UNDERSTANDING THE DRIVERS OF CHINESE PUBLIC DIPLOMACY IN THE INFORMATION ENVIRONMENT

by

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December 2016

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As a rising state, China has embraced, adapted, and increased the use of public diplomacy to influence foreign audiences in support of its strategic objectives. China’s public diplomacy program is the cornerstone of its effort to re-brand the country’s image as a responsible international power and as an attractive economic partner. The quantitative analysis of this thesis explores which types of events tend to drive China’s public diplomacy volume and whether China uses public diplomacy to shape the online global discussion prior to or after domestic and foreign events. Using data derived from website monitoring tools, combined with machine-generated international events data, this analysis demonstrates that it is possible to analyze the relationship between China’s public diplomacy volume and event data to enable assessment of the drivers of China’s public diplomacy. In addition to the statistical results, this project also seeks to provide useful lessons for how the U.S. Department of Defense can take advantage of Internet monitoring tools to better understand the information environment.
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ABSTRACT

As a rising state, China has embraced, adapted, and increased the use of public diplomacy to influence foreign audiences in support of its strategic objectives. China’s public diplomacy program is the cornerstone of its effort to re-brand the country’s image as a responsible international power and as an attractive economic partner. The quantitative analysis of this thesis explores which types of events tend to drive China’s public diplomacy volume and whether China uses public diplomacy to shape the online global discussion prior to or after domestic and foreign events. Using data derived from website monitoring tools, combined with machine-generated international events data, this analysis demonstrates that it is possible to analyze the relationship between China’s public diplomacy volume and event data to enable assessment of the drivers of China’s public diplomacy. In addition to the statistical results, this project also seeks to provide useful lessons for how the U.S. Department of Defense can take advantage of Internet monitoring tools to better understand the information environment.
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<th>Full Form</th>
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<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
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<tr>
<td>CAMEO</td>
<td>Conflict and Mediation Event Observations and Actor</td>
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<td>CCP</td>
<td>Chinese Communist Party</td>
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<td>CCTV</td>
<td>China Central Television</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<td>IO</td>
<td>information operations</td>
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<td>GDELT</td>
<td>Global Database of Events, Language, and Tone</td>
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<tr>
<td>PLA</td>
<td>Peoples Liberation Army</td>
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<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
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<tr>
<td>SCIO</td>
<td>State Council Information Office</td>
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<tr>
<td>TNE</td>
<td>total network effect</td>
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<td>UN</td>
<td>United Nations</td>
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ACKNOWLEDGMENTS

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I. INTRODUCTION

Globalization and the information revolution have connected the world, making it easier for governments to communicate and influence foreign audiences. As a rising state, China has embraced, adapted, and increased its use of public diplomacy to influence foreign audiences in support of its objectives. At the same time, the relative power of Western countries has stagnated for the first time since the end of the Cold War, as Christopher Layne argues in his 2012 article “The End of Pax Americana: How Western Decline Became Inevitable.”¹ China’s “peaceful rise” has so far been like no other country in history, as China has established government, economic, and influence operations on every continent with little to no opposition. This suggests that China has implemented a strategy that is mutually beneficial to foreign governments, their populations, and China itself. How is China able to make beneficial deals with foreign governments and remain in good standing with the host nation populations? One argument is that it is all about the appeal of China’s economy, driven by global market incentives. However, another compelling argument is that the growing attraction of China is a result of its use of public diplomacy. China’s public diplomacy program is the cornerstone of its effort to re-brand the country’s image as a responsible international power and an attractive economic partner.

A. PURPOSE

The primary purpose of this thesis is to analyze what drives Chinese public diplomacy. The quantitative analysis of this research explores whether China uses public diplomacy to shape global discussion in advance of domestic and foreign events, or if public diplomacy is instead a reactionary tool used to influence global perceptions post hoc. The work also examines the relationship between domestic protest, force posture changes, and diplomatic- and foreign aid-related events as potential drivers of public diplomacy messaging. The secondary purpose of this thesis is to investigate how the

Department of Defense (DOD) can take advantage of Internet monitoring tools, such as the Crimson Hexagon programs and the Global Database of Events, Language, and Tone Project (GDELT Project), to understand the information environment, using the analysis of Chinese public diplomacy as a case study to do so.

B. THESIS STRUCTURE

The following chapters progress through the topic of China’s public diplomacy program and then proceed to recommendations about how to use the knowledge gained from this project. The first three chapters examine background information about public diplomacy, China’s strategic objectives, public diplomacy efforts, and the challenges of China’s public diplomacy program. The fourth chapter explores the results of the quantitative analysis, examining how China uses public diplomacy in relation to particular events over time. The final chapter addresses the implications of this research for DOD planners and provides recommendations for the future use of Internet-monitoring tools to help the U.S. military gain a position of advantage within the information environment.

C. DEFINING PUBLIC DIPLOMACY

Most scholars agree on a common definition of public diplomacy, but opinions differ when it comes to how to measure public diplomacy programs. The remainder of this section focuses on literature about public diplomacy theory, active measurement methods, and passive listening methods of assessment of public diplomacy programs.

Almost every piece of literature reviewed for this topic offers its own definition of public diplomacy. Nonetheless, most scholars agree that public diplomacy is when a government deliberately communicates with foreign mass public audiences to influence their “attitudes or opinions” in a manner that is favorable to that government.  

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there are some minor differences in the definitions. For example, Joseph Nye states that public diplomacy is a communication instrument used to “mobilize resources to attract foreign audiences.” Additionally, Hans Tuch differentiates his definition of public diplomacy “as a process of communication with foreign publics in an attempt to bring about understanding for its nation’s ideas and ideals, its institutions and culture, as well as its national goals and current policies.” Finally, Nicholas J. Cull defines public diplomacy as “the process by which an international actor conducts foreign policy by engaging a foreign public.” A foreign government engaging with foreign audiences is a more accurate depiction of public diplomacy because governments use different forms of influence or diplomacy, not just communication.

As the definition of public diplomacy states, the main objective is to influence foreign mass audiences, but the reasons why governments use public diplomacy are more complex. The so-called ‘Information Age’ has expanded the reach of public diplomacy into areas that were once inaccessible to shape public opinion and help governments manage foreign perceptions. Governments understand that perception is reality, and public diplomacy allows a state to compete in the war of ideas, where winning is dependent on whose message is the most influential. Finally, if governments are trying to influence foreign public opinion about their country, states can use public diplomacy assessments as a feedback mechanism to policy makers, who can adjust their governments’ domestic and foreign policies to be more appealing to foreign audiences.

The means of public diplomacy are dependent on the state’s goals and the target audience. Published government texts (speeches, press releases, and congressional

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3 Joseph Nye, “Public Diplomacy and Soft Power,” *The Annals of the American Academy of Political and Social Science* 616, no. 1 (2008): 95. Nye is alluding to a similar concept as the earlier stated definition but his focus on attraction power is an important distinction.


5 Testimony before the U.S.-China Economic.

6 Tuch, *Communicating with the World*, 5.


8 Testimony before the U.S.-China Economic, 1.
transcripts), magazines, websites, cultural/art exhibits, cultural and information centers throughout the world, and exchanges, such as the Fulbright Academic Exchange Program, are just some of the means of public diplomacy. There are three major Western models of public diplomacy. The basic Cold War model is driven by an “antagonistic” relationship between countries, the non-state transnational model uses the activities of groups like nongovernmental organizations or businesses, and the domestic public relations model focuses on efforts by governments to hire outside public relations firms or lobbyists to support foreign policy objectives. Based on its goals, a state can also use a combination of these models as well as a variety of public diplomacy means to influence its target audiences.

D. ACTIVE ASSESSMENT METHOD

The first major category for measuring public diplomacy is through active methods of assessment or public opinion surveys. Polling sample populations has become the preferred method of measuring the success of public diplomacy; however, while public diplomacy goals have short-, medium-, and long-term objectives, polling results only represent opinions at that given time. Nye states that people’s opinions change and that the only way to show trends in public opinion is to conduct polls consistently over time. Worldwide index surveys and polling individual members of a population provide insight into the perceptions of a country; however, there has been no research done to test the relationship between worldwide index survey results and public diplomacy.

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9 Tuch, *Communicating with the World*, 58–85. This is a list of the mediums of public diplomacy discussed in detail in Chapter 4.


11 Ian Hall and Frank Smith, “The Struggle for Soft Power in Asia: Public Diplomacy and Regional Competition,” *Asian Security* 9, no.1 (2013): 6. Hall and Smith raise a valid point that there is little correlation between public diplomacy and changes in public opinion. They admit that polling data cannot be ignored, but offer that there is little evidence to infer that public diplomacy is a driver of public opinion.


There are numerous critiques of the use of polling as a measure of public diplomacy. Nye proclaimed that there is nothing concrete about public diplomacy effectiveness—it is hard to measure, and is often dependent on whether or not people change their mind.\textsuperscript{14} Polling data and statistics alone do not prove whether a public diplomacy program is effective, but rather provide background information and a baseline of public opinion.\textsuperscript{15} Additionally, polling data generally reflects how a sample population views a certain country’s image or reputation, but this provides little insight into what specifically influences perceptions.\textsuperscript{16} Another weakness of polls is that the sample size of surveys is usually small and that the questions are closed-ended, broad, and do not allow for in-depth understanding of what drives public opinion.\textsuperscript{17}

Another active measure of public diplomacy is what Ali Fisher refers to as the network effect (TNE).\textsuperscript{18} The TNE was a British Council (a UK government public diplomacy organization) approach designed to “nurture networks between generations of leaders” during conferences and international exchanges to measure relationships that grew and expanded because of the exchanges.\textsuperscript{19} This form of network effort is best suited for educational and professional exchanges, as it can analyze how the network and relationships of influential people can grow from before, during, and after the exchange has taken place.\textsuperscript{20} This form of active networking allows an organization to pinpoint

\textsuperscript{14} Nye, “Public Diplomacy and Soft Power,” 101.


