition in response to the leftist-socialist government in Venezuela.

This section focuses on the impact of Venezuelan protest on political opportunities during the times leading up to the presidential elections between 2000 and 2013. Additionally, the analysis also includes elements of the mobilizing structures and framing processes of the social movement to provide context to the temporal evolution of the social movement in Venezuela.

B. DATA COLLECTION

The data used in this study were collected using open-source materials and a combination of data-mining tools and existing databases. The data consist of Venezuelan election data, protest, social media usage, population data, and various economic and political factors. Election data results were retrieved from the Venezuelan Consejo Nacional Electoral (National Electoral Council) website and ESDATA, which provided a breakdown of the presidential election results by candidate at the national, state, and municipal levels for each of the presidential election years examined from 2000–2013. Though we would have liked to include the 2018 presidential election data, we adequate

---

103 This chapter includes our work previously published by Taylor and Francis. Specifically, the figures and tables as well as much of the content in Sections B, C, and D were derived from the following publication: Owen and Lally, “Illuminating Venezuelan Opposition.”

The social media data used in this study came from StatCounter, a web-based analytics service that tracks “unbiased stats on Internet usage trends.” We used search-engine parameters that focused on media usage in Venezuela from “Mar 2009–May 2018.” The resulting dataset was a monthly breakdown of the percentage of usage by social media platform, which included Facebook, Twitter, YouTube, Pinterest, StumbleUpon, Tumblr, Google+, and other platforms.

The population data used in this study came from citypopulation.de, which provides population estimates for Venezuelan municipalities for 2001 and 2011 as well as a population projection for 2017. Though it did not have the population data for the election years in this study, we extrapolated based on the values provided in 2001 and 2011 to create estimates for the population data in the election years of 2000, 2006, 2012, and 2013.

The economic and political factor datasets used in this study came from the Global Economy Database and consisted of the annual data from 2000–2017 for the gross domestic product (GDP), government corruption, political stability, and inflation.

C. THE ROLE OF SOCIAL MEDIA IN MOBILIZING THE OPPOSITION

The proliferation of technology and social media play an ever-increasing role in protest mobilization, enabling the opposition to mobilize in a decentralized manner. Though the turn to social media outlets such as Twitter, Facebook, Instagram, and YouTube were largely due to the population’s’ mistrust of private and government-controlled media outlets, social media has played an important role for the opposition to

---

inform and mobilize the population. Per a Pew Research Center study found that Venezuelans primarily use social media to access political news, mobilize protest, and expose government corruption and human rights violations. Per the results presented in Figure 10, we concluded that Twitter is the most preferred social media platform for mobilization. We then statistically analyzed our hypothesis through a Poisson regression model to determine the top platforms used between January 2011 and February 2018. This timeframe includes two of the most significant protest periods in Venezuela’s modern digital age, 2014 and 2017. The overlay on the protest data provides insights into how social media and platforms coincide to protests. It appears there is a correlation between protest spikes and changes in social media use by platform.

We take this a step further by analyzing these variables with multivariate regression to determine their significance. Our regression model compares social media usage to protests to understand mobilization in the modern and digital age. The model’s purpose is to understand which social media platforms play the most significant role in mobilizing protests in Venezuela. Protests are the population’s form of addressing grievances and potentially incite change, in a country where reform has been uncommon the last 20 years. The study sought to use other factors outside of social media use, such as word-of-mouth and number of instance of leaders officially advocated for protest, however due to the lack of data and the scope of the study we were unable to do so.

The dependent variable in the models are protests by count over time (one month). The independent variable within the models is social media usage per platform over time (one month). Here we define social media usage as the percentage of time spent by Venezuelans using that platform during that month. For example, in January of 2011, Facebook accounted for 72% of the social media usage by the population, while Twitter accounted for 13%. In other words, if one individual represented the population and that

---


109 Wilson.

110 We used the Poisson model rather than a standard OLS because our data was count data (non-negative integer values).
individual spent 100 minutes a month on social media, then they spent 72 minutes on Facebook 13 minutes on Twitter, with the remaining time spent on other social media platforms such as YouTube or Myspace.
Figure 10.  Venezuela’s Social Media Platforms by Percentage 2011–2018 with Protest by Date.  

The platforms we focused on were Twitter, Facebook, YouTube, Stumble upon, Reddit, Google+, Digg, LinkedIn, Delicious, Now Public, and Myspace. However, due to the lack of significance for StumbleUpon, Reddit, Google+, Digg, LinkedIn, Delicious, and Now Public, we left them out of our models. The unit of analysis used in the model is months. We determine that, based on the data used, the month was the best way to connect the dependent and independent variables over time. The results of the Poisson regression models (see Figure 11) match our intuition that Facebook and Twitter are the dominant platforms for social media in Venezuela. We use RStudio as the platform to estimate three Poisson regression models that included different combinations of social media platforms in order to identify the preferred platform.

![Figure 11. Poisson Regression Models Comparing Social Media Platforms against Protests](image-url)
After estimating the models, we found that Facebook had the largest statistically significant effect with a coefficient of 1.809, and Twitter had the second, with a coefficient of 1.178 (see model 1 in Figure 10). In this model, we used the natural log function of the usage rate to ensure that the data reduced exponentially. We also included a lag function moving time one month to the left to determine if there was a change in social media usage in Facebook and Twitter with protests occurring one month later; this proved to be negative and statistically significant.

