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Electoral Campaigning and the Internet in Japan in the 2010s

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Abstract

Electoral Campaigning and the Internet in Japan in the 2010s

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In the late spring of 2013, Japanese politicians passed a revision to their election laws that essentially unbanned the use of the Internet in electoral campaigns. This dissertation is composed of three independent, but thematically-linked studies revolving around the passing of this legal revision and its early effects on Japanese electoral politics. The first study is a process tracing of the factors that led to 2013 Public Offices Election Law (POEL) revision. It uses an institutional change framework which provides insight into both how and why the legalization happened when it did. This study considers the implications of the 2013 legal change not only for election campaigning, but also for Japanese politics, media systems, and studies of institutional change. The second study is a quantitative analysis of the relationship between use of the social media platform Twitter by politicians and voting results. This study uses three distinct statistical methods

and the unique circumstance of the 2013 POEL revision as the basis for its analysis of an original dataset built around all the candidates in the 2014 general election in Japan. The third study is a mixed-methods content analysis of an original dataset of tweets from Japanese politicians and candidates during the 2014 general election. Pulling the tweet history of more than 500 individuals, this study analyzes nearly one million Japanese language tweets from over a six-year period to try and determine what type of content, political and non-political, was posted during various time periods, including before and after the 2013 POEL revision and during the 2014 general election campaign period.

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DEDICATION

This work is dedicated to my wife Hiroko and son Zen. They are the driving forces of my life.

Chapter 1. INTRODUCTION

In the late spring of 2013, Japanese politicians passed a revision to their election laws that essentially unbanned the use of the Internet in electoral campaigns. This dissertation is composed of three independent, but thematically-linked studies revolving around the passing of this legal revision and its early effects on Japanese electoral politics in the 2010s.

2013 was a digital political milestone in Japan: political parties and politicians became free to campaign online for the first time in national and local elections. After the 2012 election, the Liberal Democratic Party of Japan pushed through legal revisions to the Public Offices Election Law (POEL) creating provisions for online campaigning activities common in other democracies. The first study (chapter 2) seeks to understand the sociopolitical and legal origins of why the Internet was previously restricted in this technologically advanced democracy, the process that led to the legal change two decades after the popularization of the Internet, and the implications of the new law. Using an institutional change framework and process-tracing techniques, this study finds the restrictiveness of the prior version of the law to be due to bureaucratic interpretation of outmoded regulation in a civil law society and ruling party resistance to liberal changes to electoral processes that was strong enough to prevent a new or revised law from being passed for nearly two decades. The 2013 legalization followed a shift in the sociopolitical environment relating to the historic ruling party switches in 2009 and 2012, making it seemingly inevitable. Finally, this study provides deeper insight into the shifting realities of the institutions of Japanese politics, media, and the Internet.

The December 2014 general election in Japan was another digital milestone in Japanese politics. As the result of the liberal revision to the generally restrictive national elections law, the

occasion marked the first real time in the country that candidates became able to freely use the Internet to seek votes. Using a unique full population dataset of candidates running in single member district races in combination with the 2013 electoral policy change, the second study (chapter 3) seeks to discover whether the use of Twitter—and by extension social media—is associated with the electoral fortunes of candidates. Based on the results of three distinct statistical techniques, this study finds that use of Twitter in general did not affect the 2014 election, despite its popularity among politicians and a few notable outliers. This study adds a new dimension to the rich body of work on Japanese elections and the growing body of work on digital politics and Twitter use.

Until a 2013 legal revision to the POEL, Japanese politicians were officially barred from using Internet-based tools, such as Twitter, during designated electoral campaign periods. In 2014, Japan's first major national election was held during which the effects of this legal change could be tested. How did politicians choose to utilize these newly accessible digital campaign tools? Utilizing a unique longitudinal dataset of just under one million social media posts, the third study (chapter 4) seeks to discuss differences in the general content and trends of social media posts over a six-year period from Japanese politicians and candidates who participated in the 2014 election to discern whether and to what extent the 2013 campaign law change affected politicians' and candidates' postings about ramen (daily matters) and rhetoric (politics and policy). Four specific research questions are addressed: To what extent do general tweeting habits of politicians and election candidates in Japan match those in Western democracies? Did the 2013 legal revision of the Japanese election law to allow for the use of Internet tools in election campaigns affect the general tweeting habits of politicians and election candidates? What are the contents of the social media topically as posted by Japanese politicians and candidates on Twitter, and how does that

fluctuate based on individual characteristics of the users making the posts? Do the contents of tweets affect their popularity among other users? This study finds Japanese politicians do follow their Western counterparts in terms of focusing on politically oriented content, with general habits changing based on major political events such as elections. In particular, however, the anticipation of the 2013 legal change did appear to affect politicians' willingness to sign up for Twitter and to tweet. Specific tweeting habits are also affected by individual characteristics of the tweeting population, most notably party affiliation.

Combined, these three studies provide insight into the interconnection of multiple domains of study, including political science, communications, and Internet studies, from the perspective of an important non-Western democratic nation. These studies also lay the foundation for much further research.

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Chapter 2. THE LEGALIZATION OF DIGITAL ELECTORAL CAMPAIGNING IN JAPAN

2.1 INTRODUCTION

橋下徹 (Hashimoto Tōru) @t_ishin

そして今行われている選挙運動は何か。バカみたいな形式的ルールによる儀式的な運動。名前の連呼。何枚枚と言う証紙をビラに貼る無意味な途方もない前近代的な作業。何から何までばかげている選挙運動。ネットでの選挙運動を解禁すれば、どれだけ選挙が盛り上がるか。新しいサービス業が生まれるか。

What is this campaign exercise we are doing now—these stupid and formal rules based on ceremony, these meaningless and preposterously outdated activities like saying our names over and over again, and handing out a certain number of stamped fliers? Everything about it is absurd. If we unbanned online campaigning, how much more invigorated would elections become? What new businesses might be created?2

Retweets 194 Likes 67

12:22 PM - 4 Dec 2012

https://twitter.com/t_ishin/status/276059010065653761

On December 9, 2012, one week before the Japanese Lower House general elections, former lawyer, then-Mayor of Osaka City and founding-head of the Japan Restoration Party³, Hashimoto

¹ This study opts to use the Japanese-style of name use, whereby the family name comes before the given name.

² Partial translation via Koh (2012b).

³ The *Japan Restoration Party* is a Japanese political party founded in mid-2012 by Hashimoto Tōru with the help of then-Mayor of Tokyo Ishihara Shintaro and Osaka Prefectural Governor Matsui Ichiro, among others. The party was an outgrowth of Hashimoto's regional political party, the *Osaka Restoration Party*, started in 2010. Promoting a set of national policies which included more regional economic autonomy, the party was dubbed the “Third Force” by those who hoped it would help break up the national rule of the Liberal Democratic Party and its main opponent, the Democratic Party of Japan (Johnston 2012; Koh 2012a).

Tōru stated in a stump-style speech in Akihabara, the bustling technology hub of Japan located in the heart of Tokyo, “It is possible that after the election I might be arrested. Please help me at that time” (Koh 2012b)⁴. What had Hashimoto done that would cause him, the elected head of the third largest city in a major first-world democracy, to make such a precarious prediction in public? He had utilized the social media microblogging platform Twitter to vigorously announce to his more than 900,000 followers (a record for a Japanese politician at the time) his displeasure for the nation’s restrictive electoral campaign laws, seemingly in defiance of that law’s de facto ban on Internet use by Japanese politicians during election campaign periods (Koh 2012b).

The debate over online campaigning, however, goes back well before Hashimoto’s political career or the creation of Twitter. Like in the U.S., Japanese politicians had been online since the 1990s (Tkach-Kawasaki 2011; Sasaki 2013; Nishida 2013b, 95–96). While Barack Obama would make history with his successful online campaigns in the 2008 and 2012 U.S. presidential elections (Bimber 2014), and the Arab world would mobilize against dictators with the notable aid of digital technologies (Farrell 2012; Howard and Hussain 2011; Lynch 2011), Japanese politicians kept themselves legally antiquated in regard to the Internet. It is tempting to point at the story mentioned in brief above—a rebellious Hashimoto and his fledging party leading a defiant charge against an entrenched set of political and bureaucratic institutions—as the central story of noteworthy political change. However, this sort of account is obviously too simplistic; the Japan Restoration Party had only taken a mere 11 percent of the House of Representatives in 2012 and had no seats in the Upper House of Parliament at the time. Instead, Hashimoto and his Twitter account were

⁴ Also see, Sankei Shimbun. 2012. “「*Taiho Sareru Kamo*」 Tsuittā Keizoku de Hashimoto-Shi Hatsugen, *Chōshū No Han’ nō Imaichi?* [‘I May Be Arrested’ Hashimoto Announces in Relation to Twitter, Response from Listeners Lacking?].” 10 December 2012. http://sankei.jp.msn.com/west/west_affairs/news/121209/waf12120920350021-n1.htm. Accessed 7 June 2015.

just a reflection of the political mood of that time, one in which a major institutional change had been anticipated for several years, but the right timing to spend the political capital necessary to make the change had become elusive under the weight of other greater political priorities. And as it turns out, a variety of actors and events working in tandem over multiple years finally accumulated into a period of inevitability. In April, 2013, the election law, more formally known as Japanese Public Offices Election Law (POEL),⁵ would be revised by the Japanese Diet with highly specific regulation designed to allow for online election campaigns (Ministry of Internal Affairs and Communication 2013).

Using an institutional change framework detailed by Mahoney and Thelen (2010), this case study seeks to trace the process that led to the 2013 revision to the electoral law allowing for online campaigns in Japan. However, as important to the question of why the law was changed is why the law was not changed for so many years despite rapid advancement of Internet technologies and usage. Therefore, this study specifically seeks answers to four major questions: 1) Why was Japan's Public Offices Election Law election law so restrictive for so long in regard to online campaigning? 2) What accounts for the scope and timing of the liberalization of the election law? 3) What exactly changed in the election law regarding online activity? And, 4) What are the potential implications of online campaigning for Japan? In answering these questions through an institutional change framework, we hope to provide consideration for what this case tells us not only about the direct changes within the Japanese electoral law regarding online campaigning, but also about the shifting realities of the institutions of Japanese politics, media and the Internet.

This study continues as follows: Section I provides a brief primer on institutional change and the general framework used in the analysis. Section II gives background on changes to the greater

⁵ "Public Offices Election Law" is the English translation for the Japanese phrase *kōshoku senkyo hō* (Tkach-Kawasaki 2011, 56).

institutional landscape in which the election law revision for online campaigning in Japan occurred, including changes in Japanese political systems, media systems, and Internet technologies. Section III, analyzes the process that led to the election law revision. This is done first by considering the history of the election law as well as early attempts to see the law changed to reflect the budding Internet in the late 1990s and early 2000s. Then, systematically utilizing news article archives from five major Japanese newspapers⁶, this study analyzes the process that led to the law's revision in 2013 from the first creditable signs the revision would eventually happen in 2009. Finally, Section IV discusses the four underlying questions noted above, and provides greater consideration to the implications and importance of this case study.

2.2 A BRIEF PRIMER ON INSTITUTIONAL CHANGE

Before continuing with details of the study, we must first consider the general framework under which this study operates. To discuss even the background within which the online campaigning legalization is situated requires a discussion of the institutional changes that both primed the legal revision and undoubtedly also affected the final form of the outcome—a logical temporal flow that can be at least partially inferred using the theory of path dependency (Pierson 2004). Specifically, this study follows in the vein of Woodall's (2014) work on institutional change in the Japanese cabinet system by drawing on the framework set out by Mahoney and Thelen (2010). However, unlike Woodall, this study seeks to look at a specific policy change (i.e. legalization of the use of the Internet in electoral campaigns) in the context of its institution (the electoral law) and those

⁶ Specifically, five major Japanese newspapers, the *Asahi*, *Yomiuri*, *Mainichi*, *Nippon Keizai*, and *Sankei*, were searched over a four-year period, starting with the 2009 general election and finishing in the months after the POEL revision was passed and the 2013 Upper House election was conducted. The search focused around the term *netto senkyo*, a short-form word popularly understood to refer to online election campaigning (and not the ability to cast votes online, which even many Japanese have assumed).

institutions which layer on top of that (the Japanese political and media systems), rather than the specifically institution itself.

What exactly is an institution? Mahoney and Thelen provide a reasonable, if general, definition, stating institutions are “*relatively enduring* features of political and social life (rules, norms, procedures) that structure behavior and that cannot be changed easily or instantaneously.” According to the authors, their framework analyzes institutional change through a power-distributional approach, which combines historical institutionalism with sociological and rational choice institutionalism. (Mahoney and Thelen 2010, 4). Several key factors are then used to consider institutional change: first, the source of the change, being either *endogenous* or *exogenous*; second, the agent of change, being one of four types categorized by whether or not they seek to preserve institutions and whether or not they follow rules of institutions (*subversives*, *insurrectionaries*, *symbionts*, and *opportunists*); and finally, the type of institutional change, i.e. *displacement* (“the removal of existing rules and introduction of new ones”), *layering* (“the introduction of new rules on top of or alongside existing ones”), *drift* (“the changed impact of existing rules due to shifts in the environment”), and *conversion* (“the changed enactment of existing rules due to their strategic redeployment”). These various agents and types of institutional changes are largely delineated by two key bimodal explanatory factors: the character of existing institutional rules (high or low level of discretion in interpretation/enforcement) and the character of the political context (strong or weak veto possibilities). (Mahoney and Thelen 2010, 15–29). *Table 2.1* delineates how these factors likely connect according to Mahoney and Thelen.

Table 2.1. Likely Delineation of Type and Agent of Change Based on Two Key Factors

		Characteristics of the Target Institution	
		<i>Low Level of Discretion in Interpretation / Enforcement</i>	<i>High Level of Discretion in Interpretation / Enforcement</i>
Characteristics of the Political Context	<i>Strong Veto Possibilities</i>	Type: Layering Likely Agent: Subversives	Type: Drift Likely Agent: Parasitic Symbionts
	<i>Weak Veto Possibilities</i>	Type: Displacement Likely Agent: Insurrectionaries	Type: Conversion Likely Agent: Opportunists

Source: Based on Table 1.4: Contextual and Institutional Sources of Change Agents in Mahoney and Thelen (2010, 28).

Overall, what these components provide is a framework that can be used to analyze and account for the gradual change of institutions and, by extension, to consider specific notable marked points of change within times of greater change. Favorable to the aim of this study, the factorization of institutional change builds off of work focusing on policy change in particular (Hacker 2004). So, with this framework in hand, we begin consideration of the background—the macro-level institutional changes in Japanese political systems, media systems, and the Internet.

2.3 BACKGROUND

2.3.1 *Changing Japanese Political Systems*

Contemporary changes in politically oriented institutions in Japan cannot be considered without, at least in passing, accounting for the recent gradual realignment of the Japanese political system stemming back to the 1994 electoral system reform. From 1955 to 1994, Japan used a *Single Non-Transferable Vote Multi-Member District* (SNTV-MMD) system for parliamentary elections and was dominated by one party, the Liberal Democratic Party (LDP). In the SNTV-MMD system, voters were given a single vote in a district that had multiple representative seats. This system

resulted in political parties having to run multiple candidates in the same district election if they wanted to maximize their chances of winning enough seats to control the Diet; candidates from the same party would end up competing against each other. To ensure that each candidate had enough votes to win a seat without preventing a fellow party member from being elected, each candidate had to develop a loyal and reliable voting base, exemplified in Japanese politics through *koenkai*⁷ support groups.⁸ At the same time, since the candidates could not differentiate themselves by party or platform alone, they turned to *particularistic politics*—politics based on “pork” over policy (Carlson 2007, 1–15; Noble 2010). This tendency towards particularistic politics in large part helped the LDP stay in power because they were the party that had control over the doling of the pork needed to retain loyal supporters and win votes. Particularistic politics also, importantly, led to corruption. The 1955 system, as it was called, came crashing down, starting in 1993, under the weight of increasingly alarming scandals stemming from that corruption and was formally replaced in 1994 (Curtis 1999).

The 1994 electoral system reform swapped the SNTV-MMD system with a mixed-member system involving *single-member districts* (SMD) and *proportional representation* (PR) for the House of Representatives and a combination of SNTV-MMD and PR for the House of Councillors. This new system removed much of the incentive for particularistic politics because candidates for the more powerful House of Representatives, which chooses the Prime Minister, no longer competed against their own party members in individual electoral districts. This meant that LDP politicians (in particular) could promote the party name, policies, and leadership over pork

⁷ *Koenkai* are “permanent formal-membership organizations, or overlapping sets or networks of organizations, devoted to supporting an individual politician and are heavily involved in electoral mobilization,” (Krauss and Pekkanen 2011, 29–30).

⁸ For more insight on *koenkai* and other traditional Japanese campaigning, see Curtis’s (1971) classic, *Election Campaigning, Japanese Style*.

(Rosenbluth and Thies 2010; Estevez-Abe 2014). It also, arguably, led to increased accountability and responsiveness to voters by politicians (Kabashima and Steel 2010).

One of the effects of the electoral system reform was the LDP's loss of power from 2009 to 2012. Notably, this fall from power, albeit temporary, showcased the revised role of party platforms and political leaders in Japanese national politics. After Prime Minister Koizumi Junichiro resigned in 2005, the LDP went through four administrations in just four years. During this period, the LDP backtracked on some of its stances, and the main opposition party of the time—the Democratic Party of Japan (DPJ)—capitalized on the situation. This gave the DPJ a major win in the 2007 Upper House election. In 2009, a wind of change was in the air amongst voters riding on the currents of pessimism from the “Lehman Shock”⁹ and optimism for change stemming from the election of Barack Obama in the United States. The DPJ put forth a set of policy initiatives with the help of two popular opposition leaders: Hatoyama Yukio and Ozawa Ichiro, the latter of whom had been integral in the 1993 defeat of the LDP. The initiatives helped secure not only the DPJ's traditional urban vote, but also the traditionally LDP rural vote by incorporating rural-oriented policies that the LDP had started to abandon (Kabashima and Steel 2010, 128–49). The 2009 DPJ victory was a major event in Japanese politics. However, the party showed its inexperience in leadership, for instance by cycling through Prime Ministers as fast as the LDP had after Koizumi. The DPJ's problems were exponentially compounded by the triple disaster that began on March 11, 2011 (the 3/11 disaster) and the so-called ‘twisted Diet’¹⁰. The Japanese public placed much of the early blame for the Fukushima nuclear reactor meltdown and

⁹ The “Lehman Shock” is an expression commonly used in Japan to refer to the bankruptcy of Lehman Brothers, a major global investment firm, at the height of the Global Financial Crisis in 2008.

¹⁰ “Twisted diet,” derives from the Japanese term *nejire kokkai*, and refers to periods during which the two houses of the Japanese Diet are not controlled by the same party and laws have difficulty passing (Thies and Yanai 2012).

the poor governmental response to the general disaster relief efforts on Prime Minister Kan Naoto and the DPJ as a whole (Samuels 2013). The LDP then leveraged its control of the Upper House to obfuscate the DPJ's attempts to enact policies. Playing on resulting public discontent of the DPJ administration, in combination with growing nationalistic feelings stemming largely from territorial disputes with China, the LDP won back control of the government at the end of 2012 (Pekkanen and Reed 2013; Estevez-Abe 2014). This series of events, as it turns out, occupies a critical role in the discussion of the electoral law revision at the center of this study.

2.3.2 *Changing Japanese Mass Media Systems*

Media systems are another institution integral to the story of online campaigning in Japan. Williams and Delli Carpini (2011) write that “significant changes in the role of media in a democracy result both from changing economic, political, cultural and technological conditions (including telecommunications technologies) and from the norms, processes, and institutions (dubbed “media regime”) that develop from political struggles over these changes. The emerging media regime shapes the resulting discursive environment and so, in turn, shapes future economic, political, cultural, and technological conditions” (B. A. Williams and Delli Carpini 2011, 132–33). While Williams and Delli Carpini based their writings on the history of the US media system, the findings certainly could be deemed applicable to Japan and to the effects its media system has had on that nation.

Pharr (1996) provides an excellent summary of the modern history of Japanese media systems, one which encapsulates the relationship between the mainstream media and the state. Essentially, this history starts with state control of printed materials dating back centuries. In the Tokugawa era (1603–1868) there was “strict censorship of public materials.” Then, when the very first daily newspapers came out in the Meiji era (1868–1912), they were, “in a very literal sense, servants of

the state.” While newspapers did seek editorial freedoms to criticize the government, press laws enacted during this era also set the stage for media constraints and censorship up through World War II. Pharr argues that this progression established a dual tradition within the Japanese media—one as “servant” and another as “watchdog.” While the U.S. occupation officially dismantled media censorship laws, it did not truly dismantle pre-war relationships. As Japan’s economy rapidly recovered and expanded, multimedia conglomerates grew. Within these conglomerates, and with the help of reporters’ clubs, informal rules were instituted on acceptable reporting practices, limiting the type of information the general public might receive (Pharr 1996, 9–14). The archetypal example of this is the relationship between NHK, Japan’s public broadcasting system and top media source, and the LDP. NHK controls its own day-to-day functions, but has a board of governors that is appointed by the Prime Minister and receives partial funding from the government. From the 1960s to the 1990s, NHK reporters and national politicians, where they could, worked to each other’s mutual benefits. Essentially, NHK kept its relative autonomy and ability to report on governmental action; in exchange politicians were kept happy by the NHK self-censoring certain political information (Krauss 2000). At the budding of the Internet era, scholars still found “a very mixed picture of restriction and independence, cohesion and diversity in the Japanese media” (Krauss 1996, 358; Freeman 2000).

The ongoing evolution of the Internet potentially upsets the balance between the Japanese press and government, as it has between mass media and governments across the world (Ridout 2013; Rausch 2014). The diversity of news and media outlets, particularly on the Internet, has grown exponentially throughout the world in the past several decades, leading to media fragmentation—Japan is no exception. Media fragmentation means that traditional mass media sources are no longer necessarily in complete control of what information is publicly dispersed. This undoubtedly

presents a problem for politicians. For example, if a politician says or does something embarrassing on the campaign trail, the resulting news story might have previously been self-censored by the media; this is no longer possible with the multitude of independent information sources that now exist. Further, up until the 1990s, given the historical relationship of Japanese mass media with the government, outlets for political communication were limited; but Japanese citizens seemed generally satisfied with the information provided to them via the media, even if limited in actuality (Krauss 2000). That level of satisfaction with traditional media has changed, and so have Japanese politicians' attitudes towards new media. It is therefore come as no surprise that the politicians would seek new ways to control their image, particularly online.

2.3.3 *Japan and Changing Communication through the Internet*

Finally, to understand the context in which Japan restricted and eventually revised online campaigning laws, we must consider the institutions that have arisen from the Internet but are not directly connected to mass media. The Internet is an ever-evolving technology which has changed the daily lives of people across the globe. The Japanese have been online as long as almost all other developed nations outside of the United States; however, the patterns of usage in Japan have progressed in a different manner than other nations. Japan's Ministry of Internal Affairs and Communication (MIC), at the beginning of their 2015 whitepaper on information and communications technology, divided three recent decades of communication evolution into three eras: The Telephone Era (1985-1995), The Internet and Mobile Phone Era (1995-2005), and the Broadband and Smartphone Era (2005-2015) (Ministry of Internal Affairs and Communication 2015, 2). Importantly, unlike in the United States, Japan's electronic culture emphasized mobile

devices over the personal computer in the early years after the advent of the World Wide Web;¹¹ this led to different patterns in online use in Japanese society.

The use of the Internet has become ubiquitous in Japanese society. According to the Ministry of Internal Affairs and Communication (MIC), as of the end of 2014 approximately 100 million of the approximate 127 million people in the nation accessed the Internet, whether it was through personal computers, cellphones, or other means. This represents an 82.8 percent penetration rate in the population.¹² This penetration rate was an increase from 66.0 percent a decade earlier. Within the demographic of twenty- to forty-nine-year-olds¹³, the penetration rate jumps to around 97 percent, and even hovers around 50 percent for 70- to 79-year-olds. MIC estimates 53.5 percent of people had used home computers, while 47.1 percent had used smart phones.¹⁴ Popular reasons for accessing the Internet include: email use, social media and video sharing access, weather and news checking, mapping services, and online shopping and trading (Ministry of Internal Affairs and Communication 2015, 369–72).

Furthermore, there is heavy usage of social media-type sites in terms of total site traffic. A survey of data from Alexa.com in October 2015 (as roughly noted in *Table 2.2*) indicated that of the top 25 sites visited in Japan, 15 of them are social media in one form or another.

¹¹ For a brief history of the World Wide Web, see (World Wide Web Foundation 2016; Cailliau 2016).

¹² According to MIC, the penetration rate is calculated from the percentage of the population six years of age and older. Anyone who uses a device connected to the Internet, including personal computers, cellular phones, tablets, and gaming consoles, is considered an Internet user. 74.1% of Internet users use it daily, and a further 17.3 percent use at least weekly (Ministry of Internal Affairs and Communication 2015, 369–70).

¹³ It is worth noting here that 20 is the age of majority in Japan.

¹⁴ Additionally, 17.8 percent of the population had used a traditional mobile phone (Ministry of Internal Affairs and Communication 2015, 370).

Table 2.2. Simple Social Media Use in Japan Statistics

Site	Rank in Japan	Global Rank	Type of Site
youtube.com	4	3	Video Sharing
fc2.com	6	51	Blogging, Video Sharing, Live Streaming, etc.
nicovideo.jp	8	78	Video Sharing, Live Streaming
facebook.com	9	2	Social Networking
twitter.com ¹⁵	10 / 18	9 / 24	Social Networking, Microblogging
livedoor.com ¹⁶	11 / 19 / 21 / 25	100 / 227 / 298 / 339	Blogging
wikipedia.org	12	7	Crowd-Sourced Collaboration
ameblo.jp	14	130	Blogging, Social Networking
pixiv.jp	20	214	Social Networking (artists)
xvideos.com	23	47	Adult Video Sharing
2ch.net	24	308	Forum

Source: Alexa.com as gathered by author on October 29, 2015.

At the same time, while people around the world are attempting to use the Internet to change politics, the Japanese seem to have reservations about using the Internet for political purposes (Ducke 2011; McCargo and Hyon-Suk 2010; Nozawa 2012; Ducke, Wiczorek, and Tkach-Kawasaki 2003). Japanese Internet usage patterns start to shed some light on this, indicating an underlying reluctance by those who attempt to use the Internet for political purposes. For instance, most adults note they use social media to communicate with acquaintances, but less than half use it to search for desired information. Further, only a minority uses social media to connect with people of similar interests or to announce information about themselves or their personal work

¹⁵ The 18th ranked website was “t.co”, a domain used by twitter to truncate urls.

¹⁶ Livedoor is both a blogging and a portal site. The 19th and 21st ranked website is listed as Doorblog.jp and Blog.jp, domains belonging to Livedoor.

(Ministry of Internal Affairs and Communication 2015, 372). These sorts of figures show an underlying reluctance to the use of the Internet for political purposes by the Japanese in general.

What might explain this negative orientation towards political communication via technology? Ducek asserts that the potential of the Internet for Japanese political communication is hindered by two factors: “the nature of the Internet [in Japan] and the nature of Japanese politics” (Ducek 2011, 160). Certainly, there is the potential hindrances related to technical aspects of the Internet in Japan. Ikeda, Richey, and Teresi (2013) suggest that use of mobile platforms, which have traditionally high penetration rates, negatively affects political participation in Japan over use of PC. Additionally, Japan had—until 2013—disallowed three of the major potential political uses of the Internet: online campaigning, electronic voting, and online voting (Okada 2013). There are also potential cultural hindrances. Nozawa (2012) asserts that the Japanese generally do not like to put their real selves on display online, and that that anonymity has become relatively ubiquitous for the Japanese online. This lean towards anonymity has undoubtedly contributed towards a distrust of political bloggers found by McCargo and Hyon-Syk (2010). Similarly, it has been noted that Japanese civil society groups have largely used the Internet for either broadcasting or internal communication, but not for online interaction, stemming from an apparent reluctance to interact directly with strangers (Ducek 2011).

2.4 DATA ANALYSIS

With a basic understanding of changes in three significant institutional systems—the political, the mass media, and the Internet—we now move on to considering changes related to the POEL electoral law itself. We start by looking at the history of the law, as well as at early attempts to see the law changed in favor of allowing Internet activity. We move on to discuss the critical period

from the DPJ victory in the general election of 2009 to the legal revision of POEL shortly after the LDP returns to power in 2013.

2.4.1 *The Changing Public Offices Election Law*

2.4.1.1 Early History of the Electoral Law

The legalities surrounding electoral campaigning in Japan have been set by evolving institutions. The origins of the law can be traced back to an 1880 (Meiji Era) election law that helped establish the Lower House of the Japanese parliament. It was during this period that Japan fashioned a modern political system like those found in the West. In 1925, an election law was passed which enacted universal suffrage; however, this law also introduced restrictions on campaigning, such as on canvassing, campaign materials distribution, and campaign expenditures. Further restrictions were added in 1934. Then, after the end of World War II in 1945, a new Lower House election law was established—this would become the basis of the current Public Offices Election Law, enacted in 1950 (Tkach-Kawasaki 2011, 58–59).

The 1950 election law was designed to strictly control campaign activities in the name of electoral fairness. However, it is well acknowledged that the rules, which severely limit methods of campaign spending and media access, give a de facto advantage to incumbents. The law has been revised on dozens of occasions in manners that both restricted and relaxed individual regulations; but the underlying incumbent advantage has persisted (Krauss 1996; McElwain 2008; Tkach-Kawasaki 2006; Tkach-Kawasaki 2011). One important detail is the provision regarding timing of “political activities” and “election campaigning.”¹⁷ Political activities are those that happen between when an election is called and when election activities begin; election activities

¹⁷ “Political activities” is the translation for the phrase *seiji katsudō*, and “elections activities [campaigning]” is the translation for *senkyo undo* (Tkach-Kawasaki 2011, 60).

begin 12 to 17 days prior to an election (depending on the type of election) once candidates have officially filed for candidacy. During the period of political activities, candidates are not allowed to engage in activities specifically aimed at securing votes. During the period of election activities, campaigning must be done within the strict guidelines of the law (Tkach-Kawasaki 2011, 60–62).

2.4.1.2 Japanese Internet Campaign Regulation Through 2009

Japanese politicians first came online in the mid-1990s, shortly after the advent of the World Wide Web, and their use of that media has proliferated since then. Early adopters utilized the available online tools to connect with potential supporters, mainly websites and email. However, after a formal written request from the New Party Sakigake¹⁸ in late 1996, enforcers of the electoral policies in the Ministry of Home Affairs¹⁹, in keeping with the Japanese civil law system, bureaucratically applied the outmoded electoral laws to Internet activities in a memo that was interpreted to mean online campaigning was illegal (Sasaki 2013, 278–79).²⁰ In 1997, a nonpartisan group of Diet members gathered to discuss the question of online campaigning, beginning the debate on the merits and demerits of such online activity (Nishida 2013b, 95–96). Soon proposals were put forth to change the electoral law, but these came from opposition parties—namely the DPJ, which submitted bills in 1998, 2001, 2004, and 2006. The first of these proposals called only for liberalization of homepage use, but after further research and

¹⁸ New Party Sakigake was a short-lived political party (1993-2004) that early on included some future notable members of the DPJ, include Hatoyama Yukio and Kan Naoto.

¹⁹ The Ministry of Home Affairs merged into the Ministry of Internal Affairs and Communications in 2001. See, “*Jichishō* [Ministry of Home Affairs]”, *Weblio*. <http://www.weblio.jp/content/%E8%87%AA%E6%B2%BB%E7%9C%81>. (Accessed 30 June 2016).

²⁰ How laws should apply to the new tools to conform with ideals of electoral systems was, of course, a question not only being asked within Japan in the early 1990s (Campbell 1993).

consideration, later proposals included email as well. However, all of these proposals were largely ignored by the ruling LDP (Tkach-Kawasaki 2011; Miyoshi 2013, 51–52).²¹

During the 2001 Upper House election, online activities by political parties and candidates were conducted, particularly by opposition parties, in attempts to push the limits of the election laws. This led to a special commission set up by the new Ministry of Internal Affairs and Communications to study the use of the Internet in election campaigning. The commission issued a series of recommendations on how to change the electoral law to be more compatible with online activities, particularly in favor of homepages, but not emails. The commission also placed emphasis on three issues: 1) the potential digital divide, 2) abuse of Internet tools, and 3) the costs associated with the Internet. While the findings would resonate in future debates, the recommendations were largely ignored at that time. In fact, it was not until 2005 that the LDP established any kind of internal group to look at the issue of online campaigning itself. That internal LDP group concluded in 2006 that homepages alone should be unbanned, but visible movement on the issue again stalled. In 2008, the LDP's Research Commission on the Election System officially postponed any discussion of the issue (Tkach-Kawasaki 2003b; Miyoshi 2013, 51–52; Sasaki 2013).²² Regardless, the LDP members most involved with the 2005 research group would continue to push forward on the issue of online campaigning from behind the scenes in the LDP camp (Nishida 2014).

²¹ Also see, *Yomiuri Shimbun*. “*Kiso kara wakaruru netto senkyo kaikin = tokushū* [Unbanning Online Campaigning from the Basics = Special Feature]”. 1 April 2013. Page 15. And, *Asahi Shimbun*. “*(Biriomedia) Tokuhyo Uranau Kensaku-Sū Gyōkai, Seiji Ni Kyū Sekkin* [(Billiomedia) Industry Predicting Vote Shares through Search Counts, Rapidly Approaching Politics].” 17 July 2013. <http://www.asahi.com/special/news/articles/TKY201307170003.html>. Retrieved 1 November 2015. (Note: All English titles provided for Japanese-language newspaper articles are approximate and unofficial translations.)

²² Also see, *Yomiuri Shimbun*. “*Kiso kara wakaruru netto senkyo kaikin = tokushū* [Unbanning Online Campaigning from the Basics = Special Feature]”. 1 April 2013. Page 15

On the sidelines of the overall debate, tech-savvy individuals sought to push the envelope by exploiting technical loopholes during much of the 2000s, including avoiding explicit restrictions on text- or image-based communications by using videos or podcasts. In one well-noted example, Kan Suzuki, a member of the DPJ in the Upper House and noted advocate of online campaigning, set up a virtual campaign office in the 3d world *Second Life*. However, even this inventive effort appeared to have largely succumbed to legal pressures; during Kan’s 2007 reelection bid, he shut down the virtual campaign office and posted a notice on the virtual doors which stated the office would not be reopened until after the election—Kan further called upon netizens to stand up against the restrictive campaigning law (Williamson, Miller, and Fallon 2010, 38–40). In a different example, even the LDP began showing signs of willingness to skirt laws. During the 2009 general election campaign period, the LDP uploaded to the video sharing service YouTube three animated commercials criticizing DPJ’s ‘wavering’ policy stances; this has been cited as a development in negative campaigning for Japan, which would become an issue in later efforts to pass a less restrictive campaign law (Kinoshita, Kosugi, and Takayama 2011, 3).²³

2.4.2 *The Legalization of Online Campaigning*

2.4.2.1 The 2009-2010 DPJ Push

As already noted, 2009 was a historic year in Japanese politics; on August 30 of that year, the DPJ toppled the LDP at the polls, ending the LDP’s nearly unbroken 55-year rule of Japan. Japanese citizens had high hopes for change based upon the DPJ’s election manifesto—a laundry list of

²³ Those three online commercials are still available on the LDP YouTube channel, see “ *【jimintō netto CM】 rāmen hen* [[LDP Online Commercial] Ramen Version], <https://www.youtube.com/watch?v=rAjj1CGxhY8>,” “ *【jimintō netto CM】 puropōzu hen* [[LDP Online Commercial] Proposal Version], <https://www.youtube.com/watch?v=kZpSfahQ--0>,” and “ *【jimintō netto CM】 bure ru otoko-tachi* [[LDP Online Commercial] Blurred Men], <https://www.youtube.com/watch?v=9A8LnhLrz0A>,” respectively (All accessed 20 July 2016).

campaign promises. Buried amongst a number of major points—including the elimination of wasteful spending, the improvement child welfare and education as well as social security and welfare for seniors, the elimination of the notoriously expensive highway tolls, and the improvement of jobs and the economy (J. A. Williams 2009)—was the promise to revise the election law to allow for online election campaigning, a promise first incorporated into the DPJ’s official party platform in 2005.²⁴

In early November 2009, the DPJ began with a public push towards a new campaign law with its top leaders. The new Minister of Internal Affairs and Communications, Haraguchi Kazuharu, made a public announcement that he was directing his ministry to start looking into the issue, although he avoided any discussion of a timeline to see a law passed.²⁵ Within several days of that announcement, a Project Team (a working group of politicians that Japanese parties put together to research particular topics and possible related policy options) to look at online campaigning was assembled under the lead of notable DPJ members, including Ozawa Ichiro and Kaieda Banri.²⁶ Prime Minister Hatoyama Yukio told reporters in response to a question on lifting the digital ban, “[The Internet] is a world where people of different borders and genders can at the same time connect instantly.”²⁷ Despite this burst of activity, the party finally decided that any bill for the law should wait until the 2010 regular summer session of the Diet.

²⁴ *Asahi Shimbun*. “(Biriomedia) Tokuhyō Uranau Kensaku-Sū Gyōkai, Seiji Ni Kyū Sekkin [(Billiomedia) Industry Predicting Vote Shares through Search Counts, Rapidly Approaching Politics].” 17 July 2013. <http://www.asahi.com/special/news/articles/TKY201307170003.html>. Retrieved 1 November 2015.

²⁵ *Sankei Shimbun*. “Netto senkyo kaikin he tsūjō kokkai ni mo kōsenhō kaisei-an [Toward Unbanning Online Campaigning with a Public Offices Election Law Reform Bill in the Ordinary Diet Session].” 5 November 2009. Page 5.; *Asahi Shimbun*. “Netto senkyo he ronten seiri o shiji haraguchi sōmu-shō [Instruction to Organize Discussion Towards Unbanning Online Campaigning, Minister of Internal Affairs and Communications Haraguchi].” 5 November 2009. Page 4 (Morning Edition).

²⁶ *Sankei Shimbun*, “Ozawa-shi ga netto senkyo PT [Ozawa to Online Campaigning Project Team].” 7 November 2009. Page 5.

²⁷ *Nippon Keizai Shimbun*. “Netto senkyo chikadzuku?—minshu, kaikin ni sekkyoku shisei (nagatachō insaido) [Is Online Campaigning Nearing?—DPJ, Active Posturing toward Unbanning (Inside Nagatacho)].” 26 November 2009. Page 6 (Evening Edition).

Open discussion of the topic of online campaigning remained only at a simmering level among politicians until the following spring. In the meantime, the DPJ, seeing a potential for the Internet to improve politics and governance, started rapidly expanding its online activities in non-campaign (and therefore legal) ways. For example, shortly after Haraguchi directed his ministry to look into online campaigning, he himself opened a Twitter account and became one of the DPJ's most prolific Twitter users at that time. Similarly, Hatoyama took up tweeting in January 2010, though much less prolifically. In a similar domain, the DPJ began attempts to set up interactive websites, such as to solicit public opinions on various policies, and to live stream public governmental meetings in an effort to be more transparent (Matsuura 2010). Of course these sorts of efforts to harness the Internet by the administration in power were not unique, having started with similar attempts by previous LDP Prime Ministers, including Junichiro Koizumi and Shinzo Abe (Kinoshita, Kosugi, and Takayama 2011). However, that is more an aside as the previous administrations were not actively looking to provide greater freedoms via online tools.

In April 2010, the DPJ announced multiparty campaign law reform discussions to be led Sakurai Mitsuro, a twice-elected member of the Upper House. Those discussions kicked off on April 16th, and Sakurai quickly stated that all major political parties had agreed to move forward toward a bill.²⁸ Those initial discussions resulted in an agreement to aim for the passing of a less restrictive campaign law in time for the summer Upper House election.²⁹ In the meantime, the DPJ built a new internal investigative team tasked with working on details of the proposed reform,

²⁸ *Yomiuri Shimbun*. "Netto senkyo kakutō, junbi o honkaku ka minshu zenkai itchi de hō kaisei nerau [Online Campaigning, Various Parties, Preparations Fully in Progress, DPJ, Unanimously Aim at Legal Reform]." 17 April 2010. Page 4.

²⁹ *Nippon Keizai Shimbun*. "Netto senkyo de kakutō kyōgi. [Multiparty Discussions on Online Campaigning]." 24 April 2010. Page 2 (Morning Edition); *Yomiuri Shimbun*. "Netto senkyo yoyatō kyōgi [Online Campaigning, Ruling and Opposition Parties Discussions]." 24 April 2010. Page 4.

also lead by Sakurai.³⁰ Further multiparty discussions aimed at revising the current campaign law were held through most of May.

During this time, specific issues with unbanning online campaigning began to be openly discussed among politicians. DPJ Upper House member and active Twitter user Fujisue Kenzo, for instance, expressed high optimism (and some lobbying techniques) when he told the *Asahi Shimbun* that the Internet would allow for politicians to have instant discussions with voters, help connect youth to politics, and lower the cost barriers to running for office as campaigning migrates online.³¹ Major points of interparty discussions included how to deal with websites, blogs, and Twitter updates, as well as emails. Further, there was concern over issues such as an online age divide, slander and spoofing, and even levels of punishment for breaking the new law.³² Emphasis on Twitter specifically during this time was a relative phenomenon; it happened to be during this time that Twitter began exploding with popularity among Japanese Diet members—expanding from 13 users in January 2009 to 57 users in August 2009 and to 131 users in May 2010 (Kinoshita, Kosugi, and Takayama 2011, 11–12).

³⁰ *Asahi Shimbun*. “*Netto senkyo he chīmu minshu* [Team Towards Online Campaigning, DPJ].” 27 April 2010. Page 4 (Morning Edition).

³¹ *Asahi Shimbun*. “*(kō-ron) netto senkyo undō dō naru fujisue kenzō-san, inoue masahiro-san, kimura tadamasa-san* [(Argument) What Will Happen with Online Campaigning, Fujisue Kenzo, Inoue Masahiro, Kimura Tadamasan].” 19 May 2010. Page 15 (Morning Edition).