\textsuperscript{17} d’Hooghe, \textit{The Rise of China’s Public Diplomacy}, 36.


\textsuperscript{19} Ibid., 53–57.

known persons of influence in other organizations to increase the effectiveness of people-to-people diplomacy, and to assess its outcomes.

E. PASSIVE LISTENING

The second major category for measuring public diplomacy is passive listening. Passive listening uses technical methods of analysis to “listen” or gather data about a given topic using network analysis, social media, event, and news media monitoring. The network measurement approach uses social media technology to convert the public diplomacy process into an interactive process in which states can rely on the audience to send and receive public diplomacy information within their own influence networks.\(^{21}\) This allows the sending organization to map and analyze the interactions, relationships, opinions, and feedback of the network to allow the message senders to adjust their strategy as needed to be more effective.\(^{22}\)

The use of technical tools to monitor social media and online news media to conduct network analysis is an important tool in public diplomacy assessment. One example is the use of networks to map Twitter hashtags to determine what topics are trending on Twitter, or building a network to show relationships of users and locations of the discussions.\(^{23}\) Organizations can also build network illustrations to show who is following their organization, track their interactions with other users, and then analyze the data to understand how influential their public diplomacy campaign may or may not be in social media conversations.\(^{24}\) Influence tracking is another passive method that attempts to pinpoint influential people in a population, discern and track their opinions, and analyze the influencers’ relationships through network analysis.\(^{25}\)

The second passive listening approach is through Internet-based news media monitoring. News media analysis consists of content analysis, which tracks the coverage

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22 Ibid., 4.
24 Ibid., 64–68.
and portrayal of a story or issue in the media over time.\textsuperscript{26} Additionally, news media monitoring tracks whether a topic trends positively or negatively in the media and can help determine how influential media sources are in a given area.\textsuperscript{27} For this thesis, Chinese public diplomacy is analyzed using data derived from the passive listening monitoring tool provided by Crimson Hexagon.

An important concept in both the active and passive approaches is the outcome dependent approach, which is that the desired outcome of the public diplomacy program determines the tools of evaluation.\textsuperscript{28} According to David Steven, there are five intermediate outcomes of public diplomacy: “changing perceptions, setting an agenda, building networks, developing capacity, and changing institutions.”\textsuperscript{29} The logic is that each outcome drives the process and the type of evaluation, as well as the tools used to gather the data for analysis. For example, if an organization needs to assess changing perceptions, then it should use case studies, survey data, and third-party research.\textsuperscript{30} Additionally, if an organization wants to assess international partnerships, it should analyze established networks, reports from those whom it has an established relationship, and analyze the activity of the network through media analysis, and through the tracking of influencers and topics.\textsuperscript{31}

Public opinion data and network-based approaches to understanding public diplomacy are valuable. This thesis analyzes the use of public diplomacy in relation to event data over time, in the hopes that this process could provide analysts with another mechanism to understand what drives a government’s public diplomacy efforts. This insight can help a government counter or preempt another state’s public diplomacy to compete more effectively for influence in the information environment. Before exploring

\textsuperscript{26} Ibid., 14.
\textsuperscript{27} Ibid., 15.
\textsuperscript{28} Ibid., 12. Steven does not have a title for this framework except a description of Figure 6 on page 13 stating, “Collecting evidence to show progress against intermediate outcomes.”
\textsuperscript{29} Ibid., 12.
\textsuperscript{30} Ibid., 13.
what drives China’s use of public diplomacy, it is critical to understand the PRC’s strategic objectives and how those objectives are related to China’s use of public diplomacy.
II. CHINA’S STRATEGIC OBJECTIVES

Political scientist Joseph Nye wrote, “A communications strategy cannot work if it cuts against the grain of policy. Actions speak louder than words, and public diplomacy that appears to be mere window dressing for hard power projection is unlikely to succeed.”32 Nye’s comment highlights the importance of nesting public diplomacy within a strategy that effectively uses words and deeds in concert to achieve strategic objectives. To analyze the effectiveness of China’s public diplomacy programs, it is important to have a basic understanding of China’s foreign policy strategy. Through this understanding of strategy, it is then possible to understand how and why China influences foreign audiences through public diplomacy. The following section highlights China’s strategic objectives through the lenses of economics, political influence, and military goals, based upon the analysis of a combination of Western and Chinese government documents and scholarly works.

Prior to any deeper discussion about China’s strategy, it is important to communicate a disclaimer about China’s national objectives or grand strategy. All of the information, analysis, and conclusions for this thesis are a result of open source research. As Aaron Friedberg discusses in Contest for Supremacy, both Western and Chinese scholars, diplomats, and analysts have written extensively on Chinese strategy, but any attempt to describe China’s grand strategy using the available open and even classified resources will “contain gaps and inferential leaps.”33 As with most states, the full details of strategic decisions are not available to the public, especially in the case of an authoritarian state like China. Therefore, inferences must be made using the information available, which here means that the assessment of China’s strategy will be developed through an analysis of multiple open source documents from both Western and Chinese sources.

Most, if not all, nations have some type of strategy, set of goals, or ideals that guide their foreign policy decisions and actions. China is no exception; however, like most countries, China’s grand strategy is not a detailed formal document but rather a “consensus of People’s Republic of China (PRC) foreign policy goals,” which guides international action.\(^{34}\) Another way to think of grand strategy is that it is a government’s strategic vision for the future, which links strategy to policy, policy to resources, and resources to action.\(^{35}\) The definition of grand strategy utilized here is the art of integrated use of national strategic resources to fulfill national security and international objectives, whereby a state uses its strategic resources and strategic means, at the political, economic, military, cultural, and ideological levels, to protect and further the country’s overall security, values, national interests, and so on.\(^{36}\)

Based on this definition, the three supporting focus areas of China’s grand strategy are economics, global political influence, and military goals. These three focus areas align with China’s motivation to achieve its overarching goal of “rejuvenating and building a strong, prosperous, modern socialist society rooted in a harmonious culture by 2049.”\(^{37}\) Understanding China’s grand strategy is important to public diplomacy because the actions taken to achieve strategic objectives not only drive public diplomacy efforts, but are also actions that China can use to illustrate to global audiences that it is a responsible and valuable global partner.

A. ECONOMIC OBJECTIVES

The economic goals that underlie China’s grand strategy are to increase global economic ties, develop efficiency-focused industrialization, and sustain domestic


\(^{35}\) Ibid., 19.


legitimacy. According to a 2011 Chinese white paper, the economic goals aim to increase the Chinese people’s standard of living and quality of life as well as to improve China’s overall international competitiveness, which would promote stability for China, the Asian Pacific region, and a “harmonious world.” The reasoning behind its peaceful development policy in the economic sector is that “China’s development could not be achieved without the world, and the world’s development likewise could not be achieved without China.” To continue economic growth, China requires access to import and export markets. To ensure access to these markets, China relies on a combination of agreements and a diverse network of trading and investing partners. Additionally, this allows China to globally extend its economic influence and diversify its agreements through multiple countries, thus limiting the amount of economic leverage any one actor may have over it. In an effort to increase economic efficiency, China is determined to lower natural resource consumption, utilize domestic energy sources, and establish an optimal workforce allocation to meet growing domestic and international production demands necessary to maintain profits. Domestically, a strong economy will continue to maintain the Communist Party’s legitimacy, improve living standards/expectations, and potentially stifle inequality in China.

Internationally, Chinese foreign policy functions under the national strategy to support economic growth and modernization, to reunify China with Taiwan, and to increase China’s global stature. To promote economic growth, China relies on building

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41 Ibid.


relationships and partnerships and keeping an open dialogue with a diverse range of countries to promote a stable environment.\textsuperscript{44} The effects of these partnerships are twofold. First, the partnerships nest partner nation’s interests with China’s interests and second, it deters competing nations from joining against China, as it would be too economically costly.\textsuperscript{45} Moreover, China’s actions in Africa are a great example of the results of Chinese foreign policy leading to beneficial economic outcomes. China has gained access to the resource rich African countries of Ethiopia, Kenya, Nigeria, and South Africa through diplomatic and trade agreements, which opened the door for other economic initiatives, such as financial loans, cultural exchanges, education projects, mining/oil rights agreements, and the establishment of Chinese-based media outlets.\textsuperscript{46}

\textbf{B. INTERNATIONAL POLITICAL OBJECTIVES}

China uses its foreign policy, through partnerships and outreach, to influence global audiences to support reunifying China with Taiwan, to counter Chinese threat concerns, and to promote peaceful development. By using economic and social integration, deterring internal Taiwanese independence movements, and by gaining commitment from other world powers to support the one-China policy, China has applied an indirect strategy to recover Taiwan.\textsuperscript{47} Additionally, China has reached out to countries in Latin America, Africa, and the Pacific to influence states to sever their relationships with Taiwan and often uses the one-China policy as a precondition for agreements, humanitarian assistance, or investment deals.\textsuperscript{48}

In a competitive world, powerful nations are constantly maneuvering to position themselves advantageously, and China is no exception. The Chinese strategic goal of power transition is based upon China’s standing as one of the world’s oldest civilizations and their belief that only China has the ability to compete with the United States and

\textsuperscript{44} d’Hooghe, \textit{The Rise of China’s Public Diplomacy}, 10.
\textsuperscript{45} Goldstein, “An Emerging China’s Emerging Grand Strategy.”
\textsuperscript{46} Donovan Chau, \textit{Political Warfare in Sub-Saharan Africa} (Carlisle Barracks, PA: Army War College Strategic Studies Institute 2007), 50.
\textsuperscript{47} David Lai, \textit{Learning from Stones: A GO Approach to Mastering China’s Strategic Concept, SHI} (Carlisle Barracks, PA: Army War College Strategic Studies Institute, 2007), 23.
\textsuperscript{48} Congressional Research Service, \textit{China’s Foreign Policy}, 6.
change the international order to be more favorable to China.\textsuperscript{49} To accomplish this transition, the focus of Chinese foreign policy is to maximize China’s reach of influence to as many people, agencies, and governments as possible through a wide range of coordinated Chinese agencies, businesses, and actions.\textsuperscript{50} Additionally, China has donated billions for foreign infrastructure development, education programs, and government ministries with the goal of influencing local populations and convincing governments that China is a reliable global power.\textsuperscript{51} Power transition is often threatening to other nations, which is why China has pursued multilateral diplomatic relations in an effort to counter threat perceptions.\textsuperscript{52}