In the second model, we removed YouTube and MySpace due to their statistically insignificant results. We then ran the time lag functions and the results showed no changes from model 1 as to which platforms supported protest mobilization. In addition, we observed that the lag results of Facebook, Twitter, and protests remain similar as with models 1 and 3. However, the lack of significance in lagging the social media platforms by one month is due to the instantaneous consumption of social media and the ability of the masses to organize through the platforms. Meaning, there are shortcomings in using the lag function for the data period of one month. Social media trends likely change more rapidly and lagging for a month may not be as effective as for a week or a day, therefore leading to lack of significance. However, without weekly or daily data, we were only able to lag for the monthly data.

In Model 3, we determined that Twitter was the best platform to use for instantaneous mobilization in Venezuela. The roles reverse once we remove the other platforms and lags from the model. However, Twitter becomes statistically significant but only by a minimal margin with a difference of .097. This also shows that Facebook is just as preferred by the masses. In determining which platforms are best or safe to use for mobilization purposes, we must understand how the Maduro regime sees and understands the opposition’s use of these platforms.

These results suggest that a conscientious choice by the opposition to use followers, groups, and connections within the top social media platforms to send rapid messages is vital for mobilization and protests in Venezuela. Moreover, when comparing the top two platforms, Twitter has the highest usage. This may be due to ease of following hashtags and individuals.
However, the Maduro government has recognized the opposition’s reliance on social media as its preferred method to organize. As a result, it has tried to censor some of the sites. In 2014 the Maduro regime attempted to censor Twitter “by preventing users from posting and see[ing] photos on Twitter, throttling and shutting down the Internet in certain areas of the country, and blocking the walkie-talkie app Zello.”\textsuperscript{112} It failed to achieve the desired effects when Twitter provided a workaround. More recently, in October 2017, Maduro passed anti-hatred legislation “which … requires immediate actions, including administrators of social media accounts to remove any hateful posts and the creation of a commission to enforce the anti-hate legislation.”\textsuperscript{113}

The government also used social media as a propaganda platform and has allegedly purchased followers, created fake accounts, and even hired trolls to harass critics.\textsuperscript{114} Though they are much less effective than the opposition in their use of social media, they do use Twitter to denounce the protest and further criminalize the opposition.

In sum, social media plays an increasingly important role for the opposition in informing and mobilizing the population, despite the Maduro regimes’ growing censorship. Furthermore, understanding which social media platforms are used to organized protest are important for the international community too, as they can provide indicators to rise of movements and better prepare governments and non-governmental organizations to the aftermath of violent clashes or even regime changes.


\textsuperscript{114} Franceschi-Bicchierai, “In Venezuela, the Only Free Media Is Twitter.”
D. STATISTICAL ANALYSIS OF PROTESTS ON ELECTIONS

Over the past 20 years, according to Provea ONG and Observatorio Venezolano de Conflictividad Sociál, Venezuela has experienced over 67,000 protests under the leftist Chávez and Maduro regimes.\textsuperscript{115} The protests varied in size and scope but have mostly been in response to government actions and have increased in quantity over time (see Figure 12).

![Total Number of Protests In Venezuela](image)

Figure 12. Annual Protest Count between 1998 and 2017, Trending Upward over Time

This increasing social unrest and overt disapproval of the government leads one to believe that it would have an effect on voting patterns of the populace to oust the Chávez or Maduro governments. This leads us to the questions: Are protests having an effect on voting habits? What other factors are contributing to the change in voting patterns?

We began by overlaying the presidential election results for the years 2000, 2006, 2012, and 2013 with the georeferenced locations of the protest that took place during the time between the election cycles. See Figure 13.

![Figure 13. Presidential Election Results by Municipality Overlaid with Protest](image)

This visualization reflects how the population actually voted during election cycles at the municipal level; however, Figure 13 does not show the change in voting patterns. To show this, we plotted the difference in the voting patterns from the previous election to the election year depicted (Figure 14). For example, “2000 Election” in the figure reflects the change in votes from the 1998 election and the 2000 election. This comparison allows one to see trends in the population’s political sentiment (left leaning or right leaning), as well as whether the locations where protest occurred had a greater, lesser, or no effect on the change in the voting patterns.
Figure 14. Change in Presidential Election Results by Municipality Overlaid with Protest

Though the visualizations make for some interesting observations about where the protests took place and the voting results of those municipalities, it does not sufficiently determine if the protests actually had an effect on changing the vote away from the leftist Chávez and Maduro regimes. In order to determine if they were having an effect, we developed a statistical model using linear regression with the unit of analysis as the municipalities and election years.

The dependent variable used in this model was the change in the votes between election years, which we defined as “Percentage Change in Vote for Chávez/Maduro.” This value was the percentage change of Chávez and Maduro votes from the previous election in Figure 15. To simplify the understanding of this variable, a negative change in “Percentage Change in Vote for Chávez/Maduro” means that people are changing their vote from the left to the opposition.
The independent variables used were the rate of protest by municipality during the time between election years, the mean GDP, inflation rate, and government corruption levels between election years. The reason the mean values were used is dependent variables occurred only for the years 2000, 2006, 2012, and 2013 and the research aimed to include all the independent variables that were affecting those changes that occurred during non-election years.‘

In addition, to ensure that outliers did not impact our model, we ran the linear regression for the independent variables and the log of the independent variables. Figure 15 depicts the results.