³² *Nippon Keizai Shimbun*. “*Netto senkyo kaikin isogiashi, 「natsu no san'in-sen kara」 yoyatō kyōgi—fusei bōshi nado kadai ni* [Fast-paced Unbanning of Online Campaigning, “From the Summer’s Upper House Election” Ruling and Opposition Party Discussions—On the Subject of Fraud Prevention, etc.].” 22 April 2010. Page 2 (Morning Edition); *Nippon Keizai Shimbun*. “*Senkyo kikan no hōmupēji kōshin, san'in-sen kara kaikin, yoyatō gōi*. [Parties Agree to Unban Homepage Updates Starting from the Upper House Election].” 12 May 2010. Page 1 (Evening Edition); *Sankei Shimbun*. “*Burogu • HP kōshin, san'in-sen kara kaikin netto senkyo, yoyatō gōi* [Update Blogs and Homepages, From the Upper House Election, Ruling and Opposition Parties Agree].” 13 May 2010. Page 5.; *Sankei Shimbun*. “*Netto senkyo, shūin hirei kaikin* [Online Campaigning, Unbanning Lower House Proportional Elections].” 22 May 2010. Page 5; *Yomiuri Shimbun*. “*Senkyo burogu kōshin ima kokkai seiritsu he* [Update Election Blogs, Toward Establishment this Diet Session].” 22 May 2010. Page 4.

By mid-May of 2010 the DPJ indicated it was in favor of unbanning updates to homepages, but was still considering its position on the use of Twitter and email. In contrast, the LDP, which had submitted its own bill for unbanning online campaigning in the Lower House on April 28,³³ was in favor of updates to homepages, Twitter, and emails (with some restrictions), but also took a stance against the use of paid online advertisements (Sasaki 2013, 283).³⁴ Sakurai stated the reservations on the part of the DPJ were due to “the problem of having an unmanageable system under present circumstances,” particularly in regard to slander and impersonation.³⁵ There were also calls by some for the necessity to “take consideration for those who do not use the net.”³⁶ Finally, on May 26, it was agreed among the parties to take up the issue early in the June Diet session so that a law might be ready for the summer Upper House election and potentially any subsequent local-level elections. Two days later, guidelines developed from the groups’ discussions were published. The focus would be on allowing for updates to websites and blogs. Due to fears of impersonation, Twitter would only be allowable under the vague terms of ‘self-restraint.’ Paid political ads put out by the parties also received the ‘self-restraint’ imposition. Emails, as well as digital newsletters, were to still be restricted over fears of slander. On more

³³ Officially, the LDP’s bill would remain in the Diet for consideration until the Lower House was dissolved in November 2012 (Sasaki 2013, 283).

³⁴ Also see, *Asahi Shimbun*. “(Media Times) *senkyo-sen, netto de kawaru? san'in-sen-muke-hō kaisei no ugoki* [(Media Times) Elections to be Changed by the Internet? Movement Towards a Revised Law for the Upper House Election].” 11 May 2010. Page 37 (Morning Edition).

³⁵ *Asahi Shimbun*. “*Netto senkyo, HP • burogu kōshin gōi san'in-sen-muke yoyatō tsuittā wa miokuri* [Online Campaigning, Agreement on Updating Homepage • Blogs, Ruling and Opposition Parties Aim for the Upper House Election, Twitter is Postponed].” 13 May 2010. Page 4 (Morning Edition).

³⁶ *Yomiuri Shimbun*. “*Netto senkyo kakekomi kaikin kadai sanseki 「tsuittā」 jishuku futōmei* [Online Campaigning, Last Minute Push for Unbanning, Many Problems, Opaqueness of Twitter Self-Restraint].” 27 May 2010. Page 4

nuanced points, printing and distribution of homepages, as well as displaying of homepages on projection screens, was also to be prohibited.³⁷

Movement towards lifting the online campaigning ban was not simply within the DPJ during this period. For the LDP, there seemed to be a much more internal and evolving debate. For example, in November 2009 the LDP's Chairman of the Research Commission on the Election System, Murata Yoshitaka, was making statements like, "We need a cool discussion [of the campaigning law] apart from the current trends."³⁸ In April 2010, corresponding to the multiparty discussions, it was Murata who was leading a group with the LDP to create the party's version of digital campaigning guidelines.³⁹ In another example, notable LDP proponent of online campaigning, Seko Hiroshige, helped convince LDP President Tanigaki Sadakazu to take up Twitter the same month as the LDP's online campaigning proposal, despite Tanigaki's having made public comments against personally wanting to tweet only months earlier (Matsuura 2010).⁴⁰

³⁷ *Yomiuri Shimbun*. "Netto senkyo HP to burogu kaikin-an 「san'in-sen kara」 yoyatō itchi [Online Campaigning, Plan to Unban Homepages and Blogs 'from the Upper House Election,' Parties Unanimous]." 27 May 2010. Page 2; *Nippon Keizai Shimbun*. "Netto senkyo undō, natsu no san'in-sen kara, yoyatō, kaikin de saishū gōi. [Online Campaigning, From the Upper House Election, Ruling and Opposition Parties, Final Agreement on Unbanning]." 26 May 2010. Page 1 (Evening Edition); *Nippon Keizai Shimbun*. "Netto senkyo katsudō, gutai-ron de kadai mo, natsu no san'in-sen kara kaikin he, raigetsu 4 nichi seiritsu he tsume isogu [Online Campaigning, Problems with Concrete Points, Towards Unbanning for the Summer Upper House Election, Squeeze in Passage by the 4th of Next Month]." 27 May 2010. Page 2 (Morning Edition).; *Asahi Shimbun*. "Netto senkyo, itsu kaikin san'in-sen wa kon'nan, hirogaru rakutan [Online Campaigning, When to Unban, Difficult for the Upper House Election, Discouragement Spreading]." 4 June 2010. Page 38 (Morning Edition).

Nippon Keizai Shimbun, "「seitō no yūryō kōkoku」, 「tsuittā」 jishuku, netto senkyo kaikin de yoyatō shishin. [Paid Party Ads, Self-restraint on Twitter, Ruling and Opposition Party Guidelines for Online Campaigning]." 29 May 2010. Page 2 (Morning Edition).

³⁸ *Nippon Keizai Shimbun*. "Netto senkyo chikadzuku?—minshu, kaikin ni sekkyoku shisei (nagatachō insaido) [Is Online Campaigning Nearing?—DPJ, Active Posturing toward Unbanning (Inside Nagatacho)]." 26 November 2009. Page 6 (Evening Edition).

³⁹ *Nippon Keizai Shimbun*. "Jimin • senkyo seido chōsa-kai, netto senkyo he hōan yōkō [LDP: Electoral System Investigation Committee, Bill Guideline towards Online Campaigning]." 15 April 2010. Page 2 (Morning Edition); *Yomiuri Shimbun*. "Jimin, netto senkyo kaikin-an 「tsuittā」 nado mitomeru [LDP, Online Campaigning Guidelines, 'Twitter' etc. Accepted]." 15 April 2010. Page 2.

⁴⁰ In the long term, Tanigaki Sadakazu's statement regarding not being the type of person who uses Twitter appears to have come true—as of July 2016, Tanigaki's had not tweeted since July 2012, despite there

It is worth noting that Seko, a multi-term member of the Upper House (representing Wakawama), was a former employee of Japan's largest communications firm, NTT, had gone to graduate school for communications studies at Boston University, and had become a prominent strategist for the LDP's public relations and would continue to be so (Nishida 2013b, 123–25; Tsuda, Yasuda, and Suzuki 2013, 25–28).

Additionally, despite the DPJ being the only opposition party to openly promote the need for unbanning the Internet, via their 2009 election manifesto, other minority parties looked to influence the process once it began. For example, in December 2009, Your Party's Asao Keiichiro would debate DPJ's Fujisue Kenzo on the politics of the Internet in an organized setting via Twitter and Ustream.⁴¹ By April 2010 it was reported that no parties were against the idea of election law reform.⁴² Further, when it came to the multiparty discussions later that month, the Social Democratic Party and the People's New Party sat in as part of the ruling coalition, despite their relatively small presence in the Diet.⁴³

Private sector interests also expressed a desire for election law change with the new DPJ-led administration. For example, Yahoo Japan⁴⁴, one of the nation's leading web portals, put out a petition online calling for the ban lift in October 2009.⁴⁵ The petition was later promoted by six

being obvious interest in his thoughts due to the 136,000 followers he has gathered. (See Tanigaki Sadakazu Twitter feed at https://twitter.com/Tanigaki_s (Accessed July 5, 2016)).

⁴¹ *Sankei Shimbun*. “【Web】hakunetsu, kokkai giin-hatsu no Twitter tōron [[Web] White Light, The First Parliamentary Member Debate on Twitter].” 10 December 2009. Page 13.

⁴² *Sankei Shimbun*. “Netto senkyo kaikin, hantai de zu [Unbanning Online Campaigning, No Opposition].” 17 April 2010. Page 4.

⁴³ *Asahi Shimbun*. “Netto senkyo de yoyatō ga kyōgi san'in [Ruling and Opposition Parties in Discussions on Online Campaigning, Upper House].” 17 April 2010. Page 4 (Morning Edition).

⁴⁴ See Yahoo! Japan's corporate profile at <http://ir.yahoo.co.jp/en/company/profile.html> for more details about the company.

⁴⁵ *Sankei Shimbun*. “Netto senkyo undō yafū 「kaikin o」 shomei katsudō sutāto [Online Campaigning, Yahoo “Remove the Ban”, Starts Signature Gathering].” 29 October 2009. Page 23.

other major Internet-based companies, including: Rakuten⁴⁶, one of the top online retail websites in the nation; DeNA⁴⁷, owner of the popular gaming platform Mobage; CyberAgent⁴⁸, parent of the popular blogging and social network site Ameba; Nifty⁴⁹, a web service provider and web portal; Myspace⁵⁰, a social media site; and, Mixi⁵¹, a Japanese social media site. Yahoo! Japan would announce in April 2010 that the petition had gathered 71,507 names signed in a five-month period before sending the petition to the Ministry of Internal Affairs and Communications, the DPJ, and the LDP alike.⁵² Yahoo! Japan's CEO Inoue Masahiro summarized the business perspective regarding the concerns of politicians over online campaigning when he stated that it was not good to avoid tools that may have some risk because with proper 'know-how' that risk can be negated. Further, he expressed the belief that problems such as slander and impersonation were not at the level that should negate the use of online campaigning. Most importantly, though,

⁴⁶ See Rakuten's corporate profile at <http://global.rakuten.com/corp/about/> for more details about the company.

⁴⁷ See DeNA's corporate profile at <http://dena.com/intl/company/overview/> for more details about the company.

⁴⁸ See CyberAgent's corporate profile at <https://www.cyberagent.co.jp/en/corporate/> for more details about the company.

⁴⁹ See Nifty's corporate profile at <http://www.nifty.co.jp/company/outline/> for more details about the company.

⁵⁰ See Myspace's corporate profile at <https://myspace.com/pressroom> for more details about the company.

⁵¹ See Mixi's corporate profile at <http://mixi.co.jp/en/overview/> for more details about the company.

⁵² *Nippon Keizai Shimbun*. "Netto senkyo chikadzuku?—minshu, kaikin ni sekkyoku shisei (nagatachō insaido) [Is Online Campaigning Nearing?—DPJ, Active Posturing toward Unbanning (Inside Nagatacho).]" 26 November 2009. Page 6 (Evening Edition).; *Nippon Keizai Shimbun*. "Yafū inōe shachō, netto senkyo undō 「kaikin o」 [Yahoo CEO Inoue, Unban Online Campaigning]." 3 April 2010. Page 2 (Morning Edition).; *Nikkei Sangyo Shimbun*. "Netto senkyo undō kaikin de yōbō-sho, yafū nado sōmu-shō ni [Petition to Unban Online Campaigning, Yahoo and others to the Minister of Internal Affairs and Communications]." 5 April 2010. Page 4; *Asahi Shimbun*. "(kō-ron) netto senkyo undō dō naru fujisue kenzō-san, inoue masahiro-san, kimura tadamasa-san [(Argument) What Will Happen with Online Campaigning, Fujisue Kenzo, Inoue Masahiro, Kimura Tadamas]." 19 May 2010. Page 15 (Morning Edition).

Inoue noted that he wanted his company to be able to provide politically oriented services to not only politicians, but also regular individuals.⁵³

Other forms of Internet campaign advocacy were undertaken with the help of the private sector. Dot-JP⁵⁴, an NPO that aims to ‘connect young people and politicians’⁵⁵, is one notable example. With the backing of Rakuten, Yahoo! Japan, and Google Japan, Dot-JP held a conference in November 2009 on digital campaigning aimed at legislators—130 people attended, though mostly staffers of the legislators.⁵⁶ The same group held another conference the following May with a smaller attendance.⁵⁷ In another notable case, in February 2010 a new online business advocacy group, Japan e-Business Association⁵⁸, held its first annual meeting with a reported 1,665 participants⁵⁹ under the direction Rakuten CEO Mikitani Hiroshi, and with the help of Yahoo! Japan CEO Inoue Masahiro and CyberAgent Founder and President Fujita Susumu. (Japan Association of New Economy 2015). Unbanning online campaigning would become one of the group’s first advocacy issues.

⁵³ *Asahi Shimbun*. “(kō-ron) netto senkyo undō dō naru fujisue kenzō-san, inoue masahiro-san, kimura tadamasa-san [(Argument) What Will Happen with Online Campaigning, Fujisue Kenzo, Inoue Masahiro, Kimura Tadamasu].” 19 May 2010. Page 15 (Morning Edition).

⁵⁴ See Dot-JP’s homepage at <http://www.dot-jp.or.jp/> for more details on the organization.

⁵⁵ This slogan was being used in 2009 (and still is as of 2016). See dot-jp.or.jp at the Internet Archive <https://web.archive.org/web/20090909052049/http://www.dot-jp.or.jp/> (Accessed 6 July 2016).

⁵⁶ *Nikkei Sangyo Shimbun* “Rakuten • yafū • gūguru, giin-muke benkyō-kai, netto senkyo kaikin niramū [Rakuten, Yahoo, Google, Conference Aimed at Diet Members, Staring at the Unbanning of Online Campaigning].” 20 November 2009. Page 4.; *Nippon Keizai Shimbun*. “Netto senkyo chikadzuku?—minshu, kaikin ni sekkyoku shisei (nagatachō insaido) [Is Online Campaigning Nearing?—DPJ, Active Posturing toward Unbanning (Inside Nagatacho)].” 26 November 2009. Page 6 (Evening Edition).

⁵⁷ *Nippon Keizai Shimbun*. “Netto senkyo nami nogasa nu, san’in-sen shutsuba yotei-sha-ra, wakamono-hyō ni kitai, 「enzetsu o nama chūkei」 [Do Not Miss the Wave of Online Campaigning, Potential Upper House Candidates, Hoping for the Youth Vote, Broadcasting Speeches].” 15 May 2010. Page 39 (Morning Edition)

⁵⁸ Japan e-Business Association is the official translation of “e Bijinesu suishin rengō-kai” (Japan Association of New Economy 2015).

⁵⁹ *Nikkei Sangyo Shimbun*. “1665 sha de 「e bijinesu suishin rengō-kai」, netto kanren no seisaku teigen, 「kajō na kisei」 fusegu. [1665 Companies in the ‘Japan e-Business Association,’ Internet-related Policy Proposals, Prevent ‘Excessive Regulation’].” 23 February 2010. Page 3.

Finally, media was promoting the issue of online campaigning, even if passively, through reporting of the political proceedings. At the end of 2009, the *Sankei Shimbun* declared that “politics and Internet reform” was the second biggest online news story of the year.⁶⁰ Reporting met a peak in April and May of 2010, when the law seemed likely to pass. Articles went beyond Diet affairs, sometimes providing in-depth interviews with academics, business leaders, and politicians on the debates and the potential effects of online campaigning.⁶¹

2.4.2.2 The 2010-2012 Lull

At the end of May 2010, with the summer legislative session and Upper House elections looming, prospects for at least partial passage of online campaign law revisions were high.⁶² However, those prospects came crashing down with the sudden resignation of Prime Minister Hatoyama on June 2. This resignation had virtually nothing to do with POEL revision, but rather with failed promises on dealing with the perpetually controversial U.S. military bases on Okinawa. It was immediately evident that many slated bills, including those on postal administration reform, global warming countermeasures, and national civil service reform among others, would not be presented before the Diet until internal DPJ politics were sorted out. Given that any bill designed to allow for online campaigning in time for the Upper House election had to pass by June 4th, consideration of the bill was initially postponed.⁶³ Some optimistically speculated that bills might still be passed if the Diet

⁶⁰ The top online news story was the ‘beginning’ of Twitter, in terms of mass popularity. See, *Sankei Shimbun*. “【Web】netto 10 dai nyūsu [[Web] Top 10 Online News Stories].” 31 December 2009. Page 15.

⁶¹ For an example of one such article, see, *Asahi Shimbun*. “(kō-ron) netto senkyo undō dō naru fujisue kenzō-san, inoue masahiro-san, kimura tadamasan [(Argument) What Will Happen with Online Campaigning, Fujisue Kenzo, Inoue Masahiro, Kimura Tadamasan].” 19 May 2010. Page 15 (Morning Edition).

⁶² *Asahi Shimbun*. “(shasetsu) netto senkyo kaikin tsugi no ōkina ippo ni tsunagu [(Editorial) Unbanning Online Campaigning, Connecting to the Next Big Step].” 27 May 2010. Page 3 (Morning Edition).

⁶³ *Asahi Shimbun*. “Kimoiri hōan, tonza yūsei, mitōshi tata zu netto senkyo, jikangire hatoyama shushō taijin [Sponsored Bills, Setback, Postal Reform, No Forecast, Online Campaigning, Out of Time,

session was extended.⁶⁴ However, it soon became clear that no bill for online campaigning would be presented that Diet session at all. Fujisue Kenzo told reporters, “Because the Diet session will not be extended, it is probably impossible at this point. I apologize to those Internet users who had expectations.”⁶⁵

Various levels of frustration with the situation were expressed beyond the DPJ. Newspapers quoted politicians from various parties indicating regret for inaction.⁶⁶ Mikitani Hiroshi issued a press release via the Japan e-Business Association at the end of the summer legislative session in mid-June chastising politicians for both failing to get a law passed, as well as for focusing solely on privileges for parties and candidates but not regular citizens (Mikitani 2010).

Regardless of the failure to pass a law, by the time of the Upper House election all the major parties were circumventing the Public Offices Election Law and conducting online activities, such as by updating their websites with commercials and videos of their leaders and candidates. Similarly, the candidates themselves were regularly finding ways to circumvent the law. For example, some politicians not up for election were tweeting out the daily schedules of candidates for those candidates. In one case, a candidate handed his blog over to his secretary, and the secretary was then posting the schedule. The key to why this was continuing during the election

Resignation of Prime Minister Hatoyama].” 3 June 2010. Page 7 (Morning Edition); *Sankei Shimbun*. “*San'in-sen netto senkyo miokuri mo hōan shingi susuma zu* [Upper House Election, Online Campaigning Postponed, Deliberation of Bill Does Not Advance].” 4 June 2010. Page 2; *Nippon Keizai Shimbun*. “*Netto tsukatta senkyo undō, san'in-sen no kaikin miokuri mo, hō kaisei shingi 「jikangire」* [Online Campaigning, Unbanning for the Upper House Election Postponed, “Time is Up” for Deliberations of the Legal Revision].” 4 June 2010. Page 2 (Morning Edition).

⁶⁴ *Yomiuri Shimbun*. “*Netto senkyo kaikin, yokuryū kyūfu-kin ... hōan seiritsu mo kaiki enchō de* [Unbanning Online Campaigning, Interment Benefits...Bill Enactment also with a Diet Session Extension].” 5 June 2010. Page 4.

⁶⁵ *Sankei Shimbun*. “*San'in-sen netto senkyo miokuri mo hōan shingi susuma zu* [Upper House Election, Online Campaigning Postponed, Deliberation of Bill Does Not Advance].” 4 June 2010. Page 2

⁶⁶ *Yomiuri Shimbun*. “*Netto senkyo, ondan ka, yūsei ... seikyoku de haian 「zan'nen」 kankei-sha-ra san'in-sen go kitai* [Online Campaigning, Global Warming, Postal Administration...Scrapped in the Political Situation, ‘Regret’, Officials Hope for After the Upper House Election. 16 June 2010. Page 14.

campaign period was that these activities did not explicitly call for votes, and could hence be regarded as ‘political’ activities and not ‘campaigning’ activities—conducting political activities online were deemed acceptable under the law, and the Ministry of Internal Affairs and Communications took the stance that since the line between electoral and political activities was not clear they would not say it was immediately illegal. They further admitted to the difficulty they would have trying to police all online activity of this nature. Even if the Ministry did find feasible ways to police this issue, other loopholes were still available and being tested. One openly discussed loophole was to use sound online, which the Ministry of Internal Affairs and Communications indicated would be considered the same as stump speeches, and hence not regulated under the more restrictive law involving pictures and text.⁶⁷ Another potential loophole was the use of bots—automated programs—to make posts anonymously for (or against) a candidate.⁶⁸ Regardless, nothing would prove the difficulty that legal enforcers faced more than the case of Motoyama Takaharu, a 30-year old candidate running for the Fukuoka City Council in April 2011. Motoyama was investigated by local police for openly campaigning online—and while

⁶⁷ *Yomiuri Shimbun*. “Netto senkyo 「kaikin」 jōtai? kōho nittei 「tsubuyaku」 shūin giin-hō kaisei maniawa zu [In a State of “Unbanned” Online Campaigning? Upper House Members Tweeting Candidate Daily Schedules, Without Having Revised the Law].” 3 July 2010. Page 15.; *Asahi Shimbun*. “(2010 san'in-sen) seitō HP, dōga ga shun netto CM, tasai na enshutsu [(2010 Upper House Election) Political Party Homepages, Video Season, Online Commercials, Various Productions].” 6 July 2010. Page 4 (Morning Edition).; *Yomiuri Shimbun*. “Netto senkyo nashikuzushi? tsuittā fukyū sōmu-shō 「chekku kon'nan」 [Online Campaigning Chipping Away? Twitter Spreading, Ministry of Internal Affairs and Communications ‘Check Problem’].” 8 July 2010. Page 14.; *Nippon Keizai Shimbun*. “Netto keisai shinchō shisei—dōga ichibu katto, kōho-sha gazō ni bokashi ... (hyōryū 2010 san'in-sen) [Cautious Online Posting—Videos Partially Cut, Candidate Images Blurred...(2010 Upper House Election Drift)].” 09 July 2010. Page 15 (Evening Edition).

⁶⁸ *Nippon Keizai Shimbun*. “Netto senkyo, jijitsu jō kaikin?, kōshoku senkyo-hō de kinshi de mo ... (12 shūin-sen) [Online Campaigning, Virtually Unbanned? Prohibited by the Public Offices Election law but...('12 Lower House Election)].” 10 December 2012. *Nippon Keizai Shimbun*. Page 15 (Evening Edition).

they found illegal activity had been conducted, they ended up suspending the indictment.⁶⁹ Motoyama later publicly boasted of having run Japan’s first online campaign (unsuccessfully).⁷⁰

Despite these seemingly bold activities, little movement towards creating a new law was seen after the end of the Upper House election. In November 2010, the DPJ indicated it wanted to hold new multiparty discussion in hopes of unbanning the Internet for the 2011 Unified Local Elections⁷¹—those discussions never materialized (Sasaki 2013, 283). In December, Katayama Yoshihiro, the new Minister for Internal Affairs and Communications, told reporters at a press conference that “rules needed to be decided quickly” because of the discrepancy created by the legal assumption that the Internet is not used for campaigning.⁷² In early March 2011 Sankei Shimbun wrote that there was not much hope for a legal change before the impending Local Unified Elections scheduled for later in the spring.⁷³ Just over a week after that notice, the triple disaster of the Great East Japan Earthquake, tsunami, and nuclear reactor meltdown would occur. This event, combined with the ‘twisted Diet,’ sealed the fate of any bill that might have seemed peripheral to the disaster relief effort—the DPJ would not pick up the issue of online campaigning in the Diet again (Nishida 2013b, 104–7, 2014).

⁶⁹ *Sankei Shimbun*. “「netto senkyo」mata kinshi datsuhō teki riyō, fukōhei-kan mo [Online Campaigning Still Prohibited, Illegitimate Use, Also a Sense of Unfairness].” 28 November 2012. Page 3.; *Mainichi Shimbun*. “Naru ho dori - netto senkyo naze dame? / kagoshima [Naruhodori – Why is Online Campaigning Not Okay? / Kagoshima].” 6 December 2012. Page 4 (Local Edition).

⁷⁰ Specifically, Motoyama’s Twitter profiles reads ‘Conducted Japan’s First ‘Online Campaign’ during the 2011 Fukuoka City Council Elections. Presently, An Independent Activist.’ See Motoyama Takaharu (@mtoyama1982) at <https://twitter.com/mtoyama1982> (Accessed 10 July 2016).

⁷¹ *Asahi Shimbun*. “Minshu, netto senkyo o kyōgi he [DPJ, Towards Discussions on Online Campaigning].” 13 November 2010. Page 4 (Morning Edition).

⁷² *Nippon Keizai Shimbun*. “Sōmu-shō, netto senkyo, rūru seibi [Minister for Internal Affairs and Communications, Online Campaigning, Rule Maintenance].” 21 December 2010. Page 2 (Evening Edition).

⁷³ *Sankei Shimbun*. “【Web】netto senkyo kaikin wa sakiokuri mo ... 「tōitsu chihō-sen」hikae shin seiji saito tsugitsugi [[Web] Unbanning Online Campaigning Postponed... Unified Local Elections Memo, New Political Websites Coming One After Another].” 3 March 2011. Page 13.

2.4.2.3 The 2012-2013 LDP Success

The issue of online campaigning may have been lost to other political priorities and considerations during the DPJ administration, but it certainly was not a forgotten issue. In December 2012, the LDP, led by former Prime Minister Abe Shinzo, regained control of Japan in stunning fashion. Voters had become convinced that the DPJ was failing to properly lead the nation, both in regard to their broken campaign promises and their failed leadership of the disaster recovery effort, and flocked back to the LDP as well as to a number of smaller opposition parties later dubbed the *Third Force* (Pekkanen, Reed, and Scheiner 2013). With the LDP's win, renewed discussion of revising the POEL to allow for online campaigning began.

To start, Abe had become convinced that the Internet was a beneficial tool, both by individuals like Seko Hiroshige and Mikitani Hiroshi and by his own personal success at gaining a strong social media following (Nishida 2013b, 93–147; Tsuda, Yasuda, and Suzuki 2013). Such confidence in the advantages of the Internet would occasionally emerge in comments at press conferences—for instance, at one point in March 2013 Abe would bluntly tell reporters that “The LDP does not work for disadvantages. Online campaigning will have an effect.”⁷⁴ Unbanning the Internet in electoral campaigns was noted in the LDP's campaign promises, as well as in those of a few other parties including the DPJ and Your Party (See *Table 2.3*).⁷⁵ After the election, Abe quickly announced his support for such legislation, stating “We should unban the Internet for electoral campaigns by the next election. I think using the Internet for election information

⁷⁴ *Nippon Keizai Shimbun*. “Netto senkyo kaikin, 「 jimin ni wa yūri 」 , shushō, rikai motomeru [Unbanning Online Campaigning, ‘Advantageous for the LDP,’ Prime Minister, Requests Understanding].” 2 March 2013. Page 4 (Morning Edition).

⁷⁵ *Asahi Shimbun*. “Shūin-sen, ichi ni tō no kōyaku minshu • kōmei • min'na • mirai • daichi [Lower House Election, 12 Parties' Campaign Promises, DPJ, Komeito, Your Party, Tomorrow Party of Japan, New Party Daichi].” 4 December 2012. Page 17 (Morning Edition).

publication and interaction will lead to a rise in voter turnout.”⁷⁶ Later in the month he would state, regarding online campaigning, “It’s unnatural to not use the net. Beyond allowing many people to understand my opinions, it is effective regardless of my budget.”⁷⁷ Abe’s statements indicate the intent to have the law revised in time for the summer 2013 Upper House election, and by the end of December 2012 the LDP had announced it would pursue the law with the ordinary Diet session beginning at the end of the following month.⁷⁸ In mid-January, the LDP announced they would start working with their smaller coalition partner, Komeito, on drafting legislation prior to the beginning of the Diet session, followed by negotiations with Your Party, the New Renaissance Party, and the Japan Restoration Party during the Diet session. Working with these parties would help solve the LDP’s shortage of seats in the Upper House—which would compromise the bill if they were faced with opposition from the DPJ, JCP, SDP, and The People's Life Party.⁷⁹ However, to what extent the DPJ would oppose a new Internet campaign bill was unclear at that point; DPJ Secretary General Hosono Goshi indicated in a press conference in early January a willingness to make an agreement, and he publicized a basic outline of the DPJ party’s goals at the end of the month.⁸⁰

⁷⁶ *Asahi Shimbun*. “*Netto senkyo kaikin ni iyoku hayashi-shi no nyūkaku katamaru jimintō • abe sōsai* [Willingness for Unbanning Online Campaigning, Hayashi is Certain to Join the Cabinet, LDP President Abe].” 21 December 2012. Page 1 (Evening Edition).

⁷⁷ *Yomiuri Shimbun*. “*Netto senkyo kaikin-an teishutsu he jimin, tsūjō kokkai ni san'in-sen de jitsugen mezasu* [Online Campaigning. Toward Submitting a Bill to Unban, LDP, In the Regular Diet Session, Aiming for Realization by the Upper House Election].” 30 December 2012. Page 4.

⁷⁸ *Nippon Keizai Shimbun*. “*Netto senkyo kaikin, kōsenhō kaisei-an, jimin, tsūjō kokkai teishutsu he* [Unbanning Online Campaigning, Revision to the Public Offices Election Law, LDP, Toward Submission in the Ordinary Diet Session].” 29 December 2012. Page 4 (Morning Edition).

⁷⁹ *Sankei Shimbun*. “*Netto senkyo kaikin, hō kaisei-an de jimin 「5 tō kyōdō teian」 nendonai seiritsu kisu* [Unbanning Online Campaigning, Law Amendment by the LDP, 5-Party Joint Proposal, Expect Passage within the Year].” 16 January 2013. Page 5.

⁸⁰ *Yomiuri Shimbun*. “*Netto senkyo kaikin san'in-sen made ni minshu • hosono kanji-chō* [Unbanning Online Campaigning, By the Upper House Election, DPJ Secretary General Hosono].” 8 January 2013. Page 4.; *Nippon Keizai Shimbun*. “*Minshu • hosono-shi, 「san'in-sen de netto senkyo」* [DPJ, Hosono, ‘Online Campaigning in the Upper House Election’].” 8 January 2013. Page 4 (Morning Edition).; *Nippon*

Table 2.3. 2012 Party Manifestos

<i>Party</i>	<i>2012 Online Campaigning Platform</i>
Liberal Democratic Party	Enact bill to unban online campaigning.
Democratic Party of Japan	Recommend unbanning of online campaigning.
Japan Restoration Party	Unban online campaigning.
Komeito	Realize the unbanning of online campaigning.
Your Party	Amend law so that candidates, parties, and even citizens can use the Internet (Facebook, Twitter, etc.) for election campaign purposes even during election periods. In a future with refined personal authentication or secured secret ballots, realize online voting using personal computers or smartphones, and market that technology to the world.
Social Democratic Party	Unban online campaigning. Also, on the website of each election commission, post political views and election information. Ensure complete compatibility regarding the unbanning of online campaigning for the visually impaired and others.
Japanese Communist Party	Starting with door-to-door visits, and including regulations on distribution of flyers and posters during election periods, regulations on the use of the Internet in election campaigning, etc., revise the Public Offices Election Law which has the characteristics of prohibiting and regulating, and demand a change to a system where the citizens who hold power can participate lightheartedly in a multifaceted election.

Source: (Sasaki 2013, 284; Nishida 2013b, 114–17), translated by author.

The LDP began a new project team on January 22, 2013 to study the situation under the direction of Hirai Takuya, who told reporters, “There are many gray zones with online campaigning, the present situation is not good.”⁸¹ At the end of January the project team assembled a framework and finalized it with the LDP’s Research Commission on the Election System. Early indication from the LDP and their project team was that they were leaning towards full liberalization of online use, particularly because of the increasing popularity of social media sites

Keizai Shimbun. “Netto senkyo kaikin, ashinami, san'in-sen he kakutō ugoku, undō kikan chū mo jōhō kōshin [Unbanning Online Campaigning, Pace, Various Parties Move Toward the Upper House Election, Information Updates During the Campaigning Period].” 1 February 2013. Page 2 (Morning Edition).

⁸¹ *Asahi Shimbun*. “Netto senkyo kaikin o giron jimin PT [Debating the Unbanning of Online Campaigning, LDP Project Team].” 23 January 2013. Page 4 (Morning Edition).

and confidence within the party that they could use it to their benefit over other parties; at the same time, the project team did provide a few basic preventative caveats to deter and remove any slander and impersonation that might arise (Nishida 2014; Sasaki 2013, 284).⁸² The LDP began talks with Komeito on February 6, and came out with a slightly more restrictive tentative agreement a week later. This agreement sought to allow parties, candidates, and voters use of websites and social media; email would be restricted to parties and candidates, and paid ads would be only for parties. Further, the two parties agreed on fines and imprisonment levels for breaking the law, as well as the potential for loss of voting rights and eligibility for future election.⁸³ The agreement would end up being the base of the law that would eventually pass the Diet.

After the agreement with Komeito, signs that the LDP was quite confident the law was going pass began manifesting, starting with a ‘study session’ the party held on online campaigning on February 18 for members of its party in the Upper House.⁸⁴ Regardless, internally there were calls for moderation on the issue. Takaichi Sanae, Chairman of the Policy Research Council, told reporters the same day as the study sessions that “a little more time was necessary” to resolve

⁸² Also see, *Sankei Shimbun*. “Netto senkyo, zenmen kaikin he jimin, raigetsu ni mo hōan SNS mo taishō [Online Campaigning, Towards Fully Unbanning, LDP, Bill Even by Next Month, Also Covering Social Media].” 31 January 2013. Page 2.; *Nippon Keizai Shimbun*. “Netto senkyo, zenmen kaikin he, san'in-sen kara, jimin hōshin, SNS mo riyō kanō ni [Online Campaigning, Toward Fully Unbanning, From the Upper House Election, LDP Policy, Social Media also Possibly Usable].” 31 January 2013. Page 4 (Morning Edition).; *Nippon Keizai Shimbun*. “Netto senkyo kaikin, ashinami, san'in-sen he kakutō ugoku, undō kikan chū mo jōhō kōshin [Unbanning Online Campaigning, Pace, Various Parties Move Toward the Upper House Election, Information Updates During the Campaigning Period].” 1 February 2013. Page 2 (Morning Edition).

⁸³ *Nippon Keizai Shimbun*. “Netto senkyo, jikō, SNS kaikin de itchi [Online Campaigning, LDP-Komeito, Agreement on Unbanning Social Media].” 7 February 2013. Page 4 (Morning Edition); *Sankei Shimbun*. “Netto senkyo 「narisumashi」 bassoku kyōka jikō saishū-an hanmei [Online Campaigning, Strengthened Penalties on ‘Impersonation,’ LDP-Komeito Final Draft Revealed].” 13 February 2013. Page 2; *Yomiuri Shimbun*. “Netto senkyo mēru 「sōshin-gawa」 han'i shōten narisumashi taisaku fukaketsu [Online Campaigning, Focus on the Scope of Who Can Send Email, Impersonation Counter-measures Necessary].” 14 February 2013. Page 2.

⁸⁴ *Sankei Shimbun*. “Netto senkyo, chūshō o fuan mi jimin benkyō-kai [Online Campaigning, Worries about Slander, LDP Study Session].” 19 February 2013. Page 5.

internal debates within the LDP. Mizote Kensei, the LDP's Secretary General for the Upper House, quipped the following day, "More research is needed. No matter what the Prime Minister says, in general we are the ones that must do the elections."⁸⁵ It would later be noted that there was fear behind the scenes within the LDP of the creation of a digital divide if online campaigning was enacted; for instance, of the 59 anticipated LDP candidates for the summer Upper House election, 5 did not have homepages, and 27 did not regularly update the ones they had.⁸⁶ Even younger politicians in the LDP, whom many would expect to be completely onboard with online campaigning, expressed some concern over the negative potentials.⁸⁷

Working-level multiparty talks began in the Diet on February 13 (Sasaki 2013, 285). Only the Japanese Communist Party notably refrained from these, despite having previously indicated it supported unbanning online campaigning.⁸⁸ Beyond that however, no parties at this point were outright opposing the idea of unbanning online campaigning, but the difficulty was in the details.⁸⁹ While some agreement was quickly arrived at, such as to let parties buy campaign ads, there were still disagreements to be worked out.⁹⁰ The two biggest concerns and areas of debate

⁸⁵ *Asahi Shimbun*. "Netto senkyo ni jimin ashibumi bōgai ya hiyō o kenen [LDP Standstill on Online Campaigning, Concern over Interference and Cost]." 20 February 2013. Page 4 (Morning Edition).

⁸⁶ *Sankei Shimbun*. "Netto senkyo giin ni jōhō kakusa no kabe FB · tsuittā · burogu [Online Campaigning, Digital Divide for Diet Members, Facebook, Twitter, Blogs]." 6 March 2013. Page 1.

⁸⁷ *Nippon Keizai Shimbun*. "「susumu jirō seinen-kyoku」, 82 nin no sonzai-kan, chōson-ha ni hitteki (nagatachō insaido) ['Shinjiro's Youth Bureau,' The Presence of 82 People, Equaling Machimura's Group (Inside Nagatacho)]." 3 March 2013. Page 4 (Morning Edition).

⁸⁸ *Sankei Shimbun*. "Kyōsan, netto senkyo kaikin ni sansei [JCP, Approves of Unbanning Online Campaigning]." 5 February 2013. Page 5; *Asahi Shimbun*. "Netto senkyo undō, mēru seigen shi kaikin san'in-sen kara [Online Campaigning, Prohibition Limited to Email from Upper House Election]." 22 February 2013. Page 1 (Evening Edition); *Asahi Shimbun*. "Netto senkyo kaikin, jikō-an o teishutsu he min · mi wa taian [Online Campaigning, LDP Present Plan, DPJ and Your Party Counter-proposal]." 28 February 2013. Page 2 (Evening Edition).

⁸⁹ *Asahi Shimbun*. "Netto senkyo kaikin de itchi kakutō, raishū ni mo kyōgi-kai minshu mo gen'an o kettei [Agreement to Unban Online Campaigning, Parties, Discussions Even Next Week, DPJ Also Decides on Draft Bill]." 6 February 2013. Page 4 (Morning Edition).

⁹⁰ *Nippon Keizai Shimbun*. "Yūryō kōkoku katsuyō, seitō wa OK, netto senkyo, yoyatō itchi, mēru kaikin wa heikō-sen [Using Paid Advertisements, Parties are OK, Online Campaigning, Ruling and Opposition Parties Agree, Email Prohibition on Similar Plains]." 20 February 2013. Page 4 (Morning Edition).; *Sankei*

by politicians were, as they had been since 2010, over the use of email by the general population, and the potential for slander from online impersonators.⁹¹ In regard to the first point, the worry was that individuals would inappropriately use emails, though the same concern was inexplicably not extended to other forms of online messaging. The latter point was less tangibly controllable, so terms of specific punishment were proposed, including fines and possible jail sentences.⁹² The underlying issue was well summarized by Hashimoto Gaku, one of the LDP members working on specifics of the law, when he stated, “If there is an excessive burden or confusion among regular individuals, or if slanderous impersonation harms the integrity of the election, we will revert back to discussion of whether to allow online campaigning.”⁹³ Regardless, to the DPJ and Your Party, who were putting up the greatest opposition to the LDP proposal, any remaining restrictions would become an impediment to information flows during election campaigns, and therefore needed to be removed.⁹⁴

Shimbun. “*Yotō, mēru seigen dakyō-an netto senkyo kaikin, 28 nichi ni mo gōi* [Ruling Party, Email Limits Compromise, Online Campaigning, Agreement Even On the 28th].” 23 February 2013. Page 5.

⁹¹ *Asahi Shimbun*. “*(shidō netto senkyo) mēru seigen no kyōkai shōten yūkensha wa kinshi ka, zenmen OK ka* [(Starting Online Campaigning) Focus on the Boundary of the Limits to Email, Will Voters Be Prohibited or Everything Open?].” 14 March 2013. Page 3 (Morning Edition).; *Asahi Shimbun*. “*Yūkensha, mēru tensō kinshi netto senkyo, yoyatō ga shishin’an* [Voters, Prohibit Sending Emails in Online Campaigning, Ruling and Opposition Party Guidelines].” 12 April 2013. Page 1 (Morning Edition); *Asahi Shimbun*. “*(shidō netto senkyo) chūshō • narisumashi ni fuan taisaku ni genkai* [‘ryōshiki tanomi’ [(Starting Online Campaigning) Unease about Slander and Impersonation, Limits of ‘Requesting Common Sense’ in Measures]. 12 April 2013. Page 2 (Morning Edition).

⁹² *Asahi Shimbun*, “*Kaisei kōshoku senkyo-hō no yōshi netto senkyo* [Summary of Revisions to the Public Offices Election Law, Online Campaigning].” 20 April 2013. Page 3 (Morning Edition).

⁹³ *Asahi Shimbun*. “*(shidō netto senkyo) mēru kaikin han’i de giron kōsenhō kaisei ga shitsugi iri* [(Starting Online Campaigning) Debating the Range of the Prohibition on Email, Revisions to the Public Offices Election Law Enter Questioning].” 2 April 2013. Page 2 (Evening Edition).

⁹⁴ *Asahi Shimbun*. “*(shidō netto senkyo) ronsen, shisen wa kaikin go mēru katsuyō, heikō-sen* [(Starting Online Campaigning) Debate, Considering After Unbanning, Email Usage, Similar Plains].” 4 April 2013. Page 2 (Morning Edition).

To coincide with the LDP discussions, the DPJ and Your Party created their own separate discussion groups.⁹⁵ By the end of the month, however, the two parties had decided they would submit their own bill and let deliberations happen in parliament; that bill was submitted March 1, 2013. Their proposal was a more liberal version of the LDP/Komeito plan, allowing even normal citizens to use email for campaigning purposes and allowing candidates to purchase online ads (citizens would be banned from doing that under both plans) (Sasaki 2013, 285).⁹⁶ The DPJ and Your Party likely stepped forward in this manner because both openly pledged to unban online campaigning, as previously noted. In fact, Your Party demonstrated very strong interest in what online campaigning could provide them. They had submitted in the Upper House their own proposed bill for online campaigning in June 2012, but it went nowhere.⁹⁷ After the 2012 election, they submitted another bill. On the same day that Abe announced his support for unbanning online campaigning, Watanabe would also tell reporters “Unbanning online campaigning is what we hope for. [Our proposal] is a present for Abe’s new administration”⁹⁸

⁹⁵ *Asahi Shimbun*. “*Mēru, tō • kōho nomi netto senkyo kaikin, yotō-an* [Email for Party and Candidate Only, Online Campaigning, Ruling Party Plan].” 13 February 2013. Page 4 (Morning Edition); *Asahi Shimbun*. “*Minshu • min'na wa mēru museigen-an netto senkyo-meguri teiji* [DPJ, Your Party, Present Plan for Unrestricted Email relating to Online Campaigning].” 16 February 2013. Page 4 (Morning Edition).