The international community may feel threatened by China’s economic and military development and modernization and by China’s push to influence the international environment. However, China attempts to reassure the world through the strategic concept of “peaceful development.” China’s reference to peaceful development has both domestic and international meanings. Domestically, peaceful development refers to the “common prosperity of the people” in building a modern, harmonious society.\textsuperscript{53} Externally, peaceful development refers to the building of a harmonious world based upon “equality, mutual trust, including and learning from one another and mutually beneficial cooperation.”\textsuperscript{54} China’s 2011 “Peaceful Development” white paper states that it will “promote friendly relations with other countries based upon the Five Principles of Peaceful Coexistence,” which are “mutual respect for sovereignty and territorial integrity, mutual non-aggression, non-interference in internal affairs, equality and mutual benefit, and peaceful coexistence.”\textsuperscript{55} The next chapter explores in more detail this ‘peaceful development’ theme as part of China’s overall public diplomacy strategy.

\begin{footnotesize}
\begin{enumerate}
\item Lai, \textit{Learning from Stones}, 17.
\item Chau, \textit{Political Warfare in Sub-Saharan Africa}, 51.
\item Ibid., 50.
\item Goldstein, “An Emerging China’s Emerging Grand Strategy,” 83.
\item Ibid.
\item Information Office of the State Council of China, \textit{China’s Peaceful Development}.
\end{enumerate}
\end{footnotesize}
C. MILITARY GOALS

China’s military supports the PRC’s grand strategy through a defensive military policy, and continued modernization. In May 2015, China’s State Council Information Office of the People’s Republic of China (PRC) released a white paper describing China’s military strategy, which highlighted eight strategic tasks. The strategic tasks include safeguarding Chinese sovereignty and interests (domestic and overseas), “reunification of the motherland,” as well as strategic deterrence, maintaining regional peace through military cooperation, counterterrorism, and humanitarian missions.\(^{56}\) One of the most prominent and controversial examples of the People’s Liberation Army (PLA) safeguarding China’s interests and territory are the PLA force projections in the South China Sea to protect Chinese territorial claims.

China has also deployed troops to support cooperative military missions to combat piracy, terrorism, and to support United Nations (UN) peacekeeping operations.\(^{57}\) For example, over the last 15 years, China has conducted training and exercises with Kyrgyzstan, Kazakhstan, Tajikistan, and Russia, which are focused on countering terrorism in central Asia.\(^{58}\) In addition, in 2007, China sent 125 “special police” officers to Haiti as part of a UN peacekeeping force\(^{59}\) as well as additional peacekeeping forces to Liberia, South Sudan, Darfur, Sudan, and Democratic Republic of the Congo.\(^{60}\)

To accomplish strategic objectives, modernization has also been a top priority of the PLA. Between 1997 and 2007, China quadrupled its annual spending on military equipment from $3.1 to $12.3 billion, purchasing an array of surface-to-surface and surface-to-air missiles, fighter aircraft, unmanned reconnaissance aircraft, and surface and submarine naval vessels.\(^{61}\) China explains that the purpose of its military

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\(^{58}\) Congressional Research Service, *China’s Foreign Policy*, 70.

\(^{59}\) Ibid., 19.

\(^{60}\) Ibid., 113.

modernization “…is to safeguard China’s sovereignty, security, territorial integrity, and interests of national development.”  

Understanding China’s strategic objectives is just the first step in analyzing China’s public diplomacy and its effectiveness in influencing global audiences. China’s economic, technological, and military modernization ambitions, coupled with its desire to take on a stronger international leadership role, send a variety of signals to the international community. At face value, the aim of creating a prosperous and harmonious society, both domestically and internationally, seems to be a genuine and a well-intentioned goal; however, when members of the international community interpret China’s actions, they are often viewed as a potential threat to the regional balance of power. For this reason, China has invested manpower and money to positively influence foreign audiences through its public diplomacy programs and campaigns. This notion is reflective of Nye’s argument that actions speak louder than words and that public diplomacy cannot be successful if it is just “window dressing for hard power.”

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III. CHINA’S PUBLIC DIPLOMACY

Implementation of strategy along economic, international, and military lines has implications in foreign countries, and it requires a public diplomacy program to educate and influence foreign populations. Journalist Joshua Cooper Ramo stated that “China’s greatest strategic threat today is its national image.”64 He went on to say that, if perception is reality, then global perception of China affects the prospects of the future development of China.65 Ramo’s comments illustrate the important role China’s public diplomacy plays in managing foreign perceptions and misinterpretations related to foreign policy actions. Additionally, Professor He Lan of the Communications University of China, wrote in 2010 that the Chinese Foreign Ministry’s goal for public diplomacy was to “secure the support of foreign public opinion in an effort to direct domestic public opinion.”66 This illustrates how important China’s national image is to the national interest both domestically and internationally. The following section highlights China’s historic use of public diplomacy, its goals, tools, and the overarching themes of its public diplomacy program.

A. CHINA’S PUBLIC DIPLOMACY HISTORY

As China’s government has evolved over time, so too has its public diplomacy. Upon the establishment of the People’s Republic of China in October of 1949 until the post-Mao 1970s, China’s public diplomacy was focused on the developing socialist nations throughout the world and contained strong communist and socialist ideological messages.67 After President Nixon’s visit to China in 1972 and under Deng Xiaoping’s leadership in the late 1970s, China “opened up” to the world, and its public diplomacy was not as assertive under Deng’s “low-profile foreign policy.”68 After the Tiananmen

64 Joshua Cooper Ramo, Brand China (London: The Foreign Policy Centre, 2006), 9.
65 Ibid., 7.
68 Ibid., 43.
Square crackdown in June of 1989, the 1990s were a decade focused on addressing the negative perceptions of the international community regarding human rights in China and improving China’s broken image. In the 2000s, China’s public diplomacy has been directed at addressing the world’s concerns over China’s rise through the concept of the “peaceful rise.” As this century progresses, China’s public diplomacy continues to evolve and respond to the ever changing globalized environment.

In the era of globalization, it is clear that China sees the value of public diplomacy as a means to support its foreign policy objectives through the influence of foreign audiences. Advances in communications technology and transportation due to globalization have produced an interconnected international environment between countries, businesses, and people who are more willing and able to interact. This creates an environment in which “domestic issues will be internationalized while international issues nationalized,” thus making it necessary for governments to use public diplomacy to communicate with foreign audiences to explain domestic policies and promote international policy initiatives. The use of public diplomacy by China to address domestic and international issues is especially important for its approach in influencing the Chinese diaspora or Chinese living overseas. Chinese leaders and public diplomacy officials believe that China must set the tone of international communications, especially to the Chinese diaspora, as they represent a critical means of people-to-people diplomacy within the countries they live but only if they themselves are compelled or persuaded to support China’s goals.

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69 Ibid., 44.
70 Ibid.
72 Ibid.
B. CHINA’S PUBLIC DIPLOMACY GOALS

Chinese public diplomacy supports its national strategy through five overarching communication goals. The first goal is to inform foreign audiences that China seeks to peacefully become a global power through economic development and modernization and to gain world acceptance of Chinese power.74 The second goal is to influence foreign audiences to invest in China and promote trade to grow the Chinese economy.75 The third goal is to counter the negative global perceptions about China’s international intentions by disproving the “China threat” perceptions and showcase China as a trustworthy international actor.76 The fourth goal is to educate foreign audiences through cultural diplomacy that displays China’s rich, vibrant history, people, and art.77 The fifth goal is to influence global opinion leaders by showing the world a positive image of China’s domestic environment to improve the international perception and legitimacy of the Chinese Communist Party (CCP) and by highlighting China’s harmonious society.78 These goals also drive Chinese government officials to understand the necessity of developing a strong public diplomacy program that uses a variety of tools.

C. CHINA’S PUBLIC DIPLOMACY TOOLS

China has a diverse range of public diplomacy tools it uses to influence foreign audiences, and the three greatest are the media, education institutions/exchanges, and China-sponsored events. China has expanded the role of domestically run media sources such as CCTV, Xinhua, and Chinese Radio International broadcasts to target international

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audiences in almost every major language, and it has hired a number of foreign anchors.\textsuperscript{79}

With the advent of satellite TV in the early 1990s, China took advantage of the international broadcasting opportunity provided by household satellite receivers.\textsuperscript{80} Since the early 1990s, China Central Television (CCTV) has steadily increased its international broadcasts, beginning in 1992 with CCTV-4 (Mandarin), CCTV-9 (English) in 2000, CCTV-Spain/France in 2004, CCTV-Arabic, and CCTV-Russian in 2009.\textsuperscript{81} Currently, CCTV International reaches over 83.8 million subscribers in 137 countries with target audiences ranging from Chinese living abroad to mainstream Western audiences.\textsuperscript{82}

Additionally, China has expanded its public diplomacy efforts via the Internet by redesigning web pages and social media sites. In 1997, the China National Network (www.china.com.cn) was created as a medium to promote China overseas.\textsuperscript{83} The PRC State Council Information Office (SCIO) designs many of its websites for the purpose of public diplomacy promoting official government information, Chinese culture, and to provide news in multiple languages.\textsuperscript{84} On social media, China’s media outlets and public diplomacy messages are easy to find on Twitter, Facebook, and through the China National Network. Even though Twitter is banned in China, all the major Chinese media outlets have Twitter accounts in multiple languages as do Chinese government organizations like the State Council Information Office, China’s mission to the United Nations and European Union, the Chinese Communist Party, and even China’s President Xi Jinping.\textsuperscript{85} Most of the messages on social media and within the Chinese international


\textsuperscript{80} Xiaoling, “Chinese State Media Going Global,” 45.