![Linear Regression Model](image)

The results suggest that there is negligible difference in regression models between the log model and the non-log model, with an Akaike Information Criterion (AIC) difference of only .075. The results depicted in Figure 15 are of the non-log model with only GDP and inflation having statistical significance with values of -0.00003 and 0.004, respectively. Additionally, the results demonstrate that as inflation increases, one can expect that the voting patterns will change, with high confidence, in favor of the Chávez
and Maduro governments. Intuitively, this makes sense because the socialist government can leverage the high inflation to garner more votes by incentivizing people to vote for them. Recently, in the 2018 election, Maduro incentivized people to vote for him by handing out food in return for votes, stating, “I give and you give.”\(^{116}\) Counter to the inflation results, the GDP results suggest that as GDP increases, voters are more likely to vote for the opposition. This is consistent with the findings of Michael Coppedge in his work *Explaining Democratic Deterioration in Venezuela through Nested Inference*, which demonstrates the “relationship between per capita GDP and democracy in Venezuela.”\(^{117}\) This too makes sense, because wealth then allows people to be less reliant on the government and less likely coerced into voting for the socialist government.

The fact that the results suggest the protest rate is insignificant is because of the insufficient amount of protest data used in this statistical model. Approximately half of the protest data in our database was for 2013 and later, a period that included the highest protest rates. However, without the 2018 election results, our study was not able to use them in this model. If we included the missing data into the model, we expect to have significant findings. However, the theory that protest can affect changes in voting pattern in Venezuela, statistically, remains unfounded.

It is also worth noting that protest, in the context of this study, could be an epiphenomenon to the change in voting patterns, and the true factors are those actions of the government that causes it to lose the confidence of the population. Additional research and data is necessary to continue this study to further refine the results and determine if there is statistical significance to the relationship of protest and voting patterns. The findings could have implications for social movement theory and applicability to unconventional methods of warfare to support opposition and resistance movements.

---


E. CONCLUSION

The results in both sets of regression models addressed both hypotheses, but they raised more questions and the recommendation to further study how and why there has been a lack of political reform in Venezuela. We found with relatively high confidence that social media, specifically Twitter and Facebook, is a valuable tool for the opposition to mobilize protest against certain grievances. In the second set of models, we found that changes in inflation and GDP caused Venezuelans to vote toward the left or right politically. However, there is more to answer in terms of the GDP and municipal inflation measures compared to protest and voting patterns. This may further our research and create more fidelity as to why political reform has not taken place in a country where poverty has increased because of failed social policies.

This quantitative analysis supports the extensive qualitative research conducted on the crisis in Venezuela. The most significant findings are that Twitter and Facebook correlate with changes in protest and social media usage, and GDP and inflation appear to have a relationship with changes in voting trends for the government and opposition. This analysis was unable to quantify and control for intangible factors that could explain how Maduro remains in power and continues to reduce the effectiveness of his opposition. For example, variables such as political exclusion of parties by the president, the purchasing of votes in recent elections, and the creation of a new constituent National Assembly to usurp the original National Assembly in which the opposition held the most seats, are difficult to measure. Though difficult, it is possible to quantitatively account for and test these variables; however, this cumbersome task lays outside the scope of our research.
VI. SUMMARY OF FINDINGS

A. SIGNIFICANCE OF THE FINDINGS

The results of our analysis support the vast amount of existing, qualitative research in understanding the political landscape, social movements, and economic factors that led to the destabilization and decline of Venezuela in the Chávez and Maduro era. Additionally, our exploratory analysis in the fields of social network analysis (SNA), social movement theory, and quantitative analysis offer an alternative approach to traditional methods of analysis in these fields, with the objective of understanding how and why the Venezuelan opposition has been unable to create reform. Moreover, this thesis contributes to the ongoing research of the destabilization in the SOCSOUTH AOR and supports the formulation of a strategy to address it. Lastly, our contributions follow the work of Bauer, Maggard, and Murray in their assertions that Venezuela is the most central node as conveyed in Convergence in Latin America: Illuminating the Pink Tide and Iranian Nexus Through Social Network Analysis.118

B. VENEZUELAN POLITICAL NETWORKS

This study provides further support to many of the findings outlined in existing, qualitative studies; however, the analysis offers new insights into the topic by examining it relational, spatially, and statistically. By conducting SNA of the political landscape at each election cycle, we illustrated the dynamics of the political system. Using topographical measurements and observing structural changes, our results show the network changed at every snapshot of each election cycle due to the network reacting to the dynamics behind the political system. We illuminated the dynamics and variations of the political parties that occurred through the establishment of coalitions, creation of new parties, and the fracturing of political parties between election years. Additionally, the

---

118 This work identified Venezuela as the central node in the Pink Tide network, serving as the basis to suggest that targeting Venezuela would achieve the most significant effects of disrupting the Pink Tide network. Bauer, Maggard, and Murray, “Convergence in Latin America.”
application of SNA highlighted important shifts of political identity, ideologies, and National Assembly seats. Moreover, by temporally depicting the relationships and attributes, this study demonstrated how the parties aligned through political identity to become more polarized antagonistic political camps that are ideologically separate.

Our research suggests there is a relationship between the eigenvector centrality (EC) score and the opposition party that ran for the presidency in each election cycle (see Appendix B). These findings support Ellner’s notion that the number of ties or relationships between political parties is a tenet of the post-1958 political party system, which Chávez challenged as he fractured the established political order causing more parties and more ties.119 The networks grew in size over time to show an increase in ties throughout each election cycle from 2000–2013, giving more data points to allow EC to be of use. However, in the 2018 election, due to the exclusion of political parties by Maduro, this was not the case, as EC could not predict the party that ran for president. Therefore, unless the elections are free and open, we are unable to use EC to determine which opposition party will be the likely party to run for the presidency. Though it is untested in other countries, we hypothesize that given similar conditions; EC can provide greater fidelity of which political party will run for the president. This can support strategy development in Venezuela.