⁹⁶ *Nippon Keizai Shimbun*. “*Netto senkyo, mēru zenmen kaikin wa* 「*san'in-sen go kentō*」, *yotō, kanren hōan teishutsu he* [Online Campaigning, Fully Unbanning Email to be ‘Examined After the Upper House Election,’ Ruling Party, Towards Related Bill Submission].” 28 February 2013. Page 1 (Evening Edition).; *Sankei Shimbun*. “*Konka san'in-sen ni mo sutāto no netto senkyo* 「*mēru*」 *yūkensha wa?* [Online Campaigning Starting Even This Summer’s Upper House Election, ‘Email’ for Voters?].” 1 March 2013. Page 5.; *Asahi Shimbun*. “*Netto senkyo kaikin de taian minshu • min'na, kyōdō teishutsu* [Counter-proposal for Unbanning Online Campaigning Presented by DPJ and Your Party].” 2 March 2013. Page 4 (Morning Edition).; *Nippon Keizai Shimbun*. “*Jikō • ishin, netto senkyo hōan, shūnai ni mo teishutsu = teisei ari* [LDP/Komeito • JRP, Online Campaigning Bill, Submitted within the Week = Corrected Version

⁹⁷ *Asahi Shimbun*. “*Netto senkyo kaikin kaisei-an, min'na no tō ga san'in ni teishutsu* [Bill to Unban Online Campaigning, Your Party Submitted to Upper House].” 16 June 2012. Page 4 (Morning Edition).

⁹⁸ *Nippon Keizai Shimbun*. “*Netto senkyo, kiun takamaru, abe-shi, kaikin ni iyoku, kakutō, san'in-sen niramū, han'i nado kadai* [Online Campaigning, Growing Momentum, Abe, Willingness to Unban, Various Parties, Looking Towards the Upper House Election, Issues Such as Scope].” 22 December 2012. Page 4 (Morning Edition).; *Sankei Shimbun*. “「*netto senkyo kaikin*」 *abe-shi, raika san'in-sen ni mo*

On March 12 the LDP and Komeito finalized their draft bill, and on March 13 submitted it with the Japan Restoration Party, who had agreed to the LDP/Komeito plan a week earlier.⁹⁹ Continued signs of LDP confidence in the bill flourished; on March 17 they started a series of conference on online campaigning for LDP diet members and their secretaries—seven conferences were planned to be held through June.¹⁰⁰ The DPJ was also beginning to hold similar sessions with its members and staff.¹⁰¹ On March 22, the Lower Houses’ Special Committee on Political Ethics and Election Law took up formal deliberations.¹⁰² Despite continued disagreement between the LDP/Komeito side and the DPJ/Your Party side, the special committee agreed to move the process to real deliberations at the end of March; those deliberations officially started on April 2.¹⁰³

Within a day of real deliberations starting, the DPJ and Your Party acquiesced and agreed to the LDP/Komeito plan with a promise to revisit the issues of email and paid online advertisements

[‘Unbanning Online Campaigning’ Abe, Even for Next Summer’s Upper House Election].” 22 December 2012. Page 3.

⁹⁹ *Nippon Keizai Shimbun*. “*Netto senkyo-an, jikō, ishin to kyōdō teishutsu he* [Online Campaigning Bill, LDP/Komeito, Toward Joint Submission with the JRP].” 5 March 2013. Page 2 (Evening Edition); *Sankei Shimbun*. “*Netto senkyo kaikin jikō, kaisei hōan ryōshō kyō kokkai teishutsu* [Online Campaigning, LDP, Amendment Approval, Diet Submission Today].” 13 March 2013. Page 1; *Asahi Shimbun*. “*Netto senkyo hōan, gogo teishutsu jikōi* [Online Campaigning Bill, Afternoon Submission, LDP-Komeito-JRP].” 13 March 2013. Page 1 (Evening Edition).

¹⁰⁰ *Yomiuri Shimbun*. “*Feisubukku tedorī ashidori ... netto senkyo mazu kenshū kakutō ōisogashi* [Facebook, Spoonfeed... Online Campaigning, First Training, Parties Very Busy].” 20 March 2013. Page 4.

¹⁰¹ *Asahi Shimbun*. “*Minshu, netto senkyo kenshū* [DPJ, Online Campaigning Training].” 15 March 2013. Page 4 (Morning Edition).

¹⁰² *Sankei Shimbun*. “*「netto senkyo kaikin」 shingi iri* [‘Unbanning Online Campaigning’ Enters Deliberations].” 23 March 2013. Page 5.

¹⁰³ *Asahi Shimbun*. “*Netto senkyo hōan, jisshitsu shingi he gōi jimin • minshu* [Bill to Unban Online Campaigning, LDP and DPJ Agree to Formal Dileberations].” 28 March 2013. Page 4 (Morning Edition); *Sankei Shimbun*. “*Netto senkyo kaikin raishū shūin tsūka mo* [Unbanning Online Campaigning, Passage in the Lower House Even Next Week].” 29 March 2013. Page 5.

Sankei Shimbun. “*Netto senkyo kaikin minshu, jikōi-an ukeire he jisshitsu shingi iri* [Unbanning Online Campaigning, DPJ, Accepting LDP/Komeito/JRP Proposal, Entering Real Deliberations].” 3 April 2013. Page 2.

after the Upper House election.¹⁰⁴ While they had put up a fight over a few points, there was indication that the DPJ's top priority had become, in fact, to not let the chance for a law to allow online campaigning to slip through their fingers again. DPJ President Kaieda Banri stated after the agreement, "Whatever happens, we want to pass a law in time for the Upper House election."¹⁰⁵ Your Party also seemed to be of a similar mindset.¹⁰⁶ Finally, after being delayed about a week, the LDP bill was fully agreed upon by the Special Committee on Political Ethics and Election, ending the DPJ/Your Party bill, as well as a seldom discussed bill submitted by the JCP which called for unbanning online campaigning for all individuals and groups except corporations. A day later, the 12th of April, the bill passed the full Lower House (Sasaki 2013, 286–89).¹⁰⁷

From there out the bill saw little debate as it went through the Upper House. By April 18 the bill received the approval of the Upper House Special Committee on Political Ethics and Election System. Within a day the bill would be approved, albeit with three revisions, by the full Upper House and become law.¹⁰⁸ Those three revisions included a requirement for the government to

¹⁰⁴ *Sankei Shimbun*. "Netto senkyo kaikin jikōi-an no shūsei minshu dōi seiritsu he mēru kisei, kanwa ni michisuji [Unbanning Online Campaigning, LDP/Komeito/JRP's amendment, DPJ Agreement, Toward Establishment, Email Regulation, Path to Relaxation]." 4 April 2013. Page 2.; *Nippon Keizai Shimbun*. "Netto senkyo, kon kokkai seiritsu he, ji • min, hōan shūsei de gōi, san'in-sen go ni saikentō [Online Campaigning, Establishment This Diet Session, LDP • DPJ, Agreement on Amendment Bill, Reexamine After Upper House Election]." 4 April 2013. Page 4 (Morning Edition).

¹⁰⁵ *Sankei Shimbun*. "Netto senkyo kaikin shūin-i saiketsu, 11 nichi ikō ni minshu nanshoku, kuwari hōan fūji ka [Unbanning Online Campaigning, Passing the Lower House Committee, DPJ Disapproval, Apportionment Bill Stuck?]." 5 April 2013. Page 2.

¹⁰⁶ *Nikkei Sangyo Shimbun*. "Netto senkyo shōsen haya honban—mēru sōshin, taishō-meguri tairitsu, san'in-sen kaikin de wa itchi [Online Campaigning Early Real Product War—Sending Email, Subject of Confrontation, Agreement to have an Unbanned Upper House Election]." 21 March 2013. Page 3.

¹⁰⁷ Also see, *Sankei Shimbun*. "Netto senkyo hōan, kyō shūin tsūka [Online Campaigning Bill, Lower House Passage Today]." 12 April 2013. Page 5. *Sankei Shimbun*. "Netto senkyo hōan, shūin tsūka raishū ni mo seiritsu 「0-zō 5-gen」 -an mo teishutsu [Online Campaigning Bill, Lower House Passage, Enactment Even Next Week, '0 Increase, 5 Decrease' Bill Also Submitted]." 13 April 2013. Page 2.

¹⁰⁸ *Sankei Shimbun*. "Netto senkyo kyō hōan seiritsu [Online Campaigning, Enacting Today]." 19 April 2013. Page 1; *Yomiuri Shimbun*. "Netto senkyo-hō ga seiritsu [Online Campaigning Bill Enacted]." 19 April 2013. Page 1; *Asahi Shimbun*. "(shidō netto senkyo) hasshin-ryoku shōbu he kaisei-hō seiritsu, san'in-sen kara kaikin [(Starting Online Campaigning) Towards Communicativity Contests with Bill's Enactment, Unbanned from the Upper House Election]." 20 April 2013. Page 3 (Morning Edition).

study how to deal with possible online obstruction of elections, a requirement for the government to support the establishment of electoral commissions able to deal with online campaigning, and a statement strongly encouraging national and local governmental bodies to strengthen information dissemination and promote the enhancement of content in relation to online campaigning to help citizens make their decisions. Regardless of those stipulations, the law was promulgated on April 26 and officially went into effect on May 26 (Sasaki 2013, 289). As hoped by many online campaigning advocates, this new law came into being just in time to be utilized during the 2013 Upper House election. Anticipation was high.

2.4.2.4 External Movement under the LDP's Administration

While all of the above politics were moving the POEL toward passage, outside of the Diet, various interest groups were also continuing to try to make their voices heard. Looking at the external movement to push campaign law change starts with examining the views of local level politicians. While the clear majority of interests were in favor of the change, there were groups that had reservations about the reform, including local LDP party members who worried they would be negatively impacted.¹⁰⁹ The effect of online campaigning on local level elections was a vastly underreported angle of the issue. Advocate and online campaigning entrepreneur Takahashi Shigeru of *VoiceJapan* told reporters from the *Nippon Keizai Shimbun* that he believed “The biggest change would happen in local elections” because only a small fraction of local-level politics had homepages; further, as online activity increased among local-level politicians, voters

¹⁰⁹ *Asahi Shimbun*. “Netto senkyo undō kaikin, jimin kenren ga hantai yōbō /niigata ken [Unbanning Online Campaigning, LDP Prefectural Chapter has Opposition Demands / Niigata Prefecture].” 9 March 2013. Page 29 (Morning Edition); *Asahi Shimbun*. “San'in-sen, saibā han tōnyū keishichō, netto senkyo o kanshi [Upper House Election, Cyber Squad Investment, Tokyo Metropolitan Police Department, Monitoring Online Campaigning].” 27 April 2013. Page 11 (Evening Edition).

would start looking up politicians before voting.¹¹⁰ However, the concerns of these members were largely ignored by the national party as they pushed forth with its plans in 2013 (Nishida 2014).

On the business front, much of the advocacy for online campaigning was being conducted by the Japan Association of New Economy (JANE), formerly the Japan e-Business Association, and its head Mikitani Hiroshi. In early November 2012, days before the Lower House would be dissolved by Prime Minister Noda Yoshihiko, high level representatives of JANE made a direct request to the major political parties pressuring for the unbanning of online campaigning (Mikitani 2012).¹¹¹ Undoubtedly there was interest from Abe in the positions of JANE, as Mikitani received an early audience shortly after the LDP's win was confirmed in December 2012; this notably happened before top business lobbying group Keidanren received audience, indicating that Abe was placing a high value on the technology sector.¹¹² The meeting with Mikitani has also been credited by some within Japan with returning focus to passing a law for online campaigning (Kojima 2013). Directly after this meeting, Abe would tell reporters, "I think we should unban online campaigning by the next election."¹¹³ Several months later, Abe would state in a video message during a symposium organized by Mikitani that Mikitani was an 'old friend,' while Mikitani would reciprocate by calling Abe 'the most understanding of online business of all

¹¹⁰ *Nippon Keizai Shimbun*. "Netto senkyo de kazaana ake yo (kazamidori) [Opening the Vent for Online Campaigning (Weathercock)]." 3 March 2013. Page 2 (Morning Edition).

¹¹¹ Also see, *Nikkei Sangyo Shimbun*. "Netto senkyo kaikin teigen he, shin keiren, seitō hōmon ya keimō katsudō [Toward a Proposal for Unbanning Online Campaigning, Japan Association of New Economy, Party Visits and Public Awareness Campaign]." 8 November 2012. Page 3.; *Nikkei Sangyo Shimbun*. "Netto senkyo katsudō kaikin-muke yōbō-sho, shin keiren, kaku seitō ni [Request Regarding Unbanning Online Campaigning, Japan Association of New Economy, To Various Political Parties]." 15 November 2012. Page 5.

¹¹² *Sankei Shimbun*. "「 netto senkyo kaikin 」 abe-shi, raika san'in-sen ni mo ["Unbanning Online Campaigning" Abe, Even for Net Summers Upper House Election]." 22 December 2012. Page 3; *Nikkei Sangyo Shimbun*. "Abe-shi, mikitani-shi to kaidan, netto senkyo kaikin hazumi [Abe, Mikitani in Talks, Unbanning Online Campaigning Momentum]." 25 December 2012.

¹¹³ *Yomiuri Shimbun*. "Netto senkyo abe-shi 「 kaikin o 」 raika san'in-sen ni mo [Online Campaigning, Abe 'Unban' by Even the Summer Upper House Election]." 21 December 2012. Page 2.

previous Prime Ministers.’¹¹⁴ In early February, just prior to the start of the LDP’s multiparty talks, Mikitani met with a group of ten Diet members representing various parties on the issue of electoral systems reform. He provided the members with draft points for a bill, including a call to allow parties, candidates, and citizens alike to send election information online, allow an opt-in agreement for sending emails, allow both parties and candidates to buy ads, and allow for post-campaign period greetings. Mikitani also stressed how online campaigning could create fair election campaigns cheaply and be environmentally friendly, and he indicated his hope that the process would not get caught up in the details.¹¹⁵

Besides the lobbying, the private sector had slowly and steadily pushed forward with politically oriented business ventures. After the 2010 DPJ debacle, Internet-oriented businesses also seemed to try and reconcile their politically oriented business plans with the reality of not having a law passed. Both Yahoo! Japan and Rakuten began services allowing people to make small political donations online. Yahoo also ran a site, Yahoo! People’s Politics, that provided information on party manifestos and election-related news. CyberAgent looked to capitalize on its member network to run surveys. NEC, a major Japanese IT service provider, sought to sell Twitter analytics to parties.¹¹⁶ In 2011, timed with the unified local elections, three independent election and candidate databases launched, looking to capitalize on those interested in candidates and elections

¹¹⁴ *Sankei Shimbun*. “*Shin keiren, abe seiken to mitsugetsu mikitani-shi, zaikai kaeru?* [JANE, Abe Administration and the Honeymoon, Mikitani, Changing the Financial World?].” 17 April 2013. Page 13.

¹¹⁵ *Nippon Keizai Shimbun*. “*Netto senkyo kaikin, san kiya-shi 「konkai koso」, kokkai-nai kaigō de uttae* [Unbanning Online Campaigning, Mikitani ‘Definitely This Time,’ Appeal at a Meeting Within the Diet].” 6 February 2013. Page 4 (Morning Edition).; *Nikkei Sangyo Shimbun*. “*Netto senkyo, chūshō taiō kadai, shin keiren ga shinpo—kakatō giin, 「san'in-sen made ni chōsei」* [Online Campaigning, The Subject of Countering Slander, JANE’s Symposium—Various Party Diet Members, ‘Adjustments by the Upper House Election’].” 6 February 2013. Page 3.

¹¹⁶ *Nippon Keizai Shimbun*. “*Netto seiji kenkin, yafū ga honkaku ka* [Online Political Donation, Yahoo Goes Full Swing].” 12 June 2010. Page 13 (Morning Edition).; *Nikkei Sangyo Shimbun*. “*San'in-sen 「netto senkyo」 miokura re ta ga ..., yūkensha no giron wa kappatsu ni?* [Upper House Election, Online Campaigning Postponed, but...Voter Discussion is Active].” 25 June 2010. Page 32.

at both the national and local level.¹¹⁷ By the 2012 General Election, Dwango (owners of the popular *Nico Nico Douga* video streaming service), Google Japan, and Twitter would also be running various election-related services.¹¹⁸ Services kept expanding thereafter as well.¹¹⁹ Some of these ventures were obviously attractive to politicians; GMO Internet, for example, began offering a digital signature service to help protect against impersonation in March 2013, and was picked up by candidates from the LDP, DPJ, Your Party, and the Japan Restoration Party.¹²⁰ There has also been an expansion in the use of “election planners,” a relatively new phenomenon of consultants that function both as campaign managers and public relations professionals, offering packages that range from improving tradition to campaigning methods to capitalizing on new media through websites, SEO optimization, and so forth.

Finally, among external movements in favor of online campaigning, there was the increase in advocacy from non-business, citizen-led interest groups. One group that may have been influential behind the scenes during this time was the Jimin-to Net Supporters Club (J-NSC¹²¹), an LDP *koenkai* composed of netizens. This was the group that has been credited with helping Abe regain

¹¹⁷ *Nikkei Sangyo Shimbun*. “Seiji kanren saito kaisetsu aitsugu—「netto senkyo」 kaikin niramuru (*netto shin chōryū*) [Political Oriented Sites Successive Establishment—Keeping an Eye on Unbanning Online Campaigning (New Tides Onlines)].” 31 May 2011. Page 5.

¹¹⁸ *Nippon Keizai Shimbun*. “Shūin-sen 4 nichi kōji, senkyo jōhō saito, sanku-gata de atsuku—dowango • yafū (@netto) [Lower House Election Public Notice on the 4th, Election Information Site, Participatory Types Popular—Dwango, Yahoo (@Net)].” 1 December 2012. Page 12 (Morning Edition).; *Nikkei Sangyo Shimbun*. “Netto kigyō, senkyo de ugoku, seitō kensaku kinō ya kenkin saito, kōsenhō kaisei motomeru [Net Businesses, Moving with the Election, Party Search Functions and Political Donation Sites, Seeking Revision to the Elections Law].” 5 December 2012. Page 3.

¹¹⁹ *Nippon Keizai Shimbun*. “Netto senkyo bijinesu chakuchaku, kensaku dēta ya kakikomi bunseki, hottorinku ya yafū [Online Campaigning Business Steadily Coming, Search Data and Content Analysis, Hotlink and Yahoo].” 15 February 2013. Page 13 (Morning Edition).

¹²⁰ *Nikkei Sangyo Shimbun*. “GMO, narisumashi bōshi, netto senkyo ni taiō, yon seitō ga dōnyū [GMO, Slander Prevention, Aimed at Online Campaigning, 4 Parties are Starting].” 28 February 2013. Page 5.; *Nikkei Sangyo Shimbun*. “Netto senkyo shōsen haya honban, narisumashi taisaku ya shiji kakudai shien, IT kakusha, seitō ni urikomi [Online Campaigning Early Real Product War, Slander Countermeasures and Support Expansion Help, Various Companies, Selling to Political Parties].” 21 March 2013. Page 3.

¹²¹ See the official J-NSC website at <http://www.j-nsc.jp/>.

control of the LDP (Tsuda, Yasuda, and Suzuki 2013; Nishida 2014). Another group was *One Voice Campaign*, which had logged in online in May 2012 and began calling for unrestricted online campaigning. *One Voice Campaign* was of interest because it was not business led (like JANE), nor was it organized within a political party (like J-NSC) rather it was largely youth organized¹²². While this group was not overly large, it did receive attention from both politicians, particularly the LDP, and the media. *One Voice Campaign* representative Harada Kensuke optimistically stated that “If we can raise public opinion on the legal revision, it should move politics. At minimum unbanning online campaigning is a start, we want to change politics one step.”¹²³ The group apparently made enough of an impact that after the online campaigning law was passed, and just prior to the Upper House elections, Abe published a short personal video message regarding online campaigning in which he directly praised the group’s efforts.¹²⁴

2.5 DISCUSSION

With a consolidated history of movements among important actors at hand, all working to pass ground-breaking revisions to the Public Office Election Law, the initial questions posed in this study should be revisited in light of the Mahoney and Thelen (2010) framework for analyzing institutional change. As previously noted, there are three main factors that should be considered when looking at institutional change: the source of the change, the agent of change, and the type of change. The agent and the type of institutional change is determined by two key factors: the

¹²² It is worth noting that some of the group's prominent members did have business ties to election services, such as Kaoru Matsuda, an election planner (See, *One Voice Campaign* “About” page, <http://onevoice-campaign.jp/about.php>. Accessed 3 August 2016). However, these individuals belonged to smaller ventures, rather than large companies like Yahoo! Japan or Rakuten.

¹²³ *Asahi Shimbun*. “*Senkyo ni netto riyō 「ii ne! 」 wakamono kyanpēn, hankyō yobu* “Youth Campaign to “Like” the use of the Internet in Elections, A Reaction].” 12 May 2012. Page 10 (Evening Edition).

¹²⁴ See the video on YouTube, *Liberal Democratic Party*, “*Netto senkyo undō kaikin abe sōri messēji - heisei 25 toshi 6 tsuki 26-bi* [Unbanning Online Campaigning, Prime Minister Abe’s Message, 26 June 2013].” 26 June 2013. <https://www.youtube.com/watch?v=iYCI7JiSIEU>. (Accessed: 25 July 2016).

characteristics of the institution and the characteristics of the political context. These factors will be applied in the discussions of the questions that follow.

2.5.1 *Why was the POEL So Restrictive for So Long?*

As was well documented, the Japanese Public Offices Election Law was designed from its inception to be restrictive in the name of electoral fairness, though it actually afforded significant advantages to incumbents (Tkach-Kawasaki 2011; McElwain 2008; Krauss 1996). When the Internet came into being, the outmoded laws were stringently applied. This system meant that “*relatively enduring* features of political and social life” (Mahoney and Thelen 2010, 4) found in existing institutions had to be changed forcefully.

In terms of political context, the LDP’s hold over the Japanese Diet in the late 1990s and early 2000s provided them with strong veto possibilities over any institutional change. Given that initial popularization of the Internet happened around the time that the LDP lost control of the Diet briefly for the first time (1993-4), it is not surprising that those incumbents appeared wary of change that was being pushed by the opposition and that might lead to decreased electoral effectiveness for them in the future. Further, as became quickly evident from the 1996 Ministry of Home Affairs memo mentioned above, that there would be low levels of discretion in interpretation and enforcement of election rules on the part of politicians. Under Mahoney and Thelen’s framework (2010) as seen in *Table 1*, we can expect that if institutional change were to happen, it would happen through *layering* (creating new laws on top of old laws), and would happen through *subversive* agents (those who are not seeking to preserve the institution but do follow the rules of the institution). The individuals most capable of being subversives in this context would have had to have been from within LDP, and given the turmoil the party went through just a year prior, it is not surprising that any LDP member in support of online campaigning would “bide their time,

waiting for the moment when they can actively move toward a stance of opposition.” (Mahoney and Thelen 2010, 26).

While the Japanese legal system generally does not allow for high levels of discretion in the interpretation of laws, the shifting institutions of the media environment and new technologies created continual gray zones in the campaign law in the late 1990s and early 2000s. This led to a situation that might seem favorable for agents of change most associated with institutional drift—*parasitic symbionts*, those who exploit an institution for private gain, while depending on the greater institution, to achieve gain. As Mahoney and Thelen write, “Parasites can flourish in settings where expectations about institutional conformity are high, but the actual capacity to enforce those expectations is limited. Indeed, parasites will not persist if institutional supporters are able to maintain and shore up institutions to address these gaps in compliance” (Mahoney and Thelen 2010, 24). As noted, this is what happened with many Internet campaigning proponents who sought to continue exploit legal loopholes, but were generally unsuccessful due to strong enforcement of rules despite the changes and general lack of gains.

At the same time, other types of potential change actors did not appear to fare well either during this time. Those who might be *insurrectionaries*, in an attempt to lead to displacement, were found in the opposition camp and had little chance of seeing such institutional change due to the strong veto from the LDP. This easily explains why early proposals for legal changes were all but shut down. Similarly, subversives were continuing to bide their time. There were individuals within the LDP actively working to see change, but they were unable to find the right time.

2.5.2 *What Accounts For the Scope and Timing of the Liberalization of the POEL?*

The historic 2009 electoral win of the DPJ over the LDP, a major tipping point in the changing political system, created an air of inevitability in regard to eventual change of the POEL. With the

DPJ in charge, there seemed to be a clear path for those who sought change—the *insurrectionists* who had had little chance of prevailing prior to the opposition win. By most accounts, this singular event should have provided the right timing to see institutional change. However, it was only one of a series of dramatic and largely exogenous events in the political system, including the resignation of Prime Minister Hatoyama, the 2011 Triple Disaster, and the twisted Diet, that disrupted the process. The veto vote possibilities were weak and the potential for change was ripe, but the timing failed—not only for those seeking online campaigning, but for a whole host of other proposed DPJ changes. It is worth noting here, though, that part of the initial delay may have actually been due to the fact that once the DPJ took power, many of the *insurrectionists* ended up becoming *subversives*, seeking layering as a method of legal change rather than outright displacement. This held up the change long enough for the exogenous events that finally doomed the efforts to come into being. Had the DPJ been quicker, taking four months like the LDP would end up doing rather than the eight months they actually did to get to the issue, a DPJ law might have been passed instead of the current one.

Going back to the LDP, during this period of turmoil within the DPJ, those in the LDP who had held back change in the law had eventually bought into the need for it through a combination of the long-term efforts of the original *subversives* who came from within the LDP as well as through newer efforts from *subversives* who were external to the party politics such as business lobbyists, and from having changed in their attitude regarding their level of electoral vulnerability due to having lost power—that, or they had simply lost their jobs outright. Importantly, LDP members high up in the command structure, most notably Abe Shinzo, had been convinced by behind-the-scenes actors, such as Hirai Takuya, Seko Hiroshige, and even Mikitani Hiroshi, that the legal change would be to their advantage. The result of changing opinion meant that when the

LDP came back into power, the prospects of veto began to diminish, increasing the chances of layering on a new law or displacing it. While the role exogenous actors played and various events stalled change, the primary actors of change were all endogenous to the actual political process. In the end, it was the original *subversives* that won—the law was amended to provide provisions online in a layering effect which will be described next. A summary of the overall key events in the process above are laid out in *Table 2.4* below, while *Table 2.5* places this case study within the Mahoney and Thelen framework.

Table 2.4. Key Events Leading to the Online Campaigning Law

Date	Event
Early 1990s	Politicians start using the Internet.
October 1996	New Party Sakigake makes a written request to the Ministry of Home Affairs regarding the legality of online campaigning; the Ministry rules that POEL rules apply to computers, resulting in an official ban.
May 1997	Nonpartisan group of Diet members discuss merits of online campaigning for the first time.
June 1998	First DPJ bill to unban online campaigning proposed.
May 2001	Second DPJ bill to unban online campaigning proposed.
July 2001	Parties run online campaigns in Upper House elections.
October 2001	Ministry of Internal Affairs and Communications creates special commission to study online campaigning; recommendations for legal changes issued 10 months later.
April 2004	Third DPJ bill to unban online campaigning proposed.
October 2005	LDP creates working group to investigate online campaigning; recommends unbanning homepages seven months later.
June 2006	Fourth DPJ bill to unban online campaigning proposed.
June 2008	LDP Research Commission on the Election System recommends postponing issue of online campaigning.
August 2009	DPJ wins control of the Diet; unbanning online campaigning included on party election manifesto.
October 2009	Yahoo! Japan begins petition to unban online campaigning; submits 70k+ signatures the following April.
November 2009	DPJ announces intent to pursue online campaigning bill; sets up project team.
February 2010	Japan e-business Association (Later, Japan Association of New Economy) established.
April 2010	<ul style="list-style-type: none"> • DPJ begins multiparty talks. • DPJ creates research team. • LDP submits first bill for online campaigning.

Date	Event
May 2010	Parties agree to enact bill during June Diet session.
June 2010	Hatoyama Yukio resigns as Prime Minister, online campaigning bill postponed in resulting chaos.
July 2010	<ul style="list-style-type: none"> • Online campaigning activities advance in Upper House election, despite ban. • LDP wins out over the DPJ, creating a <i>twisted Diet</i>.
March 2011	Great East Japan Triple Disaster occurs.
May 2012	<i>One Voice Campaign</i> is established.
June 2012	First Your Party bill to unban online campaigning proposed.
December 2012	<ul style="list-style-type: none"> • LDP wins back control of the Diet. • Mikitani Hiroshi meets with Abe. • Abe announces support for online campaigning. • Your Party submits second bill for online campaigning.
January 2013	LDP starts working group on online campaigning.
February 2013	<ul style="list-style-type: none"> • LDP begins talks with Komeito and comes out with an agreement a week later; that would become the outline of the eventual final law. • LDP begins multiparty talks. • DPJ and Your Party create discussion group, decide to submit separate bills.
March 2013	<ul style="list-style-type: none"> • DPJ and Your Party submit bills to Diet. • LDP, Komeito, and Japan Restoration Party submit bill to Diet. • Lower House's Special Committee on Political Ethics and Election Law convenes.
April 2013	<ul style="list-style-type: none"> • Discussion of bill moves from Special Committee to full house. • DPJ and Your Party acquiesce to LDP plan in exchange for future discussion of issue after Upper House election. • Bill passes Lower House on April 12. • Bill moves quickly through Upper House and passes on April 19 with minor amendments. • Bill promulgates on April 26.
July 2013	First Upper House elections with sanctioned online campaigning takes place.
December 2014	First Lower House elections with sanctioned online campaigning takes place.

Source: Authors' work.

Table 2.5. Placing the Electoral Law Revision within Mahoney and Thelen’s Framework

		Characteristics of the Target Institution	
		<i>Low Level of Discretion in Interpretation / Enforcement</i>	<i>High Level of Discretion in Interpretation / Enforcement</i>
Characteristics of the Political Context	<i>Strong Veto Possibilities</i>	<i>Type: Layering</i> <i>Likely Agent: Subversive</i> (Pro-internet LDP members, DPJ insurrectionaries post-2009 win, Lobbyists)	<i>Type: Drift</i> <i>Likely Agent: Parasitic Symbionts</i> (Certain Pro-Internet Individuals)
	<i>Weak Veto Possibilities</i>	<i>Type: Displacement</i> <i>Likely Agent: Insurrectionaries</i> (Certain Minority Parties Pre-2009, notably the DPJ)	<i>Type: Conversion</i> <i>Likely Agent: Opportunists</i> (Not Seen)

Source: Based on Table 1.4: Contextual and Institutional Sources of Change Agents in Mahoney and Thelen (2010, 28) in context with author’s analysis.

2.5.3 What Changed in the POEL?

Essentially, the legal change in the POEL deregulated the use of the Internet during campaign periods in Japan and follows the layering method of institutional change—“the introduction of new rules on top of or alongside existing ones” (Mahoney and Thelen 2010, 15). In this context, the electoral law was changed by adding very specific language to account for the Internet. The new law provided the greatest freedoms to parties, followed by candidates, and finally citizens. For instance, parties are allowed to purchase web banners, while candidates and citizens are not. Candidates are allowed to send promotional messages via email, while regular citizens are not. Those under the age of majority are not allowed to use the Internet to for any campaigning purposes. No one is allowed to impersonate politicians. Finally, the law sets out specific punishments for breaking the law.¹²⁵ While the law basically removes restrictions on online

¹²⁵ *Sankei Shimbun*. “「 i ne ! 」 no mae ni ... netto senkyo doko made OK? [Before hitting “Like”...What is OK in Online Campaigning?].” 3 May 2013. Page 12.

campaigning, there are groups that remain restricted—specifically minors and those who have lost voting rights (according to POEL Article 137-2 and 137-3 respectively) (Miyoshi 2013, 52–53). Had the law been displaced rather than layered, Japanese politicians might have had even greater online (or even offline) freedoms when it comes to campaigning.

2.5.4 *Conclusion*

What does this case study on the electoral law change tell us about Japanese politics, modern media systems, and institutional change? To conclude this study, we can look the implications from the bottom up.

2.5.4.1 Implications for Electoral Campaigning

The type of institutional change enacted on Japan's electoral law, layering, provided new levels of opportunities for players; it did not completely revolutionize the law. While many proponents of the POEL revision, held high hopes for the potential of online campaigning at the time of the revisions passage, this analysis shows that such hopes may have been slightly misplaced. Notably, while there were exogenous actors involved, the institutional change was largely brought about endogenously. This means we should expect a more rapid internal response to the change than external. And this is exactly what seems to be happening so far.

Since the passage of the POEL revision, up until the time of this study, there have been three major national elections and one major set of local elections to test its potential influence. The first election, the Upper House election, came in July 2013. Hopes appeared high from the political world. Political parties put forth a variety of initial efforts to attract attention. However, candidates only half-heartily used the Internet in their campaigns, preferring to stump via the traditional method out on the streets. This was anticipatable—incentives for candidates in party-oriented

systems (such as Japan) have less reason to use online tools that favor personalization (G. S. Enli and Skogerbø 2013). Further, even when social media was used, it was focused largely on providing basic information and announcements, rather than to push policy positions or engage in debates (Uenohara 2014). More importantly, voters did not seek out the new tools for information. One exit poll, for instance, indicated that 65 percent of respondents felt the Internet had no effect on their voting decision, only 9 percent had accessed candidate and party websites, and a mere 5 percent had used social networking sites to find political information (Macromill 2013). Another study that compared activities and effects between 2012 and 2013 found no significant impact of online campaigning (Yamazaki 2015). Even on the opposite end of the spectrum, in terms of illegitimate use of the Internet, illegal activities were virtually non-existent. Regardless of the source of change, part of the causes of these disappointing results were the fact that while the law was well anticipated by some, the three months between its revision and the election were not enough time for the law's provisions to be fully saturated by the average candidate or voter (Nishida 2014). Further, the election itself was not seen as highly consequential; the election covered only half of the Upper House, and had little chance of affecting the LDP's position in power. In fact, the lack of importance of this election was reflected shortly thereafter when a multiparty group, formed in September to revisit the issue of online campaigning as promised to the DPJ and Your Party in April, ended without any recommendations for change, despite the unimpressive results of online campaigning (Sasaki 2013, 290–91).

The more important test came in the following year. In November 2014, Abe and the LDP shocked the Japanese political world by calling for a snap election the following month. This time around, the political world appeared more subdued. Political parties continued to push forth with innovative efforts to utilize the Internet, but it was not as highly publicized by the media. Citizens

seemed a bit more receptive to online campaigning. Early indications were that online campaigning may have played at least a minimal role in affecting the outcome of the election (J. A. Williams and Miller 2016; Stage Group 2014). More systematic accounts present mixed results (see Chapters 3 and 4). However, it was still evident that politicians were reacting more to the ability to use the Internet than voters were.

In April 2015, the first unified local elections allowing online campaigning were conducted. Much of the analysis on this election has been anecdotal. And no real systematic effort to analyze it has been found.

Finally, there was the Upper House election in the summer of 2016. Again, use of online media has continued to progress. One notable example of the ever-expanding use of online media among political parties, business groups, and citizens happened three days prior to the start of the official campaign period. On June 19, 2016, the leaders of nine political parties gathered for a debate broadcasted online and sponsored by a group of new media companies.¹²⁶ Regardless, the true influence online campaigning had on this election has also yet to be determined.

Despite both the initial enthusiasm from both politicians and the traditional mass media over the election law revision, what these early results suggest is that until voter perceptions change regarding the use of the Internet for electoral campaigning, or for politics in general for that matter,

¹²⁶ These companies including Cyber Agent, The Huffington Post Japan, SmartNews, Senkyo.com, Twitter Japan, Dwango, Video News Network, BuzzFeed Japan, Yahoo Japan, and LINE. See, *Wasshoi! Netto Senkyo*. “*San'in-sen 2016 「netto tōshu tōron」 6 tsuki 19-bi (nichi) nikofāre de kaisai netto jigyōsha 10-sha 「wasshoi! netto senkyo」 kyōdō kikaku* [2016 Upper House Election ‘Net Party Leaders’ Debate’, June 19 (Sunday), ‘Wasshoi Netto Senkyo’ Sponsored by 10 Online Companies at Nicofarre.]” 16 June 2016. <http://pr.yahoo.co.jp/release/2016/06/16a/> (Accessed 3 August 2016).; *Independent Web Journal*. “*San'in-sen 2016 「netto tōshu tōron」 2016.6.19* [2016 Upper House Election. ‘Net Party Leaders’ Debate’ 2016.6.19].” 19 June 2016. <http://iwj.co.jp/wj/open/archives/310285> (Accessed 3 August 2016).

the potential of the Internet to connect Japanese voters and politicians will be relatively weak. This will require greater institutional change.

2.5.4.2 Implications for the Japanese Political System

Implications from this analysis come in several forms. First, this analysis suggests that given the Japanese political system, with a generally LDP-dominated administration and strong bureaucratic enforcement, legal changes will most likely happen through layering. This, in turn, suggests that future legal change will generally be slow, and likely foreseeable. Slow and foreseeable, of course, is not always going to be the case. Mahoney and Thelen interestingly use the LDP's active neglect of reapportionment as a means to help consolidate and maintain electoral dominance as their prime example of institutional drift (Mahoney and Thelen 2010, 17).

At the same time, the shift in the political system, stemming from the 1993 electoral system reforms that led to greater accountability and responsiveness from Japanese politicians to citizens, means the likelihood of seeing parties shift power more often. When this happens, there will be greater chances for more sudden and dramatic institutional changes in the form of displacement if the new party in power is willing to capitalize on its power quickly and not shift into a mode that leads to layering.

Tangentially, this analysis provides further evidence to the vast literature analyzing how the 1993 electoral system reform has affected the political environment in Japan. For example, we find an increase in the role that party leaders play in affecting party policy. The role of Abe in reinitializing the debate on online campaigning after the 2012 election appears critical to the success of the revision. With the revised POEL law providing the most legal freedoms to political parties, we also see a shift in focus toward the party.

2.5.4.3 Implications for Media Systems and the Internet

This case study provides, in some ways, a sobering note for looking at the potential for political changes in regard to media systems. While greater institutional changes in the Japanese media system highly affected some aspects of Japanese politics, it was not the driving factor that led to change regarding the media system. If the advent of the Internet had been immediately impactful, we would expect to have seen change regarding its use in Japanese politics much sooner. Instead, we find a case where political realities heavily dictated the time of the outcome of the electoral law revision. This is not to say, of course that the changes are inconsequential, but rather we should not expect changes in institutions—Japanese or otherwise—to happen quickly as a result of these larger systematic changes, particularly where the institutions at hand are already well established.

For example, this analysis suggests that attitudes in Japan regarding communication, particularly political communication, over the Internet are changing. The growing willingness of politicians to connect online provides greater opportunity for the Japanese populous to connect to them and suggests a shift is occurring. This shift has particularly seemed to have happened since the expansion of social media tools, notably starting with Twitter, but now also Facebook, LINE, YouTube, and so forth. The question remains how long it will take and to what extent will the populous take advantage of this opportunity. Until they more fully accept online political communication, Japanese politicians may continue to have trouble capitalizing on Internet technologies.

2.5.4.4 Implications for Studies of Institutional Change

Finally, this study detailed an example of institutional change in Japan using a framework proposed by Mahoney and Thelen (2010). The framework worked well in general for our purposes. However, the framework has a strong focus on the action of change, whereas this analysis found

maintenance of the status quo to be just as compelling a question. While these are, in some ways, two sides of the same coin, explaining change versus maintenance does appear to require different tools. The timing of the electoral reform attempt under the DPJ, and its failure thereof, along with the subsequent time and success of the reform under the LDP were largely due to political events that were only tangentially connected with the reform itself. When considering institutional reform, careful thought needs to be given to these sorts of factors. Regardless, studying the process of such institutional change can provide much useful information to help better understand the greater context of particular political institutions, such as was done here with Japanese politics.

Chapter 3. DOES TWITTER AFFECT ELECTORAL OUTCOMES? THE CASE OF THE 2014 JAPANESE GENERAL ELECTION

3.1 INTRODUCTION

Since the mass popularization of use of the Internet began two decades ago, increasing attention is being paid to how that medium influences societies across the globe. As politicians turn to the Internet to broadcast and expand the reach of their campaign platforms (Howard 2006; Chadwick 2013), one notable area of interest is the effects of the Internet on elections; interest in Barack Obama's successful use of social media during the electoral campaigns in 2008 and 2012 (Bimber 2014), as well as more recently Donald Trump's enigmatic online activities during the 2016 presidential election (Gross and Johnson 2016), well exemplify this.

Within this greater context, the microblogging platform Twitter, used by both Obama and Trump, has gained considerable notice among politicians, the public, and scholars alike. While there has been increasing focus on this platform among scholars, there has been surprisingly little systematic analysis of its direct effects on elections, particularly from the perspective of candidates' own use of Twitter (Vergeer 2015; Jungherr 2016; Jacobs and Spierings 2016a, 159–74). Further, while there has been a steady increase in research relating the Internet to politics (Howard and Chadwick 2009), analyses are still heavily dominated by data from Western societies, even when looking at a globally utilized platform like Twitter (Jungherr 2016). This reliance on Western data leaves many theoretical questions unanswered.

This study begins by turning to the important, but often left unconsidered, nation of Japan to start filling the voids in the global research and discourse on the relationship between the Internet and politics. The December 2014 Japanese general election was a noteworthy election for Japan,

not because of the topics of debate underlying its sudden call¹²⁷ nor because of the outcome¹²⁸, but rather because it presented one of the first times Japanese politicians were not legally barred from campaigning online for votes. Just over a year and a half prior to the election, the Public Offices Election Law, the law which regulates Japanese elections (and heavily so), was changed specifically to allow for use of the Internet in election campaigns; prior to that point bureaucratic interpretation of existing laws written well before the creation of the Internet resulted in a prohibition of any online activities during official election campaign periods (J. A. Williams and Miller 2016) (also see Chapter 2).