\textsuperscript{81} Ibid., 45.


\textsuperscript{83} Xiaoling, “Chinese State Media Going Global,” 45.

\textsuperscript{84} d’Hooghe, The Rise of China’s Public Diplomacy, 32.

\textsuperscript{85} Twitter accounts verified on July 19, 2016 at https://twitter.com/.
media broadcasts revolve around current news events, sports, economics, cultural events, and promote “an image of prosperity and societal success.”86

Even though China has modified and expanded its use and global reach of the media, Western audiences are still skeptical about Chinese media and messages. Understanding that the international community may view Chinese media as propaganda, CCTV and other CCP controlled media outlets have taken more of a Western journalistic approach to telling China’s story to foreign audiences by covering topics like China’s energy and pollution crisis.87 However, the Chinese media have applied an “active defense” involving controversial topics for China; issues like Taiwan, Tibet, corruption, human rights, and political stability either are avoided or are covered from a more positive perspective.88 Instead, the media focuses its international messages about China on the topics of peaceful development and the win-win benefits of China’s rise.89

China also uses Confucius Institutes throughout the world and other educational exchanges as a primary means of influencing foreign audiences for long-term benefits. In 2002, China announced its plan to establish worldwide Confucius Institutes as a means of promoting the Chinese language and culture to the world.90 Established in 2004, the first Confucius Institute opened to “develop and facilitate the teaching of the Chinese language overseas and promote educational and cultural exchange and cooperation between China and other international community’s [sic].”91 As of April 2016, there were 500 Confucius Institutes and 1000 Confucius Classrooms in over 135 countries.92

Additionally, China uses student exchanges to promote Chinese language and culture to foreign students. Foreign student exchanges in China utilize a home field

87 Testimony before the U.S.-China Economic,
88 Xiaoling, “Chinese State Media Going Global,” 47.
89 Ibid., 47.
91 Ibid., 58.
advantage, allowing China to display a positive image and culture directly to foreign audiences. According to Wen Jiabao, the former premier of the State Council for the PRC, student exchanges are valuable because they “fostered an image of China as a country that is committed to reform and opening, a country of unity and dynamism, a country that upholds equality and values friendship, and a country that is sincere and responsible.”

Furthermore, the economic appeal of the Chinese markets and economy has created a large demand from foreign students to learn Mandarin and about Chinese culture and business customs with a future goal of “doing business with China.”

The Institute of International Education’s Project Atlas estimated that in 2014, about 377,054 international students were attending institutions of higher learning in China.

Furthermore, China uses cultural, sport, and business-related events both domestically and overseas as a tool of public diplomacy to promote China’s brand to foreign audiences. Examples of events hosted in China are the 2001 Asia-Pacific Economic Cooperation (APEC) Summit, the World Exhibition in 2012 in Shanghai, the Asian games, the 2008 Olympic Games, and the annual Boao Forum for Asia, which is an economic forum held in Boao, China.

Additional events take place in the target audience nations to promote China and increase Chinese influence. “Chinese Culture Weeks” and “China Year” are a series of organized cultural and art exhibits, sporting events, dance/music performances, and other cultural events designed to highlight the rich culture of China as well as build relationships between China and the different cultures around the world.

Finally, China has begun to use businesses and companies as a means of outreach to global audiences. Coupled with China’s foreign business strategy of companies “going out,” China views business interactions overseas as a public

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diplomacy opportunity to promote cross-cultural exchange and present the Chinese political and economic models. Chinese Institute of International Studies researcher Zhang Weiwei argues that using businesses for public diplomacy will help make China more approachable and dispel doubts about China by the West and aid its greater economic modernization objectives.

From this review, it is clear that China’s public diplomacy programs and efforts consist of diverse means that support its strategic ends. Additionally, China has expanded its use of public diplomacy over the last 20 years by expanding its global media reach, education and businesses exchanges, Confucius Institutes, and public diplomacy events to promote China as a prosperous, responsible global partner.

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99 Ibid.
IV. DATA AND ANALYSIS

The advent of Internet monitoring tools combined with China’s increased desire to improve its global image using online social and news media sources, makes China an excellent case study concerning the use and assessment of public diplomacy. This study expands on previous research cited above, which utilized passive listening tools to measure the effects of public diplomacy. However, instead of measuring how public diplomacy is impacting public opinion, this study focuses on what drives China’s public diplomacy in the first place, and whether its use is to preempt or react to major events. This chapter analyzes China’s online public diplomacy posts in relation to event data over the period January 1, 2013 through August 31, 2016 and illustrates a strong relationship between Chinese diplomatic, military force posture, and foreign aid events and days with events with high volumes of public diplomacy posts.

A. APPROACH

The first data set measures the dependent variable, which is the volume of China-related public diplomacy posts by day from January 1, 2013 to August 31, 2016. The source of this data is a Buzz Monitor provided through Crimson Hexagon, a social media analytics company. It is important to note that Crimson Hexagon is a proprietary company and its analytics tools use copyright protected algorithms. For this reason, it is also important to acknowledge the use of data from this source is a potential critique of this research since the algorithm used is not from an open source. However, the abilities of the Crimson Hexagon Buzz Monitor search allows for a more focused search not only by topic but by source as well. Narrowing the search to China’s sanctioned sources is critical to gathering an accurate view of how it is using state media, Twitter, blogs, and other forums to transmit their public diplomacy messages.

The first step in using this platform was to establish clear search parameters to be applied by the algorithm during the established period of study. Appendix A contains the

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full search parameters used in this study. The search parameters consist of key public diplomacy terms specific to China’s public diplomacy programs as well as the web addresses and Twitter handles of Chinese agencies or state-run organizations that are used as mechanisms of public diplomacy. After establishing an additional filter by source and type of media, the result was a database consisting of public diplomacy volume by day from Chinese state administered news websites, Twitter pages, forums, and blogs.

The independent variables were derived from four data sets from the Global Database of Events, Language, and Tone (GDELT Project). The GDELT Project is an open source media-monitoring tool that searches various media sources dating back to 1979 in over 100 languages for event specific data.\textsuperscript{101} Domestic protest, military force posture, diplomatic cooperation, and provision of foreign aid are the four event types making up the event independent variables of this research. The GDELT Project defines each event category using the \textit{Conflict and Mediation Event Observations and Actor (CAMEO) Codebook}.\textsuperscript{102} Each coded event type has sub-event codes accounting for different variations of the main event observation. For example, there are 26 variations of protest-related events, six variations of military posture, eight variations of diplomatic cooperation, and six variations of the provide aid event, each with its own definition and code.\textsuperscript{103}

To compile each of the event data sets for the independent variables required date specific searches using GDELT Project’s Analysis Services Event Record Exporter tool.\textsuperscript{104} For example, the protest event data resulted from a search using China as the initiating country, civilians as the initiating actor type, using the event code 14, and the event location of China. This produced a return of 19,453 protest events over the 44


\textsuperscript{102} Philip A. Schrodt, \textit{CAMEO: Conflict and Mediation Event Observations Event and Actor Codebook} (University Park, PA: Pennsylvania State University, 2012).

\textsuperscript{103} Ibid., 31, 35, 66, 73.

months covered in this study. For the force posture events (event code 15), the initiating actor and type is the Chinese military, and for both diplomatic cooperation (event code 05) and provide aid (event code 07), the initiating actor and type is the Chinese government.

There are two different independent variables derived from each of the four event data sets. The first variable is the total number or count of events on a given day in each event category. The second variable is a 30-day rolling average of the count of events on a given day in each category. The 30-day rolling average provides an assessment of the general trend of the data over a 30-day period prior to each event. The reason for using the 30-day rolling average in this regression is that it allows comparison between a single day of events versus an average of the previous 30 days’ worth of events, allowing longer trends to be more evident.

The last group of independent variables for this study is a selection specific days and 30-day pre- and post-lag periods for each date. Each date variable helps analyze the relationship between specific events and Chinese public diplomacy. Each of the selected dates produced an event that gained widespread global attention. This study tests the relationship between each specific date and the event data in relation to the volume of public diplomacy posts. One potential critique of using non-randomly selected dates is that this study is “cherry picking” dates that would statistically improve the results of the models. However, the counter to this critique is that, by using days that gained global attention, it allows analysis of how China uses public diplomacy when the eyes of the world are watching and not just on days when there are other global issues competing for global media attention. Additionally, since public diplomacy does not just happen as one event on one specific day, the two versions of this independent variable cover the 30 days prior to and after the specific date. The reason for testing the pre- and post-30-day lag periods is to illustrate if China uses public diplomacy prior to and/or after an event to shape the global discussion.

105 Ibid.
106 Ibid.
The first date is June 18, 2014, with a public diplomacy post volume of 28,355 (see Table 1). On June 18, 2014, the Foreign Minister from Vietnam met in Beijing with Chinese officials to discuss growing tensions in the South China Sea and specific concerns about Vietnamese oil rights. Additionally, on June 18, 2014, the Occupy Central protests in Hong Kong were gaining global attention amid the Hong Kong democracy referendum, which was scheduled for June 20, 2014. The second date is September 27, 2014, with a post volume of 5,046. This date is significant because it was the start of the Umbrella Movement in Hong Kong, which was a major news story of 2014. During this movement, thousands of pro-democracy students and citizens marched and protested for multiple weeks. The third date is October 27, 2015, with a public diplomacy post volume of 37,377. This date is significant because for the first time since 2011, the U.S. Navy sent a destroyer to patrol just over 12 nautical miles from one of the Chinese held islands in the South China Sea. The fourth date is July 12, 2016, with a post volume of 48,497. This day is significant because The Hague Permanent Court of Arbitration released “The South China Sea Arbitration,” ruling in favor of the Philippines, stating that China’s territorial claims in the South China Sea are

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in violation of international law.\textsuperscript{115} Figure 1 shows PRC public diplomacy by day, represented with the gray line, in relation to the specific events discussed above, marked by the four vertical dotted lines.