In addition to EC, the network’s structure changed over time. Increases and decreases in network size illustrate the cooptation of parties, which affects available opportunities. These measurements suggest that political parties organized and consolidated with political affiliation. These are indicators that coalitions are informally developed. We also found that the rise of coalitions drove parties to act independently of their alliances. This level of analysis provides quantitative support to Ellner’s qualitative research on the fracturing of political parties that led to the political crisis that gave rise to Chávez.120

The application of network analysis contributed to our understanding of the evolution of relational dynamics among the parties. Specifically, the results support

119 Ellner, *Rethinking Venezuelan Politics*, 93.
120 Ellner, 94.
Frances Hagopian and Scott Mainwaring’s assertions that, “party system polarization has an important impact on the rate of democratic and semi-democratic breakdowns in Latin America.” We found this assertion to be correct in Venezuela, as the party system polarization increased and then became authoritarian. The 2000 network demonstrates a time when there was not a breakdown in democracy, and 2018, when the breakdown appears to be at its pinnacle. After noticing this polarization, overlaying attributes provided visual distinctions between ideological identity, party affiliation, and power through National Assembly seats.

The attributes of ideological identity (left, center, or right) and party affiliation (pro-Chávez/Maduro, opposition, or independent) show how the parties evolved to gain position in the political power struggle. The National Assembly seats attribute overlaid with the previous two attributes resulted in the identification of the parties holding power at each election cycle. The visualization of the political landscape networks with these attributes provides illustrations of shifts in political parties’ ideologies, affiliations, and power. This helps to understand how parties’ relationships affected political power during elections. This notion creates the need to analyze individual networks within the political parties further to account for how interpersonal relationships change political party networks.

In addition to our findings, we identified a few weaknesses in using SNA. For example, the oversimplification of networks can miss specific social and individual aspects. We also found that using only snapshots of a network could inhibit the structural and visual changes between the election years, which may force assumptions or the need to rely on qualitative information.

A second weakness previously alluded to is illustrating and understanding the individual networks that affect the ever-changing political landscape in Venezuela. There is a sociological part to understanding the individual within this network. Each personal relationship to other individuals plays a crucial role but also makes the model exponentially complicated and time-consuming. The individual-based network provided insights into actors in each political party that are leverageable to create change. Additionally, this

---

121 Hagopian and Mainwaring, *The Third Wave of Democratization in Latin America*, 43.
network can provide information about who is on the peripheral and how they connect to internal and external actors whether nefarious or benign.

A third weakness when analyzing a social network is it only provides a visual snapshot given specific conditions within a particular period. One is only able to get the measurements of the network at that time, limiting the analysis surrounding the period. The visualizations and analysis of change between election years 2012 and 2013 exemplify how much change can take place in one year.

Though worthwhile in that specific period, the system is continuously changing. Moreover, maintaining the network through its changes are difficult. Depending on the type of analysis one is conducting, updating the network’s changes may or may not have an impact. In the case of Venezuela, the snapshot of the network structure, topographic measurements, and analysis of identity and ideology of political parties proved worthwhile in further understanding the fracturing and polarization of the political networks over five different election cycles versus understand the minuscule changes every year.

The use of SNA allows researchers, academics, and experts to dive into complex networks to illuminate relationships otherwise unable to visualize. Additionally, it provides for the application of attributes to support delineating specific actors and their relationships within a network. These SNA tools support a model for further analyzing political landscapes in Pink Tide countries to support strategies in the region.

C. SOCIAL MOVEMENTS IN VENEZUELA: FINDINGS, IMPLICATIONS AND FUTURE RESEARCH

The results of the research conducted in this thesis suggest that protests and social movements in Venezuela have been ineffective to achieve political reform. In our first test, we analyzed the timing and quantity of protest to important political events to determine if the data supported the theory of social movement theorists McAdam, McCarthy, and Zald. They theorized that changes in any of the four dimensions of the political systems should “render the political system more receptive or vulnerable to challenge by [opposition]
groups.”¹²² In our analysis, we found that three distinct social movements emerged in the Chàvez-Maduro era: the elitist movement, the political opposition movement, and the mass movement.

The elitist movement derived from Chàvez’s reforms that redistributed land and wealth, causing elitists to begin striking and protesting in response to the government’s policies. In this movement, Chàvez created a political opportunity for the opposition by destabilizing the elite alignments that undergird the traditional post-1958 political system. The political opposition movement began with the violent repression of protests, strict policy reform of media regulations, and denial of access of the opposition to the political system. In this movement, the political opportunity for the opposition arose from the closure of the political system and the regime’s capacity and the propensity of repression. Repression then led to the final movement, the mass movement, which derived from increased repression by the regime and the deteriorating economic policies and political reforms by President Maduro after the global recession.

We found that McAdam, McCarthy, and Zald’s theory held right at the micro- and macro-analysis levels of the monthly protest data as well as the entirety of the movements. Any time Chàvez or Maduro closed off the political system to the opposition or any time they would violently repress the population, they were making the political system more susceptible to challenge by the opposition. Furthermore, the results suggest that the opposition was taking actions, such as protests and social movements, when the political opportunity presented itself. However, they were unable to surpass the tipping point that would have enabled them to achieve political reform. The opposition did enjoy short-term and small victories, but any gain made was ultimately undone, countered, or circumvented by the Chàvez or Maduro regime. After 18 years of a challenge by the opposition, the socialist government has insulated and coup-proofed itself to ensure that it is not vulnerable to challenge even when the political system changes in favor of the opposition.