This election provides two important and distinct lenses with which to study the effects of the Internet on electoral politics: one which allows us to view the effects of Twitter—and indirectly the Internet—on elections through a distinct policy change, and another which provides an opportunity to look at digital campaign efforts in a fully developed, yet non-Western, democratic context.

This study proceeds as follows: First, it briefly provides background to Japanese elections, online campaigning in general, and Twitter. Next, it lays out the details of a large original dataset relating to Internet activity of all 959 single-member district candidates in the 2014 election, and the various methodologically improved approaches employed to analyze it. It finishes with a discussion of the results and their implications on research of both digital politics and Japanese studies.

¹²⁷ The December 2014 general election was a snap election called by Prime Minister Abe Shinzo just one month prior to the actual day of voting.

¹²⁸ For more details on the rather unsurprising outcome of the 2014 general election, see Pekkanen et al. (2015).

3.2 BACKGROUND

3.2.1 *Japanese Elections and Political Communication*

Japan uses a parliamentary system with two houses, known commonly as National Diet of Japan (or just the Diet). Members of the House of Councillors (the Upper House) are elected for six year terms, half every three years, using a mixed-member system of single non-transferable votes within prefectural districts and a national proportional representation list. The House of Representatives (the Lower House), in contrast, uses a mixture of single-member and proportional representation districts. Lower house elections, also known as general elections, must be called at least once every four years, but can be called sooner at the discretion of the Prime Minister, who is also chosen by that house.

A noteworthy general election was held in 2012, which put the Liberal Democratic Party (LDP), led by Abe Shinzo¹²⁹, back in power after having lost it three years prior for only the second time since the birth of the modern Japanese political system in 1955. The next general election was not, then, anticipated to be held until sometime in 2016. However, due to a combination of political pressures and circumstances that were negatively affecting his political position, Prime Minister Abe opted to call for an unscheduled election in November 2014 in the hopes of reconsolidating his power—a well-considered gamble that paid off in his favor (Pekkanen, Reed, and Scheiner 2015; Fackler 2014; Hough 2014).

As for electoral campaigns in Japan, they are notoriously heavily regulated, and media access is strictly limited for candidates, parties, and the public alike. Notably, announcement of candidacy and the seeking of votes must be done within a very specific and short campaigning period: 12

¹²⁹ This study opts to use the Japanese-style of name use, whereby the family name comes before the given name.

days for the Lower House and 17 days for the Upper House, just prior to Election Day. Outside of this election campaign period, politicians may attempt to establish a presence or do general political campaigning, but are not legally allowed declare future candidacy or directly seek votes. Prior to 2013, despite politicians having been online as long as any group within society, all Internet activity for election campaigns was effectively prohibited by elections laws well predating the era of the Internet (see Chapter 2).

Calls for legal changes to allow for online campaigning date back to the 1990s, but resistance from the ruling LDP prevented any meaningful action. When the main opposition—the Democratic Party of Japan (DPJ)—took control of the Japanese government for the first time in 2009, it seemed nearly assured the elections law would finally change. However, a series of unrelated, confounding events, including the sudden resignation of Prime Minister Yukio Hatoyama in 2010, the Great East Japan earthquake, tsunami, and nuclear meltdown in March 2011, and the so-called *twisted diet*,¹³⁰ prevented any change from happening. When the LDP came back into power at the end of 2012, internal party opinions of the potential of the Internet had shifted so drastically—particularly from the viewpoint of Prime Minister Abe—that the legal revisions necessary to allow Internet use in electoral campaigns became a top priority. The law was changed in time for the 2013 upper house election, but timing would prove to be too soon to see any meaningful impact (McElwain 2008; Tkach-Kawasaki 2006, 2011; J. A. Williams and Miller 2016) (also see Chapter 2). The 2014 general election, therefore, became the first real opportunity to see how online campaigning might affect electoral outcomes. Early studies indicated that such activity in general did not heavily impact results (J. A. Williams and Miller 2016; Stage Group 2014), however rigorous statistical analysis on the topic has yet to be published.

¹³⁰ “Twisted diet,” derived from the Japanese term *nejire kokkai*, refers to periods the two houses of the Japanese Diet are not controlled by the same party and laws have difficulty passing (Thies and Yanai 2012).

It must be added, however, that there is reason to be suspicious of the potential for online political communication to work in Japan. First, it has been noted that the Japanese have some mistrust of political bloggers (McCargo and Hyon-Suk 2010), which does not bode well for the potential for online activity to spread. Second, there is an apparent reluctance to interact with strangers online, at least in regard to one portion of the general political sphere—civil society (Ducke 2011). Finally, Ikeda et al (2013) find in a national representative survey in Japan that use of mobile platforms actually correlated with a decrease in political participation. They surmised this was due to mobile communication facilitating one-to-one communications with individuals already in one's social network, failing to allow for activities that might bridge social capital. They also noted via their survey that the Japanese public was still heavily reliant on traditional media (TV and newspapers) as their main source for political information.

3.2.2 *Internet Patterns and Electoral Success*

Use of the Internet in electoral campaigns is a growing topic of conversation, and research suggests that politics has entered a period of hyper- or hybrid-campaigning—that is political campaigns now directly incorporate Internet communication technologies with more traditional campaigning methods (Howard 2006; Chadwick 2013). Research into countries around the world have indicated the growing importance of the Internet in campaigns to a varying degree, including for example in Australia (Gibson and McAllister 2011), Brazil (Gilmore and Howard 2013), Denmark (Hansen and Kosiara-Pedersen 2014), France (Koc-Michalska, Gibson, and Vedel 2014), Finland (Strandberg 2013), Germany (Lilleker and Jackson 2011), Malaysia (Gong 2011), Poland (Koc-Michalska et al. 2014), South Korea (Y.-O. Lee 2009), the UK (Lilleker and Jackson 2011), and of course the US (Bimber 2014).

Present online campaigning tactics can be divided into two main groups: those using older Web 1.0 technologies like personal websites and email, and newer Web 2.0 technologies that incorporate social media functions like Facebook, Line¹³¹, or Twitter. Web 1.0 technologies generally facilitate unilateral communication such as information dissemination, while Web 2.0 technologies generally facilitate multilateral communication and discussion (Jackson and Lilleker 2009).¹³² Further, because of the inherent differences in technologies, each platform is often seen as serving a specific function within a campaign. For example, Facebook provides for a more controlled environment for electoral candidates to communicate with supporters, while Twitter provides for more public and instantaneous broadcasting and conversation. While focusing on Twitter, this study attempts to account for, at least rudimentarily, both Web 1.0 and Web 2.0 platforms due to the varying nature of their use as described above.

Jacobs and Spierings (2016a, 2016b) layout three direct reasons and one indirect reason social media may impact elections. First, there are *advertisement effects*, which allow for candidates to showcase themselves, functioning “as the equivalent of a campaign poster or flyer, with the bonus of adding a halo of innovation and creativity.” Second, there are *human-contact effects*, which are the result of social media allowing candidates to directly interact with citizens; this in turn leads to higher intentions to vote for that individual, so long as the candidate interacts enough that they appear willing to respond if a question is asked. Third, there are *targeted group effects*, which result from candidates connecting themselves with groups not normally accessible via traditional media. Finally, there are *salon-debate effects*, which are the indirect gains made by a candidate

¹³¹ Line is a popular social media platform in Japan, and several other countries around the world (Statista 2015c; J. A. Williams and Miller 2016).

¹³² However, this is not to say that multilateral communication does not happen on Web 1.0 technologies, nor that Web 2.0 technologies can be used simply for unilateral communication (Jackson and Lilleker 2009).

connecting with opinion leaders, journalists, and friends of friends, who then spread the candidate's message, all via social media (Jacobs and Spierings 2016a, 159–63, 2016b). All of these effects are plausible in the case of Japan campaigning.

In terms of the known effects of the Internet in general on Japanese elections, much of the existing research was conducted prior to the 2013 legal change, and is largely only accessible in Japanese. This research is mostly descriptive in terms of trends in online activities of politicians and parties on websites or in the blogosphere (Tkach-Kawasaki 2003a; Okamoto 2005; Tkach-Kawasaki 2006; Okamoto 2007; Nakanishi 2011; Ogasahara 2012), or of the effects of websites on voter intentions (Okamoto, Ishibashi, and Wakisaka 2006, 2009, 2010; Okamoto 2011a; Okamoto, Ishibashi, and Wakisaka 2012). There is some discourse regarding the potential effects of a legal change in the campaign laws regarding use of the Internet (Okamoto 2011b). Finally, a couple of studies have attempted to look at the general effect of the Internet on elections since the 2013 legal change (Ogasahara 2014; Yamazaki 2015), but they have mostly focused on the 2013 Upper House election and found little effect. Ogasahara (2014) attributed this to largely to political culture differences between America, where social media has been seen as very influential, and Japan, including the fact that Japanese politicians do not look to raise money or find campaign volunteers the same way America does. From a policy implication perspective, it is also possible that the 2013 election happened too soon after the legal change for the policy effects to reach fruition.

3.2.3 *Twitter*

This study, while aiming to provide an insight into the overall effects of the Internet on elections, privileges the microblogging social media platform Twitter. Since its inception in 2006, Twitter has gained popularity worldwide as an easy means to connect with groups of any size (Boyd,

Golder, and Lotan 2010). By 2015, Twitter stated it had more than 300 million active users and 500 million daily tweets (Twitter 2015).

Notably, as of the end of 2014, Twitter was the most widely used social media platform in Japan (Statista 2015c), and that nation ranked among the top worldwide in active Twitter users by multiple measures (Cheng, Evans, and Singh 2014; Richter 2015). This strong presence is likely a result of the high mobile adoption rate among the Japanese populace in combination with Twitter's highly mobile-friendly interface (Wagner 2013; Vergeer 2015), as well as the ability of the Japanese language to more compactly fit within the 140 character posting limit of Twitter in comparison to languages such as English (Miller 2015; Beck 2013). Further, the platform allows for relative anonymity, if desired, which may have also aided in its popularity in Japan (Beck 2013; Wang 2016; Nozawa 2012). Finally, Twitter embraced the Japanese language soon after its inception; Japanese is noted as being the first non-English language usable on the platform (Wang 2016). Twitter gained popularity among politicians in Japan (as it did in other countries) after Barack Obama's success with the platform in 2008 (Matsuura 2010, 671). However, based on the number of followers, politicians remain less popular than other type of celebrities on the platform for the average Japanese Twitter user (Socialbakers 2015).

Twitter has been the subject of much recent research due not only to its worldwide popularity, but also to the open—and hence researcher-friendly—nature of access to its content (Jungherr 2016). This study has similar reasons for privileging the Twitter platform. For example, while more Japanese politicians reported having Facebook accounts than Twitter accounts, a majority of the Facebook accounts were closed groups; the closed-group nature of Facebook political accounts presents both technical and ethical difficulties for data gathering and other research purposes.

Jungherr (2016) provides an exceptional, systematic literature review on the use of Twitter in election campaigns, examining 127 English-language articles from peer-reviewed journals or in peer-reviewed conference proceedings. These articles cover 26 countries from around the world, though a majority of them dealt with the United States; only a handful (around 15%) of the articles dealt with non-Western countries—including just one that dealt with Japan.¹³³ Jungherr breaks down the studies based on whether they focus on parties/candidates, publics, or mediated events. He further breaks down the parties/candidates category by whether the articles dealt with reasons for adoption of Twitter, tendencies of use of Twitter, or the functions and effects of Twitter use by parties and candidates. In regard to the last point, Jungherr notes that “No clear picture emerges with regard to the connection between Twitter use, public attention on Twitter, and popularity or electoral chances. Some studies identify a link between Twitter use and electoral wins while others do not. In the same vein, some studies find links between the mentions political candidates or parties received on Twitter and their election results while others do not. Thus, if there is a relationship between Twitter use and electoral success, this seems to be an indirect one, highly dependent on the respective electoral context” (Jungherr 2016, 74–76). It is worth adding that Jungherr separately notes a group of studies that utilize experiments, surveys, interviews, or qualitative case studies to look at the effects of candidates tweets, yet still concludes the effects are “not really well understood” (Jungherr 2016, 77).

Part of the problem with the results noted above is that the majority of the studies cited deal with data that is based on a selection of general Twitter data and not the Twitter activities of the candidates themselves (DiGrazia et al. 2013; Jungherr 2013; Mejova, Srinivasan, and Boynton 2013; McKelvey, DiGrazia, and Rojas 2014; Murthy and Petto 2015); the studies that do focus on

¹³³ See Kobayashi and Ichifuji (2015) for the one article cited focusing on Japan and Twitter.

the candidates either only treat Twitter use as a binary with other social media (Gilmore 2012) or include limited controls—notably lacking controls of opposition activities or higher level characteristics (Vergeer, Hermans, and Sams 2011; LaMarre and Suzuki-Lambrecht 2013; Kruikemeier 2014).

There is also the issue that studies often appear to treat the connection between Twitter use by candidates and their vote results to only a limited array of statistical inquiry (Vergeer, Hermans, and Sams 2011; LaMarre and Suzuki-Lambrecht 2013; Kruikemeier 2014). For example, in a lengthy and insightful look at Twitter and politics, Parmelee and Bichard only skirt the issue in their discussion on frames used with Twitter content in the 2010 US congressional elections (Parmelee and Bichard 2012, 187–89)

These technical and research aspects of research aside, it may simply be that Twitter use shows mixed results because Twitter use has limited potential to attract votes. In a separate review of Twitter and political campaigning, Vergeer (2015) notes two explanations that have been presented for this limitation. First, the idea of homophily, where generally people follow those on Twitter they already have preferences for. Second, individuals with political knowledge are both less likely to switch political party preferences and more likely to follow politicians on Twitter than individuals without political knowledge (Vergeer 2015, 754).

Finally, a couple studies have focused on Twitter in Japanese elections, written in both English (Kobayashi and Ichifuji 2015) and Japanese (Uenohara 2014). Kobayashi and Ichifuji (2015) found through a randomized field experiment that Twitter feeds could improve voter attitudes towards individual candidates, but did not improve voters' intention to vote. Uenohara (2014) showed that Japanese politicians were mostly using Twitter for making announcements rather than creating multi-directional dialogs, apart from some third-party candidates. This combination of

results, though limited, does not bode well for the potential of Twitter use by politicians to affect elections in Japan.

3.3 RESEARCH QUESTION

It is evident that there is still much need for in-depth and systematic statistical research on how Twitter use by political candidates may affect electoral outcomes, particularly from non-Western data sources. This study, therefore, seeks to find out whether the use of Twitter in an election campaign¹³⁴ can be associated with the probability of a vote being cast to a specific political party candidate.

We hypothesize that:

The volume of Twitter activity is associated with the probability of a vote being cast for a specific political party candidate, though the association is weak (politicians would not have the incentive to use the platform if they felt it was not at all beneficial). However, the association of Twitter activity to voting result will be highly depended on the party (For example, the LDP has more traditional and well-established methods of campaigning that may be a better use of time during the short and sudden campaign period).

Rather than expand the research to multiple questions based on available data as other studies seem to like to do, as noted above, this study opts to look at the singular question using multiple statistical methods to better hone in on a meaningful answer.

¹³⁴ The election campaign in the 2014 General Election was an official 10-day period immediately prior to Election Day. It is illegal to official announce candidacy or seek votes before the election campaign period.

3.4 DATA

The data for this study is based on a unique, full population dataset of national candidates during the 2014 Japanese general election. First and foremost, this data is noteworthy because it comes from an election, after a very discrete policy change, in which online activity for strict election purposes went from legally nonexistent to nearly unrestricted. Further, by the time of the 2014 election Twitter was a relatively well-established tool among Japanese politicians; little adaptation to the tool happened immediately prior to the election campaign period (notably only approximately 6 percent of the Twitter accounts were made after Abe dissolved parliament in November 2014). The dataset consists of a combination of biographical, electoral, party, and social media-related variables. It also contains both individual candidate-level variables and district-level variables. *Table 3.1* below provides a basic statistical summary of some of the key variables of interest from the dataset for this study. *Appendix A* provides a full listing of the variables used.

Table 3.1. Dataset Summary of Key Variables

	N	Mean	St. Dev.	Min	Max
Votes for Candidate	959	55,203.03	34,052.89	960	168,953
	The total number of votes a candidate received				
Tweets During Election	959	30.761	80.325	0	938
	The total number of candidate tweets during the campaign election period				
Opposition Tweets During Election	959	85.018	170.081	0	1,409
	The sum of the total number of tweets of a candidate's opposition had at the end of the election period				

Source: Author's calculations

There are a few points that make this dataset stand out from previous studies:

- It is a complete dataset, incorporating all candidates, rather than a sample.
- It incorporates opposition data points, which were only previously considered in studies that looked at mentions of candidates instead of the candidate's themselves.
- It incorporates district level controls, which are not known to have been considered in other studies.
- It incorporates, to a limited extent, other Internet-related data.
- It partially incorporates 2012 election data to create a time panel dataset relating to the Japanese 2013 campaign policy change, which is used in two of the statistical techniques below.

There are a few key decisions worth noting regarding use of this dataset.

- This study chooses to focus on candidates in the races in single member districts, rather than proportional representation districts. This is because we are using largely candidate-driven data, while votes in proportional representation are geared towards parties. However, since candidates can run on both ballots simultaneously, we have included a covariate to account for that fact in part of our models (see *Appendix A*).

- Ten different party designations are noted in our dataset for single member districts.¹³⁵ We reduce the effective number of parties to four groups: LDP + Komento¹³⁶, DPJ¹³⁷, JCP¹³⁸, and all others¹³⁹ (see *Appendix A*).
- The Twitter data was gathered at regular intervals daily using the Twitter rest API during the election campaign period (December 2 to 13, 2014, Japanese Standard Time).¹⁴⁰
- This study has opted to set aside the actual content of individual tweet being used in this analysis in favor of general aggregate volumes. This is partly due to current limitation on analyzing Japanese language tweets (see Chapter 4), and partly due to the desire to focus on a multifaceted analysis of the general use of Twitter in regard to electoral outcome prior making decisions on what might be the most appropriate method of content division.

¹³⁵ The 10 party designations are: Liberal Democratic Party (LDP, 283 candidates), Komeito (KM, 9 candidates), Democratic Party of Japan (DPJ, 178 candidates), Japanese Communist Party (JCP, 292 candidates), Japanese Innovation Party (JIP, 77 candidates), Party for Future Generations (PFG, 39 candidate), Social Democratic Party (SDP, 18 candidates), People's Life Party (PLP, 13 candidates), Other (5 candidates), and Independents (45 candidates).

¹³⁶ The LDP and Komeito are inherently different parties with different philosophies and different campaign strategies. For example, Komeito noted a preference for the platform LINE while the LDP kept a more general strategy for their online campaign strategies in the 2014 election (J. A. Williams and Miller 2016). Regardless, the two parties are coalition partners and coordinate on candidates in SMD districts so as not to compete with one another. At worst the difference in party strategy adds a small negative bias to any results regarding Twitter given that Komeito candidates only make up 3 percent of this combined grouping.

¹³⁷ The DPJ was the largest opposition party during the 2014 election.

¹³⁸ The JCP, while not heavily represented in the Japanese parliament, ran a candidate in almost every SMD race regardless of those candidates' actual potential to win in a race. This is a relatively typical action for this party.

¹³⁹ While there is some overlap in electoral districts, there is no other party that stands nationally to warrant a separate category for this study.

¹⁴⁰ The data was gathered with the help of Prof. Emma Spiro and the University of Washington's iSchool. Due to constraints in declaration of candidacy, the collection of account data for non-incumbents began mid-way through the campaign period when those candidates and their accounts became clear in the media. Information was backlogged to every extent possible, and minimal data loss is believed to have occurred.

3.5 METHODOLOGY

This study employs three distinct methods to help answer the research question in a thorough and multifaceted manner. The first method is a binomial regression which allows for incorporation of most of the available data. This method provides a more nuanced evaluation of the effects, but at the expense of less general statistical certainty over potential causality. The second and third methods are difference-in-differences and matching, respectively. These two methods allow for stronger causal inference through incorporation of time series data, but at the cost of more nuanced results.

3.5.1 *Method 1: Binomial Regression*

The first method is binomial regression. All elections are a series of individual choices (votes) that are affected by a series of factors (which theoretically affect a voter's choice). Those factors can be: characteristics of the voter, characteristics of the candidate, characteristics of the party, characteristics of the election, or characteristics of the environment (like the electoral district). Votes are presumably independent and identically distributed if these factors are controlled for.¹⁴¹ However, we do recognize that this assumption is partially violated in this study, as we are unable to control for some factors, such as characteristics of the voter.

The goal of the binomial regression model is to predict the probability that any one vote will be cast in one direction or another. To simplify the issue, we want to make this a binary choice: Whether (or not) a vote is cast for one party in particular—for example the LDP. We then assume that all other votes, regardless of party, are a simple vote against the LDP. In this line of assumption, it is not important then if there are multiple candidates/parties in any given district

¹⁴¹ This, of course, is debatable in practical application if we are discussing the uniqueness of every individual casting a vote.

because we are looking at individual votes and the probable result is just a result of all factors added up.

In essence, we can analyze this probability under the assumption of a Bernoulli distribution with a standard logit model described in the following equation (3.1):

$$\Pr(\text{Vote for } LDP_i | \pi_i) = f_{bern}(\pi_i)$$

$$\pi_i = \frac{1}{1 + \exp(-\mu_i)}$$

$$\mu_i = \beta_0 + \beta_1 \text{Election Tweets} + \beta_2 \text{Opp. Election Tweets} + \beta_k \text{Controls} \dots$$

It should be noted in the specification of the binomial that an independent variable (votes) is specified using a two-column response, where the first column is votes for the candidate (successes) and the second column for any of the candidates' opponents (failures).¹⁴² Additionally, this study opts for a quasibinomial, rather than a standard binomial. Quasibinomials only differ from standard binomials in that dispersion is not fixed, therefore allowing for compensation of overdispersion. Overdispersion happens when trials are not identically distributed or independent, as was previously noted as the case with our data.

For this method, we devise three models, a simple, a media, and a complex one. The simple model looks only at two basic factors: the number of tweets by a politician, and importantly the number of tweets by the opponents. An interaction term was also included to check for the possibility of correlated effects.

¹⁴² See the “family {stats}” help file in R, available at <https://stat.ethz.ch/R-manual/R-devel/library/stats/html/family.html>, for details on this specification.

Simple Model (3.2):

$$\begin{aligned} \text{Vote}_i &\sim \text{Bernoulli}(\pi_i) \\ \pi_i &= \text{logit}^{-1}(\beta_0 + \beta_1 \text{Election Tweets} + \beta_2 \text{Opp. Election Tweets} \\ &\quad + \beta_3 (\text{Election Tweets} \times \text{Opp. Election Tweets})) \end{aligned}$$

The second model includes a small variety of media-related variables to try and separate out Twitter from other new media forms. Further, a separate traditional media variable¹⁴³ was devised and incorporated to try and separate out new media effects from traditional media effects. Interaction terms are included to account for the interaction among social media and traditional media in modern campaigns.

Media model (3.3):

$$\begin{aligned} \text{Vote}_i &\sim \text{Bernoulli}(\pi_i) \\ \pi_i &= \text{logit}^{-1}(\beta_0 + \beta_1 \text{Election Tweets} + \beta_2 \text{Opp. Election Tweets} + \beta_3 \text{Twitter Followers} \\ &\quad + \beta_4 \text{Opp. Twitter Followers} + \beta_5 \text{Facebook} + \beta_6 \text{Opp. Facebook} \\ &\quad + \beta_7 \text{Homepage} + \beta_8 \text{Opp. Homepage} + \beta_9 \text{Cited Stump Speeches} \\ &\quad + \beta_{10} \text{Opp. Cited Stump Speeches} + \beta_{11} \text{Newspaper References} \\ &\quad + \beta_{12} \text{Opp. Newspaper References} + \beta_{13} (\text{Interactions}) \dots) \end{aligned}$$

The complex model includes the variables from the simple and media models, but then incorporates a host of representative control variables that fall into three major categories: candidate, election, and environmental (i.e. district or prefectural). The complex model controls

¹⁴³ This variable was created for each candidate

were partially chosen through AIC stepwise modeling on the entire potentially applicable available variables in our dataset. See the full selection in *Appendix Table III* in *Appendix B*.

Complex Model (3.4):

$$\pi_i = \text{logit}^{-1}(\beta_0 + \beta_1 \text{Election Tweets} + \beta_2 \text{Opp. Election Tweets} \\ + (38 \text{ covariates \& interaction terms}) \dots)$$

An in-depth explanation of these variables can be found in *Appendix A*. We use each model on our four party groups.

3.5.2 *Method 2: Difference-in-Differences Analysis*

The second method used in this analysis is a difference-in-difference approach that incorporates a limited amount of data from the 2012 general election. Difference-in-differences is one method used in policy analysis to try and remove biases for better causal effect estimates. The use of this method in this analysis is focused solely on individuals who ran in both elections. We can create a pseudo-experiment by placing all those who did tweet in the 2014 election in a treatment group, and those who did not tweet in a control. We acknowledge that there is self-selection bias into the treatment group in this setup, but this bias can be mitigated by removing individuals who joined Twitter after the policy change was passed in 2013.¹⁴⁴ Additionally, as there is also a likely difference between candidates who tweeted in different volumes, we conduct the test using three treatment subgroups: those who tweeted minimally (less than once a day), those who tweet moderately (between 1 and 10 times a day), and those who tweet heavily (over 10 tweets a day).

¹⁴⁴ This mitigation technique also has the added advantage of removing users who are so new to Twitter that its propagating effects may not have had time to fully develop.

The estimating equation for this regression is seen in the following equation (3.5):

$$y = \beta_0 + \beta_{time}D^{time} + \beta_{treatment}D^{treatment} + \beta_3(D^{time} * D^{treatment}) + \beta_x X + \epsilon$$

Where:

$y = \text{ratio of vote won by candidate}$

$D^{time} = 0 \text{ if } 2012; 1 \text{ if } 2014$

$D^{treatment} = 0 \text{ if candidate did not tweet in } 2014; 1 \text{ if candidate did tweet in } 2014$

$X = \text{control variables}$

Finally, we devised three difference-in-differences models: one which regresses only on the difference-in-differences estimate, plus covariates for the parties; one which regresses on the first model, but also includes a short list of factors that changed between the 2012 and 2014 election; and, one that includes the same as the first two models, but also includes a small list of other control factors. These additional variables are listed out in the analysis results in *Appendix C*.

3.5.3 *Method 3: Matching*

The final method employed in this analysis is matching. Matching is an increasingly commonly used method to try and find causal effects in a wide variety of fields where observational data (such as is used in this study) is employed by necessity, rather than the more statistically robust randomized experiment. The goal of matching is to reduce bias, variance, and model dependency to find truer causal estimates by preprocessing the dataset. To do this, the matching procedure aims to find similar observational units in the treatment and control groups, removing units that do not match well, to create a more balanced dataset—hopefully without reducing the size of the dataset too drastically. A balanced dataset reduces the dependence between the treatment and the covariates, which in turn reduces variance (Ho et al. 2007).

For this part of the analysis we use the same treatment-control method as described above in the difference-in-differences method. First, we need to select variables that affect both the treatment assignment and the dependent variable (Ho et al. 2007). To do this we match candidates based on candidate characteristics that are known to influence adaptation and use of Twitter, theoretically prior to the policy change, including party, age, gender, urban density, and election competitiveness (Jungherr 2016, 74). For election competitiveness we use a small list of electoral-related variables relating to the 2012 election, including incumbency, whether cross-listed, and election results. We further include the presence of a homepage as an influencing factor. This analysis opts for a genetic matching algorithm (Sekhon 2011), as recent research casts doubt on using propensity scores for matching estimates (King and Nielsen 2016). This section of the analysis employs the R packages *MatchIt* (Ho et al. 2007, 2011) and *Zelig* (Imai, King, and Lau 2008, 2009); it follows the analytic suggestions of the *MatchIt* authors.

3.6 RESULTS

3.6.1 *Method 1: Binomial Regression*

With the first method, binomial regression we start by considering a model that purely looks at tweets of a candidate, the opponents, and a potential interaction term between the candidate and opponent. As seen in *Table 3.2*, these initial results suggest several points, including that the effects of Twitter alone are small, vary by party, and that the direct relationship between a candidate's own tweets and their opponents does not exist.

Table 3.2. Results of the Simple Model

	Probability of Winning a Vote				
	<i>All Candidates</i>	<i>LDP</i>	<i>DPJ</i>	<i>JCP</i>	<i>Other Minor Parties</i>
Tweets During Election	-0.001**	0.001	-0.0003	0.001**	-0.001
	-0.0005	-0.001	-0.001	-0.0004	-0.001
Opposition Tweets During Election	-0.0004**	-	-0.0004	0.0001	-0.001***
		0.0004*			
	-0.0002	-0.0002	-0.0002	-0.0002	-0.0004
(Interaction)	0	0	0	0	0
	0	0	0	0	0
Constant	-0.764***	0.035	-	-	-1.138***
			0.538***	1.899***	
	-0.034	-0.033	-0.038	-0.037	-0.079
Observations	959	292	178	292	197
<i>Note:</i>	* p<0.1; ** p<0.05; *** p<0.01				

This table provides the results for key variables of the binomial regression analysis using the simple model. Source: Author's calculations.

It is important to note, however, that the above results are very difficult to interpret purely in numerical values due to the use of the quasi-binomial. We therefore display the results in a more visually friendly and interpretable format, as seen in *Figure 3.1*. These results are somewhat more apparent. Twitter use overall does not appear to positively impact candidates. For the LDP, DPJ, and the minority parties, the results of Twitter use could both be slightly positive or negative. For the JCP it appears positive, but to a very small extent. Overall the results are relatively inconclusive.

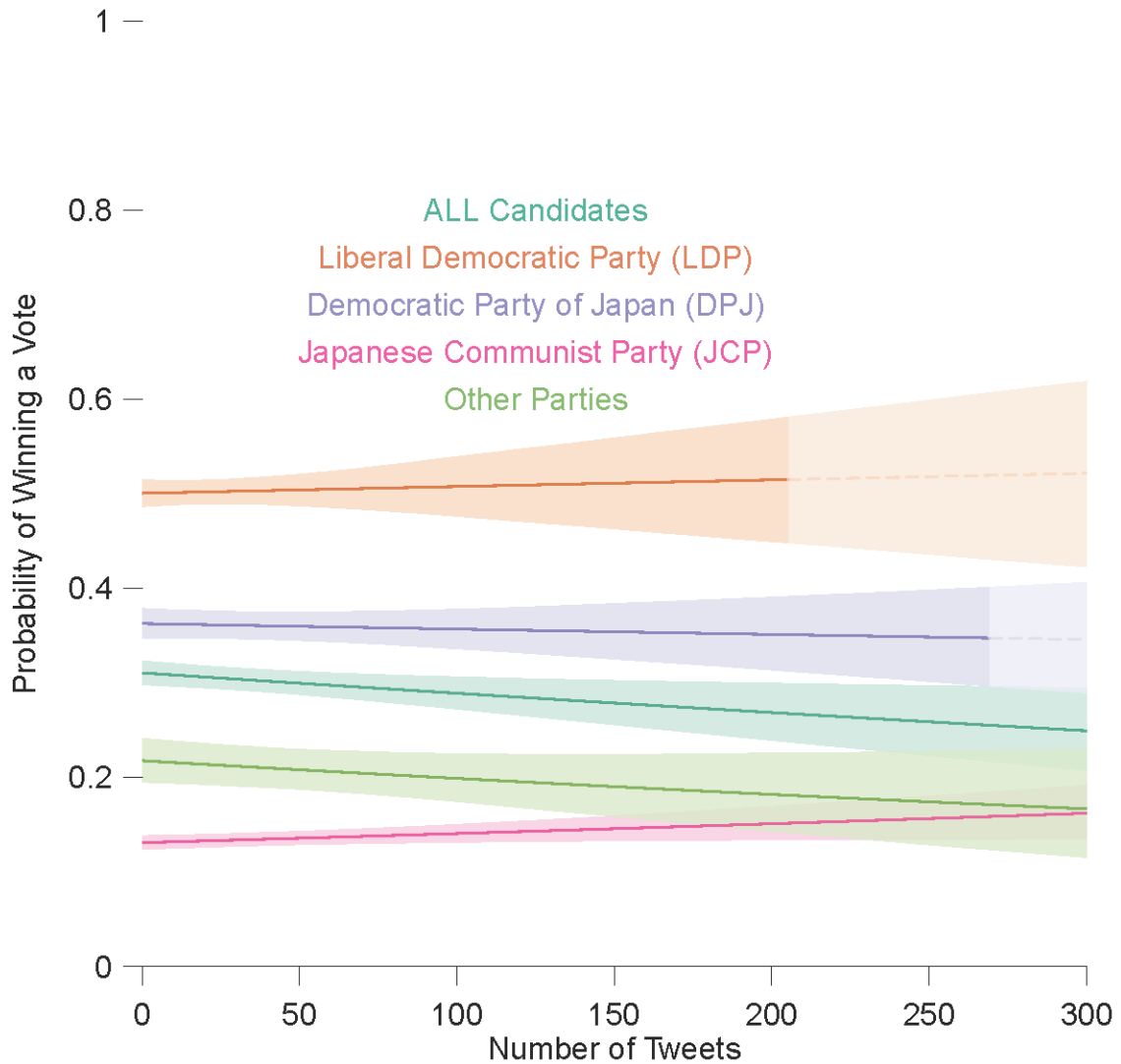


Figure 3.1. Results of Simple Model Graphically

This figure provides a graphical interpretation of the results of the binomial regression analysis using the simple model. The horizontal axis is the number of tweets posted by a candidate during the election campaign period. The vertical axis is the probability of winning a vote. The lines from top to bottom are LDP candidates, DPJ candidates, all candidates, other party candidates, and JCP candidates, respectively. Source: Author's calculations.

Next, we tested the media model, which includes some covariates to account for other media-related factors, as previously described. Note that here we removed eight outliers, such as DPJ

leader Kaieda Banri, who are mentioned so frequently in newspapers that their inclusion resulted in high standard errors.¹⁴⁵ The results, listed in summary below in *Table 3.3* and in full in *Appendix Table II* in *Appendix B*, indicate similar results to the results of the simple model: overall the results do not appear in general to be statistically or practically significant. Further, the results vary by party. The major difference is that the JCP no longer appears to gain from Twitter use.

Table 3.3. Media Model Results

Probability of Winning a Vote					
	<i>All Candidates</i>	<i>LDP</i>	<i>DPJ</i>	<i>JCP</i>	<i>Other Minor Parties</i>
Tweets During Election	-0.0001	0.004	0.0002	-0.002	0.002
	-0.002	-0.004	-0.002	-0.001	-0.003
Opposition Tweets During Election	-0.0004	-	0.001	-	0.002*
	-0.001	0.001**	0.0003	-0.001	-0.001
(Other Covariates and Interaction Terms)	--	--	--	--	--
Observations	951	289	176	292	194
Note:	*p<0.1; **p<0.05; ***p<0.01				

This table provides the results for key variables of the binomial regression analysis using the media model. Source: Author's calculations.

Figure 3.2 below provides a graphical interpretation of the results. Again, we see inconclusive results.

¹⁴⁵ Kaieda Banri, ironically, lost his seat and resigned as the head of the DPJ in the 2014 election, which is likely part of the reason for the statistical deviation that required his removal from the analysis.

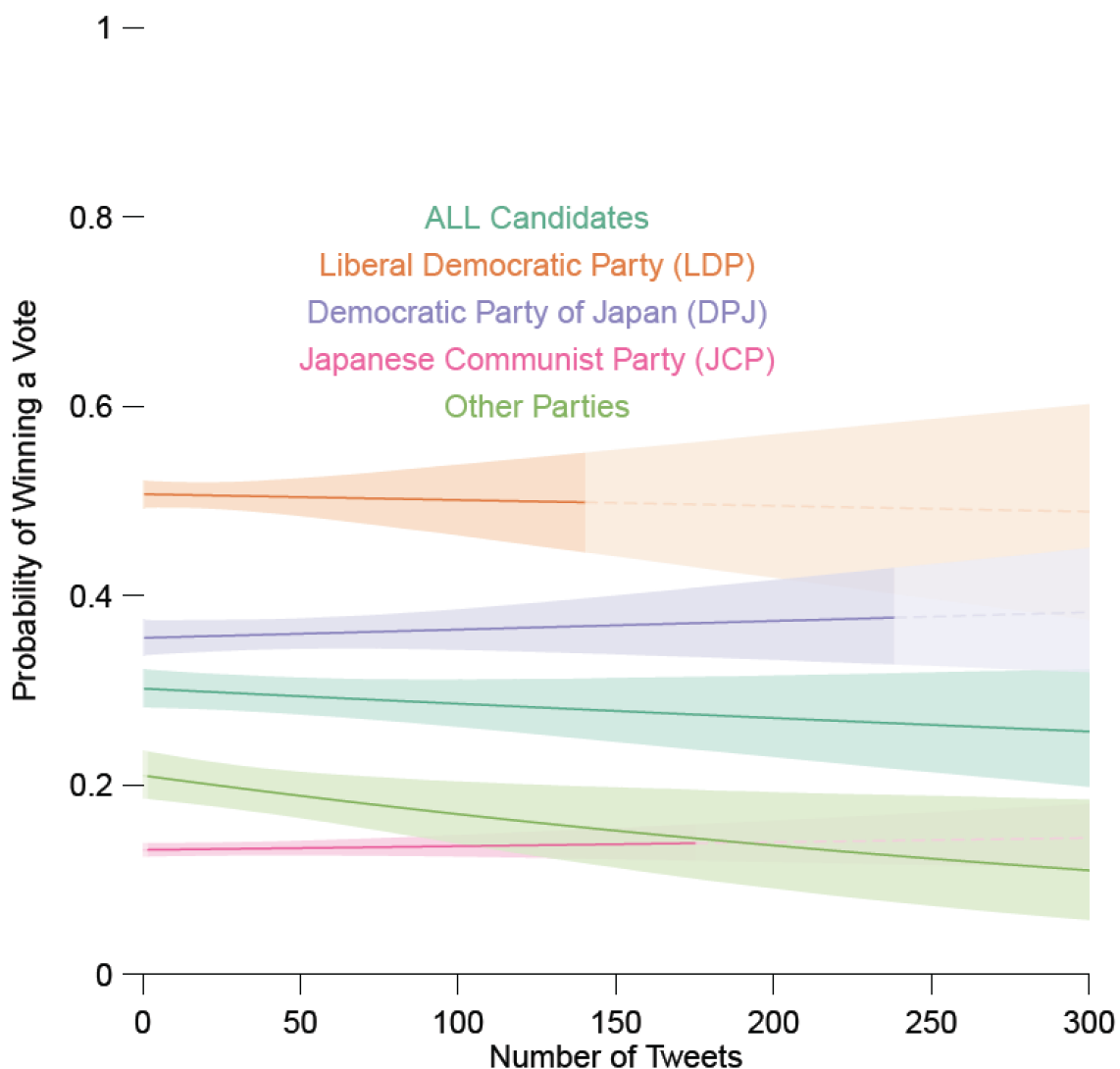


Figure 3.2. Media Model Results Graphically

This figure provides a graphical interpretation of the results of the binomial regression analysis using the media model. The horizontal axis is the number of tweets posted by a candidate during the election campaign period. The vertical axis is the probability of winning a vote. The lines from top to bottom are LDP candidates, DPJ candidates, all candidates, other party candidates, and JCP candidates, respectively. Source: Author's calculations.

Finally, we analyzed the complex model, which includes a variety of covariates beyond those related to media.¹⁴⁶ Note that the inclusion of these additional covariates mitigated the need to remove the outliers noted in the media model. The results are listed in summary below in *Table 3.4*, and in Full in *Appendix Table III* in *Appendix B*. These results yet again mimic the previous results in general.

Table 3.4. Complex Model Results

	Probability of Winning a Vote				
	<i>All Candidates</i>	<i>LDP</i>	<i>DPJ</i>	<i>JCP</i>	<i>Other Minor Parties</i>
Tweets During Election	-0.0001	0.003	0.001	- 0.0004	-0.001
	-0.001	-0.003	-0.001	-0.001	-0.002
Opposition Tweets During Election	-0.0004	- 0.001***	- 0.00002	- 0.001*	0.002*
	-0.0003	-0.0003	-0.001	-0.001	-0.001
(Other Covariates and Interaction Terms)	--	--	--	--	--
Observations	959	292	178	292	197
Note:	*p<0.1; **p<0.05; ***p<0.01				

This table provides the results for key variables of the binomial regression analysis using the complex model. Source: Author's calculations.

As before, we attempted to display the results in a more visually friendly and interpretable format, as seen in *Figure 3.3*. We can see that the effects of Twitter use are generally inconclusive.

¹⁴⁶ A stepwise analysis indicated that none of the qualitatively chosen variables should be removed from the binomial analysis.