Figure 1. Chinese Public Diplomacy Volume with Dated Events\textsuperscript{116}

The final category of variables for this study is comprised of the control variables. The first control variable is the total volume of public diplomacy related posts by day from January 1, 2013 to August 31, 2016. This variable consists of all sources and is not restricted to only Chinese sources.\textsuperscript{117} The second control variable is the total number of all recorded events by day from GDELT 1.0 Event Database Normalization Files from January 1, 2013 to August 31, 2016.\textsuperscript{118} These control variables are designed to account


\textsuperscript{116} Adapted from study results from the searches from the Crimson Hexagon database.

\textsuperscript{117} Buzz Monitor search results (raw data), Crimson Hexagon, accessed October 1, 2016, https://www.crimsonhexagon.com/.

for days that generate high volumes of aggregate global news traffic. In addition to the total count of posts and events per day, the models also include a 30-day rolling average for the public diplomacy and GDELT volume control variables. The intention of the 30-day rolling average for the control variables is to mitigate the impact of outliers or days that have abnormally high numbers of posts or events.

B. HYPOTHESES

The analysis below examines three main hypotheses concerning the drivers China’s public diplomacy efforts, and one minor hypothesis about how China uses public diplomacy in relation to specific events. The first hypothesis (H1) of this study is that Chinese public diplomacy volume increases as the number of domestic protests increases. In an attempt to influence global perceptions about China’s domestic situation, China is expected to increase public diplomacy in an attempt to paint China as a responsible and stable state actor. To test H1, the study used models to analyze protest events over time and compare aggregate rates of protest with public diplomacy volume. In addition, the September 27, 2014 independent variable is used to test for a relationship between the emergence of the Umbrella Movement in Hong Kong and Chinese public diplomacy posts.

The second hypothesis (H2) is that as the PLA changes its force posture, China will increase its public diplomacy activity to mitigate “China threat” perceptions. To test H2, the next models of compared PLA force posture related events to public diplomacy volume. The third hypothesis (H3) is that diplomatic and foreign aid related events are primary drivers of PRC public diplomacy. To test H3, models examined the relationship between PRC public diplomacy and diplomatic and foreign aid events. Diplomatic and foreign aid events are important topics for China and allow it to illustrate to the world that it is a responsible global actor. Finally, the fourth hypothesis (H4) is that Chinese public diplomacy is used to shape the global discussion prior to and after a major event. To test H4, the selected date variables with pre- and post-30-day lag periods to examine whether there is a relationship between the volume of PRC public diplomacy posts in the 30 days prior to and after each event.
C. REGRESSION MODELS

This study uses negative binomial regression models to examine what drives Chinese public diplomacy volumes. The reason for using a negative binomial regression was to create statistically relevant models using day-by-day count variables for both the dependent and independent variables. Using the “R” statistical analysis language each data set was imported and organized into a single data set showing public diplomacy posts by day. After consolidating the data and running multiple regression models, the most noticeable trend was that the 30-day rolling averages for the independent variables were consistently the most significant factor in relation to the volume of Chinese public diplomacy posts. Using these trends, five models provide insight into what drives China’s public diplomacy.

The first model is the baseline model that serves as a starting point from which to build and compare the other models. Table 1 illustrates the organization of the coefficients for each model as well as the significance levels, which are discussed in the following section. Model 1 compares the relationship between Chinese public diplomacy posts with the event counts by day, event 30-day rolling averages by day, and the control variable counts and 30-day averages (see Appendix B for the equations for each model). For models 2 through 5, each consists of the baseline factors described above plus the selected day and the pre- and post-30-day lag periods for each of the dates. Model 2 is for July 12, 2016, Model 3 examines September 27, 2014, Model 4 compares June 18, 2014, and Model 5 is for October 27, 2015. Adding the selected date variables separately to each model makes it easier to analyze how the events of that day affect the relationship between the other event categories and the overall volume of China’s public diplomacy posts. The lag periods also provide insight into how China uses its public diplomacy to either shape or react to specific events.
Table 1. Coefficients and Results

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<td>(0.488)</td>
</tr>
<tr>
<td>October 27 2015 Post 30-day lag</td>
<td>0.314</td>
<td>0.314</td>
<td>0.314</td>
<td>0.314</td>
<td>0.314</td>
</tr>
<tr>
<td>(0.099)</td>
<td>(0.099)</td>
<td>(0.099)</td>
<td>(0.099)</td>
<td>(0.099)</td>
<td>(0.099)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.903</td>
<td>1.903</td>
<td>1.903</td>
<td>1.903</td>
<td>1.903</td>
</tr>
<tr>
<td>(0.088)</td>
<td>(0.088)</td>
<td>(0.088)</td>
<td>(0.088)</td>
<td>(0.088)</td>
<td>(0.088)</td>
</tr>
</tbody>
</table>

Notes: *p<0.1; **p<0.05; ***p<0.01

119 Adapted from study results from the searches from the GDELT Project and the Crimson Hexagon databases. Table 2 constructed using R programming language specifically the “stargazer” command Table shows coefficients from negative binomial regression models, with standard errors in parentheses.
D. RESULTS

Upon initial inspection, there are three general trends across all five models. First, the results show that there is evidence suggesting a relationship between Chinese public diplomacy and diplomatic, foreign aid, and force posture events. Second, the day-to-day event counts of the force posture, diplomatic cooperation, and foreign aid variables do not show a significant relationship with Chinese public diplomacy posts on the same day, but the 30-day rolling averages do show significant relationships. Third, there is not enough statistical evidence to infer that the protest count or protest 30-day rolling average variables have a significant relationship with the volume of public diplomacy posts. The protest event results indicate that there is insufficient evidence to infer positively or negatively that China increases its online public diplomacy efforts during instances of domestic protest. Figure 2 illustrates the data underlying this study; the x-axis is time in days, and the y-axis is the count of posts or events. The gray line represents the number of Chinese public diplomacy posts per day, the colored lines represent the number of each corresponding event per day, and dotted vertical lines represent the dated events.
Statistically, the event 30-day rolling averages for force posture, diplomatic cooperation, and foreign aid appear to be the main drivers of Chinese public diplomacy. These factors are represented by the red, green, and purple lines (respectively) in Figure 2, and each of these models has statistically significant positive coefficients, with p-values < 0.01. This means that the evidence supports a relationship between the 30-day rolling averages for force posture, diplomatic cooperation, foreign aid events, and the volume of Chinese public diplomacy posts. These results support Hypothesis 2 and Hypothesis 3, which predicted that as force posture, diplomatic, and foreign aid events increase, the volume of public diplomacy will increase as well.

One interpretation of these results is that when these events occur, China is likely to support diplomatic cooperation, force posture moves, or foreign aid actions with public diplomacy. This falls in line with the previous discussion in Chapter III about how China uses public diplomacy to support its strategic actions and objectives in an attempt to brand China in a positive manner. Additionally, using events such as diplomatic cooperation and foreign aid helps China to sell a more positive image of itself, which

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120 Adapted from study results from the searches from the GDELT Project and the Crimson Hexagon databases.
reinforces the Chinese claim that it is a responsible global actor. Finally, China can use public diplomacy posts to accompany military force posture events as a way to explain military moves to prevent misinterpretation and to counter the greater China threat perceptions in the international community.

Another interesting result is that certain dated events seem to be drivers of Chinese public diplomacy. The results of the September 27, 2014, Umbrella Movement variable show a statistically significant relationship with Chinese public diplomacy, whereas the GDELT aggregate protest event data did not. In Figure 2, the first two vertical lines represent June 18, 2014 and September 27, 2014, dates (respectively) that had large internationally visible protests in China. The June 2014 protests show a relatively low public diplomacy volume in comparison to the September 2014 Umbrella Movement, which lasted for weeks. The line plot and the data surrounding the Umbrella Movement protests suggest that this event was an important driver of Chinese public diplomacy. As shown in Table 1, both the pre- and post-30-day lag periods are both statistically significant factors in relation to public diplomacy volume, with negative coefficients and p-values <0.01. This means that as the number of protest events increased, Chinese public diplomacy volume decreased. Additionally, Figure 2 shows that in the 30-day time period after September 27, the number of protest events peaked and then decreased, whereas the volume of public diplomacy decreased and then increased after the number of protests began to decline. A potential explanation for the initial reduction in public diplomacy volume is that China did not want to draw global attention to the protests in Hong Kong until it had gained control of the situation. This allows China to control the narrative and show the world that the Chinese government is a more restrained and responsible actor than historic events like Tiananmen Square massacre suggest.

Additionally, Figure 2 shows spikes in public diplomacy volume during the days leading up to and following the U.S. Navy patrol of the South China Sea, on October 27, 2015. The results show statistically significant positive coefficients, with p-values <0.05 indicating that there is a relationship between public diplomacy posts and the 30 days prior to October 27, 2015. The findings also indicate significant positive coefficients with
p-values <0.01, showing a relationship between public diplomacy posts and the 30-day period after October 27, 2015. This event illustrates a relationship between Chinese public diplomacy and events that were well publicized in the global media. In this case, the United States had signaled through statements in September of 2015 by President Obama, the secretary of defense, and U.S. Navy officials that the United States would conduct patrols to maintain the Freedom of Navigation Act. This is important when analyzing the pre-30-day lag results because U.S. signaling through official statements and press releases could also have triggered a response from China within the 30 days leading up to October 27, 2025. Additionally, the post-30-day increase of public diplomacy in relation to the Navy patrol is expected, as China would have to counter U.S. actions in the South China Sea, specifically to signal strength to regional partners as well as to domestic and foreign Chinese audiences.