While the first test aimed to understand when the opposition mobilized, the second focused on how the opposition mobilized. By analyzing the geospatial relationship of

¹²² McAdam, McCarthy, and Zald, Introduction, 10.
protest, terrain, and population, we found patterns began to emerge. The resulting analysis revealed that there were challenges with mass mobilization and organization of protest and social movements by the opposition due to the terrain and population dispersion throughout Venezuela. Qualitative analysis suggested that the opposition was turning to social media to organize and mobilize protest, but was not specific as to which social media platforms the opposition used, quantitatively speaking.

In our third and final test of the social movement portion of this thesis, we developed a statistical model to determine which social media platform was most significant to the mobilization and organization of protests and social movements by the opposition. We found that both Facebook and Twitter were statistically significant to organize protests and mobilize the population. Moreover, we found that Twitter is the preferred platform and that protests from the previous month are statistically significant in contributing to the protests of the month observed. In other words, the opposition used Twitter as its primary method to organize protests and previously seen protests were attracting other demonstrators by either word of mouth, observation, or media coverage. However, there is a burnout factor for both the social media platform and protests observed, which suggest that after approximately two months, the effects begin to diminish. Additionally, we found that Chávez and Maduro’s efforts to counter the opposition’s use of social media for mobilization were ineffective.

Aside from the actual findings of our research on social movements in Venezuela, there are greater implications, as well as shortcomings that emerged, which will require future investigation.

The more significant implications of this research are that we have developed a model to use data-mining technologies to obtain data on a subject that is often difficult to get in a country that intentionally suppresses collection of this type of data. Though it is not perfect, we validated the data to prove that it is an accurate-enough sample for analysis. Other socialist-leftist countries and Pink Tide states throughout Latin America can used this methodology to determine the viability of the opposition’s efforts to use social movements to effect political reform. The models and research can enable the U.S. government to have a better understanding of which countries are more likely to be able to
self-correct the government through internal means and which are at risk of becoming authoritarian regimes that will likely require external resources to restore democracy.

Additionally, we developed a method to analyze the social media platforms used by the opposition to mobilize and organize social movements. The results can be used to understand not only where to look to see where mobilization efforts may be taking place, but also as a tool to follow trends of social media use and increases in protests. With this data, we can begin to predict, to a certain degree, when there is going to be an increase in protest activity and social movements. With this information, external actors can support a movement with various means and resources before the movement grows to give it the nudge necessary to reach and overcome the tipping point. These results can counter the traditional ebb and flow of protest by precisely targeting when to interject to maximize results.

Some shortcomings of this research need addressing. First, as alluded to by the previous implications, our approach has yet to be validated by using it to analyze similar situations in other countries; however, we hope that it serves as a proof of concept that can be adapted and modified to any state that has a political opportunity and an opposition organizing social movements. Second, the data-mining tools are imperfect and often duplicate data or miss critical data points. Third, we validated our data by comparing it to another source, but this option may not be available for other countries. Lastly, we conducted our analysis through a particular lens, the political process model of social movement theory. Different theories and models may more appropriately apply to this type of analysis in other countries. In sum, this is only a proof of concept and not a prescription for how this specific model applies to any country. Future research should expound on this model and test it in other countries in Latin America and elsewhere.

D. QUANTITATIVE FACTORS THAT CONTRIBUTE TO VOTING HABITS

In this study, based on the findings or lack thereof in the social movement portion of this thesis, we furthered our research by hypothesizing that locations where protests were taking place were more likely to have a change in voting patterns away from the left and toward the opposition. Additionally, we wanted to determine quantitatively what factors
were having the most significant influence on changing the vote to the left. While the most recent study on this subject conducted by Quierolo focused on the ideological dimensions behind changes in voting patterns toward the left, our focus was on the protest and social movement’s impact on voting patterns away from the left.  

We accomplished this by building a statistical model, which used the change in vote from left to right at the municipal level as the dependent variable and social (protest rate), economic (GDP and inflation), and political factors (corruption) identified through qualitative research as independent variables.

The results suggest protests were having an insignificant effect on the change to voting patterns. However, the economic factors of GDP and inflation were having a statistically significant impact on voting patterns. Moreover, we found that as GDP increases, people are more likely to vote away from the left, while, as inflation increases, people are more likely to vote toward the left. These results fall in line with Echegaray’s findings that economic factors are a significant component that accounts for some of the change to voting patterns. We did not test for the degree to which economics affect changes in voting patterns as Echegaray did; therefore, we cannot agree or disagree with his claim that economics account for one-third of the difference in votes. However, we do agree that other social and political factors are significantly affecting the change in voting patterns.

There are significant implications to the research on the factors that contribute to the change in voting patterns in Venezuela and Latin America from left to right. Currently, most socialist countries in Latin America still claim they are democratic and therefore hold elections. Even though those elections are often corrupt, there are times, before the situation deteriorates, when votes from the opposition can overwhelm and overcome the left, even when there is corruption. For example, in Colombia, Honduras, Mexico, and

---

123 Queirolo, The Success of the Left in Latin America, 8.
124 Echegaray, Economic Crises and Electoral Responses in Latin America, 183.
125 Echegaray, 183.
Panama, the elections ousted the left.\textsuperscript{126} If research can identify the significant factors that contribute to changes in voting patterns within a socialist-leftist country, then elements of soft power\textsuperscript{127} can be leveraged by other states and actors to influence changes in the social and economic factors that contribute to differences in voting patterns away from the left. Mainly, with the knowledge of what strings to pull on to change voting patterns at municipal levels, a state or actor can have immense power to influence elections to induce an outcome that supports their national objectives.