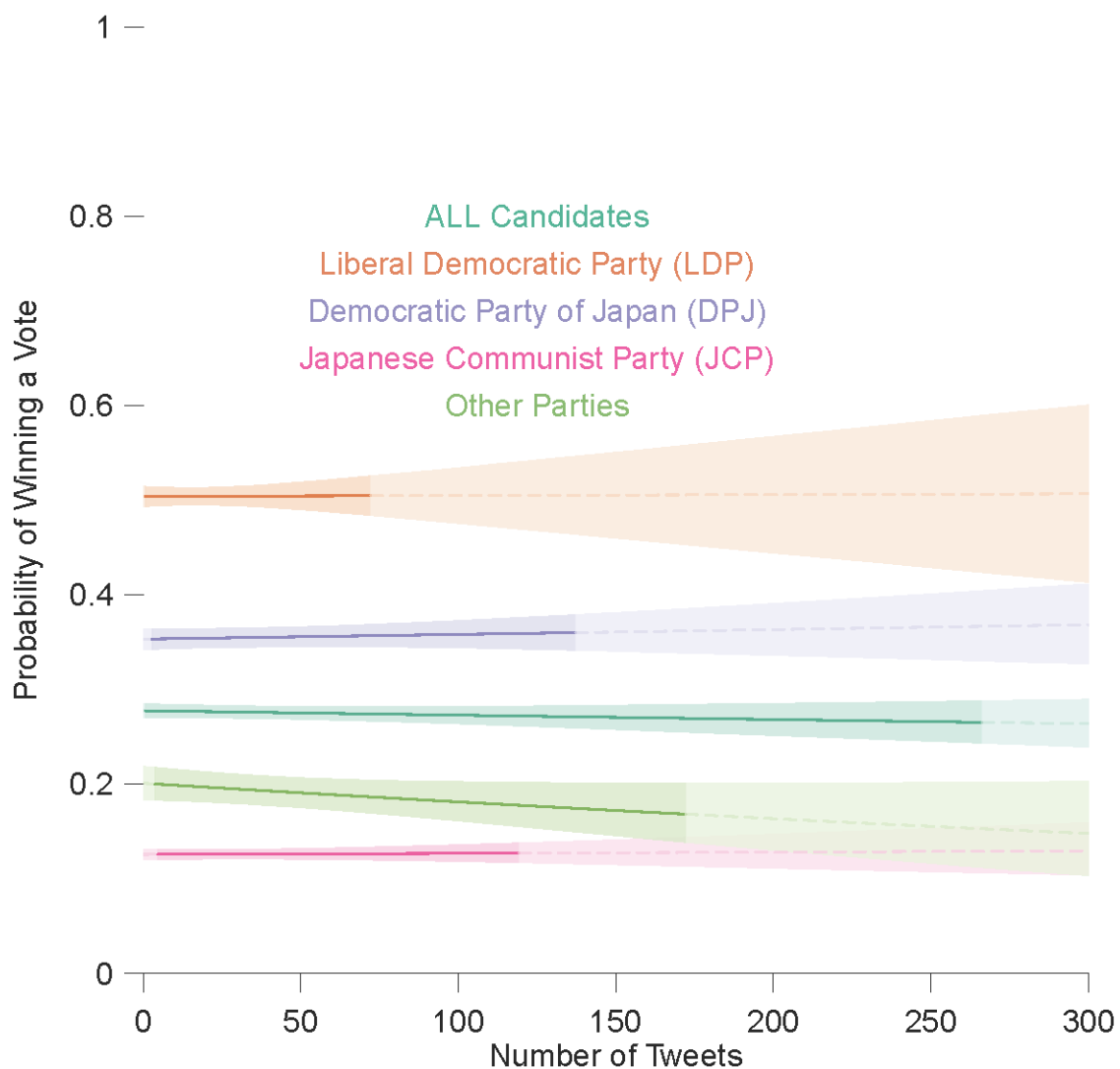


Figure 3.3. Complex Model Results Graphically

This figure provides a graphical interpretation of the results of the binomial regression analysis using the complex model. The horizontal axis is the number of tweets posted by a candidate during the election campaign period. The vertical axis is the probability of winning a vote. The lines from top to bottom are LDP candidates, DPJ candidates, all candidates, other party candidates, and JCP candidates, respectively. Source: Author's calculations.

3.6.2 Method 2: Difference-in-Differences Analysis

First, we consider the results of the difference-in-differences analysis as indicated in *Table 3.5*, and more fully laid out in *Appendix C*. What we find immediately is that the results, regardless of model, are all negative. However, once again we find that they are neither statistically or practically significant.

Table 3.5. Difference-in-Differences Main Results

Dependent variable:			
	Percentage of Votes Won in Election		
	Model 1	Model 2	Model 3
DiD Estimate for Treatment 1	-0.006	-0.013	-0.012
	-0.012	-0.01	-0.01
DiD Estimate for Treatment 2	-0.005	-0.031*	-0.030*
	-0.019	-0.016	-0.016
DiD Estimate for Treatment 3	-0.002	-0.007	-0.006
	-0.015	-0.012	-0.012
DiD Estimate for Treatment 4	-0.022	-0.002	-0.0001
	-0.025	-0.02	-0.02
Note:	*p<0.1; **p<0.05; ***p<0.01		

This table provides the main results of the difference-in-differences analysis. The three models are models of increasing complexity: One which regresses only on the difference-in-differences estimate, plus covariates for the parties; one which regresses on the first model, but also includes a short list of factors that changed between the 2012 and 2014 election; and one that includes the same variables as the first two models, but also includes a small list of other control factors. These additional variables are listed out in the analysis results in Appendix C. The four treatments are as follows: All Twitter users, Twitter users who tweet less than once a day, Twitter users who tweet 1 to 10 times a day, Twitter users who tweet more than 10 times a day, respectively. Source: Author's calculations.

Next, we checked for differences between parties, as displayed in summary in *Table 3.6*. Here we find once more that results that are neither statistically nor practically significant. If we look beyond this major point, what the numbers indicate is that generally for the LDP using Twitter was not beneficial, while it was for all the other parties. These specific party-oriented results do not well match the results from the binomial regression method.

Table 3.6. Difference-in-Differences Results, Sub-grouped by Party

	LDP			DPJ			JCP			Other Minority Parties		
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
DiD Est. for T.1	-0.004	-0.02	-0.018	0.023	-0.003	-0.003	0.0001	0.002	0.004	-0.004	0.006	0.003
	-0.021	-0.016	-0.016	-0.024	-0.019	-0.018	-0.013	-0.012	-0.011	-0.038	-0.029	-0.027
DiD Est. for T.2	-0.017	-0.047*	-0.047*	-0.017	-0.041	-0.04	0.001	0.014	0.018	0.043	-0.023	-0.015
	-0.034	-0.026	-0.025	-0.048	-0.036	-0.036	-0.019	-0.017	-0.016	-0.055	-0.04	-0.038
DiD Est. for T.3	-0.004	-0.012	-0.011	0.016	0.0004	0.002	-0.001	-0.002	0.001	0.009	0.03	0.025
	-0.024	-0.018	-0.018	-0.029	-0.023	-0.022	-0.016	-0.014	-0.013	-0.048	-0.036	-0.034
DiD Est. for T.4	0.031	0.014	0.025	0.059	0.01	0.012	0.005	-0.004	-0.008	-0.135*	-0.005	-0.02
	-0.054	-0.04	-0.04	-0.045	-0.034	-0.034	-0.022	-0.02	-0.019	-0.071	-0.054	-0.052
<i>Note</i> :	*p<0.1; **p<0.05; ***p<0.01											

This table provides the main results of the difference-in-differences analysis, divided by party sub-groups. The three models are models of increasing complexity: One which regresses only on the difference-in-differences estimate, plus covariates for the parties; one which regresses on the first model, but also includes a short list of factors that changed between the 2012 and 2014 election; and, one that includes the same variables as the first two models, but also includes a small list of other control factors. These additional variables are listed out in the analysis results in Appendix C. The four treatments are as follows: All Twitter users, Twitter users who tweet less than once a day, Twitter users who tweet 1 to 10 times a day, Twitter users who tweet more than 10 times a day, respectively. Source: Author's calculations.

3.6.3 Method 3: Matching

One of the key elements of the effectiveness of the matching technique is balance improvement.

In *Table 3.7* we see these results. Here can we find almost universally strong balance improvement in all four treatment groups. Knowing that we had found potentially strong matches, and have

reasonable remaining samples sizes (see *Table 3.7*)¹⁴⁷, we estimated the Average Treatment Effects (ATE) on the percentage of votes received in the 2014 election.

Based on the ATE results of the analysis (see *Table 3.7*), we found that Twitter may give minimal positive advantages to those who use the service at least moderately (more than one tweet a day). However, these results are neither statistically nor practically significant.

Table 3.7. Results of Matching on Treatments 1 – 4

	Treatment 1		Treatment 2		Treatment 3		Treatment 4	
Covariates	<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>	
distance	93.5		99.7		97.5		82.6	
DPJ	95.1		100.0		100.0		5.3	
JCP	44.7		100.0		93.7		44.6	
Other Minority Parties	92.5		100.0		100.0		93.7	
Age	92.2		99.3		98.7		86.2	
Gender (Female)	31.5		100.0		90.0		69.7	
Prefectural Population Density	87.1		83.0		86.5		90.1	
Cross-listed (2012)	10.0		100.0		70.7		22.4	
Incumbency (2012)	89.6		100.0		22.3		37.7	
Votes Earned in 2012 (Pct.)	78.6		98.1		91.1		82.4	
Presence of Homepage	100.0		100.0		100.0		73.0	
Sample Sizes	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>
All	377	291	377	80	377	158	377	53
Matched	239	291	120	80	174	158	66	53
Unmatched	138	0	257	0	203	0	311	0
Discarded	0	0	0	0	0	0	0	0
	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>
Average Treatment Effect (ATE)	0.004	(0.005)	-0.002	(0.009)	0.003	(0.007)	0.013	(0.014)
	2.5%	97.5%	2.5%	97.5%	2.5%	97.5%	2.5%	97.5%
Quantiles	-0.006	0.014	-0.021	0.015	-0.009	0.016	-0.012	0.040

This table provides the main results of the matching analysis. The four treatments are as follows: All Twitter users, Twitter users who tweet less than once a day, Twitter users who tweet 1 to 10 times a day, Twitter users who tweet more than 10 times a day, respectively. Source: Author's calculations.

¹⁴⁷As previously noted, the matching was done using a genetic algorithm. Matches were done with a ratio of 2 and replacement, allowing for multiple controls to be matched to each treatment, and each control to be matched to multiple treatments.

While the previous analysis did control for party, the results did not distinguish between parties. Therefore, we again estimated the first treatment, but this time consolidating each estimate based solely on samples taken from individual party groupings. The results are shown in *Table 3.8*.

Table 3.8. Results of Matching on Treatment 1, Sub-grouped by Party

	Treatment on LDP		Treatment on DPJ		Treatment on JCP		Treatment on Other Minority Parties	
Covariates	<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>		<i>Pct. Balance Improved</i>	
Distance	94.2		95.4		95.7		93.4	
Age	97.0		86.6		93.1		92.1	
Gender (Female)	21.9		68.6		77.0		-108.3	
Prefectural Population Density	93.9		61.9		65.1		57.0	
Cross-listed (2012)	67.5		0.0		100.0		70.5	
Incumbency (2012)	76.1		86.7		0.0		2.8	
Votes Earned in 2012 (Pct.)	96.1		75.1		90.5		85.5	
Presence of Homepage	57.7		100.0		77.9		96.2	
Sample Sizes	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>	<i>Control</i>	<i>Treated</i>
All	164	108	82	53	81	58	50	72
Matched	107	108	47	53	41	58	38	72
Unmatched	57	0	35	0	40	0	12	0
Discarded	0	0	0	0	0	0	0	0
	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>	<i>Mean ATE</i>	<i>Std. Dev.</i>
Average Treatment Effect (ATE)	-0.012	(0.01)	0.029	(0.007)	-0.002	(0.012)	0.016	(0.013)
	2.5%	97.5%	2.5%	97.5%	2.5%	97.5%	2.5%	97.5%
Quantiles	-0.031	0.007	0.014	0.043	-0.023	0.025	-0.009	0.041

This table provides the main results of the matching analysis, divided by party sub-groups. Source: Author's calculations.

Yet again we find good balance and reasonable sample sizes. However, we must note that for the DPJ sub-group we had to drop the cross-listed (2012) covariate from the regression analyses leading to the ATE estimates due to lack of variation. Similarly, we had to drop the incumbency

(2012) covariate from the JCP sub-group, and the gender covariate from the other minority parties sub-group.

As for the average treatment effect, we see slightly more interesting results than with the four general treatment groups. Here we find that the LDP and JCP have very minor losses. On the other hand, the DPJ and other minority parties have positive gains that are statistically significant. All results appear to still be insignificant in practice.

3.7 DISCUSSION AND CONCLUDING REMARKS

The Japanese general election in 2014 provided a unique chance to see how liberalizing policy regarding Internet use in election campaigns may affect the elections themselves. It also provided a chance to look at a new arena of political campaigning tactics in a manner that has largely not been done so in regard to Japanese politics.

The main conclusion of this study is that, all else being equal, Twitter use did not appear in general to help candidates in the 2014 election. This result is surprising on the surface due to the fact that the platform is both popular among politicians and citizen alike, and because of the initial enthusiasm that helped lead to the 2013 legal change (see Chapter 2). There are several apparent and reasonable explanations for this.

To start, following hyper/hybrid media theories (Howard 2006; Chadwick 2013), Twitter is only one tool politicians have for campaigning among a growing host of available options, both online and offline. Realistically speaking, one tool should not be expected to create a great advantage overall for all candidates. Rather, the success of a candidate is more likely due to how they employ each of the available methods to best connect with their individual constituents. Certainly, there will be individuals (power users/ influencers) that see great success using the Twitter platform, or other similar platforms. For instance, Japanese politicians may be able to

achieve online success by building strong online communities like traditional *koenkai* support groups¹⁴⁸; Prime Minister Shinzo Abe did this by harnessing support of the online fringe-right (Tsuda, Yasuda, and Suzuki 2013), as did the Osaka-based politician Toru Hashimoto, who leveraged Twitter and regionalism in his favor (see chapter 2). Certainly, such individuals who purposely ignore traditional media and established party practice for their own fortune are not unique to Japan (Vergeer 2015).

Next, it appears that there is a disconnect between supply and demand. While Japanese politicians and political parties have bought in to the possibilities inherent in the Internet (J. A. Williams and Miller 2016) (also see Chapter 2), the still politically reluctant netizen community within Japan has largely not (McCargo and Hyon-Suk 2010; Ducke 2011; Ikeda, Richey, and Teresi 2013). It is similarly possible that Japanese political culture does not have the systems in place for politicians to use online tools for what it is most efficient at, such as raising donations or finding campaign volunteers (Ogasahara 2014). Also, the 2013 policy change may just have not had sufficient time to become infused into the political landscape, though this seems less likely based upon our analyses. Additionally, success in terms of vote getting may in fact not be seen directly because those who do follow politicians on Twitter are already either a) converts who do not need convincing, or b) politically minded individuals who will not be inclined to switch parties (Vergeer 2015, 754).

Finally, considering most methods of media access are heavily restricted during Japanese election campaigns, candidates may simply not know how to use this new and unrestricted form of campaigning to its fullest extent. As already noted above, factors that have made social media

¹⁴⁸ Koenkai are “permanent formal-membership organizations, or overlapping sets or networks of organizations, devoted to supporting an individual politician and are heavily involved in electoral mobilization” in Japan (Krauss and Pekkanen 2011, 29–30).

extremely relevant particularly in the United States, including the volunteer mobilization and fund raising potential, appear to have yet to be realized in Japan (Ogasahara 2014). It has also been suggested that longer running campaigns, rather than those that just focus on the election periods, may also be necessary for success (Vergeer 2015). However, our current evidence does not statistically give weight to this idea; individuals with established Twitter accounts prior to the policy change, did not necessarily fair better than those who did not have any account at all, regardless of usage patterns. Unfortunately, whatever the reason, given the rapid change of Internet technologies (Karpf 2012), by the time the politicians or the citizens figure out why Twitter is not working well, it may have become more or less irrelevant.

There are some analytic caveats that must be noted to the above conclusions. To start, there still remains the question of how representative Twitter users are of the general population (Barberá and Rivero 2015). Despite Twitter's apparent popularity in Japan, it may still only be reaching certain societal segments. We must also remember there are limitations regarding available metrics for social media, such as post count, followers, and post 'likes' (Baym 2013). Finally, this analysis was not able to consider some potentially important factors for a variety of reasons, such as the factor of voter preferences, due to lack of available data.

Regardless of the caveats, this study improves on previous studies by homing in on a variety of statistical techniques to answer a singular important research question in a thorough manner. While this study benefited from a unique policy change that allowed for the utilization of certain methods that may not work in other contexts, finding and running multiple approaches would be beneficial to any study that seek to statistically confirm hypothesis, particularly when dealing with many unknown confounding factors.

Moving forward there are several suggestions that arise out of this study that suggest need and opportunity for future research. First and foremost, more analysis that connects greater campaigning efforts, online and offline, must be conducted. As noted above, Twitter is just one tool among many. Continued study of future general elections in Japan is undeniably needed. Next, relating directly to Twitter, the contents of the tweets were not considered in this study, they should be analyzed in their relationship to potential electoral outcomes in future studies using multifaceted approaches.

Some initial efforts to look at the contents of Japanese politicians tweets has been conducted (Uenohara 2014) (also see Chapter 4). However, are politicians tweeting information that one might expect citizens to engage with in a way that would get them to vote for the candidate? This question may be of particular importance in Japan, where citizens show a preference for direct conversations over functions such as hashtags and links (Weerkamp, Carter, and Tsagkias 2011). If the patterns of more mundane use of Twitter that were seen in studies of the 2013 Upper House elections (Uenohara 2014) or less political use during campaign periods (see Chapter 4) persist, this may indicate a reason for Twitter's apparent ineffectiveness in Japan.

Similarly, the question must be asked: what emotions are the tweets portraying? Sentiment analysis of tweets has been employed in other settings to try and determine whether politicians are tweeting positive or negative remarks. While evidence of negative campaigning in Japan has been minimal, Japanese politicians worried heavily about the potential effects of negative campaigning when they passed the 2013 election law change to allow for online campaigning (see Chapter 2); if such tactics are being used—though early indication is that it is not—that may have implications as to Twitter's effectiveness.

Finally, more work at incorporating Japanese new media use into cross-cultural comparisons should be undertaken. All the previous suggestions will have the benefit of enabling more and much needed cross-culture comparative work, but direct cross-cultural comparative work needs to be conducted as well.

Chapter 4. RAMEN AND RHETORIC: TWEETS FROM JAPANESE POLITICIANS

4.1 INTRODUCTION

安倍晋三 @AbeShinzo

釧路市駅前街頭演説会での演説。この地域への外国人観光客の増加、雇用問題等、幅広い分野で安倍政権の政策を訴えました。地元の伊東良孝前衆院議員が同行してくれました。

Spoke at a stump speech event in Kushiro. Increasing the number of foreign tourists going to this area, employment issues, I spoke on a wide range of the Abe administration policies. Local and former Lower House Diet Member Yoshitaka Ito came along with me.

Retweets 432 Likes 273

10:09 PM - 26 Nov 2014

<https://twitter.com/AbeShinzo/status/537850601724329984>

安倍晋三 @AbeShinzo

函館市内。晩御飯は味噌ラーメン。とっても美味しい！

In Hakodate. Dinner is miso ramen. Very delicious!

Retweets 3,000 Likes 2,279

2:44 AM - 27 Nov 2014

<https://twitter.com/AbeShinzo/status/537920008303562752>

Since its inception in 2006, Twitter has become a major communication tool for political action around the globe, from spreading protest information during the Arab Spring in the early 2010s (Howard and Hussain 2011) to its enigmatic and ubiquitous use by Donald J. Trump during his successful 2016 United States Presidential Election campaign (G. Enli 2017; Gross and Johnson

2016). Further, Twitter has stood above many other similar Internet platforms in its continued and global use in the digital era. But how exactly has Twitter been adopted for political purposes? Certainly, its political use depends on the political role—whether citizen or politicians—and communication purpose of the user. The tweets coming from protesters in the Arab Spring may not bear any resemblance to those coming from Trump. However, once we identify groups of political actors, whether protestors or populists, we are able to analyze the content of their posts and to identify patterns within groups that illustrate just how Twitter is used politically (Vergeer 2015; Jungherr 2016).

This study seeks to shed light on questions regarding the political use of Twitter through the unique case presented by politicians and election candidates during the 2014 general election in Japan. Despite that nation's relative historical isolation online, the Japanese were among some of the earliest international adopters of Twitter (Stone 2008; Wang 2016, 2638) and remain among the most vocal of user groups on the service. Despite the popularity of this platform, due to a unique legal circumstance, Japanese politicians were restricted from using Twitter for the purpose they would seem most likely to want to use it—seeking votes during election campaigns. That was, however, until 2013 when the law was changed, allowing Japanese politicians to use the Internet largely unrestricted in electoral campaigns from then on (see Chapter 2). This legal change provides a unique chance to look at how politicians adapt Internet technologies outside of the natural evolution of Internet technologies.

Utilizing an original longitudinal dataset, which combines just under one million tweets from Japanese politicians and election candidates who took part in the 2014 national election, in combination with data on characteristics of the individual users, this study seeks to discuss content and trends of posts over a six-year period from specific individuals along political and biographical

lines to discern to what extent those politicians and candidates were posting about ramen (daily matters) and rhetoric (politics and policy). It also looks at changes over time, particularly in regard to the effects of the 2013 Public Offices Election Law (electoral law) revision on digital campaigning and specifically on the 2014 election.

Four specific research questions are addressed: To what extent do general tweeting habits of politicians and election candidates in Japan match those of Western democracies? Did the 2013 legal revision of the Japanese election law to allow for the use of Internet tools in election campaigns affect the general tweeting habits of politicians and election candidates? What are the contents of the social media communiqués typically as posted by Japanese politicians and candidates on Twitter' and how does the content fluctuate based on individual characteristics of the users making the posts? Do the contents of tweets affect their popularity among other users? This study finds that Japanese politicians do follow their Western counterparts in terms of focusing on politically oriented content, with general habits changing based on major political events such as elections. In particular, however, the anticipation of the 2013 legal change did appear to affect politicians' willingness to sign up for Twitter and to tweet. Specific tweeting habits are also affected by individual characteristics of the tweeting population, most notably party affiliation.

The study proceeds as follows: First, background and research on Twitter use in the political world in general, as well as Twitter use specific to Japan, is discussed. Second, the main research questions, along with the data and methodology used is detailed. Third, analysis of the data and results of the inquiry are provided. The study then concludes with summary discussion and suggestions for future research.

4.2 BACKGROUND

The content of political messages by politicians and electoral candidates, regardless of the medium, are critically important to the functioning of a democratic society. It has been argued, for example, that citizens make better choices in a democracy the more they have access to a broad range of information (Carpini and Keeter 1996, 63–65). This logically leads to the idea that the better a citizen understands a politician or political candidate, and his or her relative policies and views, the better that citizen is able to be civically engaged (Coffé 2016, 3). How does this this notion of informing citizens extend to new media, such as Twitter?

4.2.1 *Twitter and Electoral Campaigns*

Twitter is one of the most well-known microblogging platforms worldwide (Boyd, Golder, and Lotan 2010). Users send out ‘tweets,’ short 140 character messages, which are generally open for the public to read. Users may follow or be followed by other users, allowing for individuals to quickly keep up to date on posts from those they desire to hear from and hence arises the potential for rapid conversation-like interaction. While interaction among users can be private, most users allow for messages to be available to the general public regardless of the nature of the post. This interaction can happen in a variety of ways, including through posts (posts can be replied to, reposted/retweeted, liked/favorited¹⁴⁹, grouped with like-minded posts under common hashtags, and searched for via a variety of search functions) and through user accounts (through direct messages, @-mentions, and followers). By 2015, Twitter stated it had more than 300 million active users and 500 million daily tweets (Twitter 2015).

¹⁴⁹ Posts were originally ‘favorited’, but in late 2015 Twitter changed that function to ‘liked’ (Kumar 2015).

There has been a reasonable amount of research on the use of Twitter in the context of elections, though this has generally been from a Western perspective. In a systematic literature review of the topic, Jungheer (2016) looked at 127 English-language studies. While 26 countries are looked at in total, only around 15% of the studies dealt with non-Western Countries. Jungheer takes a wide-ranging approach to the review, and finds that studies could be broken down into three broad categories: parties/candidates, publics, or mediated events. Of the studies analyzed, 70 focused on tweets from parties/candidates, looking at either which kind of parties/candidates adopt Twitter, what functions and effects Twitter use has for parties/candidates, or how parties and candidates tend to use Twitter. Specifically, Jungheer finds that “Parties and candidates tend to use Twitter predominantly to post information on their campaign activities [and] link to their own Web sites,” citing studies from the US, UK, Netherlands, Canada, and Australia. At the same time, he finds only two studies suggesting some candidates use Twitter primarily for personal content. Jungheer notes a number of studies indicating that politicians rarely use Twitter to ‘get out the vote’ or fundraise; politicians typically adopt ‘broadcast’-style messaging, and interaction, when it does happen, is typically interparty or with journalists. These and other studies, he notes, suggest little evidence for dialog between candidates and citizens, though that is heavily dependent on the individual user. (Jungheer 2016, 74–77).

In a separate review of Twitter and political campaigning, Vergeer (2015) provides additional perspective. For instance, he notes that politicians generally are “amateurs” on Twitter, which can lead to mistakes. While the platform is easy for them to adopt, it can be difficult to become savvy users. Regardless, Twitter has some general advantages for politicians, he finds, because it allows for easy broadcasting, like traditional mass media, and can be nonreciprocal if desired. It is easily used on smartphones, and mimics short messaging service (sms) texts. Vergeer also indicates that

politicians predominately use Twitter during election campaigns, and that tweets are generally about campaign and party affairs rather than other political or nonpolitical topics.

The findings from both reviews are not necessarily surprising. Individuals adapting to new communication tools have shown habits of utilizing the new technologies in manners that were thought to be effective in the past, such as in the public relations realm (Grunig 2009). Focusing on posting information on campaign activities or links in a broadcast manner matches more ‘traditional’ means of campaigning, both online and offline.

Tweets can cover an immense range of topics and purposes. This leads to the question of how to organize them for analytic purposes. Dann (2010) in analyzing ways to classify tweets in general suggests broadly classifying them into 24 categories, which subsequently fall into six catch-all groupings: *conversational* (“Uses an @statement to address another user”), *status* (“An answer to ‘What are you doing now?’”), *pass along* (“Tweets of endorsement of content”), *news* (“Identifiable news content which is not [a link to content created by the user]”), *phatic* (“connected presence between members of a social network through sheer existence of a tweet rather than any specific content”), and *spam*. However, while Dunn’s categories may provide for strong analysis of overarching generalizations of Twitter users and their usage habits, the categories may be inadequate for providing more nuanced understandings of how particular types of users engage with particular types of topics—particularly politically. Politicians, for instance, have been shown to have different tweeting habits than general users; Hosch-Dayican et al. (2016), for example, argues politicians generally aim towards persuasive campaigning while citizens are almost as likely to use negative campaigning as persuasive campaigning. Different approaches to how to look at the content of politicians’ tweets have been developed. For example, Graham et al. (2016) take an approach in which they distinguish 14 different types of tweet behaviors (falling

largely under campaign activities and party affairs) and 19 different topics discussed by politicians: campaign/party affairs, business/economy, government, health/social welfare, civil/human rights, immigration, infrastructure, education, environment, crime/judicial proceedings, animal rights, and eight other less frequent topics. Glassman et al (2010, 2013) uses an eight-category approach; district, official action, policy, position taking, personal, media, campaign, and other. Golbeck et al (2010) used 9 purpose categories; information, location/activity/external communication, official business, personal message, requesting action, inner communication, fundraising, and unknown. Overall, the approaches are quite varied.

Regardless of how they are classified, the content of the tweets is undoubtedly important (Vergeer 2015, 751). For instance, Panagiotopoulos, Bigdeli, and Sams (2014) showed Twitter in some contexts to be an effective means to engage the public during politically charged events when the entity is proactive. While this may be, politicians appear uncertain as to what that context should be. For example, one study of the UK found the majority of the tweets were about the campaigns or party affairs, and policy talk was minimal (Graham et al. 2013). In a different study in the Netherlands, researchers found that just over half of all tweets collected from citizens, journalists, and politicians combined were aimed at campaigning (Hosch-Dayican et al. 2016).

4.2.2 *Twitter in the Japanese Context*

Twitter is a very popular social media platform in Japan.¹⁵⁰ As of the end of 2014 (one of the focal time periods of this study), Twitter was the most widely used social media platform in the nation—though by some accounts it has since been surpassed by YouTube in terms of user activity (Statista

¹⁵⁰ A more thorough documentation of Japan and the Internet as a whole can be found in Chapter 2.

2017a) or by Line in terms of social network penetration rate (Statista 2017b).¹⁵¹ Regardless, Twitter still remains quite popular, both among the general Japanese populous and—importantly for this study—politicians (See chapter 3 for more on this context).

There have been a small number of studies looking specifically at Twitter use among the Japanese, utilizing a variety of topics and methodologies. For example, Acar and Deguchi (2013) find in a small study of 4,000 tweets from 200 Japanese and American college students that the Japanese tweet about themselves 39% of the time and about events or news 16% of the time (this compared to 31% and 21% respectively among Americans). Wang (2016) looks at social factors in Japan that may lead to Twitter use, noting that Twitter provides enough general anonymity and sense of group to meet the needs of individuals seeking a means to express their true selves without fear of the strong real world repercussions that happen when doing so publicly in a society noted for strong collectivism. Beyond profiling general habits of Japanese Twitter users, the use of Twitter during major events are another area of interest—notably during and after the March 11, 2011 Great East Tohoku Earthquake, tsunami, and Fukushima nuclear reactor meltdown (3/11 triple disaster) (Peary, Shaw, and Takeuchi 2012; Hara 2013; Shinoda et al. 2013; Abdullah et al. 2015). In terms of political-oriented research involving Twitter, the topics have also varied. Kobayashi and Ichifuji (2015) look at how Twitter could positively affect intention to vote through a randomized field experiment conducted during the 2013 House of Councillors election. Nishida (2013a) looks at how Japanese Diet members' Twitter accounts connected amongst each other after the 3/11 triple disaster. Also, Uenohara (2014) looks at topics of Japanese Tweets from the 2013 Upper House Election—the study closest at heart to this one. However, despite all of these

¹⁵¹ Note that social media and social network are not being used interchangeably by the source (statistica.com), but rather social network is considered a subset of social media.

studies, Twitter usage in Japan, political or otherwise, is understudied, particularly given the size of the share of usage Japan makes on Twitter as a whole.

4.3 RESEARCH QUESTIONS

We can see that despite the growing abundance of research on Twitter in connection to political campaigns, that there is both a dearth of research on the non-Western contextualization and implications, as well as a continued need to find means to dive into the actual content on in a large-scale manner and across larger periods of time. Japan provides a unique opportunity to fill this gap given its relative Twitter popularity, but this nation has largely been overlooked when it comes to research into digital campaigning, most notably because its use was essentially barred up until 2013 for politicians during the time they were most likely to use it—election campaigns—while most other democracies were using it. With this in mind, we pose four research questions with the intent to start filling in some lacuna by looking at the trends and content of Japanese politicians not only directly around multiple important political events (namely, the 2013 election law change and the 2014 general election), but also before and after those events as well. The first question dives right to the heart of the applicability of the Japanese case, despite cultural contexts, to the greater body of research.

Research Question 1: *To what extent do general tweeting habits of politicians and election candidates in Japan match or differ from those in Western democracies?*

Western politicians tend to use Twitter more during highly political times, namely during election campaigns (see Glassman, Straus, and Shogan 2010; Kruijemeier 2014 for examples). While Japanese elections and politics have their own cultural quirks, such as *kōenkai* support

groups (Curtis 1971; Krauss and Pekkanen 2011, 29–99), the modern Japanese political system is based on Western democratic systems (Curtis 1988, 157–60). And so, it is not surprising that the general literature on Japanese politics would suggest Japanese politicians and voters bear a similarity to their Western counterparts—particularly among parliamentary systems. The Japanese political system has similar structural underpinnings, with elections and campaign strategies run in similar manners to many Western systems (Reed 1993; Shugart and Wattenberg 2001).

While it has been argued that the Japanese do have the political culture that makes online campaigning successful in the West, namely the drive to solicit for campaign donations and volunteers (Ogasahara 2014), the overall similarity in political tendencies and campaign strategies should even apply to the political use of a platform like Twitter, particularly in regard to Japanese politicians. Since a major electoral reform, which altered how parliamentary seats are won, happened in 1993, Japanese politics have moved toward a system of greater accountability and responsiveness to Japanese citizens at a national, rather than local, level (Kabashima and Steel 2010). Twitter provides one more possible tool in that revised relationship between voters and politicians. Therefore, it is hypothesized that *general tweeting trends among Japanese politicians will tend towards revolving around major political events as they do in the West.*

Research Question 2: *Did the 2013 legal revision of the Japanese election law to allow for the use of Internet tools in election campaigns affect the overall tweeting habits of Japanese politicians and election candidates?*

There is the lack of focus on discrete changes in media environments, particularly policy-oriented changes, when it comes to research on election campaigns. What constitutes the Internet

changes so rapidly that one cannot assume “all things are equal” in regard to the use of digital media over time (Karpf 2012); yet, most studies just drop themselves into the middle of rhetorical debate without addressing the temporal concern of this natural technological evolution. Researching how Twitter (and other Internet platforms) is being used by politicians, and potentially affecting elections, inherently involves a bias driven by the organic inclusion of a medium that is not truly well-vetted. The 2013 election law revision and 2014 general election in Japan provide a unique chance to get a more accurate picture of how Twitter and other similar Internet tools truly affects and potentially changes the habits of politicians.

If Japanese politicians do focus activities during major political events (i.e. elections) as predicted in the first research question, then having access to a popular tool for use in elections should result in a quantifiable change of behavior. Therefore, it is hypothesized that *the legal change resulting in unprecedented access to digital media for election campaigning will have resulted in an evident quantitative effect on the patterns of use of Twitter by Japanese politicians.*

Research Question 3: *What is the topical content of the social media posts by Japanese politicians and candidates on Twitter, and how does the frequency of use of specific topics fluctuate based on individual characteristics of the users making the posts?*

If we conceptualize the purpose of media for politicians as either a source of passive and active information gathering or an arena to spread information, either to gain attention and favorable coverage or to promote issues (Van Aelst and Walgrave 2016), social media becomes seen as a seemingly ideal arena for to spread information. Thus, the question becomes: what information might they want to spread? When thinking about social media content, studies on electoral

campaigns have mostly opted to look at purpose, particularly from the standpoint of whether politicians use social media simply to broadcast to voters, or if they take advantage of social media capabilities to allow for direct interaction with voters. It seems to be well concluded that the majority of politicians prefer to broadcast (Jungherr 2016; Vergeer 2015). As noted above, if Japanese politicians are showing comparable tendencies as their Western-counterparts as expected, there is little reason to expect a difference here. What has generally been missing, instead, is research on and discussion of the actual topics of conversation, political or otherwise.

If the hypothesis from the first research question is true—that general tweeting trends among Japanese politicians will tend towards revolving around major political events (with less emphasis on daily matters) as they do in the West—we should expect tweets from Japanese politicians to have a political orientation more often than not. This does not mean they will not discuss other topics as well, of course (Kruikemeier 2014). As a result of this political orientation, political and/or electoral factors should show evidence of affecting content. Non-political factors, such as age and gender, which are often used as factors of interest in analysis, might also be expected to result in differences in content. In fact, a few studies have already shown that such variables, both political and non-political, cause variation in patterns of adoption and usage of social media as a campaigning tool, both with Twitter (Evans, Cordova, and Sipole 2014) and with other social media platforms like Facebook (C. B. Williams and Gulati 2013). Thus, it is hypothesized that *given that different political parties draw different political ideologies, at minimum we should expect for variation in Tweet content based on party affiliation, but other political and non-political factors will show evidence of causing variation as well.*

Research Question 4: *Does the content of individual tweets affect the popularity of that tweet among other Twitter users?*

A number of studies look at the use of Twitter in election campaigns from the perspective of either the politicians/candidates or the public (Jungherr 2016), but rarely do they consider the connection between politicians/candidates and the public in terms of their Twitter usage. One way to look at that connection is through the lens of the popularity or lack of popularity of politicians' and candidates' tweets.

One direct measure of the popularity of a tweet is the number of retweets. Here we can hypothesize that users generally pay attention to a politician or electoral candidate when they are interested in their political stances. Therefore, we can expect that *political-oriented tweets from politicians and electoral candidates will be more popular, as measured by the number of retweets, than non-political tweets from those same individuals.*

4.4 DATA

To answer the above questions, several methods will be combined as described below. However, prior to providing the methods, a brief explanation of the data used is necessary. Specifically, the data for this study is an original dataset that combines the content metadata of social media posts on Twitter with user metadata gathered separately. The social media posts were gathered from the tweeting history of incumbent members of both houses of the Japanese parliament, as well as all election candidates for the December 14, 2014 Japanese General Election immediately prior to the election.

Data collection¹⁵² began on a list of Twitter accounts of members of the Diet approximately three days after the lower house of parliament was officially dissolved for election on November 21, 2014 by Prime Minister Abe Shinzo.¹⁵³ The list of Twitter accounts for individual politicians was gathered from a publicly available social media list published on the Japanese newspaper Mainichi Shimbun's website¹⁵⁴ and then independently reviewed for inconsistencies and missing information.

Unlike many social media sites, including Facebook, the vast majority of posts on Twitter are publicly available, and Twitter provides open (although sometimes limited) access to relevant metadata to anyone seeking the information through its Application Programming Interfaces (API) under its general developer's policy. Such metadata is broadly categorized under four main object types: tweets (information about a post on Twitter), users (information about the person or thing that generated a post), entities (additional contextual information about a post, such as embedded hashtags, URLs, or user mentions), and places (information about the geophysical location of a post) (Twitter.com 2017a). There are multiple means of accessing this data based on different APIs. The two most commonly used ones are the Rest API, which allows for "programmatically access to read and write Twitter data" (Twitter.com 2017b), and the Streaming API, which gives "low latency access to Twitter's global stream of Tweet data" (Twitter.com 2017c). Knowing the account names of the target users, this study pulled its data from the Rest API.

¹⁵² Assistance in Twitter collection and data storage was graciously provided by Prof. Emma S. Spiro and the University of Washington iSchool.

¹⁵³ This study opts to use the Japanese-style of name use, whereby the family name comes before the given name.

¹⁵⁴ Mainichi Shimbun. 2014. "*Dejitaru kokkai giin meikan [Digital National Diet Member Directory]*" <http://sp.senkyo.mainichi.jp/giin/>. Last Updated October 14. Accessed November 19.

Specifically, the user account posting history was first backlogged to the fullest extent possible¹⁵⁵, and then set to capture account activity on a twice per week basis. The collection was then expanded upon to include all candidates running in the December 11, 2014 election based on publicly available social media data for the candidates gathered by the Japanese Newspaper Asahi Shimbun and, again, independently reviewed for inconsistency.¹⁵⁶ It was not feasible to begin collecting prior to the campaign period as candidates for a general election cannot officially announce their candidacy until 12 days prior to the election itself, the point at which the official election campaign period begins—one of many limiting election campaign rules in Japan. Data collection of the 2014 user group ended on approximately July 1, 2015.¹⁵⁷ This dataset resulted in a collection 0.97 million unique tweets. While all available metadata was archived, only limited variables for each post were parsed for the purposes of this analysis, including: the content of post, the time and date of post creation, the user of post origin, and the number of post retweets. Some basic user-related metadata was also gathered and parsed, including number of followers of target Twitter users and number of individuals each target user followed.

Individual user metadata not available through Twitter was pulled from the unique dataset used in *Does Twitter Affect Electoral Outcomes? The Case of the 2014 Japanese General Election* (see Chapter 3), and provides delineation of the Twitter users on a variety of factors. These factors include candidate (i.e. age or sex), election (i.e. party or incumbency), environmental (i.e. prefectural population density), and social media (i.e. presence of a Facebook Account). Rationale

¹⁵⁵ At time of collection, the previous 2,000 available tweets from any individual account are available to download via the Twitter API. Direct tweets and tweets that may have been deleted are not available nor recoverable via the Twitter APIs.

¹⁵⁶ Asahi Shimbun. 2014b. “*Kōho-sha - 2014 shūin-sen [Candidates – 2014 General Election]*.” <http://www.asahi.com/senkyo/sousenkyo47/kouho/>. Accessed: December 7.

¹⁵⁷ The data collection was continued and backlogged for a majority of the targeted users in preparation for analysis of the 2016 election.

for choice of these factors is detailed in the analysis section. Select summary statistics are seen in *Appendix D*. Overall, these additional factors are necessary to facilitate the political-oriented nature of this research.

4.5 METHODOLOGY

Two related analytic methods are used in this study, and are described as follows. First, to understand basic underlying trends sought in the first two research questions, this study will look at the dataset via time-based histograms. This simplistic method has the ability to provide a significant amount of information visually when applied to various aspect of the dataset, including the time stamp on the posts or the politician's account creation date.

The second and more complex method, a textual content analysis, will help to provide the analysis necessary to answer all of the research questions, but is aimed at detailing out responses to the latter two questions. One way to conceptualize such a content analysis is to look at frequency of specific words over time among various sets of users. This study's word-based approach expands upon a word-based approach used by Uenohara (2014) in his study of the tweets of Japanese politicians during the 2013 Upper House election. Word-based approaches have been applied to Japanese-language tweets in multiple context; for instance, Arakawa et al. (2015) used the approach on a relatively small sample of tweets from Japanese academic researchers, while Wakamiya et al. (2015) applied and combined the word-based analysis method with sentiment analysis on a large-scale database of tweets from across Japan in a multi-angled study on distributions of tweets.

Uenohara, for his part, focuses on political topics, listing approximately 100 Japanese keywords/phrases over several categories. Uenohara's work is, at the time of this writing, the only known work on Twitter content in Japanese election campaigns, and therefore provides the only

potential preexisting starting point. With the consultation of a professional Japanese/English translator¹⁵⁸ to help choose the most natural and likely used terms, this study expands Uenohara's word list to 292 words, covering 13 political and non-political categories. This study takes his cue and improves upon his approach in several critical ways: First, this study increases the general consistency of the number of words across categories, allowing for more even comparisons across topics. Second, this study adds non-politically oriented words, allowing for more generalized analysis. Third, this study expands the time frame well beyond a single election campaign event, also allowing for more generalizable analysis.

This study roughly divides the words in Japanese politicians' tweets into two broad groupings: political, and non-political. Specifically, the terms are divided into 8 political categories (Foreign Policy; Economy/Finance; Disaster Prevention/Infrastructure; Welfare/Employment; Society; Energy; Political/Administrative Reform; and Protests) and 5 non-political categories (Food & Restaurants; Leisure; Hobbies; Family; and Religion). Similar to what Graham et al (2016) evidently do in their comparative study of British and Dutch election Twitter use, the overarching political topics for this study were designed to match the topics of concern of the local populous at the time of the study. While the number of terms in each category is still not equal, and the political terms in this study outnumber the non-political terms, the aim is to account for that by weighting each term so that each category has roughly an equal a likelihood to be found. This weight is calculated by dividing the category with the most number of terms (family) by the number of terms in the category under question to get a multiple score, which is then applied to later calculations of word counts. This expansion also helps relieve some of validity concerns that arise from using word-based methods (Grimmer and Stewart 2013, 273–75). The terms used in

¹⁵⁸ Translation assistance was provided by Douglas M. Miller. Contact information is available at <http://lnked.in/dmiller>

this study are presented in *Appendix E*. Terms originally included by Uenohara (2014) in Japanese only are marked with asterisks (*).

Next, this study especially looks to compare the tweeting patterns of users when broken out into various groupings, such as those based on party affiliation or age. Following the general groupings established in Chapter 3, four broad groupings, each with two specific representative variables, are used. The groupings are as follows: political variables (by party affiliation and by house of the Diet), biographical variables (by gender and by age), election specific variables (by incumbency and by competitiveness of the election), social media variables (by Facebook usage and by number of account followers). Two other similar groupings are also used: higher level variables (by prefectural population density) and tweet-related variables (by retweet count of each post).