The most surprising result from the date specific factors was the lack of strong relationship between the July 12, 2016 Hague South China Sea ruling and Chinese public diplomacy volume. This is surprising because July 12, 2016 had the highest volume of Chinese public diplomacy posts, though there was no statistical evidence to show a relationship with that date and Chinese public diplomacy once the control variables were considered. After The Hague’s announcement, however, we find a moderately significant positive coefficient, with p-value <0.1, showing a relationship between the post-30-day lag period and the volume of Chinese public diplomacy. This provides some evidence that the PRC may in fact have used public diplomacy after The Hague ruling, rejecting the ruling and the legitimacy of The Hague and vowing to protect what China called its “sovereignty over the South China Sea.”

E. IMPORTANCE OF RESULTS

Overall, the statistical results of this study show that Chinese public diplomacy accompanies diplomatic, foreign aid, and military force posture events. However, the

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121 Larter, “Navy Will Challenge.”
results of the Umbrella Movement, U.S. Navy patrol, and the South China Sea ruling events also demonstrate relationships between each specific event and public diplomacy, revealing general trends about how China uses public diplomacy. More importantly, the main conclusion derived from the regression models is that diplomatic, foreign aid, and military force posture events are the central drivers of Chinese public diplomacy. Additionally, specific events can also be drivers of Chinese public diplomacy, though this can depend greatly on context. This is especially likely when the event gains international media attention, in which case it appears that China uses public diplomacy to shape the global discussion about the event and about China through pre- and post-public diplomacy messaging.
V. RECOMMENDATIONS AND CONCLUSION

This chapter discusses the implications of the regression results for DOD information operations (IO) planners, and it provides recommendations for the future use of Internet-monitoring tools to help the U.S. military gain a position of advantage within the information environment. Even though the DOD may only provide support to public diplomacy, the results and implications of this study are significant to DOD planners operating within the information environment to influence audiences.

A. IMPLICATIONS FOR DOD PLANNERS

The three major planning considerations that the results of this study highlight are the use of messaging volume, proactive messaging, and creating messages that account for positive and negative events.

1. Credible Volume

Across the four specific events studied, the statistics illustrate inconsistencies in Chinese public diplomacy volume levels in relation to pre- and post-event messaging. The lesson for DOD IO planners is that they must take advantage of pre- and post-event messaging opportunities. If a planning staff has the ability to anticipate an event through intelligence or planned actions, a credible, comprehensive, and diversely sourced messaging campaign must be designed and implemented to shape the perceptions of the target audience prior to and after an event. In addition to credible messaging, planners must increase the volume of messaging across the range of available communication mediums. Increasing credible messaging through volume is an attempt by planners to saturate the information environment with repetitive, multi-sourced, truthful messaging at a high volume that maximizes the reach of the message to the target audience while out-communicating the competition. Additionally, when competing in the information environment to shape target audience perceptions, planners must use credible volume to gain audience attention and tap into an audiences’ thrust for verifiable, true information. This requires a definitive strategy from policy makers and an organizational structure in which joint, interagency, and partner nations are working together towards common
objectives and are all involved in the planning, execution, and assessment of the information campaign.

2. **Proactive Messaging**

   Critical to pre- and post-event messaging is the speed of message dissemination. When possible, DOD planners must quickly and proactively message the target audience instead of only countering opposing messages. A simple Internet search for “countering Russian or Chinese propaganda” results in numerous articles about how the United States must do more to counter the influence campaigns of China or Russia. Countering the information campaigns and propaganda of competing nations is necessary; however, using staff time to plan counter narrative messaging campaigns, leaves less time and resources available to communicate a positive narrative of the United States to target audiences. Overemphasizing the need to counter competing narratives, concedes an influence advantage to competing state and non-state actors in the information environment.

   To avoid this concession, DOD planners must first use proactive messaging to promote the U.S. narrative. Proactive messaging means that DOD planners should use information campaigns to set the pace, tone, and timing of communications with the target audience, and they should not wait for competing messages to reach the target audience prior to acting. Additionally, DOD planners must establish definitive counter narrative criteria that specify what type of competing messages require attention. The criteria must consider the tone, reach, believability, and the potential negative effects the competing messages have on strategic objectives. Countering only the messages that meet the select criteria allows DOD planners to react when necessary while maintaining the integrity of the broader information campaign.

3. **Positive and Negative Events**

   The third implication from this study for DOD information operations planners is that U.S. information campaigns must address both negative and positive events. Statistically speaking, Chinese public diplomacy focuses on mostly positive events, in this study specifically, diplomatic cooperation and foreign aid. The results show little
relationship between protest events in China and the Chinese use of public diplomacy. Addressing instances of civil unrest within China through public diplomacy does not present a positive image of domestic stability to potential investors or Chinese diaspora living abroad. However, by not addressing domestic protests and other negatively perceived events, it allows other actors in the information environment to lead the discussion about China’s domestic situation. The lesson for DOD planners is that ignoring negative events leaves a void in the global conversation, allowing other actors to seize the advantage. It is not possible for the United States to ignore negative events. Thus, the best option for DOD IO planners is to use information campaigns to contribute to the discussion within the information environment using truth and facts to explain the situation and what the United States is doing to address negative issues.

The actions of the United States attract global attention, and DOD IO planners must address both negative and positive events to manage global perceptions. During the global war on terror, the U.S. Department of Defense has had to address multiple negative events ranging from civilian casualties, mistreatment of detainees, and other sensitive issues that caused outrage in the global court of public opinion. The DOD already has systems and procedures in place to publicly address negative or crisis related events but one way to improve the management of negative events is through near real time assessments that assist planners in understanding if the crisis mitigation efforts are successful or not. Using Internet-monitoring tools to measure sentiment about a given event would assist public affairs organizations and IO planners in analyzing if a crisis messaging campaign is successful in managing perceptions.

B. APPLICATION OF MONITORING TOOLS

As discussed in the approach section of Chapter IV, the data for this study came from a Crimson Hexagon Buzz Monitor and the GDELT Project’s Event Exporter tool. As the Internet has become one of the most prominent mediums of communication throughout the world and as technology continues to improve, private businesses and the DOD are investing time and resources to research how to best use Internet-monitoring tools. This section highlights the personal lessons gained from using the Crimson
Hexagon Buzz Monitor from this study to discuss planning considerations and ways to improve Internet-monitoring tools for future DOD use. It is important to note that social media analytics and event data archives are only tools and require a great deal of prior research about the topic, audience, and competing actors in the information environment. The information gained from these tools is just data and requires detailed analysis; staffs must process and scrutinize the data to gain true understanding of what the information actually means for their organizations. This requires that planners understand the mechanics of how each Internet-monitoring tool compiles the data, which also allows planners to control for and fill any potential gaps in the information or results to ensure the highest level of understanding.

1. Creating a Baseline

Internet monitoring tools provide valuable information that can provide planners with baseline information about the information environment, which can assist planners in creating information campaigns to more effectively reach target audiences. This requires a significant amount of time devoted to researching the topic and the specific actors for each project. One of the most important aspects of using tools such as Crimson Hexagon is the creation of the search criteria. If there are gaps in the search criteria, the data will not accurately represent reality and will cause planners to make decisions using incomplete information. Wide searches result in a greater number of returns based upon the established search criteria and narrow searches will focus on specific authors or websites using the search criteria (see Appendix A for examples). The upfront investment in research results in a comprehensive baseline of data to assist planners in understanding the situation within the information environment and lead to more efficient IO targeting and improved campaign assessments. Understanding the topics and discussion trends is critical in planning an information campaign because planners must be able to design their messages to fit as part of the ongoing discussions within the information environment.

Additionally, sentiment analysis tools are also important in understanding the target audience. Sentiment analysis tools categorize posts within a search monitor into
positive, neutral, and negative sentiment, allowing the user to gain a general understanding of how the topic is trending among other people and organizations. Figure 3 shows the sentiment analysis results from the Crimson Hexagon Monitor for this thesis.\textsuperscript{123} Another useful tool for audience analysis is the source breakdown tool that illustrates the various communication mediums used a given search monitor. Figure 4 is the source breakdown for the search results about Chinese online public diplomacy, showing that the discussion about Chinese public diplomacy is mostly taking place on news sites, blogs, Twitter accounts, and forums to transmit public diplomacy messages.\textsuperscript{124}

Figure 3. Crimson Hexagon Sentiment about PRC Public Diplomacy\textsuperscript{125}

![Crimson Hexagon Sentiment about PRC Public Diplomacy](image)

Sentiment of all searchable sources about PRC public diplomacy from the Crimson Hexagon Buzz Monitor search results from January 1, 2013, to August 31, 2016.


\textsuperscript{124} Ibid.

\textsuperscript{125} Ibid.
A simple example using the data from this study shows that at first glance, a reader will see a largely neutral and negative-leaning sentiment trend for the topic of Chinese public diplomacy. However, if this is combined with the source breakdown, the sentiment results makes more sense, as it seems likely that high percentages of news sources contribute to higher percentages of neutral posts. This is just one example of how planners can use these analytical tools to provide insight about the audience and how organizations use the media sources. It is also an example of a necessary future research project that would help planners understand how to use sentiment analysis within different forms of media. This example also highlights two new questions that planners would have to answer: (1) “what is driving the neutral sentiment?” and (2) “are media sources really neutral?”

2. Assessment

Using Internet-monitoring tools to assess information campaigns is the latest area of consideration for DOD planners. The simplest way to measure success of an information campaign is to compare current results against the baseline data over time.

126 Ibid.
To understand if an information campaign is effective, planners must define success with clear, realistic objectives. If there is not an available baseline to compare current results to, planners must gather historic data to assess whether or not a campaign has been successful. Internet monitoring tools can help gather the historical data necessary to measure change in the information environment for assessments. To measure for success, there also must be continual comparison of the current data to the baseline data to show changes that support or contradict the stated objectives. For example, planners could use changes in sentiment of a given topic to illustrate the effectiveness of an information campaign. Alternatively, analysts could monitor key influential author posts, such as news sources, blogs, or Twitter accounts, to look for changes in how they perceive events or messaging related to the information campaign. Planning how to assess an information campaign is just as important as planning the campaign itself, and without assessments, it is impossible to measure success or to modify existing plans to achieve success.