One reason we believe that our results suggest protests were insignificantly affecting voting patterns was because of the insufficient amount of data points and the manner in which the data was aggregated to fit into the statistical model. Additional research as new data becomes available is essential to test the social dynamic that qualitative research proves can affect voting patterns. Moreover, due to the scope of this thesis, we only examined the effects at the municipal level, but future research should test at the state, district, and even specific voting locations.

In addition to the voting and protest data, economic and political data require more attention. One of the challenges associated with much of the economic and political data is the collection of the data only occurs annually or monthly. Additionally, understanding the economic factors at the municipality level may provide evidence as to how voting is affected. With the advancement in technologies coupled with the evolution of social movements in social media and the speed at which things change in the modern era, advances in the speed and accuracy in which we can produce, collect, and analyze data become increasingly important.

Ultimately, this thesis supports the exploratory use of “big data” to understand political, social, and economic dynamics in Venezuela, the epicenter of a populist socialist movement and a complex trans-regional, trans-national threat network full of nefarious state and non-state actors. Lastly, prospects for political reform in Venezuela through may

\textsuperscript{126} Charles A. Kupchan, \textit{No One’s World: The West, the Rising Rest, and the Coming Global Turn} (New York: Oxford University Press, 2012), 137.

improve better understanding of missed opportunities of the opposition, supporting the formulation of strategy in Latin America as the United States and its regional allies strive to enhance stability in the region.
APPENDIX A. NETWORK CODEBOOK


A. POLITICAL ORGANIZATIONS IN VENEZUELA

1. Political Party (one mode)—Any member of the political organization that is mentioned in an official capacity with the organization.

2. Affiliate Organization (one mode)—Organizations that have a relationship with another political organization. They are affiliated with them in some capacity for collaboration or communication.

3. Split From (one mode)—Organization that had cooperative relationships, previously, then severed ties and created ties with other political organizations. Typically, these are organizations that establish ties with different affiliate organizations.

4. Supporting affiliate organizations (one mode)—Organizations that align ideologically with other political parties and their affiliate political parties. These ties are typically clear during election cycles in Venezuela.

B. ATTRIBUTES OF POLITICAL ORGANIZATIONS IN VENEZUELA

1. Spectrum—The political party’s spectrum of ideology. Ideology is simply defined by the party’s spectrum from left to center-left to center to center-right to right. This provides changes temporally of how parties swing within the ideological spectrum.

2. The political party’s identity delineates their affiliations among three factors. These three categories are opposition, government, or independent. Opposition is defined by parties who are opposing current
government policies. Government is defined by current parties aligned with the government. Independent is defined by political parties that do not align with either government or opposition.

3. Assembly seats—The National Assembly is indicative of who is in power within the National Assembly (comparable to the House of Representatives in the United States). Prior to each election cycle there are elections associated with which political parties hold seats in the National Assembly.

4. Election Participation (only for election cycle 2018)—Election participation is defined by the specific political parties that are allowed to participate in the upcoming Venezuelan elections. Only specific political parties are allowed to participate under the dictation of the president.

C. LIST OF POLITICAL PARTIES (NODES)

1. Acción Democratica (AD)
2. Proyecto Venezuela (PV)
3. Comité de Organización Política Electoral Independiente (COPEI)
4. Movimiento al Socialismo (MAS)
5. La Causa Radical (LCR)
6. Primero Justicia (PJ)
7. Patria Para Todos (PPT)
8. Un Nuevo Tiempo (UNT)
9. Alianza Bravo Pueblo (ABP)
10. Movimiento V Republica (MVR)
11. Partida Communista de Venezuela (PCV)
12. Organizacion Autentico de Renovacion (ORA)
13. Movimiento de Integridad Nacional (MIN)
14. Opinion Nacional (OPINA)
15. Izquierda Democratica (ID)
16. Convergencia (Convergence)
17. Solidaridad Independente (SI)
18. Union Republica Demoratica (URD)
19. Gente Emergente (GE)
20. Bandera Roja (BR)
21. Movimiento Electoral del Pueblo (MEP)
22. Independientes por la Comunidad Nacional (IPCN)
23. Venezuelan Revolutionary Currents (CRV)
24. Fuerza Liberal (FR)
25. Movimiento Democratico Independiente (MDI)
26. Movimiento Independiente Ganamos Todos (MIGATO)
27. Patriotic Pole (PP)
28. Movimiento Laborista (ML)
29. Movimiento Revolucionario Tupamaro (MRT)
30. Por La Democracia Social (PODEMOS)
31. Union de Republica Democratica (URD)
32. Vanguardia Popular Nacionalista (VPN)
33. Socialista Liga (SL)
34. Independientes por la Comunidad Nacional (IBCR)
35. Movimiento Civico Militante (MCM)
36. Movimiento por la Democracia Directa (MDD)
37. Movimiento Nacional Independiente (MNI)
38. Unidad Patriótica Comunitaria (UPC)
39. Fuerza Popular (FP)
40. Cuentas Claras (CC)
41. Partida Socialistas Unidades de Venezuela (PSUV)
42. Vanguardia Unitaria Comunista (VUC)
43. Unidad Vision Venezuela (UVV)
44. Gran Polo Patriotico (GPP)
45. Movimiento de Integridad Nacional (UNIDAD)
46. Organized Socialist Party in Venezuela (PSOEV)
47. National Youth Action Unit with Bimba (JUAN BIMBA)
48. Venezuela Movement Responsible, Entrepreneurial and Sustainable (MOVE)
49. Networks of Responses of Communitary Changes (REDES)
50. Republican Bicentennial Vanguard (VBR)
51. Vente Venezuela (VV)
52. Unidos para Venezuela (UPV)
53. Revolutionary New Way (NCR)
54. Marxist-Leninist Communist Party of Venezuela (PCMLV)
55. Revolutionary Middle Class (CMR)
56. Progreso (PRG)
57. Marea Socialista (MS)
### APPENDIX B. POLITICAL NETWORK TABLES