Another way to compare tweet content is over various time periods. This study conceptualizes two different types of time periods. The first type is over even periods centered around the focal event, in this case the 2013 election law change. By looking at multiple even periods around this event, we can attempt to infer patterns and effects caused by the event in question at even rates of time.

The second way to conceptualize time for analysis is to look at periods of interest. In this case, five time periods of interest have been identified relating to four important political events: time prior to the 2013 election law change (any time prior to April 26, 2013); time between the election law change and beginning of the 2014 General Election campaign period (April 26, 2013 to December 3, 2014); time during the 2014 General Election campaign period (December 3, 2014 through December 13, 2014); the 2014 General Election day (December 14, 2014); and, the period of time immediately after the 2014 General Election day through the end of Twitter data collection

(December 15, 2014 to July 1, 2015). These periods are important because we hypothesize the focus of use could be different during various time periods. In the case of the first time period, we can expect less willingness to talk about political topics, as some uncertainty over the legality of the activity like existed among the politicians studied. The second period covers the first extended timeframe when politicians would have felt free to post generally as much as they like outside of an election—this period does, however, cover the 2013 Upper House election. The third period represents the peak political period for the majority of the users in the dataset. The fourth period is a single day when we might expect little or no activity as individuals wait for election results to come back. The final time period should see a return to a tweet activity level closer to the activity seen in the third period, although topic variation may still exist as different political issues get raised at different times.

The process of analyzing the Japanese-language tweets following the categorization approach described above is as follows:

- 1) For each grouping of interest, a single file containing all tweets is generated matching the grouping requirements. These requirements may be time based, user based, tweet, or any combination thereof. The number of tweets entered into each file is separately counted.¹⁵⁹ This step is necessary to generate the files that will be fed into the program described in the next step.
- 2) The generated group files are then run independently through a Japanese term dictionary in R using the program RMeCab¹⁶⁰, following the recommendations of Ishida and

¹⁵⁹ Analyzing the tweets individually per steps 2 to 4 prior to aggregation would be another, likely more robust, manner of analysis; however, technical and resource limitations prevented such an approach for this study.

¹⁶⁰ RMeCab (available at <http://rmecab.jp/wiki/index.php?RMeCab>) connects the program MeCab (available <http://taku910.github.io/mecab/>) to the R statistical computing and graphics software. MeCab analyzes terms in a Japanese text document based on a dictionary of terms. The default dictionary for

Kobayashi (2013, 51–85) to get a count of all words in the document. This is a critical step in the process as words in Japanese language texts are not divided by spaces as in most Western languages, rendering useless many available R packages for text mining which rely on that spacing for analysis purposes.¹⁶¹ Since the Japanese language is written in a continuous mix of traditional Chinese characters and the Japanese alphabets (hiragana and katakana), each symbol can have multiple meanings depending on what characters come before or after it. Therefore, a Japanese dictionary is necessary to sort the terms out appropriately. RMeCab is the only known available program for doing this sort of language analysis with Japanese in R; R arguably provides the greatest versatility in terms of conducting the overall analysis with combined variables at such large quantitative scales without getting into heavily advanced big data programming techniques.

- 3) As some words from the categories in the study are in actuality short word combinations, such as the Japanese terms for ‘security preservation’ (*anzen hoshō*) or ‘electoral system’ (*senkyo seido*), they cannot be found using the RMeCab basic word dictionary. Instead, the file generated in the first step in the process is then run through RMeCab’s n-gram functionality—run once for two-level and once for three-level n-grams.¹⁶² N-grams are word clusters, and allow for the counting of terms such as the two described above.
- 4) Based on results obtained in steps one through three, the desired word counts are pulled and aggregated by the topics of interest. Those overall topic counts are weighted using the

Windows is the IPA dictionary (there are several other available options), and is based on the Balanced Corpus of Contemporary Japanese (BCCJW, available at http://pj.ninjal.ac.jp/corpus_center/bccwj/) (Ishida and Kobayashi 2013, 1–22).

¹⁶¹ There are, of course, numerous commercially available services for obtaining social media data (Ampofo et al. 2013), which presumably include Japanese language capabilities for the right price.

¹⁶² Even higher level n-grams are functionally possible, but unnecessary given the word set used in this study.

method described above and then divided by the number of tweets analyzed in each case to get an approximate weighted frequency of topic for each grouping of interest.

Before moving on to the analysis, there are several potential issues with the word-based approach described above that should be clearly noted. First, terms are searched and accounted for individually and independently. This means that a single tweet may be counted multiple times if multiple terms are found in the same tweet or even if the same word is repeated multiple times in the tweet. While there are means to alleviate this problem, such as analyzing each tweet individually prior to making group calculations, implementation of individual tweet analysis involving RMeCab proved problematic for this study and so the technique described above was chosen. Second, it is reasonable to assume that the distribution of the number of words from the word list used for each category which appeared in an average tweet would not be the same among the categories, leading to comparison biases. Third, certain terms chosen for this study have multiple ways of being said in Japanese. For example, this study includes six different Japanese versions for the word ‘wife’ and three for ‘husband.’ This is a nuance of the Japanese language that must be accounted for (although it is certainly also an issue that exists to some extent in the English language as well) and finding the most appropriate bag of words is for any study a challenge in and of itself. Finally, this is not as sophisticated a method of analysis as presently exists, such as using training sets and letting the computer ‘learn’ which tweets might fall into which categories (for an example in the Japanese context, see Wakamiya (2015)). Therefore, the study is likely not as accurate in terms of minimizing biases and providing the truest possible estimate of topical patterns. On the other hand, this study’s method is arguably less resource intensive (Grimmer and Stewart 2013, 273–79), and therefore more easily replicated for future

studies. Further, and importantly, no vetted training data presently exists to allow for this method to be utilized within the political context in the Japanese language.

4.6 ANALYSIS AND RESULTS

We now can consider the results of the data analysis based on the two methodologies described above in consideration to our research questions. We will first look at general data patterns, followed by general tweeting content patterns, and finally at tweet content patterns by groupings of target users.

4.6.1 *General Data Patterns*

First, we look at the dataset as a whole through histograms for some general trends. The histogram plotted in gray in Figure 4.1 below lays out all the tweets for all users tracked (668 accounts, 642 accounts actively tweeting) based on the time of their postings. There are several noticeable points to be discerned here. First, we see graphically a general increase in data over time. This is partially indicative of the increase in the number of accounts, as shown by the black line in the same figure.

Second, the plot flows with major political events. The earliest event, a general start to Twitter activity in the data set beginning in late 2009, corresponds with a major increase in the number of politicians using Twitter after the Democratic Party of Japan (DPJ) won the 2009 general election and subsequently announced the intention to change the election law to allow for the use of the Internet in election campaigns by the July 2011 Upper House election. This increase in political Twitter users continued until the DPJ fell into disarray after the resignation of Prime Minister Hatoyama Yukio in 2010, resulting in the failure to pass the election law revision in time for Upper House election (see Chapter 2) for more details on the history of this legal change). Regardless, we see a rise in activity shortly before that 2010 Upper House election, likely in anticipation of the

eventual legal change. The brief hole following the spike in activity corresponds with the official election campaign period, when Twitter and other such online tools were barred from use by the elections law.

Between the 2010 Upper House election and the December 2012 General Election, there is only a gradual increase in Twitter activity among the users in the dataset. One noticeable spike occurs, however, during this period, directly corresponding to the 3/11 triple disaster (which is part of the reason for the general research interest in regard to Twitter use in Japan during that period, as noted above). In November 2012, we see another spike in Twitter activity in anticipating of the General Election, with another noticeable hole matching the election campaign period when online activity was again barred.

We then see a fresh rise in activity that began with the election law revision in late April 2013 under the new Abe Shinzo administration, culminating in a sizable spike of activity during the 2013 Upper House election. While the previous two instances of Diet election would suggest the presences of another hole in activity, instead we can find the strongest spike up until that date—a direct indication that the reversal of policy affected political campaign behavior, and a strong signal of the importance of campaign periods to Japanese politicians. From there we see yet another relative leveling of activity until the final major spike in data, which corresponds with the 2014 General Election.

The third major trend is the overall volume of Twitter activity by the user set, which remains generally higher after the 2013 Election Law revision than during any time prior to the revision. At the same time, the rate increase in the number of users was relatively steady from the DPJ's initial pledge until the reform the law, when the number of users leveled off. While some of the increase can be chalked up to a natural increase as the platform gained increased prominence both

in Japan and worldwide, overall this suggests that even the anticipation of the legal change freed most Japanese politicians to test new digital waters. It is significant in that regard that the number of users leveled off with the legal change, suggesting the anticipation was strong enough for long enough to meet a saturation level for those politicians willing to try new campaigning tactics outside of the immediate election campaign period. While there was a final spike in account creation immediately prior to the 2014 General Election, this can simply be attributed to stragglers (and not, as additional analysis not pictured suggests, non-incumbents).

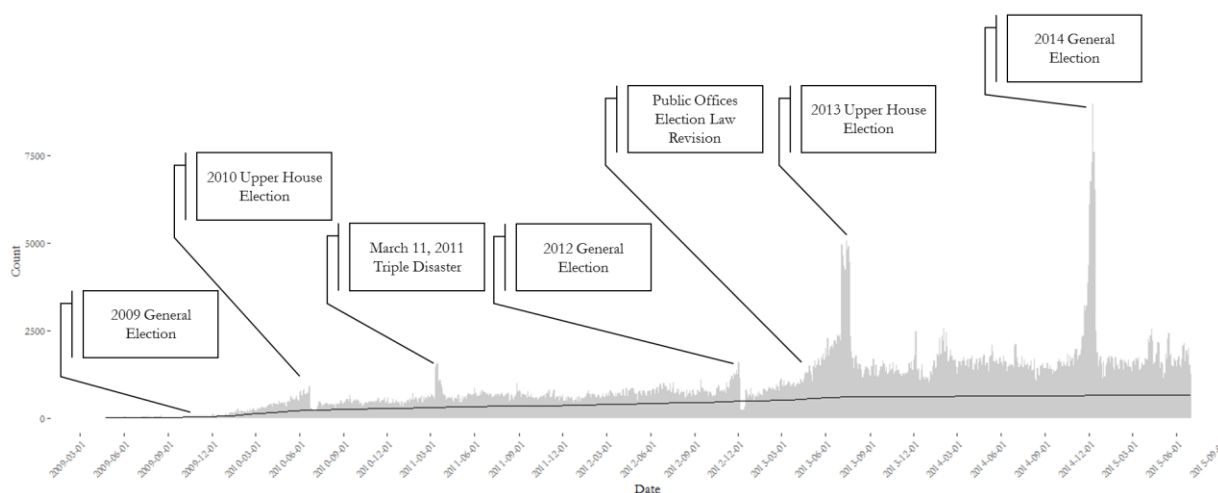


Figure 4.1. Histogram of all tweets in dataset

The figure above contains two overlaid plots. The gray plot is a histogram of the number of tweets in the main dataset over time. The black line plot is the cumulative number of user accounts, based on date of account creation. Both plots are on the same scale. Source: Author's calculations.

Overall, what we find from this part of the analysis is as expected—the volume of Twitter activity by politicians and candidates mirrors major political events, particularly elections. This suggests that at least at the rudimentary level, the use of Twitter by Japanese politicians is in lines with the use of Twitter by their Western democratic counterparts as hypothesized. We also see clearly that the 2013 legal revision influenced user activity, as expected. At the same time, one

slightly unexpected result was the evidence that the mere anticipation of the 2013 legal revision to the Japanese election law showed signs of affecting the propensity of Japanese politicians to use Twitter for campaigning purposes as well.

4.6.2 *General Tweet Content Patterns*

Next, we look at an overview of the general content of the tweets based on key terms noted in *Appendix E. Table 4.1* lays out a general summary of the results. First, we can see that political topics appear to be much more frequently tweeted than non-political categories. If it were possible that each term found was completely independent of any other term found, just over 50 percent of all tweets would then be politically oriented, while only 10 percent would be based on the non-political categories defined. When we weight each term by both the relative term frequency (see ‘Weight’ in *Table 4.1* below), as well as by the weight of the two overarching categories (at an 8 to 5 political to non-political ratio), political terms still outnumber non-political terms by 3.4 to 1. Unsurprisingly, either way of analyzing the count suggests that Japanese politicians prefer in general to discuss political issues.

When we look at the ten top individual terms, as shown in *Table 4.2*, all but one is politically oriented. It is further possible that even that single non-political term—*house*—could easily fall into the political category under other contexts; the two quotes from Abe Shinzo below demonstrate this: in the first tweet Abe is discussing *house* in the context of jogging, while in the second Abe is discussing *house* in the context of the politically charged historical issue of comfort women.

安倍晋三 @AbeShinzo

今朝、久々にジョギングしてきました。いつもの様に家を出発して代々木公園を三周し、家に帰るコースです。いつもと違うのは、数名のSPが一緒という事です。... <http://fb.me/IutBUECn>

This morning I took a jog for the first time in a while. I took my usual course of three laps around Yoyogi Park before heading back to my house. The difference today was the number of security police with me. ...
<http://fb.me/IutBUECn>

Retweets 442 Likes 133

5:54 PM - 16 Feb 2013

<https://twitter.com/AbeShinzo/status/302959169454108672>

安倍晋三 @AbeShinzo

「このなかにおいて河野談話は、ある意味で政治的に、外交的に発出されたものではある。河野談話によって、軍が強制的に人の家に入り込んで、女性を人さらいのように連れて行って、慰安婦にした。この不名誉を今、日本は背負っていくことになっている」(安倍晋三、公開討論会にて)

"In the context of Kono's statement, a political and diplomatic meaning arises. According to Kono's statement, the army forcefully entered peoples house to kidnap women and make them comfort women. That is now placing the burden of this dishonor on Japan." (Shinzo Abe, at a public debate)

Retweets 125 Likes 25

11:07 PM - 14 Sep 2012

<https://twitter.com/AbeShinzo/status/246852738196070400>

It is further worth noting the sheer dominance of the category of foreign policy amongst these top terms. As will become more evident later in this analysis, there are likely some party-related distributional reasons for this trend.

On a slightly different note, the top terms within each category, as shown in *Table 4.1*, are a mixture of fairly nondescript terms (corporations, education, house, lunch, medical, or soccer) and

more culturally contextualized terms (Fukushima, Nuclear Power Plant, Propaganda using Automobiles, and—to an extent—Civil Servants, Constitution, Ocean, or even Shrine¹⁶³). This provides some evidence as to the importance of cultural context when looking specifically at topics, which may dampen some future efforts to generalize patterns among countries.

Table 4.1. Overview Statistics of Categories and Terms in Dataset

Category	Term Count	Terms to Number of Tweets	Weight	Weighted Term Count	Weighed Category Rank	Top Category Term	Top Term Count
<i>Foreign Policy</i>	142,080	14.7%	1.13	160,612	1	Constitution	23,271
<i>Economy / Finance</i>	123,764	12.8%	1.04	128,715	2	Corporations	20,197
<i>Disaster Prevention / Infrastructure</i>	69,873	7.2%	1.73	121,113	3	Fukushima	17,114
<i>Welfare / Employment</i>	45,903	4.7%	2.36	108,498	4	Medical	9,217
<i>Society</i>	26,272	2.7%	1.63	42,692	7	Education	10,284
<i>Energy</i>	75,496	7.8%	1.13	85,343	5	Nuclear Power Plant	44,828
<i>Political / Administrative Reform</i>	18,630	1.9%	1.44	26,910	9	Civil Servants	3,379
<i>Protests</i>	16,141	1.7%	1.44	23,315	10	Propaganda using Automobiles	7,715
<i>Food & Restaurants</i>	15,707	1.6%	1.08	17,016	11	Lunch	2,254
<i>Leisure</i>	28,687	3.0%	1.08	31,078	8	Ocean	3,883
<i>Hobbies</i>	5,749	0.6%	1.53	8,793	13	Soccer	1,676
<i>Family</i>	55,099	5.7%	1.00	55,099	6	House	20,408
<i>Religion</i>	8,250	0.9%	2.00	16,500	12	Shrine	3,986

'Terms to Number of Tweets' is a percentage derived by dividing the total number of terms (per Appendix D) found in the dataset (represented by 'Term Count') by the total number of Tweets analyzed (969,107). The weight is calculated by dividing the category with the most number of terms (per Appendix D) by the number of terms in the category under question. Source: Author's calculations.

¹⁶³ The entire 'religion' category is arguably culturally dependent.

Table 4.2. Top Terms in Dataset

Rank	Term	Category	Term Count
1	Nuclear Power Plant	Energy	44,828
2	Constitution	Foreign Policy	23,271
3	House	Family	20,408
4	Corporations	Economy / Finance	20,197
5	War	Foreign Policy	19,645
6	Fukushima	Disaster Prevention / Infrastructure	17,114
7	Tax Hike	Economy / Finance	15,924
8	Self-Defense	Foreign Policy	15,000
9	China	Foreign Policy	14,655
10	Consumption Tax	Economy / Finance	14,321

Source: Author's calculations.

When we look over time (based relative to the election law revision), as seen in *Table 4.3* below, we see some varied trends in tweet topics. First, no obvious major change in topical pattern appears to have happened simply because of the election law revision. It is arguable that there was a modest reduction in the use of non-political topics, but the given the consistently relative overall lesser use of non-political topics, this change would appear to be relatively insignificant.

Rather, second, the political topics tweeted over time would appear to match other significant political events in Japan. We can see a major increase in the disaster prevision/infrastructure category in 2010/2011 and 2011/2012. This undoubtedly is a result of the 3/11 triple disaster. The major uptick in discussion of energy also matches the concern over energy, particularly given concern over nuclear power post-Fukushima nuclear reactor meltdown. The increase seen in the discussion of economics and finance from 2011/2012 onward would match the emphasis placed on this topic by the Abe administration, particularly given the prominence of Abenomics as well as concerns over the economics of post-3/11 triple disaster recovery (Pekkanen, Reed, and Scheiner 2013, 2015; Pekkanen and Pekkanen 2015). Similarly, we can see a steady increase in the discussion of the topic of foreign policy also matching an emphasis of the Abe administration,

particularly in 2014/2015; this covers the period when the LDP started to renew efforts on increasing its national security policy (Pekkanen and Pekkanen 2015; Hughes 2015). The spike in the foreign policy category in 2015, despite the period only containing a little over a month's worth of data in this dataset, could be due to two major political events: Prime Minister Abe's historical address to the joint session of the U.S. Congress, in which he made a subtle apology for Japanese World War II crimes as the 70th anniversary of the end of the war was drawing near (S.-Y. Lee and Przystup 2015); or, the barely failed referendum in Osaka to seek to make Osaka a special metropolis with the same special status given to Tokyo led by the notable third-party politician and avid Twitter user Hashimoto Toru, who also happened to be well in favor of constitutional reform (Johnston 2015). Further discussion of some of this difference in topic of discussion within the tweets, as potentially driven by characteristics of the Twitter users, will be done in the next section.

Overall, we can see additional evidence that a gradual general increase in the use of Twitter and prolonged anticipation of the electoral law revision brought with it an increased likelihood that political terms would be used, at least for the first several years tracked. At the same time, there was very little change in the frequency of non-political topics, which were also much less used overall.

Table 4.3. Weighted Ratio of Terms to Tweets

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015*
<i>Foreign Policy</i>	5.6%	8.4%	9.1%	13.6%	13.7%	19.6%	40.9%
<i>Economy / Finance</i>	7.5%	8.6%	16.9%	16.5%	13.6%	13.1%	6.2%
<i>Disaster Prevention / Infrastructure</i>	5.2%	20.4%	21.3%	12.4%	11.2%	9.6%	8.5%
<i>Welfare / Employment</i>	9.4%	7.3%	9.6%	10.4%	12.2%	12.3%	11.5%
<i>Society</i>	3.0%	2.9%	3.8%	4.3%	4.7%	4.8%	4.9%
<i>Energy</i>	1.0%	3.3%	11.3%	12.7%	10.1%	7.7%	3.8%
<i>Political / Administrative Reform</i>	2.0%	2.1%	4.3%	3.4%	2.2%	2.8%	2.3%
<i>Protests</i>	1.1%	1.3%	0.9%	2.4%	2.4%	3.2%	3.0%
<i>Food & Restaurants</i>	2.9%	2.3%	2.2%	1.8%	1.7%	1.5%	1.2%
<i>Leisure</i>	4.2%	3.6%	3.6%	3.3%	3.1%	3.0%	3.1%
<i>Hobbies</i>	0.7%	1.0%	1.2%	1.0%	0.8%	0.8%	0.9%
<i>Family</i>	6.1%	5.5%	7.0%	6.3%	5.0%	5.8%	4.9%
<i>Religion</i>	0.7%	1.4%	1.9%	1.8%	2.1%	1.5%	1.1%
<i>Political Topics Sum</i>	34.8%	54.3%	77.3%	75.7%	70.1%	73.1%	81.1%
<i>Political Topics Average</i>	4.4%	6.8%	9.7%	9.5%	8.8%	9.1%	10.1%
<i>Non-Political Topics Sum</i>	14.6%	13.8%	15.9%	14.0%	12.8%	12.6%	11.3%
<i>Non-Political Topics Average</i>	2.9%	2.8%	3.2%	2.8%	2.6%	2.5%	2.3%
<i>Total Tweets Analyzed</i>	15148	83989	10395 0	13211 5	27967 0	30400 4	50763

The chart provides a weighted ratio of the number of terms found to number of tweets over year ranges. The values are presented in percentages, but those percentages may not add up to 100 percent because they are weighted and terms are being counted independently of all other terms. The year ranges are based from April 25th of year 1 to April 24th of year 2. This is done to detail changes over time based on the Public Offices Election Law revision, which took effect on April 25, 2013 (as indicated in the chart with the double zigzag line). *2015 only includes from April 25, 2015 to the end of collection of Twitter data on July 1, 2015. Source: Author's calculations.

4.6.3 Tweet Content Patterns by Groupings

Finally, we look at the tweet content, broken down by groupings and over periods of time connecting important political events. As noted above, the groups are aggregated by: political variables (by party affiliation and by house of the Diet), biographical variables (by gender and by

age), election-specific variables (by incumbency and by competitiveness of the election), social media variables (by Facebook usage and by number of followers), by higher-level variables (by population density), and finally by the tweets themselves (by retweet count). The time frames, as also described above, are as follows: tweets prior the election law revision (prior to April 25, 2013), tweets between the election law revision and the 2014 General Election campaign period, tweets during the 2014 General Election campaign, tweets on Election Day, and tweets after Election Day through to the end of collection of Twitter data. Quantitative details of each of these groupings over the time periods are laid out in detail in Appendix F.

4.6.3.1 Tweet Content Patterns by Party Affiliation

Given that different parties hold different political philosophies, priorities, and campaign strategies, we should expect differences in topical patterns based on, at minimum, party affiliation alone. Previous research indicates that party affiliation does have effects on Twitter use (Evans, Cordova, and Sipole 2014; Lassen and Brown 2011). The analysis in this study breaks down parties into four groups based upon the individual tweeter's political party of association at the time of the 2014 election¹⁶⁴—the Liberal Democratic Party (LDP), the Democratic Party of Japan (DPJ), the Japanese Communist Party (JCP)¹⁶⁵, and all other individuals and third parties.

To start, the LDP as a whole was less likely to discuss political topics on Twitter than other parties. This is despite the fact that LDP used Twitter more prevalently than any other party, with the exception of the JCP. This suggests that the LDP did not feel it needed to discuss such matters to gain attention. At the same time, given their overall weighted volume of political tweets (54%)

¹⁶⁴ While some Japanese politicians are known to switch parties, such occurrences are deemed few enough to remain relatively inconsequential to the overall picture of the analysis here.

¹⁶⁵ While the JCP does not have a large footprint in within the Diet itself, they are both very active on Twitter and consistently run large volumes of candidates in elections.

in combination with the low weighted frequency of tweets with non-political terms (15%), it appears the LDP was using Twitter to conduct activities that were outside of the topics analyzed. For instance, one younger LDP politician admitted in an interview that his Twitter posts were largely just links to his Facebook posts.¹⁶⁶ As for the use of terms, the LDP was also the most consistent over time in how they used political terms outside of the 2014 election, not showing as strong of ebbs and flows on political topics that other parties did. Finally, the LDP showed a strong restraint on using political terms during the 2014 election time period, using political terms about half as frequently as during other time periods. This follows the general reserve nature they had taken in regard to use of the Internet for campaigning purposes despite having been responsible for pushing through the 2013 legal reform. This action suggests that LDP politicians did not see a reason to take on political issues in their campaign at least on Twitter, likely reverting to using Twitter to promote their more traditional campaign tactics, like talking with groups of supporters and making stump speeches, that had generally helped them win elections since the 1950s.

The DPJ, the leading minority party (after losing control of Japan in the 2012 general election), has some noticeable differences in comparison to the LDP. Firstly, we see that the DPJ was more likely to use political terms than the LDP (75% to 54% respectively), but two topics stand out: welfare/employment (DPJ's 17% to LDP's 8%) and energy (DPJ's 9% to LDP's 4%). The emphasis on welfare and employment matches the general policy-emphasis stance the DPJ has taken. Interestingly in this regard, while the LDP has generally focused more on economic concerns, they did not tweet more about economics in relative comparison to the DPJ (11% to 14% respectively). As for energy, it is not surprising that the DPJ paid more attention to that topic because the DPJ had to deal with the issue of the nuclear power post-Fukushima during its

¹⁶⁶ LDP politicians in interview with author, 14 September 2015.

administration, when they had the highest percentage of discussion of the issue (essentially the majority of the pre-election law period). On the other hand, the LDP, and particularly the Abe administration, has been work towards reinstating nuclear power—a contentious issue among the general public that the DPJ undoubtedly do not want to get into a large online debate over.

The other minority parties as a combined group, excluding the JCP, generally followed the overall tweeting patterns of the DPJ in terms of average numbers of political and non-political tweets (minority parties' 66%/13% to the DPJ's 75%/15% respectively). However, the specific topics discussed differed. As noted above, the DPJ focused heavily on welfare and employment, whereas the minority parties placed much of their apparent emphasis on foreign policy (19%). On the other hand, while the DPJ emphasized foreign policy at a level on average with all its other political topics (10%), the minorities parties placed less emphasis on welfare and employment (6%) compared to its average for weighted ratio of terms to tweet for political topics (8%). This may be because the minority parties group tends to lean to conservatively when excluding the DPJ and the JCP.

Lastly, when looking at party affiliation, the JCP stands out as being, by far, the group most likely to tackle political topics (94%). In fact, they posted more on political topics as a percentage of their tweets in every time period, and tweeted more in any time period since the 2013 election law change than any of the other groups. This well reflects the JCP's stated collective and publicized issue-oriented Internet strategy that revolved around Twitter, among other tools (J. A. Williams and Miller 2016). Like the other minority parties, excluding the DPJ, foreign policy stood out as the being the topic discussed the most (22%), but they also placed strong emphasis on economy and finance (17%), welfare and employment (17%) (matching the leftist tendencies already noted with the DPJ), and energy (16%).

Finally, looking at the party data as a whole, we can also see that politicians even further reduced discussion on non-political issues during the 2014 election, regardless of the party. The DPJ would appear at first glance to be an exception, but one category—family—appears to be causing that deviation. In fact, that category stands out for the DPJ specifically during the election campaign period, indicating one or more of the terms was commonly included in campaign rhetoric.

4.6.3.2 Tweet Content Patterns by Diet House

Differences in length of time in office and time of election, at minimum, provide reason to expect differences in the content patterns of tweets between politicians who are in the Lower and Upper House of the Japanese Diet. Previous research on Western politicians also gives us some initial evidence to corroborate this expectation (Glassman, Straus, and Shogan 2013; Lassen and Brown 2011). We do see a significant difference in the content patterns of tweets among politicians based on their house of representation, particularly during the 2014 election campaign. While both were nearly equal in lack of non-political topics, the Upper House members appeared much freer to discuss political issues, tacking on all topics at nearly two times the rate the Lower House (68% to 38% respectively). If we take into account the actual volume of tweets, the difference becomes twice as extreme. Alternatively, if we use the Upper House as a baseline, we could argue that the Lower house may in fact be tweeting about political issues at the same actual volume, but the Lower House, whose members were up for election, greatly increased their overall tweeting habits to post other issues not found in this analysis (for example locations of campaign stops). Given the massive increase in tweets during the 2014 general election period, as seen in *Figure 4.1*, this interpretation gains strength.

Outside of the 2014 election period, the difference is slight, perhaps even negligible. The Upper House showed slightly more interest in discussing issues of foreign policy and disaster prevention/infrastructure than the Lower House (16% to 12% and 16% to 14%, respectively), suggesting there is a slightly greater willingness to discuss longer term issues when the terms of office are longer. Other issues were more of a tossup. We do see far fewer tweets in terms of overall volume, from the Upper House—but this is expected given the Upper House has far fewer individuals. At the same time, the average Upper House members were slightly more likely to tweet than the average Lower House members, outside of the Lower House election period.

4.6.3.3 Tweet Content Patterns by Gender

Gender is a common control variable in many social science statistical analyses, but would there be any reason to assume a Twitter user's gender would cause them to tweet about different topics? Previous research would suggest so (Evans, Cordova, and Sipole 2014). In Japan, women are severely underrepresented in the parliament, and have generally been excluded from leadership roles. In 2014, despite the Prime Minister's noted push to include women in the workforce, little changed in representation (Gauder 2016). This under-representation, combine with evident pushes on topics such as gender equality (Eto 2012), is a strong reason to believe that females in the dataset may tweet differently than the males. In fact, the pure number of the tweets by men vastly outweighed the number of tweets by women, by around 5:1. At the same time, the difference in the number of female versus male Twitter users in the dataset was around that ratio as well. This difference stems from a general low-level of political participation by women in national politics.

Differences in the use of Twitter by gender were in fact seen when the data in this study were analyzed. As expected, women paid more attention to topics related to family than men—they were more likely to tweet about welfare and employment (15% for women to 11% for men,

respectively) on the political end and family (8% to 5%) on the non-political end. But this may in fact be misleading, as women were also more likely to tweet about all political topics on average (10% to 9%)—tweeting noticeably more about foreign policy (17% to 16%), disaster prevention and infrastructure (14% to 11%), and energy (13% to 9%) as well. In comparison, the only topic that men were tweeting noticeably more than women was economy and finance (14% to 12%, respectively). The difference in tweeting habits was most evident during the 2014 election campaign period, but carried across all periods analyzed.

Whether it is gender that is actually driving all of this is uncertain; almost certainly the differences in tweet topics is being influenced by (and potentially influencing) other factors. For example, *Table 4.4* shows that half of the female Twitter users in the dataset are from the JCP; at the same time, female users are only a fraction of the male users even in the JCP. As seen above, the JCP stood out by far from the other parties in terms of their Twitter content. It is therefore reasonable to assume that the political affiliation of users is affecting the results when looking at gender. It is of course also possible that the gender of the politician is affecting their propensity to run as members of certain parties.

Table 4.4. Twitter Users' Gender by Party

	LDP	DPJ	JCP	Others
Female Users	11	14	39	23
Male Users	129	62	105	124
Ratio of Females to Male	0.09	0.23	0.37	0.19

Source: Author's calculations.

4.6.3.4 Tweet Content Patterns by Age

There are at least a couple reasons to consider whether age results in differences in content. First, age could affect how users learn to adapt to new technologies, both in terms of how likely they are to attempt to use it and in what ways. Second, policy preferences and attitudes can change among

different generations. Third, prior research shows age contributes to adaptation rates of Twitter among politicians (Lassen and Brown 2011).

If we divide the Twitter users in our dataset into three groups, those under 45, those between 45 and 64, and those above 65, we do in fact see noticeable differences in the content of their tweets. To start, with the three groups lining up respectively, the older the users, the more they appear to tweet about political topics (67% to 75% to 91%, respectively). It is unclear what may cause this, but potentially age correlates positively with a willingness to discuss political matters or negatively with concern over online image. Alternatively, it could also be that younger individuals are expressing their political views on other platforms, such as Facebook, YouTube, or blogs, while older individuals are less diverse in the digital tools they choose to use.

In terms of topic, the oldest group stood out for talking heavily about foreign policy (26% for the oldest group, to 14% for the youngest and 17% to the middle age group). Further, they discussed disaster prevention and infrastructure, energy, and protest, though the rates fluctuated heavily depending on the time period. On the other hand, ignoring that these age groups were not created with an even distribution of users in mind, the oldest age group by far tweeted less in terms of actual volume, meaning a few users could have dominated the results.

In that light, if we just compare the youngest to the middle age groups, both of which have many more users and tweets to analyze, the two groups are much less different in their tweeting content. We still find the same topics—foreign policy, disaster prevention and infrastructure, energy, and protest—as discussed in greater numbers by the older of these two groups, but the trend is not as evident. Overall, what this suggests is that age may only really be relevant when we start looking at large generational changes.

4.6.3.5 Tweet Content Patterns by Incumbency

Incumbency undoubtedly affects the chances of Japanese politicians' ability to be elected. It is therefore reasonable to expect that the willingness to discuss certain topics may vary along these lines. Further, it seems reasonable to expect those in power to be discussing topics differently than those out of power. Previous research shows incumbents in other countries using Twitter differently than challengers (Evans, Cordova, and Sipole 2014).

Given the recent fluctuations in administration, we can find three general types of incumbency—those who are incumbent to the seat, those who are new challengers (i.e. have never been elected, but may likely have run for office previously), and those who held office but lost in a previous election and currently do not have a seat. This distinction is so common that it is even made in candidates' listings released by the Japanese press.

Most notably, new candidates tweeted political topics far more frequently than incumbents and former members of parliament (82% for new, to 65% for incumbents and 58% former), particularly during the 2014 election campaign period (68% to 37% and 50%, respectively) and interestingly on election day itself, too, when we might not expect any discussion of political topics. Within specific topics, foreign policy and energy stands out for new candidates, even during the 2014 election campaign period when overall discussion of political topics drops. Former members of parliament are a little less clear cut in regard to the trends in their tweet content. This group tweeted less about political topics over all time periods than incumbents (59% for former, to 65% for incumbents, except during the 2014 election campaign period which was 50% to 37%, respectively). The only topic that really stood out was economy and finance, which they talked

about the most prior to the legal change (21% for formers, to 13% for incumbents and 15% for new during that particular time period).

Incumbency status does show differences in tweet content trends as expected; however as with gender, there is a strong likelihood the differences seen are being affected by political affiliation. As seen in *Table 4.5*, incumbency is actually fairly polarized by party. Most of the incumbents are from the LDP, most of the new candidates from the JCP, and most of the former members of parliament are from the DPJ. The strong leaning of new candidates to foreign policy, for example, well matches the tweet content trend we already laid out for the JCP.

Table 4.5. Twitter Users' Incumbency by Party

	LDP	DPJ	JCP	Others
Incumbent	129	28	6	48
New Candidate	9	15	138	79
Former Member of Parliament	2	33	0	20

Source: Author's calculations.

4.6.3.6 Tweet Content Patterns by Competitiveness of Election in 2014

Candidates finding themselves in a highly competitive race in 2014 could be expected to show different tweeting patterns during that time period than candidates in less competitive races. Previous research indicates that race competitiveness does, in fact, matter in terms of Twitter use (Evans, Cordova, and Sipole 2014). Here we define highly competitive races as those in which the final vote count for the top candidates in a district was within a 5 percent spread (ignoring any candidates then that fell outside that spread).

While those who were in competitive races in 2014 generally talked slightly more about political topics than those who were not in competitive races (76% to 71%, respectively), during the 2014 election they actually talked less about political topics than those who were not in competitive races (46% to 57%, respectively). In fact, the focus for those in competitive races during the 2014 election was lopsided in regard to discussion of the economy and finances, as well

as welfare and employment—two main campaign topics for the LDP and the DPJ respectively. Other political topics, including foreign policy, disaster prevention and infrastructure, society, and political and administrative reform, were discussed much less frequently among those individuals in competitive races than they typically talked about them during non-election periods. While this was also true for those in non-competitive races, the difference was not nearly as divergent. The lack of frequency in tweeting about political topics suggests that those politicians in competitive races were much less willing to take risks, in terms of their tweeting habits, during the most critical time period for them, choosing instead to stick to the main party platforms.

4.6.3.7 Tweet Content Patterns by Facebook Usage

Candidates that had Facebook accounts during the 2014 election could be expected to show different topical patterns in regard to their tweets than those who did not. This is because those who use both Twitter and Facebook logically show a propensity to use a more diverse set of digital tools, and prior research shows that politicians tend to use different digital platforms for different purposes (Glassman, Straus, and Shogan 2013).

As expected, overall those who use Facebook were less likely to tweet political topics than those without Facebook (70% to 79%, respectively), and were even more less likely to do so during the election campaign period (50% to 71%). This suggests that Facebook users, who well outnumber non-Facebook users in the database, are either using other digital outlets for certain political messaging, or potentially even are more concerned with their online image and less likely to take risks they might see as associated with using the Internet for political messaging activities.

At the same time, we again see evidence that the tendency to also use Facebook as a messaging platform may be correlated with political affiliation. As shown in *Table 4.6*, it is again member of

the minority parties, particularly the JCP, that are more likely to be relying on Twitter alone. This would help explain the fact that foreign policy, as well as economy and finance, welfare and employment, and energy, all stand out as trending Twitter topics among non-Facebook users.

Table 4.6. Twitter Users' Facebook Use by Party

	LDP	DPJ	JCP	Others
Does Not Have Facebook Account	18	9	48	23
Has Facebook Account	122	67	96	124
Ratio of No Facebook to Facebook	0.15	0.13	0.50	0.19

Source: Author's calculations.

4.6.3.8 Tweet Content Patterns by Twitter Followers

While it does not seem likely that the number of followers itself would directly affect the topical content of a politician's tweets, the followers count is a well-accepted indication of the popularity of any Twitter user. While a host of factors can play into a politician's popularity, ideally their policy positions would play an important factor. At the same time, in modern Japanese political culture it was not necessarily the case that policy position drove popularity until the late 2000s, the change having been driven by electoral reform in the early 1990s (Kabashima and Steel 2010). Might politicians' popularity, as evidenced by the number of their Twitter followers, drive their willingness to discuss political topics? We look at Twitter users in our database that have within the top or bottom 25th percent quantile of followers get a sense of the connection between numbers of followers and their influence on topics of choice by Japanese politicians using Twitter.

As it turns out, the first important observation to note when looking at users within the top and bottom 25th percent quantiles is that the majority of tweets in the dataset came from these two quantile groups. Given that the database is largely based on users during the 2014 election, this observation suggests that it is either well-established politicians or relatively un-established politicians who most consistently tweet. At the same time, there is very little difference between the two groups in topic patterns, whether as a whole or over any particular time period; this

includes data indicating that usage of political topics dropped during the 2014 election campaign, even the topic of foreign policy which stood out in trends in other cases. Therefore, the number of followers appears to have very little, if any, bearing on how politicians use Twitter. This conclusion then casts some doubt on assertions that Japanese politicians are becoming more responsive to voters (Kabashima and Steel 2010), at least as regards those who use Twitter.

4.6.3.9 Tweet Content Patterns by Prefectural Population Density

If we break out and compare political Twitter users based on the population density of the general prefecture they represent, we can reasonably expect a difference in topical focus. Citizens in urban areas will likely have different policy priorities than those in rural areas. While there are urban areas within rural prefectures, and vice versa, we should expect to see a general difference in the content of a politician's tweets by looking at candidates as divided by the mean of prefectural population density.

Overall, despite our initial expectation, we see very little difference in how much urban and rural politicians are tweeting political topics on average (70% to 74% sum across the political topics, respectively), with politicians from lower population density prefectures actually tweeting a fraction more outside of the election period itself (when it reverses to 58% to 54% in favor of urban politicians). Most notably, the difference appears to be driven by the point that individuals from lower population density prefectures were tweeting slightly more about disaster prevention and infrastructure (14% to 10%), likely reflecting that it has been the more rural prefectures that were more harshly hit by recent disasters, particularly the 3/11 triple disaster. During the 2014 election, there was not an individual topic that stood out for those from high density prefectures as driving the overall difference in topical trends.

4.6.3.10 Tweet Content Patterns by Retweet

Finally, as with the number of followers, the number of retweets should not be expected to directly affect the topics of Japanese politicians' tweets, but a correlation may still be found. That is, the number of retweets is typically regarded as an indication of the popularity of the tweet. If we expect Twitter users to seek out politicians because of their political leanings, we should expect that the tweets that get shared the most are those which touch more strongly on political topics. We look at this specifically by looking at the top and bottom 25th percent quantiles (more than 17 retweets and 0 retweets respectively).

Here we find one of the most significant differences of any of the divisions we have looked at. The top retweets appear to be much more politically oriented in topic than those not retweeted at all, the former showing a tendency two-and-a-half times as great as the latter (12% to 5% weighted average per political topic, respectively). Even during the 2014 election, when political topics were much less used, the difference between the two quantiles remains (8% to 3%). This, importantly, suggests that the tweets that get noticed and supported by other Twitter users are those of a political nature, as expected. Further, the two topics that had the most traction during the 2014 election amongst the popular tweets (as measured by retweets) were again the two topics most associated with the LDP and DPJ platforms—economy and finance (18%), and welfare and employment (13%). The other political topics were also quite popular outside of the 2014 election campaign period, particularly foreign policy. On a separate point, the identified non-political topics were not strong in either of the top or bottom 25th percent quantiles retweet groups, suggesting that there are other non-political topics, such as general campaign announcements, that also get little support or interest.

4.7 DISCUSSION AND CONCLUSION

Based on the above analysis, what can we now infer regarding the proposed research questions? Regarding the first research question—*To what extent do general tweeting habits of politicians and election candidates in Japan match or differ from those in Western democracies?*—we clearly find, as hypothesized, that general tweeting trends of Japanese politicians tend towards revolving around major political events as they do in the West. Prior to elections, during campaign periods, we now see major spikes in Twitter use. This even appears true prior to elections that happened before the Public Offices Election Law was changed to allow Twitter and other Internet use during the short, official election campaign period; however, prior to that revision, politicians were clearly obeying the letter of the law by stopping Internet use when required to do so. Similarly, non-electoral events can cause spikes in Twitter usage among Japanese politicians if they have large political implications, as was most vividly seen by the bump in usage after the 3/11 triple disaster, but also by the Election Law change. These results match and expand upon findings in previous studies (Jungherr 2016; Vergeer 2015).