C. CONCLUSION

This thesis examined how events influenced China’s use of public diplomacy through statistical analysis. The study began by defining public diplomacy, followed by a discussion about China’s strategic objectives and how China uses public diplomacy to help achieve its strategic objectives. The results of the statistical research highlight how domestic protest, diplomatic cooperation, military force posture, foreign aid events, and specific dated events relate to the volume of China’s public diplomacy over a wide range of Internet sources. This regression analysis consisted of a comparison between Chinese public diplomacy volume from state sanctioned Chinese online sources compiled using a Crimson Hexagon Buzz Monitor and event data categories compiled using the GDELT Project’s Event Exporter tool. The final section discussed the implications of the regression results for DOD IO planners as well as recommended improvements to tools like Crimson Hexagon.

The main findings of this study illustrate that diplomatic, foreign aid, and military force posture events are drivers of Chinese public diplomacy and that specific events can also be drivers of China’s public diplomacy, both prior to, and after the event. This is
especially true if the event gains international attention, in which case China will be more likely to use public diplomacy to attempt shape the global discussion about the event and about China. These relationships between event data and Chinese public diplomacy reinforce the idea that China uses public diplomacy to support strategic objectives and to brand the country not as a threat but as a responsible global power whose strength lies in a strong economy with a stable population.

There are multiple future research opportunities pertaining to the topic of China’s public diplomacy and the study of strategic influence campaigns. This thesis discusses the use of proactive messaging as opposed to counter-messaging. An interesting research project would be an analysis of the effectiveness of counter-narrative or counter-messaging campaigns against a case study country, such as China or Russia, or non-state actors, such as terrorist organizations. Another important research project would be to analyze the accuracy of sentiment analysis tools as a metric of measurement for information campaigns seeking to influence a target audience’s behavior. For instance, is a target audience with overwhelmingly positive views toward the United States more likely to take action that is supportive of U.S. policy and objectives? Finally, a comparative study investigating which tools more accurately measure effectiveness, comparing passive listening tools like the GDELT Project and Crimson Hexagon, to active listening techniques such as polling data, would be an excellent contribution to this area of study.

This thesis analyzed the drivers of Chinese public diplomacy using tools that are gaining attention in DOD IO communities. These tools are critical to the analysis of state and non-state actor messaging, and can provide analysts valuable clues as to how an actor may behave. As China continues to assert its influence throughout the world it is critical to understand what China is doing and why, in order to accurately assess the potential threats posed by China’s rise. To maintain an advantage in the information environment, the United States must continue to development technologies like Internet-monitoring tools but more importantly, the United States must invest more in the professionals who are tasked to win the battles of strategic influence by providing them with the best education and training, and by creating organizational structures that promote interagency cooperation.
APPENDIX A. PUBLIC DIPLOMACY SEARCH PARAMETERS

Monitor Keywords: ((Message themes) AND (CHINA) AND (potential case study countries) AND (twitter handles) OR (websites)):

("Chinese culture" OR "cultural exchanges" OR "cultural exhibit" OR "Chinese cultural exhibit" OR "Chinese cultural exhibits" OR "student exchange" OR exchange OR culture OR "business exchange" OR "citizen exchanges" OR "military exchange" OR "military to military exchange" OR "military-to-military exchanges" OR "military-to-military relations" OR "PLA peacekeeping" OR "Peoples liberation army peacekeeping" OR "peoples liberation army mission to UN" OR "peoples liberation army mission to the United Nations" OR "PLA UN peacekeeping mission" "Chinese United Nations Peacekeeping" OR "peaceful development" OR "heping fazhan" OR "和平发展" OR "economic development" OR "harmonious society" OR "hexie shehui" OR "和谐社会" OR "harmonious region" OR "win- win" OR "win win" OR "Win-Win cooperation" OR "mutual cooperation" OR "international cooperation" OR "international partner" OR "international partnership" OR "international partners" OR "bilateral cooperation" "bilateral partner" OR "bilateral partnership" OR "bilateral partners" OR "multilateral cooperation" OR "multilateral partner" OR "multilateral partners" OR "multilateral partnership" OR "responsible partner" OR "economic modernization" OR "industrial modernization" OR "military modernization" OR "Peoples liberation army modernization" OR "PLA modernization" OR "economic growth" OR "Beijing consensus" OR "china young volunteers association" OR "Confucius institute" OR "overseas Chinese affairs office of the state council" OR "trans pacific partnership" OR TPP OR "Association of Southeast Asian Nations" OR ASEAN OR "freedom of navigation" OR "Freedom of the seas" OR "five principles of peaceful coexistence" OR "five PPC" OR "5 PPC" OR "nonintervention foreign policy" OR "nonintervention" OR "noninterference principle" OR "economic independence" OR "the Hague" OR "SCS Arbitration" OR "South China Sea Arbitration" OR "SCS Ruling" OR "public diplomacy" OR "cultural diplomacy" OR "china’s tourism diplomacy" OR "Tourism diplomacy" OR "cultural ambassador" OR "Chinese language education" OR "experience China" OR "South China Sea" OR SCS OR Netizens OR "seeking truth" OR "human rights" OR "China’s Rise" OR "China Threat" OR "China’s environmental crisis" OR Tibet OR Xinjiang OR Taiwan OR "cross-strait policy" OR "9 dash line" OR "Nine Dash line" OR "one belt one road" OR "foreign aid" OR "foreign direct investment" OR "Humanitarian aid" OR "economic aid" OR "free trade" OR "China model" OR "anti-corruption" OR "corruption policy" OR "Go-out" OR "going out" OR "go south" OR "corporate Diplomacy" OR "great revitalization" OR "Weida fuxin" OR "伟大复兴" OR "Peaceful Rise" OR "heping jueqi" OR "和平崛起" OR "go abroad" OR zauhuuq OR "出国" OR "去国外" OR "close-to principles" OR santiejing OR "贴近原
economic forum” OR “Boao Forum” OR “Beijing International Conference” OR “Shanghai International Conference” OR “Chinese Model” OR “China model” OR “Shanghai Cooperation Organization” OR “White Paper” OR “Chinas peaceful development road” OR “PRC donations” OR “China donates” OR “Chinese government donation” OR “PRC donated” OR “PRC donates” OR “Chinese donations” OR “PRC grant” OR “Chinese grant” OR “Chinese loan” OR “PRC loan” OR “infrastructure development” OR “foreign infrastructure development” OR “agricultural development” OR “infrastructure agreement” OR “infrastructure agreements” “trade cooperation” OR “military equipment sales” OR “military defense contract” OR “The China Road and Bridge Corporation” OR “China Radio International” OR “China Red Cross Society” OR “the All-China Federation of Trade Unions” OR ACFTU OR “PRC Scholarships” OR “National Office for Teaching Chinese as a Foreign Language” OR NOCFL OR “one China” OR “one China policy” OR “Chinese embassy” OR “PRC embassy” OR “Ministry of Resources” OR “Ministry of Defense” OR “Chinese peoples association for friendship with foreign countries” OR CPAFFC OR “China National Tourism Administration” OR CNTA OR “Shanghai tourism commission” OR “Chinese national office for teaching Chinese as a foreign language” OR “Confucius Colleges” OR “Asia Games” OR “Chinese Soft Power” OR “China soft power” OR “international academic cooperation” OR “economic cooperation” OR “business cooperation” OR “Chinese Cultural events” OR “Chinese propaganda” OR “PLA propaganda” OR Peoples liberation army propaganda” OR “PRC Propaganda Office” OR “PRC Foreign propaganda office” OR “Chinese propaganda office” OR “Chinese foreign propaganda office” OR “think-tank communication” OR “cross-cultural communication” OR “cross cultural exchanges” OR “cross-cultural exchange” OR “cross cultural exchange” OR “All-China Youth Federation” OR “youth exchanges” OR “China’s National conference on Science and Technology innovation” OR “cultural exchange mechanism” OR “media cooperation” OR “Forum on media cooperation” OR “State Administration of the Press, publication, radio, film and television of China” OR “window into China” OR “foreign media investment”) AND ((China OR “Peoples Republic of China” OR PRC OR Chinese) AND (Argentina OR Brazil OR Canada OR France OR Germany OR Ghana OR Greece OR India OR Indonesia OR Israel OR Italy OR Japan OR Jordan OR Kenya OR Lebanon OR Malaysia OR Mexico OR Nigeria OR Pakistan OR Palestinian Territory OR Philippines OR Poland OR Russia OR Senegal OR South Africa OR South Korea OR Spain OR Turkey OR Uganda OR UK OR “United Kingdom” OR England OR Briton OR USA OR “United States” or “United States of America” OR U.S. OR Venezuela) AND (author: @CCTV_World OR author: @CCTV_America OR author: @CCTVnews OR author: @CCTV_TheHeat OR author: @CCTVdialogue OR author: @CCTVtravelogue OR author: @CCTV_brk OR author: @CCTVnewsafica OR author: @CCTV_CHINA OR author: @CCTVgloblbiz OR author: @CCTVAmericasNOW OR author: @eurobreaking OR author: @CCTV OR author: @FullFrameCCTV OR author: @Chinascio OR author: @Chinaoergcn OR author: @PDChina OR author: @XHNews OR author: @china OR author:
site: “fr.chineseembassy.org” OR site: “fr.china-embassy.org” OR site:
“lyon.consulatchine.org” OR site: “marseille.china-consultate.org/” OR site:
“marseille.chineseconsulate.org” OR site: “papeete.chineseconsulate.org” OR site:
“consulatchine-strasbourg.org” OR site: “strasbourg.chineseconsulate.org” OR site:
“strasbourg.china-consultate.org” OR site: “china-botschaft.de” OR site:
“de.chineseembassy.org” OR site: “de.china-embassy.org” OR site: “frankfurt.china-
consultate.org” OR site: “frankfurt.chineseconsulate.org” OR site: “gr.china-embassy.org” OR site: “gr.chineseembassy.org” OR site: “it.chineseembassy.org” OR site: “it.china-embassy.org” OR site: “firenze.china-consultate.org/chn/” OR site: “milano.china-
consultate.org” OR site: “chinaembassy.org.pl” OR site: “pl.chineseembassy.org” OR site: “pl.china-embassy.org” OR site: “gdansk.chineseconsulate.org” OR site:
“embajadachina.es” OR site: “es.chineseembassy.org” OR site: “es.china-embassy.org” OR site: “barcelona.china-consultate.org” OR site: “barcelona.chineseconsulate.org” OR site: “chinese-embassy.org.uk” OR site: “belfast.china-consultate.org” OR site:
“belfast.chineseconsulate.org” OR site: “edinburgh.china-consultate.org” OR site:
“edinburgh.chineseconsulate.org” OR site: “manchester.china-consultate.org” OR site:
“manchester.chineseconsulate.org” OR site: “ve.chineseembassy.org” OR site: “ve.china-
embassy.org” OR site: “embajadachina.org.mx” OR site: “mx.china-embassy.org” OR site: “mx.chineseembassy.org” OR site: “gh.china-embassy.org” OR site: “ke.china-embassy.org” OR site:
“ke.chineseembassy.org” OR site: “ng.chineseembassy.org” OR site: “ng.china-
embassy.org” OR site: “lagos.china-consultate.org” OR site: “lagos.chineseconsulate.org” OR site: “sn.chineseembassy.org/” OR site: “chinese-embassy.org.za” OR site: “za.china-
embassy.org” OR site: “za.chineseconsulate.org” OR site: “capetown.china-consultate.org” OR site: “capetown.chineseconsulate.org” OR site: “durban.china-consultate.org” OR site: “durban.chineseconsulate.org” OR site: “johannesburg.china-consultate.org” OR site:
“johannesburg.chineseconsulate.org” OR site: “ug.china-embassy.org” OR site:
“ug.chineseembassy.org” OR site: “il.china-embassy.org” OR site: “il.chineseembassy.org” OR site: “jo.chineseembassy.org” OR site: “jo.china-embassy.org” OR site: “lb.china-
embassy.org” OR site: “lb.chineseembassy.org” OR site: “tr.chineseembassy.org” OR site: “tr.china-embassy.org” OR site: “istanbul.chineseconsulate.org” OR site:
“istanbul.chineseconsulate.org” OR site: “in.china-embassy.org” OR site:
“mumbai.chineseconsulate.org” OR site: “mumbai.china-consultate.org” OR site:
“denpasar.china-consultate.org” OR site: “denpasar.chineseconsulate.org” OR site:
“medan.china-consultate.org” OR site: “medan.chineseconsulate.org” OR site: “surabaya.chineseconsulate.org” OR site: “surabaya.china-consultate.org” OR site:
APPENDIX B.  REGRESSION MODELS