#### A. TOP 10 CENTRALITY MEASURES – 2000

<table>
<thead>
<tr>
<th>Top 10</th>
<th>Degree</th>
<th>Eigenvector</th>
<th>Betweenness</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PPT (.055)</td>
<td>LCR (.847)</td>
<td>MAS (.305)</td>
<td>UNT (.393)</td>
</tr>
<tr>
<td>2</td>
<td>LCR (.052)</td>
<td>PPT (.839)</td>
<td>PPT (.274)</td>
<td>LCR (.085)</td>
</tr>
<tr>
<td>3</td>
<td>MAS (.048)</td>
<td>MVR (.321)</td>
<td>LCR (.234)</td>
<td>ABP (.078)</td>
</tr>
<tr>
<td>4</td>
<td>MVR (.041)</td>
<td>MAS (.287)</td>
<td>MVR (.192)</td>
<td>AD (.077)</td>
</tr>
<tr>
<td>5</td>
<td>AD (.034)</td>
<td>PCV (.254)</td>
<td>OPINA (.163)</td>
<td>COPEI (.077)</td>
</tr>
<tr>
<td>6</td>
<td>COPEI (.032)</td>
<td>IPCN (.232)</td>
<td>AD (.137)</td>
<td>PV (.077)</td>
</tr>
<tr>
<td>7</td>
<td>PV (.032)</td>
<td>MEP (.226)</td>
<td>PV (.114)</td>
<td>PJ (.075)</td>
</tr>
<tr>
<td>8</td>
<td>PCV (.03)</td>
<td>SI (.206)</td>
<td>ABP (.101)</td>
<td>ORA (.072)</td>
</tr>
<tr>
<td>9</td>
<td>ABP (.025)</td>
<td>BR (.201)</td>
<td>COPEI (.088)</td>
<td>MIN (.072)</td>
</tr>
<tr>
<td>10</td>
<td>OPINA (.02)</td>
<td>GE (.186)</td>
<td>PCV (.059)</td>
<td>Convergence (.072)</td>
</tr>
</tbody>
</table>

#### B. TOP 10 CENTRALITY MEASURES – 2006

<table>
<thead>
<tr>
<th>Top 10</th>
<th>Degree</th>
<th>Eigenvector</th>
<th>Betweenness</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UNT (.205)</td>
<td>UNT (.665)</td>
<td>MVR (.430)</td>
<td>PRV (.194)</td>
</tr>
<tr>
<td>2</td>
<td>MVR (.180)</td>
<td>COPEI (.501)</td>
<td>PPT (.211)</td>
<td>SL (.194)</td>
</tr>
<tr>
<td>3</td>
<td>AD (.139)</td>
<td>MAS (.493)</td>
<td>AD (.190)</td>
<td>UNT (.171)</td>
</tr>
<tr>
<td>4</td>
<td>MAS (.123)</td>
<td>PJ (.454)</td>
<td>UNT (.165)</td>
<td>AD (.169)</td>
</tr>
<tr>
<td>5</td>
<td>COPEI (.115)</td>
<td>AD (.429)</td>
<td>MEP (.139)</td>
<td>MAS (.167)</td>
</tr>
<tr>
<td>6</td>
<td>PP (.115)</td>
<td>PPT (.375)</td>
<td>PP (.124)</td>
<td>PJ (.166)</td>
</tr>
<tr>
<td>7</td>
<td>PJ (.107)</td>
<td>VP (.368)</td>
<td>MAS (.109)</td>
<td>COPEI (.164)</td>
</tr>
<tr>
<td>8</td>
<td>PPT (.098)</td>
<td>PV (.291)</td>
<td>COPEI (.062)</td>
<td>PPT (.162)</td>
</tr>
<tr>
<td>9</td>
<td>PODEMOS (.066)</td>
<td>PODEMOS (.217)</td>
<td>PCV (.037)</td>
<td>MVR (.159)</td>
</tr>
<tr>
<td>10</td>
<td>MEP (.057)</td>
<td>MVR (.200)</td>
<td>URD (.021)</td>
<td>MEP (.156)</td>
</tr>
</tbody>
</table>
C. TOP 10 CENTRALITY MEASURES – 2012