As for the second research question—*Did the 2013 legal revision of the Japanese election law to allow for the use of Internet tools in election campaigns affect the general tweeting habits of Japanese politicians and election candidates?*—we find that the legal revision did, as hypothesized, affect the general tweeting habits of Japanese politicians. In terms of overall quantitative volume, we could visually see (via time-based histograms in *Figure 4.1*) that Japanese politicians gradually increased use of Twitter in anticipation of the election law change, and were much more willing to consistently tweet after the after revision was formalized. Further, the anticipation of the legal change also appears to have increased the willingness of politicians to tackle political issues on Twitter overall—although it is also possible some of this change was due

to natural change as politicians became more accustomed to Twitter as a tool. At the same time, the election law change did not affect which particular topics were being emphasized; rather, that appears to be due to the ebbs and flows of the political climate in Japan.

Regarding the third research question—*What is the topical content of the social media posts by Japanese politicians and candidates on Twitter, and how does the frequency of use of specific topics fluctuate based on individual characteristics of the users making the posts?*—we saw results that for the most part matched expectations. In general, Twitter postings by Japanese politicians were found to be much more political than non-political. In terms of how different user characteristics played a role in the choice of content, the results are laid out in summary in *Table 4.7*. As initially hypothesized, we found political affiliation affected the contents being posted. Further, political affiliations seemed to be correlated with at least some (if not all) of the effects of the other variables, particularly gender, incumbency, and Facebook usage. Due to the limited volume of postings of non-political topics, little meaningful variation was found there.

Table 4.7. Patterns of Political-Oriented Twitter Content Summary

Variable	Expectation	Finding
<i>Party Affiliation</i>	Will affect based on political philosophies, priorities, and campaign strategies	Affected as expected, but also likely affecting other variables
<i>Diet House</i>	Will affect based on length of time in office and time of election	Affected during 2014 election, but largely not in other time periods
<i>Gender</i>	Will affect based on the limited role women have in Japanese politics	Affected, but women turned out to be more politically assertive than men; likely affected by political affiliation
<i>Age</i>	Will affect based on patterns of technology adaptation and generational policy preferences	Affected, but mostly seen largely in large generational gaps
<i>Incumbency</i>	Will affect based on ability to get elected and presence in Diet	Affected, with new candidates tweeting the most politically; likely affected by political affiliation
<i>Competitiveness of Election</i>	Will affect during election campaign period	Affect; those in competitive races more risk adverse and tweeted along major campaign platform lines
<i>Facebook Usage</i>	Will affect based on suggestion that different digital tools are used in different manners	Affected; those who use Facebook tweeted less politically; likely affected by political affiliation
<i>Twitter Followers</i>	Will affect as an indirect reflection of candidate popularity	Did not affect
<i>Prefectural Population Density</i>	Will affect based on policy preference difference of urban versus rural voters	Did not affect overall, but small topical variation found

Source: Author's calculations.

Finally, as for the fourth research question—*Does the content of individual tweets affect the popularity of that tweet among other Twitter users?*—we find as hypothesized that political-oriented tweets from politicians and electoral candidates were in fact more popular than non-political ones, based on numbers of retweets. During the 2014 election campaign period in particular, the popularity shifted towards reflecting the party platforms of the top two parties. This last point is important because this might indicate where politicians need to consider placing their focus if they want to successfully harness the capabilities of the Internet and social media in their drive for support and votes. In 2014, Twitter use did not seem to affect election results, but the reason why was not clear (see Chapter 3). If we combine the fact that politicians appeared less likely in general to tackle political topics during critical election campaign periods with the

evidence that the most popular tweets were politically oriented, we might have part of an answer to that question of ineffectiveness.

Where should we move from here? To start, this study raises a number of inferences that need to be tested more thoroughly on an individual basis. For example, ‘to what extent does political affiliation affect the propensity of other variables to lead to change in content?’ or ‘why do Facebook users post less politically on Twitter?’ Next, there is a need to more clearly and statistically connect topics of individual politician’s tweets, both in the short official campaign run, but also in the longer usage, to their electoral success. To do this, another obvious potential area for improvement on this study would be to do the analysis by developing the tools needed to undertake a hybrid approach, thereby combining this analysis, or similar analyses, with more qualitatively oriented coding and checks (Lewis, Zamith, and Hermida 2013). However, this will require more open development of methods to analyze social media content, Twitter or otherwise, for languages like Japanese that do not parse words and phrases as simply as is done with common Western languages like English.

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APPENDIX A: DATASET VARIABLES

The table below is the full listing of variables in our dataset of potential interest.

Appendix Table I: Variable Statistics Summary

	N	Mean	St. Dev.	Min	Max
Votes for Candidate	959	55,203.03	34,052.89	960	168,953
	The total number of votes a candidate received				
Total Votes in District	959	182,507.60	36,547.86	108,809	271,420
	The total number of votes cast in the candidate's district				
Tight Election (Indicator)	959	0.102	0.303	0	1
	Whether or not a candidate was within 5% of total votes of the top vote getter, or was the top vote getter and had an opponent who was within 5% of total votes				
LDP	959	0.304	0.46	0	1
	The candidate is a member of the LDP or Komeito				
DPJ	959	0.186	0.389	0	1
	The candidate is a member of the DPJ				
JCP	959	0.304	0.46	0	1
	The candidate is a member of the JCP				
Other Minority Parties	959	0.205	0.404	0	1
	The candidate is a member of another minor party or an independent				
Incumbency (Indicator)	959	0.434	0.496	0	1
	Whether or not a candidate is an incumbent (regardless of from the SMD or PR system)				
Former Diet Member (Indicator)	959	0.105	0.307	0	1
	Whether or not a candidate was previously a member of the diet				
District Competition	959	3.425	0.805	2	6
	The number of candidates in a district				
Cross-listed (Indicator)	959	0.635	0.482	0	1
	Whether the candidate was on both an SMD and PR ticket				
Age	959	52.077	11.397	25	86
	The age of the candidate				
Gender (Female)	959	0.148	0.355	0	1
	Whether or not a candidate is a female				
Facebook Account (Indicator)	959	0.629	0.483	0	1
	Whether or not a candidate is reported to have a Facebook account				
Homepage (Indicator)	959	0.766	0.423	0	1
	Whether or not a candidate is reported to have a Homepage account				
Tweets During Election	959	30.761	80.325	0	938
	The total number of candidate tweets during the campaign election period				
Mean Tweet Recount	959	12.263	48.664	0	882.235

	N	Mean	St. Dev.	Min	Max
Twitter Friends	959	557.06	3,518.73	0	77,368
Twitter Followers	959	3,061.34	21,336.44	0	429,709
Total Tweets	959	1,020.64	2,633.69	0	28,325
Twitter Account Age	959	73.438	98.445	0	359.863
Cited Stump Speeches	959	26.282	41.367	2	992
Newspaper References	959	118.664	86.677	12	2,628
Opposition's Facebook Account	959	1.548	0.941	0	5
Opposition's Homepage	959	1.871	0.894	0	5
Opposition Tweets During Election	959	85.018	170.081	0	1,409
Opposition's Mean Tweet Recount	959	30.784	76.404	0	882.235
Opposition's Twitter Friends	959	1,486.50	5,925.00	0	77,841
Opposition's Twitter Followers	959	7,675.99	32,677.13	0	429,709
Opposition's Total Tweets	959	2,671.54	4,564.97	0	29,424
Opposition's Gender (Female)	959	0.149	0.244	0	2
Younger Opposition	959	0.497	0.421	0	3
Older Opposition	959	0.493	0.41	0	2

	N	Mean	St. Dev.	Min	Max
New Opposition	959	0.466	0.307	0	3
	The number of opponents who were neither current nor former members of the Diet				
Prefectural Male-Female Ratio	959	0.925	0.048	0.84	0.991
	The male to female ratio in the prefecture				
Opposition's Cited Stump Speeches	959	65.099	74.18	5	1,003
	The sum number of newspaper mentions of a candidate's opponents' name and the phrase 'stump speech'				
Opposition's Newspaper References	959	283.125	148.567	51	2,742
	The sum number of newspaper mentions of a candidate's opponents' name, excluding the phrase 'stump speech'				
Pref. Internet Access Rate	959	0.825	0.045	0.726	0.889
	The interact access rate in a candidate's prefecture				
Pref. PC Access Rate	959	0.746	0.101	0.571	0.938
	The interact access rate in a candidate's prefecture via PC				
Pref. Phone Access Rate	959	0.644	0.067	0.537	0.763
	The interact access rate in a candidate's prefecture via phone				
District Population	959	358.424	68.319	231.66	493.811
	The number of people in a candidate's district (in thousands)				
Pref. Population Density	959	1,626.19	2,006.63	65.515	6,111.64
	The population density in a candidate's prefecture (in thousands)				

APPENDIX B: BINOMIAL MODEL RESULTS

The following tables depict the full results outputs of the three models employed in the binomial regression method.

Appendix Table II: Media Model Results

	Probability of Winning a Vote				
	All Candidates	LDP	DPJ	JCP	Other Minor Parties
Tweets During Election	-0.0001	0.004	0.0002	-0.002	0.002
	-0.002	-0.004	-0.002	-0.001	-0.003
Opposition Tweets During Election	-0.0004	-0.001**	0.001	-0.0003	0.002*
	-0.001	-0.0004	-0.001	-0.001	-0.001
Twitter Followers	0.00001**	0	0.00001	0.0001**	0.00002***
	0	0	-0.00001	-0.0001	-0.00001
Opposition's Twitter Followers	0	0	-0.00001*	0	0
	0	0	-0.00001	0	0
Facebook Account (Indicator)	0.088	-	0.059	-0.015	0.201
	-0.09	0.133***	-0.061	-0.059	-0.13
Opposition's Facebook Account	0.022	-0.027	0.066	-0.072*	-0.062
	-0.06	-0.033	-0.041	-0.04	-0.073
Homepage (Indicator)	0.727***	-0.196	0.384***	0.069	0.455***
	-0.12	-0.124	-0.129	-0.059	-0.162
Opposition's Homepage	-0.164**	-	-0.045	-0.125**	-0.309***
	-0.075	0.103***	-0.053	-0.062	-0.087
Cited Stump Speeches	-0.005	0.004*	-0.0002	-0.006	-0.032***
	-0.005	-0.002	-0.003	-0.004	-0.009
Opposition's Cited Stump Speeches	0.003*	-0.003**	-0.001	0.003***	0.012***
	-0.002	-0.001	-0.002	-0.001	-0.003
Newspaper References	0.017***	0.003***	0.011***	-0.003*	0.014***
	-0.002	-0.001	-0.002	-0.002	-0.004
Opposition's Newspaper References	-0.004***	-	-0.002***	-0.003***	-0.004***
	-0.001	0.002***	-0.001	-0.001	-0.001
(Tweets During Election x Twitter Followers)	0	0	0	0	-0.00000**
	0	0	0	0	0
(Opposition Tweets During Election x Opposition's Twitter Followers)	0	0	0	0	0
	0	0	0	0	0
(Tweets During Election x Facebook Account)	-0.0004	0.003	0.001	0.001	-0.001
	-0.001	-0.002	-0.001	-0.001	-0.002
(Opposition Tweets During Election x Opposition's Facebook Account)	-0.0001	0.0001	-0.0002	-0.0003	0.0002
	-0.0003	-0.0001	-0.0004	-0.0003	-0.0004
(Tweets During Election x Homepage)	-0.001	-0.002	0.0003	0.001	-0.001
	-0.001	-0.004	-0.002	-0.001	-0.002

Probability of Winning a Vote					
	All Candidates	LDP	DPJ	JCP	Other Minor Parties
(Opposition Tweets During Election x Opposition's Homepage)	0.0002	0.0004	0.00002	-0.0003	0.001
	-0.0004	-0.0002	-0.0004	-0.0004	-0.001
(Tweets During Election x Cited Stump Speeches)	0.00002	-	0.00002	0.0001*	-0.0001
	-0.0001	-0.0001	-0.00004	-0.00005	-0.0001
(Opposition Tweets During Election x Opposition's Cited Stump Speeches)	0	0	0.00004***	-	0
	0	0	-0.00001	0	-0.00001
(Tweets During Election x Opposition's Cited Stump Speeches)	0	0.00002*	-0.00002	0	0
	0	-0.00001	-0.00002	0	-0.00001
(Opposition Tweets During Election x Opposition's Newspaper References)	0	0	-0.00001*	0.00001**	-0.00002*
	-0.00001	0	-0.00001	0	-0.00001
Constant	-2.107***	0.598***	-1.742***	-0.666***	-1.591***
	-0.286	-0.203	-0.304	-0.205	-0.473
Observations	951	289	176	292	194
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01				

Appendix Table III: Complex Model Results

Probability of Winning a Vote					
	All Candidates	LDP	DPJ	JCP	Other Minor Parties
Tweets During Election	-0.0001	0.003	0.001	-0.0004	-0.001
	-0.001	-0.003	-0.001	-0.001	-0.002
Opposition Tweets During Election	-0.0004	-0.001***	-	-0.001*	0.002*
	-0.0003	-0.0003	-0.001	-0.001	-0.001
Twitter Followers	0	0	0	0.00003	0.00001***
	0	0	0	-0.00005	0
Twitter Friends	0	0	0.00001	-0.00001	0
	0	-0.00002	-	-0.0001	-0.00001
Mean Tweet Recount	-0.002***	-0.001	-0.001	0.00001	-0.004***
	-0.0005	-0.001	-0.001	-0.0004	-0.001
Total Tweets	0	0.00001	-	-	0
	-0.00001	-0.00001	-	-0.00001	-0.00002
Twitter Account Age	0.0003	0.00001	0.0004	0.001	0.001**
	-0.0002	-0.0003	-0.0004	-0.0004	-0.001
Opposition's Twitter Followers	0	0	0	0	0
	0	0	0	0	0
Opposition's Twitter Friends	0	0	0.00001	0	-0.00001
	0	0	-	0	-0.00001
Opposition's Mean Tweet Recount	0.0001	0.0001	-0.0002	0.001	0.0001
	-0.0002	-0.0002	-0.0003	-0.0005	-0.001

	Probability of Winning a Vote				
	All Candidates	LDP	DPJ	JCP	Other Minor Parties
Opposition's Total Tweets	0	0	- 0.00001	0	-0.00001
	0	-0.00001	- 0.00001	-0.00001	-0.00001
Age	-0.0001	0.003	-0.001	0.004	-0.006
	-0.002	-0.002	-0.003	-0.003	-0.006
Older Opposition	-0.447***	-0.462***	0.055	-0.038	0.906
	-0.102	-0.108	-0.229	-0.201	-0.658
Younger Opposition	-0.438***	-0.548***	0.008	-0.204	1.007
	-0.101	-0.111	-0.218	-0.194	-0.651
Gender (Female)	0.033	-0.042	-0.098	0.209***	-0.046
	-0.047	-0.072	-0.065	-0.051	-0.16
Opposition's Gender (Female)	0.049	0.135*	-0.246**	0.002	0.074
	-0.064	-0.069	-0.101	-0.111	-0.196
Prefectural Male-Female Ratio	-0.723	-1.441**	-0.037	-1.233*	0.887
	-0.486	-0.558	-0.695	-0.736	-1.468
Pref. Internet Access Rate	-0.325	-1.904	-0.576	3.113*	5.458
	-1.18	-1.439	-1.778	-1.752	-3.335
Pref. PC Access Rate	0.355	0.817	0.252	-0.351	-2.493*
	-0.441	-0.529	-0.706	-0.681	-1.355
Pref. Phone Access Rate	0.225	0.712	-0.343	0.916	-0.154
	-0.944	-1.098	-1.315	-1.388	-3.088
Pref. Population Density	0.00001	0.00001	- 0.00003	0.00003	-0.00001
	-0.00002	-0.00002	- 0.00003	-0.00003	-0.0001
Facebook Account (Indicator)	-0.03	-0.056	0.033	-0.006	0.061
	-0.038	-0.046	-0.053	-0.05	-0.126
Homepage (Indicator)	0.139***	-0.164	0.157	0.027	0.259*
	-0.053	-0.112	-0.11	-0.05	-0.14
Opposition's Facebook Account	-0.021	-0.03	0.005	-0.055	0.005
	-0.024	-0.03	-0.037	-0.035	-0.066
Opposition's Homepage	-0.141***	-0.061*	-0.029	-0.142**	-0.058
	-0.028	-0.032	-0.043	-0.06	-0.085
District Competition	-0.162***	-0.071	-0.031	-0.293***	-0.363***
	-0.043	-0.05	-0.128	-0.07	-0.116
District Population	-0.0002	-0.001*	0.0004	0.001	-0.002
	-0.0003	-0.0004	-0.0004	-0.0004	-0.001
Cross-listed (Indicator)	0.327***	-0.034	-0.698**	0.342***	-0.157
	-0.049	-0.083	-0.277	-0.101	-0.14
Incumbency (Indicator)	0.948***	0.356***	0.555***	1.150***	0.590***
	-0.049	-0.09	-0.071	-0.357	-0.108
Former Diet Member (Indicator)	0.429***	0.203	0.234***	0.888**	0.27
	-0.061	-0.24	-0.06	-0.393	-0.165
New Opposition	0.649***	0.660***	0.400**	0.112	0.718***
	-0.071	-0.077	-0.19	-0.104	-0.261
Tight Election (Indicator)	0.085*	-0.158***	0.176***	0.43	0.499***
	-0.049	-0.055	-0.063	-0.433	-0.156
Cited Stump Speeches	-0.001	-0.001	-0.003	0.001	-0.002
	-0.001	-0.002	-0.003	-0.003	-0.003
Newspaper References	0.001***	0.001	0.006**	-0.004**	0.007*

	Probability of Winning a Vote				
	All Candidates	LDP	DPJ	JCP	Other Minor Parties
	-0.0005	-0.001	-0.003	-0.002	-0.004
Opposition's Cited Stump Speeches	-0.0003	-0.001**	0.002	-0.0004	0.002
	-0.0005	-0.001	-0.001	-0.001	-0.002
Opposition's Newspaper References	-0.001***	-0.001**	-0.002**	0.0001	-0.001
	-0.0004	-0.0005	-0.001	-0.0004	-0.001
(Tweets During Election x Facebook Account)	-0.0003	0.0003	-	0.001*	0.0001
	-0.0004	-0.002	0.00001	-0.001	-0.002
(Opposition Tweets During Election x Opposition's Facebook Account)	0	0.0001	0.0001	0.00005	-0.0004
	-0.0001	-0.0001	-0.0003	-0.0002	-0.0003
(Tweets During Election x Homepage)	0.0001	-0.003	-0.001	0	-0.001
	-0.001	-0.003	-0.001	-0.001	-0.001
(Opposition Tweets During Election x Opposition's Homepage)	0.0002*	0.0003***	-0.0001	0.0004*	-0.0001
	-0.0001	-0.0001	-0.0002	-0.0002	-0.0002
Constant	0.081	2.562***	0.007	-2.426**	-4.550**
	-0.684	-0.798	-1.028	-1.083	-2.257
Observations	959	292	178	292	197
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01				

APPENDIX C: DIFFERENCE-IN-DIFFERENCES (DID) RESULTS

The following tables provide the full results of the various treatments and models used in the difference-in-differences analysis.

Appendix Table IV: Treatment 1 (All Twitter Users)

	Percentage of Votes Won in Election		
	Model 1	Model 2	Model 3
Treatment 1	-0.012	0.002	0.01
	-0.008	-0.007	-0.007
2014 (Year Indicator)	0.048***	-0.016**	-0.012*
	-0.008	-0.007	-0.007
DiD Estimate (Treatment 1 x 2014)	-0.006	-0.013	-0.012
	-0.012	-0.01	-0.01
DPJ	-0.149***	-0.139***	-0.135***
	-0.008	-0.007	-0.007
JCP	-0.379***	-0.343***	-0.329***
	-0.008	-0.012	-0.012
Other	-0.224***	-0.187***	-0.182***
	-0.009	-0.007	-0.007
Incumbent (Indicator)		0.081***	0.074***
		-0.006	-0.006
Cross-listed (Indicator)		-0.015	-0.011
		-0.01	-0.01
Competition		-0.049***	-0.047***
		-0.003	-0.003
Tight Election (Indicator)		-0.015*	-0.016*
		-0.008	-0.008
Redistricted (Indicator)		-0.001	-0.003
		-0.008	-0.008
Age			0.001***
			-0.0003
Gender (Female)			-0.025***
			-0.008
Internet Access Rate (Pref.)			0.21
			-0.184
PC Access Rate (Pref.)			-0.088
			-0.063
Phone Access Rate (Pref.)			-0.214
			-0.145
Population Density (Pref.)			0
			0
Facebook Account (Indicator)			-0.010*
			-0.006
Homepage (Indicator)			0.027***
			-0.008
Constant	0.471***	0.649***	0.589***
	-0.007	-0.017	-0.084
Observations	1,336	1,336	1,336
Log Likelihood	1,047.33	1,286.48	1,309.78
Akaike Inf. Crit.	-2,080.66	-2,548.97	-2,579.55
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

Appendix Table V: Treatment 2 (Twitter Users Who Tweeted Less than Once a Day)

<i>Dependent variable:</i>			
	Percentage of Votes Won in Election		
	Model 1	Model 2	Model 3
Treatment 2	-0.025*	0.003	0.01
	-0.013	-0.011	-0.011
2014 (Year Indicator)	0.048***	-0.021***	-0.016**
	-0.008	-0.008	-0.008
DiD Estimate (Treatment 2 x 2014)	-0.005	-0.031*	-0.030*
	-0.019	-0.016	-0.016
DPJ	-0.157***	-0.141***	-0.137***
	-0.01	-0.008	-0.008
JCP	-0.388***	-0.363***	-0.351***
	-0.01	-0.015	-0.016
Other	-0.213***	-0.179***	-0.174***
	-0.011	-0.009	-0.009
Incumbent (Indicator)		0.082***	0.074***
		-0.008	-0.008
Cross-listed (Indicator)		-0.023*	-0.019
		-0.013	-0.013
Competition		-0.053***	-0.050***
		-0.003	-0.004
Tight Election (Indicator)		-0.012	-0.013
		-0.01	-0.01
Redistricted (Indicator)		-0.0002	-0.002
		-0.009	-0.009
Age			0.001***
			-0.0003
Gender (Female)			-0.021**
			-0.01
Internet Access Rate (Pref.)			0.363*
			-0.219
PC Access Rate (Pref.)			-0.130*
			-0.075
Phone Access Rate (Pref.)			-0.278
			-0.174
Population Density (Pref.)			0
			0
Facebook Account (Indicator)			-0.007
			-0.007
Homepage (Indicator)			0.026***
			-0.01
Constant	0.473***	0.673***	0.552***
	-0.007	-0.022	-0.099
Observations	914	914	914
Log Likelihood	715.844	894.445	913.614
Akaike Inf. Crit.	-1,417.69	-1,764.89	-1,787.23
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

Appendix Table VI: Treatment 3 (Twitter Users Who Tweeted 1 to 10 Times a Day)

<i>Dependent variable:</i>			
	Percentage of Votes Won in Election		
	Model 1	Model 2	Model 3
Treatment 3	-0.008	0.003	0.012
	-0.01	-0.008	-0.009
2014 (Year Indicator)	0.048***	-0.021***	-0.016**
	-0.008	-0.007	-0.007
DiD Estimate (Treatment 3 x 2014)	-0.002	-0.007	-0.006
	-0.015	-0.012	-0.012
DPJ	-0.146***	-0.132***	-0.128***
	-0.009	-0.007	-0.007
JCP	-0.390***	-0.358***	-0.344***
	-0.009	-0.014	-0.014
Other	-0.223***	-0.179***	-0.173***
	-0.01	-0.009	-0.009
Incumbent (Indicator)		0.079***	0.071***
		-0.007	-0.007
Cross-listed (Indicator)		-0.024**	-0.017
		-0.012	-0.012
Competition		-0.053***	-0.050***
		-0.003	-0.003
Tight Election (Indicator)		-0.016*	-0.015*
		-0.009	-0.009
Redistricted (Indicator)		0.006	0.002
		-0.009	-0.009
Age			0.001***
			-0.0003
Gender (Female)			-0.017*
			-0.009
Internet Access Rate (Pref.)			0.15
			-0.199
PC Access Rate (Pref.)			-0.056
			-0.068
Phone Access Rate (Pref.)			-0.203
			-0.155
Population Density (Pref.)			0
			0
Facebook Account (Indicator)			-0.013**
			-0.006
Homepage (Indicator)			0.028***
			-0.009
Constant	0.472***	0.673***	0.624***
	-0.007	-0.02	-0.092
Observations	1,070	1,070	1,070
Log Likelihood	845.673	1,050.92	1,073.15
Akaike Inf. Crit.	-1,677.35	-2,077.84	-2,106.30
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

Appendix Table VII: Treatment 4 (Twitter Users Who Tweeted More than 10 Times a Day)

<i>Dependent variable:</i>			
	Percentage of Votes Won in Election		
	Model 1	Model 2	Model 3
Treatment 4	-0.013	0.002	0.008
	-0.015	-0.013	-0.013
2014 (Year Indicator)	0.048***	-0.020***	-0.017**
	-0.008	-0.008	-0.008
DiD Estimate (Treatment 4 x 2014)	-0.022	-0.002	-0.0001
	-0.025	-0.02	-0.02
DPJ	-0.163***	-0.147***	-0.142***
	-0.01	-0.009	-0.009
JCP	-0.389***	-0.356***	-0.336***
	-0.01	-0.015	-0.016
Other	-0.226***	-0.196***	-0.188***
	-0.012	-0.01	-0.01
Incumbent (Indicator)		0.087***	0.079***
		-0.008	-0.008
Cross-listed (Indicator)		-0.024*	-0.02
		-0.013	-0.013
Competition		-0.052***	-0.050***
		-0.004	-0.004
Tight Election (Indicator)		-0.015	-0.016
		-0.011	-0.011
Redistricted (Indicator)		-0.01	-0.013
		-0.01	-0.01
Age			0.001**
			-0.0003
Gender (Female)			-0.025**
			-0.01
Internet Access Rate (Pref.)			0.171
			-0.245
PC Access Rate (Pref.)			-0.094
			-0.082
Phone Access Rate (Pref.)			-0.119
			-0.188
Population Density (Pref.)			0
			0
Facebook Account (Indicator)			-0.009
			-0.007
Homepage (Indicator)			0.038***
			-0.011
Constant	0.476***	0.670***	0.596***
	-0.007	-0.022	-0.111
Observations	860	860	860
Log Likelihood	644.959	814.738	830.011
Akaike Inf. Crit.	-1,275.92	-1,605.48	-1,620.02
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

APPENDIX D: SELECT SUMMARY STATISTICS

Appendix Table VIII: Select Summary Statistics for Users in Chapter 4 Study

Statistic	N	Mean	St. Dev.	Min	Max
Age of User	507	48.4	10.8	25	86
User Has Facebook	507	0.8	0.4	0	1
Population Density of Users' Prefecture	431	2,042.40	2,233.60	65.5	6,111.60
Followers User Had at End of 2014 Election	426	7,364.90	31,646.80	16	429,709
User Was in a Tight Election	431	0.1	0.3	0	1

APPENDIX E: TERMS OF INTEREST

Below is the list of key terms of interest used in this study. They are divided into 8 political categories (Foreign Policy; Economy / Finance; Disaster Prevention / Infrastructure; Welfare / Employment; Society; Energy; Political / Administrative Reform; Protests) and 5 non-political categories (Food & Restaurants; Leisure; Hobbies; Family; Religion). Words with asterisks (*) were originally included in Uenohara (2014) in Japanese only. All English translations are *unofficial* translations provided by the author of this work.

Appendix Table IX: Terms of Interest

Foreign Policy			Economy / Finance		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
96条*	Article 96*	474	アベノミクス*	Abenomics*	5177
アジア*	Asia*	3026	農業*	Agriculture*	4869
中国*	China*	14655	ビジネス*	Business*	1613
憲法*	Constitution*	23271	消費税*	Consumption Tax*	14321
釣魚	Diaoyu	82	粉飾	Corporate Fraud	38
独島	Dokdo	80	企業*	Corporations*	20197
韓国*	Korea*	7787	赤字*	Deficit*	1183
朝鮮	Korea	1272	規制緩和*	Deregulation*	1019
北朝鮮*	North Korea*	4155	景気*	Economy*	4558
北方領土*	Northern Territories*	717	財政*	Finance (National) *	6218
改正	Revision	12998	金融*	Finance (Private) *	5785
ロシア*	Russia*	2060	漁業*	Fishing*	1125
露	Russia	634	成長*	Growth*	6776
安全保障*	Security Preservation*	5716	円高*	High Yen*	1016
自衛隊*	Self Defense Force*	8606	産業*	Industry*	6852
自衛*	Self-Defense*	15000	円安*	Low Yen*	1246
尖閣*	Senkaku*	2535	国債*	National Bonds*	1687
竹島*	Takeshima*	1558	日経平均*	Nikkei Index*	194
国連*	United Nations*	2933	復興*	Reconstruction*	11654
アメリカ*	United States*	6619	暴落	Stock Crash	299
米国	United States	6953	株価*	Stock Prices*	1008
戦争*	War*	19645	増税*	Tax Hike*	15924
靖国*	Yasukuni (Shrine)*	1304	税率*	Tax Rate*	2436
			減税*	Taxes Lowered*	2126
			TPP*	TPP*	6443

Disaster Prevention / Infrastructure			Welfare / Employment		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
新幹線*	Bullet Train*	5013	介護*	Caring for Disabled*	6291
災害	Disaster	7618	少子化*	Depopulation*	1044
防災	Disaster Prevention*	4644	雇用*	Employ*	7525
被災	Disaster-afflicted	12261	就職*	Employment*	1226
地震*	Earthquake*	4729	ブラック企業*	Exploitative Companies*	3102
避難	Evacuation	6269	保険*	Insurance*	3904
福島	Fukushima	17114	医療*	Medical*	9217
インフラ*	Infrastructure*	1162	年金*	Pension*	6512
熊本	Kumamoto	2623	子育て*	Raising Children*	3821
公共事業*	Public Projects*	1026	生活保護*	Welfare*	3135
道路*	Roads*	3353	ワーキングプア	Working-Poor	126
社会資本*	Social Capital*	81			
仮設住宅	Temporary Housing	1164			
防潮堤*	Tidal Barrier*	358			
津波*	Tsunami*	2458			

Society			Energy		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
民法改正	Civil Code Revision	122	ベクレル*	Becquerel*	343
夫婦別姓	Different Surnames	189	セシウム	Cesium	434
教育*	Education*	10284	汚染水*	Contaminated Water*	2538
家族*	Family*	5416	エネルギー*	Energy*	7640
外国人*	Foreigners*	2183	被爆	Exposure	1379
同性愛*	Homosexuality*	247	被曝*	Exposure*	868
人権*	Human Rights*	2986	被ばく*	Exposure*	601
日教組	Japan Teachers' Union	335	福一*	Fukushima Dai-ichi*	152
マイノリティ*	Minority*	131	火力*	Gas-Powered*	708
道徳*	Morals*	450	地熱*	Geothermal*	424
君が代	National Anthem	222	水力*	Hydro-Electric*	321
プライバシー*	Privacy*	174	経産省	Ministry of Economy, Trade, and Industry	1226
治安*	Public Safety*	647	原子力	Nuclear Power	5711
権利*	Rights*	2554	原発*	Nuclear Power Plant*	44828
同性婚	Same-sex Marriage	253	規制庁	Nuclear Regulatory Agency	352
国歌斉唱	Sing the Anthem	79	放射能*	Radiation*	3014
			資源*	Resources*	1497
			六ヶ所村	Rokkasho-mura	87
			川内	Sendai	1589
			シーベルト	Sievert	136
			太陽光*	Solar Power*	784
			高浜	Takahama	267
			風力*	Wind-Powered*	597

Political / Administrative Reform			Protests		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
2/3	2/3	98	活動家	Activists	445
3分の2	2/3	234	全共闘	All-Campus Joint Struggle League	20
贈収賄	Bribery	24	全学連	All-Japan Federation of Students' Self-Governing Associations	33
官僚	Bureaucrats	2846	嫌中	Anti-Chinese	13
官憲	Bureaucrats	30	反日	Anti-Japanese	898
公務員*	Civil Servants*	3379	嫌韓	Anti-Korean	66
汚職	Corruption	99	内ゲバ	Internal Gewalt	20
定数*	Diet Seats*	3116	日本会議	Japan Conference	478
選挙制度*	Electoral System*	1164	国会前	Outside Diet	912
霞ヶ関	Kasumigaseki	370	官邸前	Outside Prime Minister's Office	1990
永田町	Nagatacho	1718	街宣	Propaganda Using Automobiles	7715
国民投票	National Referendum	826	公安	Public Security Section	496
比例代表*	Proportional Representation*	1206	中核	Revolutionary Communist League, National Committee	325
選挙権*	Right to Vote*	948	暴動	Riot	115
報酬*	Salary*	1545	機動隊	Riot Police	159
分権*	Separation of Powers*	586	弾圧	Suppression	620
小選挙区*	Small Districts*	234	基地問題	US Military Base Issue	513
違憲状態	State of Unconstitutionality	207	米軍基地	US Military Bases	1323

Food & Restaurants			Leisure		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
弁当	Bento	1708	連休明け	After Holidays	280
朝食	Breakfast	1459	空港	Airport	3241
朝飯	Breakfast	44	連休前	Before Holidays	64
バーガー	Burger	55	競艇	Boat racing	25
夕食	Dinner	1276	カジノ	Casino	1263
夕飯	Dinner	179	フェリー	Ferry	277
ディナー	Dinner	88	ギャンブル	Gambling	241
食事	Eating	1723	休み	Holiday	1517
会食	Eating at High-end Japanese Restaurant	768	休日	Holiday	619
ファミレス	Family Restaurant	62	連休	Holidays	1855
ファミリーレストラン	Family Restaurant	13	競馬	Horse racing	189
銀座	Ginza	1135	カラオケ	Karaoke	469
ハンバーガー	Hamburger	42	映画	Movie	3424
料亭	High-end Japanese Restaurant	98	海	Ocean	3883
居酒屋	Izakaya	501	温泉	Onsen	1452
昼食	Lunch	2254	パチンコ	Pachinko	293
ランチ	Lunch	1037	飛行機	Planes	1625
昼飯	Lunch	192	観光	Sightseeing	3386
ミシュラン	Michelin	21	スロット	Slots	12
お好み焼き	Okonomiyaki	199	相撲	Sumo	474
ラーメン	Ramen	1951	電車	Trains	3029
サンドイッチ	Sandwich	88	列車	Trains	666
寿司	Sushi	663	バカンス	Vacation	21
焼き鳥	Yakitori	151	観戦	Watching Sports	382

Hobbies			Family		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>	<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
盆栽	Bonsai	100	アパート	Apartment	251
書道	Calligraphy	218	猫	Cat	1260
コンピュータ	Computers	79	子供	Child	6863
手芸	Crafts	17	子	Child	3789
フットサル	Futsal	90	マンション	Condo	653
ゲーム	Games	700	娘	Daughter	3627
囲碁	Go	178	犬	Dog	1167
ゴルフ	Golf	1385	父	Father	1802
ギター	Guitar	186	義父	Father-in-law	82
生花	Ikebana	27	孫	Grandchild	972
麻雀	Mahjongg	65	家	House	20408
材料	Materials (for Crafts)	478	主人	Husband	557
模型	Models	77	夫	Husband	951
オセロ	Othello	15	パパ	Husband	968
ピアノ	Piano	234	母	Mother	2301
将棋	Shogi	224	義母	Mother-in-law	111
サッカー	Soccer	1676	ペット	Pet	501
			息子	Son	2798
			子息	Son	144
			配偶者	Spouse	186
			妻	Wife	3438
			嫁	Wife	156
			家内	Wife	204
			奥さん	Wife	241
			奥方	Wife	24
			ママ	Wife	1645

Religion		
<i>Japanese</i>	<i>English Translation</i>	<i>Count</i>
教会	Church (Christian, Minor Shinto Sects, Happy Science, etc.)	184
仏壇	Family Buddhist Altar	47
墓	Family Grave	419
神棚	Family Shinto Altar	34
浄土	Jodo	12
神社	Shrine	3986
神宮	Shrine	331
お宮	Shrine	21
寺	Temple	583
仏閣	Temple	27
寺院	Temple	37
古刹	Temple	10
参拝	Visiting Religious Entity	2559

Terms Removed

A select group of terms originally included in the analysis were removed for one of the following three reasons: 1) The term had less than 10 matches in the entire dataset, indicating the term was likely not an appropriate choice for being a representative term. 2) The term had no matches, either because it was not used, or there were complications with the software used to find those terms. 3) In a few cases, terms were included in multiple categories, and so they were removed from one. All three of these reasons do indicate a weakness of the underlying methodology.

Foreign Policy

Peace Article 9* (平和 9 条*), Referendum* (国民投票*) [Duplicate Term]

Economy / Finance

n/a

Disaster Prevention / Infrastructure

Reprocessing (再処理), Restart* (再稼動*)

Welfare / Employment

n/a

Society

Same Surnames (夫婦同姓), Nontraditional Labor (非正規労働)

Political / Administrative Reform

Malapportionment (不均衡)

Energy

n/a

Protests

Activist Right-wing (行動右翼); Anti-Nuclear (反原発); Dissemination (行動拡散); Ethnic Faction (民族派); Far-left Violence Group (極左暴力集団); Imperialist Faction (皇道派); Japan Revolutionary Communist League (革マル)

Food & Restaurants

Hiroshimayaki (広島焼き); Kushiage (串揚げ); Teppanyaki (鉄板焼き)

Leisure

Shinkansen (新幹線) [Duplicate Term]; Golf (ゴルフ) [Duplicate Term]; Eating (食事) [Duplicate Term]

Hobbies

Kendama Toy (けん玉); Mobile Gaming (モバイルゲーム); Playstation (プレイステ); Playstation (プレイステーション); PS4 (PS4); Wii (Wii); WiiU (WiiU)

Family

Daughter (むすめ); Father-in-law (義理の父); Father-in-law (舅); Mother-in-law (義理の母);
Mother-in-law (姑); Sandwich (サンドウィッチ); Son (セガレ)

Religion

Rinzai (臨濟); Shingon (真言); Shrine (社格); Shrine Visit (お宮参り); Soto (曹洞)

APPENDIX F: WEIGHTED RATIO OF TERMS TO TWEETS CONTENT COMPARISONS

The following tables present results of the analysis of terms. The percentages provided are weighted ratios—that is, the number of terms found, weighted by category, and compared to the total number of tweets analyzed. All sources are the author’s calculations.