Model One:

\[ y_1 = \beta_1 (x_1) + \beta_2 (x_2) + \beta_3 (x_3) + \beta_4 (x_4) + \beta_5 (x_5) + \beta_6 (x_6) + \beta_7 (x_7) + \beta_8 (x_8) + \beta_9 (x_9) + \beta_{10} (x_{10}) + \beta_{11} (x_{11}) + \beta_{12} (x_{12}) + \beta_0 \]

When:

- \( y_1 \) = Count of Chinese public diplomacy posts per day
- \( x_1 \) = Protest count per day
- \( x_2 \) = Protest 30-day rolling average
- \( x_3 \) = Force Posture count per day
- \( x_4 \) = Force Posture count 30-day rolling average
- \( x_5 \) = Diplomatic Cooperation count per day
- \( x_6 \) = Diplomatic Cooperation 30-day rolling average
- \( x_7 \) = Provide Foreign Aid count per day
- \( x_8 \) = Provide Foreign Aid 30-day rolling average
- \( x_9 \) = Protest count per day
- \( x_{10} \) = Protest 30-day rolling average
- \( x_{11} \) = Force Posture count per day
- \( x_{12} \) = Force Posture count 30-day rolling average

Model Two:

\[ y_1 = \beta_1 (x_1) + \beta_2 (x_2) + \beta_3 (x_3) + \beta_4 (x_4) + \beta_5 (x_5) + \beta_6 (x_6) + \beta_7 (x_7) + \beta_8 (x_8) + \beta_9 (x_9) + \beta_{10} (x_{10}) + \beta_{11} (x_{11}) + \beta_{12} (x_{12}) + \beta_{13} (x_{13}) + \beta_{14} (x_{14}) + \beta_{15} (x_{15}) + \beta_0 \]

When:

- \( y_1 \) = Count of Chinese public diplomacy posts per day
- \( x_1 \) = Protest count per day
- \( x_2 \) = Protest 30-day rolling average
- \( x_3 \) = Force Posture count per day
- \( x_4 \) = Force Posture count 30-day rolling average
- \( x_5 \) = Diplomatic Cooperation count per day
- \( x_6 \) = Diplomatic Cooperation 30-day rolling average
- \( x_7 \) = Provide Foreign Aid count per day
- \( x_8 \) = Provide Foreign Aid 30-day rolling average
- \( x_9 \) = Protest count per day
- \( x_{10} \) = Protest 30-day rolling average
- \( x_{11} \) = Force Posture count per day
- \( x_{12} \) = Force Posture count 30-day rolling average
- \( x_{13} \) = July 12 2016
- \( x_{14} \) = July 12 2016 Pre 30-day
- \( x_{15} \) = July 12 2016 Post 30-day
Model Three:

\[ y_1 = b_1(x_1) + b_2(x_2) + b_3(x_3) + b_4(x_4) + b_5(x_5) + b_6(x_6) + b_7(x_7) + b_8(x_8) + b_9(x_9) + b_{10}(x_{10}) + b_{11}(x_{11}) + b_{12}(x_{12}) + b_{13}(x_{13}) + b_{14}(x_{14}) + b_{15}(x_{15}) + b_{16}(x_{16}) + b_{17}(x_{17}) + b_{18}(x_{18}) + b_0 \]

When:  
\( y_1 = \) Count of Chinese public diplomacy posts per day
\( x_1 = \) Protest count per day
\( x_2 = \) Protest 30-day rolling average
\( x_3 = \) Force Posture count per day
\( x_4 = \) Force Posture count 30-day rolling average
\( x_5 = \) Diplomatic Cooperation count per day
\( x_6 = \) Diplomatic Cooperation 30-day rolling average
\( x_7 = \) Provide Foreign Aid count per day
\( x_8 = \) Provide Foreign Aid 30-day rolling average
\( x_9 = \) Protest count per day
\( x_{10} = \) Protest 30-day rolling average
\( x_{11} = \) Force Posture count per day
\( x_{12} = \) Force Posture count 30-day rolling average
\( x_{16} = \) September 27 2015
\( x_{17} = \) September 27 2015 Pre 30-day
\( x_{18} = \) September 27 2015 Post 30-day

Model Four:

\[ y_1 = b_1(x_1) + b_2(x_2) + b_3(x_3) + b_4(x_4) + b_5(x_5) + b_6(x_6) + b_7(x_7) + b_8(x_8) + b_9(x_9) + b_{10}(x_{10}) + b_{11}(x_{11}) + b_{12}(x_{12}) + b_{13}(x_{13}) + b_{14}(x_{14}) + b_{15}(x_{15}) + b_{16}(x_{16}) + b_{17}(x_{17}) + b_{18}(x_{18}) + b_0 \]

When:  
\( y_1 = \) Count of Chinese public diplomacy posts per day
\( x_1 = \) Protest count per day
\( x_2 = \) Protest 30-day rolling average
\( x_3 = \) Force Posture count per day
\( x_4 = \) Force Posture count 30-day rolling average
\( x_5 = \) Diplomatic Cooperation count per day
\( x_6 = \) Diplomatic Cooperation 30-day rolling average
\( x_7 = \) Provide Foreign Aid count per day
\( x_8 = \) Provide Foreign Aid 30-day rolling average
\( x_9 = \) Protest count per day
\( x_{10} = \) Protest 30-day rolling average
\( x_{11} = \) Force Posture count per day
\( x_{12} = \) Force Posture count 30-day rolling average
\( x_{19} = \) June 18 2014
\( x_{20} = \) June 18 2014 Pre 30-day
\( x_{21} = \) June 18 2014 Post 30-day
Model Five:

\[ y_1 = b_1(x_1) + b_2(x_2) + b_3(x_3) + b_4(x_4) + b_5(x_5) + b_6(x_6) + b_7(x_7) + b_8(x_8) + b_9(x_9) + b_{10}(x_{10}) + b_{11}(x_{11}) + b_{12}(x_{12}) + b_{13}(x_{13}) + b_{14}(x_{14}) + b_{15} \]

When: 

- \( y_1 \) = Count of Chinese public diplomacy posts per day
- \( x_1 \) = Protest count per day
- \( x_2 \) = Protest 30-day rolling average
- \( x_3 \) = Force Posture count per day
- \( x_4 \) = Force Posture count 30-day rolling average
- \( x_5 \) = Diplomatic Cooperation count per day
- \( x_6 \) = Diplomatic Cooperation 30-day rolling average
- \( x_7 \) = Provide Foreign Aid count per day
- \( x_8 \) = Provide Foreign Aid 30-day rolling average
- \( x_9 \) = Protest count per day
- \( x_{10} \) = Protest 30-day rolling average
- \( x_{11} \) = Force Posture count per day
- \( x_{12} \) = Force Posture count 30-day rolling average
- \( x_{19} \) = October 27 2014
- \( x_{20} \) = October 27 2014 Pre 30-day
- \( x_{21} \) = October 27 2014 Post 30-day
LIST OF REFERENCES


INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California