<table>
<thead>
<tr>
<th>Top 10</th>
<th>Degree</th>
<th>Eigenvector</th>
<th>Betweenness</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MUD (.082)</td>
<td>MUD (.909)</td>
<td>PSUV (.278)</td>
<td>AP (.021)</td>
</tr>
<tr>
<td>2</td>
<td>AD (.045)</td>
<td>AD (.560)</td>
<td>PCV (.147)</td>
<td>BR (.021)</td>
</tr>
<tr>
<td>3</td>
<td>PJ (.038)</td>
<td>COPEI (.435)</td>
<td>AD (.123)</td>
<td>PSUV (.017)</td>
</tr>
<tr>
<td>4</td>
<td>COPEI (.032)</td>
<td>UVV (.425)</td>
<td>MAS (.117)</td>
<td>MAS (.017)</td>
</tr>
<tr>
<td>5</td>
<td>MAS (.029)</td>
<td>PJ (.394)</td>
<td>PJ (.113)</td>
<td>MEP (.017)</td>
</tr>
<tr>
<td>6</td>
<td>UVV (.026)</td>
<td>MAS (.380)</td>
<td>PPT (.096)</td>
<td>AD (.017)</td>
</tr>
<tr>
<td>7</td>
<td>PSUV (.026)</td>
<td>ABP (.290)</td>
<td>COPEI (.054)</td>
<td>MIGATO (.017)</td>
</tr>
<tr>
<td>8</td>
<td>UNT (.022)</td>
<td>UNT (.154)</td>
<td>MEP (.040)</td>
<td>PJ (.017)</td>
</tr>
<tr>
<td>9</td>
<td>PPT (.020)</td>
<td>PV (.140)</td>
<td>UNT (.030)</td>
<td>UNT (.017)</td>
</tr>
<tr>
<td>10</td>
<td>ABP (.017)</td>
<td>PPT (.136)</td>
<td>LCR (.027)</td>
<td>PPT (.017)</td>
</tr>
</tbody>
</table>

D. TOP 10 CENTRALITY MEASURES – 2013

<table>
<thead>
<tr>
<th>Top 10</th>
<th>Degree</th>
<th>Eigenvector</th>
<th>Betweenness</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MUD (.123)</td>
<td>MUD (.883)</td>
<td>MUD (.446)</td>
<td>Convergence (.379)</td>
</tr>
<tr>
<td>2</td>
<td>AD (.046)</td>
<td>AD (.522)</td>
<td>GPP (.261)</td>
<td>YST (.102)</td>
</tr>
<tr>
<td>3</td>
<td>PJ (.046)</td>
<td>ABP (.507)</td>
<td>PJ (.219)</td>
<td>MUD (.062)</td>
</tr>
<tr>
<td>4</td>
<td>GPP (.042)</td>
<td>PJ (.493)</td>
<td>AD (.159)</td>
<td>LCR (.061)</td>
</tr>
<tr>
<td>5</td>
<td>ABP (.040)</td>
<td>COPEI (.439)</td>
<td>PSUV (.071)</td>
<td>PJ (.060)</td>
</tr>
<tr>
<td>6</td>
<td>COPEI (.034)</td>
<td>AP (.269)</td>
<td>AP (.055)</td>
<td>BR (.060)</td>
</tr>
<tr>
<td>7</td>
<td>PSUV (.032)</td>
<td>LCR (.159)</td>
<td>URD (.051)</td>
<td>PRV (.060)</td>
</tr>
<tr>
<td>8</td>
<td>AP (.020)</td>
<td>PV (.149)</td>
<td>LCR (.050)</td>
<td>AP (.060)</td>
</tr>
<tr>
<td>9</td>
<td>LCR (.016)</td>
<td>VP (.128)</td>
<td>PPT (.045)</td>
<td>MPV (.060)</td>
</tr>
<tr>
<td>10</td>
<td>PCV (.014)</td>
<td>BR (.122)</td>
<td>UNT (.038)</td>
<td>GPP (.060)</td>
</tr>
</tbody>
</table>
## E. TOP 10 CENTRALITY MEASURES – 2018

<table>
<thead>
<tr>
<th>Top 10</th>
<th>Degree</th>
<th>Eigenvector</th>
<th>Betweenness</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MUD (.394)</td>
<td>PODEMOS (.350)</td>
<td>MUD (.235)</td>
<td>MS (.204)</td>
</tr>
<tr>
<td>2</td>
<td>AD (.364)</td>
<td>PPT (.340)</td>
<td>AP (.080)</td>
<td>UPP (.174)</td>
</tr>
<tr>
<td>3</td>
<td>PJ (.333)</td>
<td>PCV (.332)</td>
<td>MAS (.077)</td>
<td>APM (.174)</td>
</tr>
<tr>
<td>4</td>
<td>PPT (.333)</td>
<td>MEP (.325)</td>
<td>AD (.074)</td>
<td>MIGATO (.143)</td>
</tr>
<tr>
<td>5</td>
<td>VP (.318)</td>
<td>APC (.318)</td>
<td>PCV (.062)</td>
<td>VV (.133)</td>
</tr>
<tr>
<td>6</td>
<td>UNT (.318)</td>
<td>AD (.317)</td>
<td>PODEMOS (.061)</td>
<td>UNIDAD (.133)</td>
</tr>
<tr>
<td>7</td>
<td>PODEMOS (.318)</td>
<td>MAS (.311)</td>
<td>PPT (.059)</td>
<td>APC (.132)</td>
</tr>
<tr>
<td>8</td>
<td>PSUV (.318)</td>
<td>PSUV (.307)</td>
<td>APC (.056)</td>
<td>AP (.131)</td>
</tr>
<tr>
<td>9</td>
<td>PCV (.318)</td>
<td>AP (.300)</td>
<td>MS (.053)</td>
<td>PODEMOS (.131)</td>
</tr>
<tr>
<td>10</td>
<td>COPEI (.303)</td>
<td>GPP (.298)</td>
<td>PSUV (.039)</td>
<td>MEP (.131)</td>
</tr>
</tbody>
</table>
THIS PAGE INTENTIONALLY LEFT BLANK
LIST OF REFERENCES


INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California