Appendix Table X: By Party Affiliation

Weighted Ratio of Terms to Tweets from Only Members of the LDP

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	10.6%	10.0%	11.5%	1.1%	0.0%	11.9%
<i>Economy / Finance</i>	11.1%	10.6%	11.5%	10.5%	1.9%	11.5%
<i>Disaster Prevention / Infrastructure</i>	13.8%	16.4%	11.7%	4.9%	0.0%	13.5%
<i>Welfare / Employment</i>	7.5%	7.4%	7.0%	5.6%	0.0%	10.4%
<i>Society</i>	4.0%	3.5%	4.3%	1.8%	2.9%	5.1%
<i>Energy</i>	4.0%	4.4%	4.1%	1.3%	0.0%	3.2%
<i>Political / Administrative Reform</i>	2.0%	2.2%	1.8%	0.5%	0.0%	2.5%
<i>Protests</i>	0.8%	0.9%	0.7%	2.1%	0.0%	0.8%
<i>Food & Restaurants</i>	2.3%	2.3%	2.4%	1.0%	0.0%	2.1%
<i>Leisure</i>	3.6%	3.3%	4.0%	1.3%	0.0%	3.7%
<i>Hobbies</i>	1.4%	1.5%	1.4%	0.1%	0.0%	1.5%
<i>Family</i>	4.4%	4.9%	4.0%	3.9%	4.8%	4.1%
<i>Religion</i>	2.9%	2.9%	3.0%	2.5%	0.0%	2.7%
<i>Political Topics Sum</i>	53.8%	55.4%	52.6%	27.8%	4.8%	58.9%
<i>Political Topics Average</i>	6.7%	6.9%	6.6%	3.5%	0.6%	7.4%
<i>Non-Political Topics Sum</i>	14.6%	14.9%	14.8%	8.8%	4.8%	14.1%
<i>Non-Political Topics Average</i>	2.9%	3.0%	3.0%	1.8%	1.0%	2.8%
<i>Total Tweets Analyzed</i>	21327 2	97222	87603	6006	105	22336

Weighted Ratio of Terms to Tweets from Only Members of the DPJ

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	10.2%	6.8%	13.1%	4.0%	0.0%	17.3%
<i>Economy / Finance</i>	14.1%	18.1%	11.0%	11.4%	0.0%	9.7%
<i>Disaster Prevention / Infrastructure</i>	14.4%	21.0%	10.1%	5.3%	0.0%	7.4%
<i>Welfare / Employment</i>	17.3%	12.4%	20.4%	17.6%	0.0%	27.1%
<i>Society</i>	3.7%	3.1%	4.2%	2.7%	5.7%	5.2%
<i>Energy</i>	9.1%	10.9%	8.8%	6.6%	0.0%	4.1%
<i>Political / Administrative Reform</i>	3.7%	4.7%	2.4%	1.7%	2.9%	5.6%
<i>Protests</i>	2.5%	1.2%	2.9%	8.9%	0.0%	2.8%
<i>Food & Restaurants</i>	1.8%	2.1%	1.6%	0.7%	0.0%	1.4%
<i>Leisure</i>	3.5%	4.4%	2.9%	0.9%	0.0%	2.8%
<i>Hobbies</i>	0.8%	0.9%	0.9%	0.1%	5.7%	0.7%
<i>Family</i>	7.1%	6.1%	6.8%	12.0%	0.0%	9.4%
<i>Religion</i>	1.6%	1.3%	2.0%	0.5%	0.0%	1.8%
<i>Political Topics Sum</i>	<i>75.0%</i>	<i>78.2%</i>	<i>72.9%</i>	<i>58.2%</i>	<i>8.6%</i>	<i>79.2%</i>
<i>Political Topics Average</i>	<i>9.4%</i>	<i>9.8%</i>	<i>9.1%</i>	<i>7.3%</i>	<i>1.1%</i>	<i>9.9%</i>
<i>Non-Political Topics Sum</i>	<i>14.8%</i>	<i>14.8%</i>	<i>14.2%</i>	<i>14.2%</i>	<i>5.7%</i>	<i>16.1%</i>
<i>Non-Political Topics Average</i>	<i>3.0%</i>	<i>3.0%</i>	<i>2.8%</i>	<i>2.8%</i>	<i>1.1%</i>	<i>3.2%</i>
<i>Total Tweets Analyzed</i>	<i>10670</i> <i>1</i>	<i>47576</i>	<i>41872</i>	<i>6205</i>	<i>35</i>	<i>11013</i>

Weighted Ratio of Terms to Tweets from Only Members of the JCP

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	21.9%	8.1%	21.9%	13.8%	6.1%	33.0%
<i>Economy / Finance</i>	17.0%	19.0%	18.8%	23.1%	7.3%	10.7%
<i>Disaster Prevention / Infrastructure</i>	10.9%	14.8%	12.4%	4.1%	0.0%	7.1%
<i>Welfare / Employment</i>	17.3%	15.5%	18.5%	14.1%	0.0%	16.8%
<i>Society</i>	5.0%	4.1%	5.5%	2.3%	0.8%	5.3%
<i>Energy</i>	16.0%	27.1%	17.2%	8.2%	19.0%	7.9%
<i>Political / Administrative Reform</i>	2.7%	2.6%	2.4%	4.3%	2.4%	2.8%
<i>Protests</i>	3.4%	3.6%	3.2%	4.4%	0.4%	3.4%
<i>Food & Restaurants</i>	1.5%	1.7%	1.6%	0.9%	0.0%	1.1%
<i>Leisure</i>	2.9%	2.4%	3.4%	0.8%	0.0%	2.7%
<i>Hobbies</i>	0.7%	0.8%	0.9%	0.1%	0.0%	0.6%
<i>Family</i>	6.6%	9.1%	6.4%	6.0%	2.4%	5.5%
<i>Religion</i>	0.9%	0.5%	1.2%	0.5%	0.0%	0.6%
<i>Political Topics Sum</i>	<i>94.2%</i>	<i>94.8%</i>	<i>99.9%</i>	<i>74.3%</i>	<i>36.0%</i>	<i>87.0%</i>
<i>Political Topics Average</i>	<i>11.8%</i>	<i>11.9%</i>	<i>12.5%</i>	<i>9.3%</i>	<i>4.5%</i>	<i>10.9%</i>
<i>Non-Political Topics Sum</i>	<i>12.6%</i>	<i>14.5%</i>	<i>13.5%</i>	<i>8.3%</i>	<i>2.4%</i>	<i>10.5%</i>
<i>Non-Political Topics Average</i>	<i>2.5%</i>	<i>2.9%</i>	<i>2.7%</i>	<i>1.7%</i>	<i>0.5%</i>	<i>2.1%</i>
<i>Total Tweets Analyzed</i>	<i>21643 9</i>	<i>36558</i>	<i>111535</i>	<i>12611</i>	<i>247</i>	<i>55488</i>

Weighted Ratio of Terms to Tweets from Only Members of the Other Third Parties and Independents

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	18.9%	15.4%	22.3%	5.6%	6.0%	21.9%
<i>Economy / Finance</i>	12.5%	14.4%	13.0%	13.1%	12.0%	5.9%
<i>Disaster Prevention / Infrastructure</i>	9.1%	13.0%	8.0%	3.5%	1.6%	4.7%
<i>Welfare / Employment</i>	6.3%	5.9%	6.5%	6.6%	0.0%	6.7%
<i>Society</i>	5.0%	4.3%	5.7%	4.1%	3.3%	4.6%
<i>Energy</i>	7.7%	7.8%	8.9%	4.7%	8.2%	4.4%
<i>Political / Administrative Reform</i>	3.1%	3.9%	2.5%	2.5%	3.3%	2.9%
<i>Protests</i>	3.4%	2.3%	3.9%	8.7%	0.5%	2.7%
<i>Food & Restaurants</i>	1.1%	1.4%	1.0%	0.6%	0.0%	0.9%
<i>Leisure</i>	2.8%	3.0%	2.9%	0.6%	0.0%	2.5%
<i>Hobbies</i>	0.9%	0.8%	1.0%	0.2%	0.0%	0.7%
<i>Family</i>	6.1%	7.4%	5.6%	4.3%	2.7%	4.9%
<i>Religion</i>	1.9%	1.6%	2.5%	0.9%	1.1%	1.6%
<i>Political Topics Sum</i>	<i>66.0%</i>	<i>67.0%</i>	<i>70.8%</i>	<i>48.8%</i>	<i>34.9%</i>	<i>53.8%</i>
<i>Political Topics Average</i>	8.3%	8.4%	8.9%	6.1%	4.4%	6.7%
<i>Non-Political Topics Sum</i>	<i>12.8%</i>	<i>14.2%</i>	<i>13.0%</i>	<i>6.6%</i>	<i>3.8%</i>	<i>10.6%</i>
<i>Non-Political Topics Average</i>	2.6%	2.8%	2.6%	1.3%	0.8%	2.1%
<i>Total Tweets Analyzed</i>	20632 6	74676	92174	10701	183	28592

Appendix Table XI: By Diet House

***Weighted Ratio of Terms to Tweets from Individuals in the House of Representatives
(Lower House)***

Lower House	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	12.1%	8.9%	14.4%	2.7%	0.5%	17.2%
<i>Economy / Finance</i>	12.6%	12.9%	12.8%	11.2%	1.0%	11.3%
<i>Disaster Prevention / Infrastructure</i>	14.0%	17.6%	11.9%	5.3%	1.5%	11.1%
<i>Welfare / Employment</i>	11.7%	9.3%	12.6%	8.4%	0.0%	17.5%
<i>Society</i>	4.2%	3.5%	4.8%	2.0%	3.0%	5.1%
<i>Energy</i>	6.5%	5.9%	7.9%	2.5%	1.0%	4.0%
<i>Political / Administrative Reform</i>	3.1%	3.4%	2.6%	1.7%	2.0%	4.0%
<i>Protests</i>	1.3%	1.0%	1.3%	4.0%	3.0%	1.2%
<i>Food & Restaurants</i>	2.0%	2.2%	2.0%	0.9%	0.0%	1.7%
<i>Leisure</i>	3.5%	3.4%	3.7%	1.1%	0.0%	3.5%
<i>Hobbies</i>	1.2%	1.2%	1.3%	0.2%	1.0%	1.3%
<i>Family</i>	5.3%	5.7%	4.9%	4.6%	3.0%	5.7%
<i>Religion</i>	2.5%	2.3%	2.7%	1.7%	1.0%	2.4%
<i>Political Topics Sum</i>	65.5%	62.5%	68.3%	37.8%	12.0%	71.4%
<i>Political Topics Average</i>	8.2%	7.8%	8.5%	4.7%	1.5%	8.9%
<i>Non-Political Topics Sum</i>	14.5%	14.8%	14.6%	8.5%	5.0%	14.6%
<i>Non-Political Topics Average</i>	2.9%	3.0%	2.9%	1.7%	1.0%	2.9%
<i>Total Tweets Analyzed</i>	34797 5	143263	154557	10998	202	38955

**Weighted Ratio of Terms to Tweets from Individuals in the House of Councillors
(Upper House)**

Upper House	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	15.7%	10.1%	17.8%	10.9%	0.7%	24.7%
<i>Economy / Finance</i>	11.9%	14.0%	11.0%	17.1%	15.4%	8.7%
<i>Disaster Prevention / Infrastructure</i>	16.1%	20.1%	13.9%	9.7%	5.1%	14.2%
<i>Welfare / Employment</i>	10.3%	10.2%	9.5%	11.8%	10.3%	13.5%
<i>Society</i>	4.2%	3.7%	4.3%	5.5%	2.2%	4.8%
<i>Energy</i>	7.3%	7.9%	7.0%	6.3%	5.9%	7.1%
<i>Political / Administrative Reform</i>	2.9%	3.5%	2.4%	3.4%	0.7%	3.2%
<i>Protests</i>	2.0%	1.2%	2.3%	3.7%	0.0%	3.2%
<i>Food & Restaurants</i>	2.1%	2.5%	1.8%	0.9%	1.5%	1.9%
<i>Leisure</i>	3.6%	4.2%	3.3%	1.4%	0.7%	3.1%
<i>Hobbies</i>	0.7%	0.9%	0.6%	0.5%	0.0%	0.7%
<i>Family</i>	5.2%	5.9%	4.3%	4.8%	11.8%	6.3%
<i>Religion</i>	1.1%	1.0%	1.3%	0.3%	0.0%	1.1%
<i>Political Topics Sum</i>	70.4%	70.7%	68.2%	68.4%	40.3%	79.4%
<i>Political Topics Average</i>	8.8%	8.8%	8.5%	8.6%	5.0%	9.9%
<i>Non-Political Topics Sum</i>	12.7%	14.5%	11.3%	7.9%	14.0%	13.1%
<i>Non-Political Topics Average</i>	2.5%	2.9%	2.3%	1.6%	2.8%	2.6%
<i>Total Tweets Analyzed</i>	20963 6	77204	98756	4978	136	28562

Appendix Table XII: By Gender

Weighted Ratio of Terms to Tweets from Only Males

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	15.9%	10.9%	17.6%	6.9%	4.9%	24.5%
<i>Economy / Finance</i>	14.0%	15.1%	14.5%	15.6%	6.4%	9.9%
<i>Disaster Prevention / Infrastructure</i>	11.3%	15.3%	10.2%	3.8%	0.6%	7.5%
<i>Welfare / Employment</i>	10.7%	8.5%	11.6%	9.1%	0.0%	13.5%
<i>Society</i>	4.3%	3.4%	4.9%	2.6%	2.3%	4.9%
<i>Energy</i>	8.5%	8.9%	9.5%	4.9%	10.9%	5.5%
<i>Political / Administrative Reform</i>	2.8%	3.4%	2.4%	2.5%	1.9%	3.1%
<i>Protests</i>	2.4%	1.6%	2.7%	5.3%	0.6%	2.6%
<i>Food & Restaurants</i>	1.7%	2.1%	1.7%	0.8%	0.0%	1.3%
<i>Leisure</i>	3.1%	3.2%	3.3%	0.9%	0.0%	2.8%
<i>Hobbies</i>	1.0%	1.1%	1.1%	0.1%	0.4%	0.8%
<i>Family</i>	5.4%	5.9%	5.2%	4.6%	2.1%	5.1%
<i>Religion</i>	1.9%	1.9%	2.2%	1.1%	0.4%	1.4%
<i>Political Topics Sum</i>	<i>69.9%</i>	<i>67.1%</i>	<i>73.4%</i>	<i>50.7%</i>	<i>27.6%</i>	<i>71.5%</i>
<i>Political Topics Average</i>	8.7%	8.4%	9.2%	6.3%	3.5%	8.9%
<i>Non-Political Topics Sum</i>	<i>13.1%</i>	<i>14.2%</i>	<i>13.5%</i>	<i>7.5%</i>	<i>2.9%</i>	<i>11.4%</i>
<i>Non-Political Topics Average</i>	2.6%	2.8%	2.7%	1.5%	0.6%	2.3%
<i>Total Tweets Analyzed</i>	<i>61569</i> <i>7</i>	215955	273508	27481	469	98284

Weighted Ratio of Terms to Tweets from Only Females

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	17.4%	9.8%	20.6%	9.4%	3.0%	26.6%
<i>Economy / Finance</i>	11.7%	10.2%	13.2%	16.9%	10.9%	7.9%
<i>Disaster Prevention / Infrastructure</i>	14.2%	20.0%	12.9%	5.8%	0.0%	9.5%
<i>Welfare / Employment</i>	14.9%	12.0%	15.9%	17.6%	0.0%	17.1%
<i>Society</i>	5.6%	5.5%	5.9%	3.6%	2.0%	5.7%
<i>Energy</i>	13.1%	14.9%	14.4%	8.2%	10.9%	7.4%
<i>Political / Administrative Reform</i>	2.2%	2.2%	1.9%	3.4%	4.0%	2.6%
<i>Protests</i>	3.1%	2.4%	2.8%	9.0%	0.0%	2.9%
<i>Food & Restaurants</i>	1.3%	1.3%	1.3%	0.9%	0.0%	1.2%
<i>Leisure</i>	3.3%	3.7%	3.4%	0.7%	0.0%	2.8%
<i>Hobbies</i>	0.6%	0.7%	0.6%	0.2%	0.0%	0.5%
<i>Family</i>	8.3%	9.1%	7.6%	11.7%	5.9%	7.3%
<i>Religion</i>	1.5%	1.7%	1.7%	0.5%	0.0%	1.2%
<i>Political Topics Sum</i>	82.2%	77.0%	87.6%	73.9%	30.8%	79.7%
<i>Political Topics Average</i>	10.3%	9.6%	11.0%	9.2%	3.9%	10.0%
<i>Non-Political Topics Sum</i>	15.0%	16.5%	14.6%	14.0%	5.9%	13.0%
<i>Non-Political Topics Average</i>	3.0%	3.3%	2.9%	2.8%	1.2%	2.6%
<i>Total Tweets Analyzed</i>	12704 1	40077	59676	8042	101	19145

Appendix Table XIII: By Age

Weighted Ratio of Terms to Tweets from Only Those Under the Age of 45

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	14.2%	6.7%	15.7%	8.9%	2.3%	26.0%
<i>Economy / Finance</i>	13.4%	15.0%	13.6%	17.9%	4.2%	8.9%
<i>Disaster Prevention / Infrastructure</i>	9.9%	13.8%	9.1%	3.1%	0.0%	6.8%
<i>Welfare / Employment</i>	10.8%	9.0%	11.6%	10.8%	0.0%	12.2%
<i>Society</i>	4.6%	3.7%	5.3%	3.2%	2.3%	4.9%
<i>Energy</i>	8.8%	10.5%	9.1%	5.5%	14.3%	5.8%
<i>Political / Administrative Reform</i>	2.7%	3.1%	2.3%	3.0%	2.3%	2.8%
<i>Protests</i>	2.2%	1.7%	2.1%	4.2%	0.0%	2.8%
<i>Food & Restaurants</i>	1.5%	1.8%	1.5%	0.8%	0.0%	1.1%
<i>Leisure</i>	3.0%	3.0%	3.3%	1.0%	0.0%	2.6%
<i>Hobbies</i>	0.9%	1.0%	1.0%	0.2%	0.0%	0.7%
<i>Family</i>	6.1%	6.8%	6.1%	5.9%	3.1%	5.2%
<i>Religion</i>	1.7%	1.5%	2.3%	0.6%	0.8%	1.1%
<i>Political Topics Sum</i>	66.6%	63.5%	68.8%	56.6%	25.4%	70.2%
<i>Political Topics Average</i>	8.3%	7.9%	8.6%	7.1%	3.2%	8.8%
<i>Non-Political Topics Sum</i>	13.2%	14.1%	14.2%	8.5%	3.9%	10.7%
<i>Non-Political Topics Average</i>	2.6%	2.8%	2.8%	1.7%	0.8%	2.1%
<i>Total Tweets Analyzed</i>	32000 5	107536	139025	15412	259	57773

Weighted Ratio of Terms to Tweets from Only Those Between the Ages of 45 and 64

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	16.8%	12.8%	19.4%	5.3%	6.3%	22.3%
<i>Economy / Finance</i>	14.0%	14.0%	15.2%	15.2%	9.8%	10.1%
<i>Disaster Prevention / Infrastructure</i>	13.1%	17.4%	11.9%	5.4%	1.1%	8.9%
<i>Welfare / Employment</i>	12.1%	9.0%	13.2%	12.1%	0.0%	16.1%
<i>Society</i>	4.3%	3.7%	4.7%	2.7%	2.1%	5.2%
<i>Energy</i>	9.1%	8.8%	10.7%	5.8%	8.8%	5.6%
<i>Political / Administrative Reform</i>	2.9%	3.4%	2.3%	2.8%	2.1%	3.3%
<i>Protests</i>	2.4%	1.6%	2.5%	6.2%	1.1%	2.5%
<i>Food & Restaurants</i>	1.8%	2.1%	1.8%	0.9%	0.0%	1.4%
<i>Leisure</i>	3.2%	3.5%	3.3%	0.8%	0.0%	2.9%
<i>Hobbies</i>	0.9%	1.0%	1.0%	0.1%	0.7%	0.8%
<i>Family</i>	5.5%	6.1%	5.1%	4.4%	2.1%	5.8%
<i>Religion</i>	1.9%	2.1%	2.0%	1.2%	0.0%	1.5%
<i>Political Topics Sum</i>	<i>74.7%</i>	<i>70.7%</i>	<i>79.9%</i>	<i>55.5%</i>	<i>31.3%</i>	<i>74.0%</i>
<i>Political Topics Average</i>	<i>9.3%</i>	<i>8.8%</i>	<i>10.0%</i>	<i>6.9%</i>	<i>3.9%</i>	<i>9.3%</i>
<i>Non-Political Topics Sum</i>	<i>13.3%</i>	<i>14.8%</i>	<i>13.2%</i>	<i>7.4%</i>	<i>2.8%</i>	<i>12.4%</i>
<i>Non-Political Topics Average</i>	<i>2.7%</i>	<i>3.0%</i>	<i>2.6%</i>	<i>1.5%</i>	<i>0.6%</i>	<i>2.5%</i>
<i>Total Tweets Analyzed</i>	<i>37766</i> <i>2</i>	<i>135795</i>	<i>171197</i>	<i>15759</i>	<i>285</i>	<i>54626</i>

Weighted Ratio of Terms to Tweets from Only Those Over the Age of 65

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	25.6%	27.8%	25.0%	10.2%	3.8%	37.8%
<i>Economy / Finance</i>	11.3%	12.4%	10.6%	11.2%	7.7%	12.1%
<i>Disaster Prevention / Infrastructure</i>	13.8%	25.2%	12.4%	4.1%	0.0%	6.5%
<i>Welfare / Employment</i>	11.1%	10.9%	11.4%	7.9%	0.0%	13.1%
<i>Society</i>	5.6%	5.1%	6.7%	2.4%	0.0%	5.0%
<i>Energy</i>	14.5%	16.6%	16.8%	5.8%	0.0%	8.1%
<i>Political / Administrative Reform</i>	2.3%	3.6%	2.1%	1.1%	3.8%	1.8%
<i>Protests</i>	7.0%	3.6%	8.2%	12.9%	0.0%	3.6%
<i>Food & Restaurants</i>	1.2%	1.4%	1.3%	0.4%	0.0%	1.2%
<i>Leisure</i>	3.6%	4.3%	3.7%	0.6%	0.0%	4.1%
<i>Hobbies</i>	1.2%	1.9%	1.0%	0.1%	0.0%	1.4%
<i>Family</i>	7.2%	8.1%	6.1%	13.8%	7.7%	4.8%
<i>Religion</i>	2.7%	3.3%	2.8%	1.1%	0.0%	2.4%
<i>Political Topics Sum</i>	<i>91.2%</i>	<i>105.2%</i>	<i>93.2%</i>	<i>55.6%</i>	<i>15.3%</i>	<i>88.0%</i>
<i>Political Topics Average</i>	<i>11.4%</i>	<i>13.2%</i>	<i>11.7%</i>	<i>7.0%</i>	<i>1.9%</i>	<i>11.0%</i>
<i>Non-Political Topics Sum</i>	<i>15.9%</i>	<i>19.0%</i>	<i>14.9%</i>	<i>16.0%</i>	<i>7.7%</i>	<i>13.9%</i>
<i>Non-Political Topics Average</i>	<i>3.2%</i>	<i>3.8%</i>	<i>3.0%</i>	<i>3.2%</i>	<i>1.5%</i>	<i>2.8%</i>
<i>Total Tweets Analyzed</i>	<i>39977</i>	<i>9432</i>	<i>21295</i>	<i>4308</i>	<i>26</i>	<i>4916</i>

Appendix Table XIV: By Incumbency

Weighted Ratio of Terms to Tweets from Only Incumbents Running in the 2014 General Election

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	12.2%	9.1%	14.6%	2.7%	0.7%	17.5%
<i>Economy / Finance</i>	12.3%	12.6%	12.3%	11.1%	1.3%	11.5%
<i>Disaster Prevention / Infrastructure</i>	14.3%	17.3%	12.7%	5.3%	0.0%	12.0%
<i>Welfare / Employment</i>	11.4%	9.0%	12.4%	8.4%	0.0%	17.6%
<i>Society</i>	4.3%	3.6%	4.9%	2.1%	4.0%	5.3%
<i>Energy</i>	6.4%	5.7%	7.8%	2.4%	0.0%	4.1%
<i>Political / Administrative Reform</i>	3.1%	3.4%	2.6%	1.4%	2.0%	4.0%
<i>Protests</i>	1.3%	1.1%	1.3%	3.5%	0.0%	1.2%
<i>Food & Restaurants</i>	2.0%	2.1%	2.0%	0.9%	0.0%	1.7%
<i>Leisure</i>	3.5%	3.4%	3.8%	1.1%	0.0%	3.6%
<i>Hobbies</i>	1.2%	1.2%	1.3%	0.1%	1.3%	1.3%
<i>Family</i>	5.4%	5.8%	4.9%	4.7%	3.3%	5.8%
<i>Religion</i>	2.5%	2.3%	2.8%	1.8%	1.3%	2.5%
<i>Political Topics Sum</i>	65.3%	61.8%	68.6%	36.9%	8.0%	73.2%
<i>Political Topics Average</i>	8.2%	7.7%	8.6%	4.6%	1.0%	9.2%
<i>Non-Political Topics Sum</i>	14.6%	14.8%	14.8%	8.6%	5.9%	14.9%
<i>Non-Political Topics Average</i>	2.9%	3.0%	3.0%	1.7%	1.2%	3.0%
<i>Total Tweets Analyzed</i>	34514 7	148530	147967	10576	150	37924

Weighted Ratio of Terms to Tweets from Only New Candidates Running in the 2014 General Election

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	22.2%	15.2%	23.4%	11.6%	7.0%	30.3%
<i>Economy / Finance</i>	14.7%	15.1%	16.5%	19.6%	10.6%	8.9%
<i>Disaster Prevention / Infrastructure</i>	9.3%	12.7%	9.9%	3.8%	0.8%	6.0%
<i>Welfare / Employment</i>	12.4%	9.4%	13.7%	11.3%	0.0%	13.0%
<i>Society</i>	5.1%	4.3%	5.8%	3.3%	0.8%	5.1%
<i>Energy</i>	12.3%	16.6%	13.0%	7.7%	17.4%	7.1%
<i>Political / Administrative Reform</i>	2.5%	2.9%	2.2%	3.4%	2.8%	2.6%
<i>Protests</i>	3.8%	3.0%	3.8%	7.7%	0.8%	3.4%
<i>Food & Restaurants</i>	1.4%	1.8%	1.4%	0.8%	0.0%	1.1%
<i>Leisure</i>	2.7%	2.8%	3.1%	0.8%	0.0%	2.5%
<i>Hobbies</i>	0.8%	0.9%	0.9%	0.1%	0.0%	0.5%
<i>Family</i>	6.6%	7.9%	6.4%	8.1%	3.1%	5.3%
<i>Religion</i>	1.3%	1.4%	1.6%	0.6%	0.0%	0.7%
<i>Political Topics Sum</i>	82.3%	79.2%	88.3%	68.4%	40.2%	76.4%
<i>Political Topics Average</i>	10.3%	9.9%	11.0%	8.6%	5.0%	9.6%
<i>Non-Political Topics Sum</i>	12.8%	14.8%	13.4%	10.4%	3.1%	10.1%
<i>Non-Political Topics Average</i>	2.6%	3.0%	2.7%	2.1%	0.6%	2.0%
<i>Total Tweets Analyzed</i>	32439 3	78886	154368	19210	357	71572

**Weighted Ratio of Terms to Tweets from Only Former Members of Parliament Running in the
2014 General Election**

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	7.8%	6.9%	9.1%	2.5%	0.0%	10.5%
<i>Economy / Finance</i>	15.2%	20.7%	12.7%	12.4%	1.6%	6.9%
<i>Disaster Prevention / Infrastructure</i>	10.2%	18.7%	5.4%	3.7%	0.0%	3.5%
<i>Welfare / Employment</i>	7.6%	8.3%	5.8%	15.0%	0.0%	7.2%
<i>Society</i>	3.0%	3.0%	2.8%	2.9%	4.8%	3.7%
<i>Energy</i>	9.6%	12.6%	9.5%	5.0%	0.0%	2.6%
<i>Political / Administrative Reform</i>	2.3%	3.3%	1.4%	2.6%	0.0%	1.8%
<i>Protests</i>	2.9%	1.3%	3.8%	5.4%	0.0%	3.7%
<i>Food & Restaurants</i>	1.3%	1.6%	1.3%	0.7%	0.0%	1.0%
<i>Leisure</i>	3.1%	4.4%	2.6%	0.8%	0.0%	2.0%
<i>Hobbies</i>	0.7%	0.7%	0.9%	0.2%	0.0%	0.4%
<i>Family</i>	4.8%	5.6%	4.6%	2.7%	0.0%	4.4%
<i>Religion</i>	1.2%	1.0%	1.5%	0.4%	0.0%	1.5%
<i>Political Topics Sum</i>	<i>58.6%</i>	<i>74.8%</i>	<i>50.5%</i>	<i>49.5%</i>	<i>6.4%</i>	<i>39.9%</i>
<i>Political Topics Average</i>	<i>7.3%</i>	<i>9.4%</i>	<i>6.3%</i>	<i>6.2%</i>	<i>0.8%</i>	<i>5.0%</i>
<i>Non-Political Topics Sum</i>	<i>11.1%</i>	<i>13.3%</i>	<i>10.9%</i>	<i>4.8%</i>	<i>0.0%</i>	<i>9.3%</i>
<i>Non-Political Topics Average</i>	<i>2.2%</i>	<i>2.7%</i>	<i>2.2%</i>	<i>1.0%</i>	<i>0.0%</i>	<i>1.9%</i>
<i>Total Tweets Analyzed</i>	<i>73198</i>	<i>28616</i>	<i>30849</i>	<i>5737</i>	<i>63</i>	<i>7933</i>

Appendix Table XV: By Competitiveness of Election in 2014

Weighted Ratio of Terms to Tweets from Only Those in a Tight Race in the 2014 Election

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	13.4%	9.9%	16.2%	3.1%	0.0%	17.1%
<i>Economy / Finance</i>	11.0%	11.1%	10.7%	12.7%	0.0%	11.2%
<i>Disaster Prevention / Infrastructure</i>	16.5%	24.8%	11.5%	6.1%	0.0%	9.8%
<i>Welfare / Employment</i>	16.1%	9.7%	18.3%	13.6%	0.0%	29.3%
<i>Society</i>	4.8%	4.7%	4.9%	1.7%	7.5%	5.7%
<i>Energy</i>	8.4%	9.6%	8.3%	4.2%	0.0%	5.6%
<i>Political / Administrative Reform</i>	3.6%	3.9%	2.6%	1.0%	2.5%	6.6%
<i>Protests</i>	2.3%	1.3%	2.9%	3.6%	0.0%	3.0%
<i>Food & Restaurants</i>	1.9%	2.6%	1.6%	0.7%	0.0%	1.3%
<i>Leisure</i>	3.7%	4.3%	3.4%	0.9%	0.0%	3.2%
<i>Hobbies</i>	0.9%	1.0%	1.0%	0.1%	5.0%	0.7%
<i>Family</i>	5.6%	5.9%	5.2%	4.2%	5.0%	6.5%
<i>Religion</i>	2.7%	2.9%	2.7%	1.5%	5.0%	2.0%
<i>Political Topics Sum</i>	76.1%	75.0%	75.4%	46.0%	10.0%	88.3%
<i>Political Topics Average</i>	9.5%	9.4%	9.4%	5.8%	1.3%	11.0%
<i>Non-Political Topics Sum</i>	14.8%	16.7%	13.9%	7.4%	15.0%	13.7%
<i>Non-Political Topics Average</i>	3.0%	3.3%	2.8%	1.5%	3.0%	2.7%
<i>Total Tweets Analyzed</i>	90653	36298	40439	2530	40	11346

Weighted Ratio of Terms to Tweets from Only Those Not in a Tight Race in the 2014 Election

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	16.5%	10.9%	18.4%	7.8%	4.9%	25.6%
<i>Economy / Finance</i>	14.0%	14.8%	14.8%	16.2%	7.9%	9.4%
<i>Disaster Prevention / Infrastructure</i>	11.1%	14.6%	10.6%	4.1%	0.6%	7.6%
<i>Welfare / Employment</i>	10.8%	9.0%	11.6%	10.8%	0.0%	12.5%
<i>Society</i>	4.5%	3.6%	5.1%	2.9%	1.9%	5.0%
<i>Energy</i>	9.4%	9.9%	10.7%	5.8%	11.7%	5.8%
<i>Political / Administrative Reform</i>	2.6%	3.1%	2.2%	2.8%	2.3%	2.6%
<i>Protests</i>	2.6%	1.8%	2.7%	6.3%	0.6%	2.6%
<i>Food & Restaurants</i>	1.6%	1.8%	1.7%	0.8%	0.0%	1.3%
<i>Leisure</i>	3.1%	3.2%	3.3%	0.9%	0.0%	2.8%
<i>Hobbies</i>	1.0%	1.1%	1.1%	0.2%	0.0%	0.8%
<i>Family</i>	5.9%	6.5%	5.6%	6.3%	2.6%	5.3%
<i>Religion</i>	1.7%	1.7%	2.1%	0.9%	0.0%	1.3%
<i>Political Topics Sum</i>	<i>71.5%</i>	<i>67.7%</i>	<i>76.1%</i>	<i>56.7%</i>	<i>29.9%</i>	<i>71.1%</i>
<i>Political Topics Average</i>	8.9%	8.5%	9.5%	7.1%	3.7%	8.9%
<i>Non-Political Topics Sum</i>	<i>13.3%</i>	<i>14.3%</i>	<i>13.8%</i>	<i>9.1%</i>	<i>2.6%</i>	<i>11.5%</i>
<i>Non-Political Topics Average</i>	2.7%	2.9%	2.8%	1.8%	0.5%	2.3%
<i>Total Tweets Analyzed</i>	65208 5	219734	292745	32993	530	106083

Appendix Table XVI: By Facebook Usage

Weighted Ratio of Terms to Tweets from Only Those with a Facebook Account

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	15.6%	10.7%	17.6%	6.3%	5.2%	24.7%
<i>Economy / Finance</i>	13.8%	14.2%	14.5%	15.2%	9.3%	10.3%
<i>Disaster Prevention / Infrastructure</i>	11.9%	15.5%	10.9%	4.2%	0.8%	8.4%
<i>Welfare / Employment</i>	10.8%	8.1%	11.8%	9.4%	0.0%	14.9%
<i>Society</i>	4.3%	3.6%	4.9%	2.2%	2.6%	5.2%
<i>Energy</i>	8.7%	8.9%	9.8%	5.2%	7.0%	5.5%
<i>Political / Administrative Reform</i>	2.8%	3.3%	2.3%	2.5%	2.3%	3.2%
<i>Protests</i>	2.4%	1.6%	2.7%	5.6%	0.3%	2.4%
<i>Food & Restaurants</i>	1.6%	1.9%	1.5%	0.7%	0.0%	1.3%
<i>Leisure</i>	3.1%	3.2%	3.3%	0.9%	0.0%	2.9%
<i>Hobbies</i>	1.0%	1.1%	1.1%	0.1%	0.5%	0.8%
<i>Family</i>	5.6%	6.1%	5.3%	4.7%	1.8%	5.6%
<i>Religion</i>	2.0%	1.9%	2.3%	1.1%	0.5%	1.5%
<i>Political Topics Sum</i>	70.3%	65.9%	74.5%	50.6%	27.5%	74.6%
<i>Political Topics Average</i>	8.8%	8.2%	9.3%	6.3%	3.4%	9.3%
<i>Non-Political Topics Sum</i>	13.3%	14.2%	13.5%	7.5%	2.8%	12.1%
<i>Non-Political Topics Average</i>	2.7%	2.8%	2.7%	1.5%	0.6%	2.4%
<i>Total Tweets Analyzed</i>	598378	222189	263671	26074	387	86057

Weighted Ratio of Terms to Tweets from Only Those without a Facebook Account

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	18.5%	10.8%	20.3%	10.8%	3.3%	25.2%
<i>Economy / Finance</i>	12.9%	15.0%	13.7%	17.9%	2.7%	7.6%
<i>Disaster Prevention / Infrastructure</i>	11.0%	19.7%	9.9%	4.4%	0.0%	6.2%
<i>Welfare / Employment</i>	14.2%	15.4%	14.5%	15.5%	0.0%	11.9%
<i>Society</i>	5.2%	4.6%	5.8%	4.8%	1.6%	4.8%
<i>Energy</i>	11.8%	15.7%	12.8%	7.0%	19.1%	6.7%
<i>Political / Administrative Reform</i>	2.6%	2.9%	2.4%	3.2%	2.2%	2.6%
<i>Protests</i>	3.1%	2.3%	2.7%	7.5%	0.5%	3.5%
<i>Food & Restaurants</i>	1.8%	2.2%	2.0%	1.0%	0.0%	1.3%
<i>Leisure</i>	3.2%	4.1%	3.5%	0.9%	0.0%	2.5%
<i>Hobbies</i>	0.8%	1.1%	0.8%	0.1%	0.0%	0.6%
<i>Family</i>	7.2%	8.8%	6.9%	10.3%	4.9%	5.1%
<i>Religion</i>	1.2%	1.6%	1.4%	0.4%	0.0%	0.8%
<i>Political Topics Sum</i>	<i>79.3%</i>	<i>86.4%</i>	<i>82.1%</i>	<i>71.1%</i>	<i>29.4%</i>	<i>68.5%</i>
<i>Political Topics Average</i>	<i>9.9%</i>	<i>10.8%</i>	<i>10.3%</i>	<i>8.9%</i>	<i>3.7%</i>	<i>8.6%</i>
<i>Non-Political Topics Sum</i>	<i>14.2%</i>	<i>17.8%</i>	<i>14.6%</i>	<i>12.7%</i>	<i>4.9%</i>	<i>10.3%</i>
<i>Non-Political Topics Average</i>	<i>2.8%</i>	<i>3.6%</i>	<i>2.9%</i>	<i>2.5%</i>	<i>1.0%</i>	<i>2.1%</i>
<i>Total Tweets Analyzed</i>	<i>144360</i>	<i>33843</i>	<i>69513</i>	<i>9449</i>	<i>183</i>	<i>31372</i>

Appendix Table XVII: By Twitter Followers

Weighted Ratio of Terms to Tweets from Individuals in the Top 25 Percent Quantile for Followers (More than 3365 Followers)

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	15.8%	10.6%	17.7%	7.2%	4.7%	25.3%
<i>Economy / Finance</i>	12.7%	14.2%	12.8%	14.5%	5.4%	8.4%
<i>Disaster Prevention / Infrastructure</i>	12.1%	17.8%	10.1%	4.9%	0.0%	7.4%
<i>Welfare / Employment</i>	9.3%	7.0%	10.0%	11.2%	0.0%	11.8%
<i>Society</i>	4.7%	4.0%	5.2%	3.1%	1.9%	5.0%
<i>Energy</i>	9.6%	10.6%	10.6%	5.3%	13.6%	5.6%
<i>Political / Administrative Reform</i>	2.5%	3.0%	2.1%	2.2%	2.2%	2.6%
<i>Protests</i>	3.0%	1.9%	3.5%	6.4%	0.0%	3.1%
<i>Food & Restaurants</i>	1.5%	1.7%	1.4%	0.8%	0.0%	1.3%
<i>Leisure</i>	3.2%	3.4%	3.4%	0.8%	0.0%	2.9%
<i>Hobbies</i>	0.9%	0.9%	1.0%	0.1%	0.6%	0.8%
<i>Family</i>	5.8%	6.4%	5.4%	7.2%	3.5%	5.0%
<i>Religion</i>	1.9%	1.8%	2.3%	0.8%	0.6%	1.5%
<i>Political Topics Sum</i>	<i>69.7%</i>	<i>69.1%</i>	<i>72.0%</i>	<i>54.8%</i>	<i>27.8%</i>	<i>69.2%</i>
<i>Political Topics Average</i>	<i>8.7%</i>	<i>8.6%</i>	<i>9.0%</i>	<i>6.9%</i>	<i>3.5%</i>	<i>8.7%</i>
<i>Non-Political Topics Sum</i>	<i>13.3%</i>	<i>14.2%</i>	<i>13.5%</i>	<i>9.7%</i>	<i>4.7%</i>	<i>11.5%</i>
<i>Non-Political Topics Average</i>	<i>2.7%</i>	<i>2.8%</i>	<i>2.7%</i>	<i>1.9%</i>	<i>0.9%</i>	<i>2.3%</i>
<i>Total Tweets Analyzed</i>	<i>34352</i> <i>5</i>	<i>116336</i>	<i>159845</i>	<i>17439</i>	<i>316</i>	<i>49589</i>

Weighted Ratio of Terms to Tweets from Individuals in the Bottom 25 Percent Quantile for Followers (Less than 470 Followers)

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	16.1%	10.8%	18.1%	7.6%	3.8%	24.7%
<i>Economy / Finance</i>	14.4%	14.8%	15.2%	17.2%	10.0%	10.3%
<i>Disaster Prevention / Infrastructure</i>	12.0%	15.6%	11.2%	4.3%	0.9%	8.3%
<i>Welfare / Employment</i>	12.4%	9.7%	13.7%	12.3%	0.0%	15.1%
<i>Society</i>	4.3%	3.5%	4.8%	2.9%	3.2%	5.0%
<i>Energy</i>	8.7%	9.1%	9.7%	6.5%	8.5%	5.6%
<i>Political / Administrative Reform</i>	2.9%	3.4%	2.5%	3.1%	2.1%	3.2%
<i>Protests</i>	2.1%	1.6%	2.0%	6.5%	0.9%	2.3%
<i>Food & Restaurants</i>	1.7%	2.0%	1.8%	0.8%	0.0%	1.2%
<i>Leisure</i>	3.1%	3.2%	3.4%	0.9%	0.0%	2.9%
<i>Hobbies</i>	1.0%	1.2%	1.1%	0.2%	0.0%	0.8%
<i>Family</i>	5.9%	6.2%	5.7%	7.0%	2.1%	5.6%
<i>Religion</i>	1.9%	2.0%	2.1%	1.0%	0.6%	1.4%
<i>Political Topics Sum</i>	<i>72.9%</i>	<i>68.5%</i>	<i>77.2%</i>	<i>60.4%</i>	<i>29.4%</i>	<i>74.5%</i>
<i>Political Topics Average</i>	<i>9.1%</i>	<i>8.6%</i>	<i>9.7%</i>	<i>7.6%</i>	<i>3.7%</i>	<i>9.3%</i>
<i>Non-Political Topics Sum</i>	<i>13.6%</i>	<i>14.6%</i>	<i>14.1%</i>	<i>9.9%</i>	<i>2.7%</i>	<i>11.9%</i>
<i>Non-Political Topics Average</i>	<i>2.7%</i>	<i>2.9%</i>	<i>2.8%</i>	<i>2.0%</i>	<i>0.5%</i>	<i>2.4%</i>
<i>Total Tweets Analyzed</i>	<i>507311</i>	<i>182846</i>	<i>219156</i>	<i>22756</i>	<i>341</i>	<i>82212</i>

Appendix Table XVIII: By Population Density

Weighted Ratio of Terms to Tweets from Only Those in Higher Population Density Prefectures

High Population Density	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	17.0%	9.8%	19.5%	8.3%	5.6%	27.3%
<i>Economy / Finance</i>	13.1%	13.8%	13.5%	16.6%	7.6%	9.6%
<i>Disaster Prevention / Infrastructure</i>	9.5%	12.9%	9.1%	3.7%	1.0%	6.1%
<i>Welfare / Employment</i>	11.6%	9.7%	12.0%	11.6%	0.0%	14.6%
<i>Society</i>	4.4%	3.6%	4.8%	2.9%	3.6%	5.3%
<i>Energy</i>	8.5%	9.7%	9.4%	5.6%	6.9%	4.5%
<i>Political / Administrative Reform</i>	3.0%	3.8%	2.3%	2.2%	2.3%	3.3%
<i>Protests</i>	2.8%	1.8%	3.0%	6.6%	0.3%	3.0%
<i>Food & Restaurants</i>	1.5%	1.8%	1.4%	0.7%	0.0%	1.2%
<i>Leisure</i>	2.9%	3.2%	3.1%	0.8%	0.0%	2.8%
<i>Hobbies</i>	0.9%	1.0%	0.9%	0.1%	0.0%	0.7%
<i>Family</i>	6.1%	6.5%	5.8%	7.1%	4.9%	5.9%
<i>Religion</i>	1.9%	2.0%	2.2%	0.9%	0.7%	1.2%
<i>Political Topics Sum</i>	<i>69.9%</i>	<i>65.1%</i>	<i>73.6%</i>	<i>57.5%</i>	<i>27.3%</i>	<i>73.7%</i>
<i>Political Topics Average</i>	8.7%	8.1%	9.2%	7.2%	3.4%	9.2%
<i>Non-Political Topics Sum</i>	<i>13.3%</i>	<i>14.5%</i>	<i>13.4%</i>	<i>9.6%</i>	<i>5.6%</i>	<i>11.8%</i>
<i>Non-Political Topics Average</i>	2.7%	2.9%	2.7%	1.9%	1.1%	2.4%
<i>Total Tweets Analyzed</i>	<i>362360</i>	<i>128684</i>	<i>166579</i>	<i>14598</i>	<i>266</i>	<i>52233</i>

Weighted Ratio of Terms to Tweets from Only Those in Lower Population Density Prefectures

Low Population Density	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	15.2%	11.6%	16.8%	6.3%	3.4%	21.6%
<i>Economy / Finance</i>	14.2%	14.8%	15.1%	15.0%	7.1%	9.5%
<i>Disaster Prevention / Infrastructure</i>	14.1%	19.1%	12.3%	5.0%	0.0%	9.9%
<i>Welfare / Employment</i>	11.2%	8.4%	12.8%	10.2%	0.0%	13.5%
<i>Society</i>	4.7%	3.9%	5.4%	2.8%	0.8%	4.8%
<i>Energy</i>	10.1%	10.0%	11.4%	5.8%	15.4%	7.4%
<i>Political / Administrative Reform</i>	2.5%	2.7%	2.2%	3.4%	2.3%	2.6%
<i>Protests</i>	2.2%	1.7%	2.4%	5.4%	0.4%	2.3%
<i>Food & Restaurants</i>	1.8%	2.1%	1.9%	1.0%	0.0%	1.3%
<i>Leisure</i>	3.4%	3.4%	3.6%	1.0%	0.0%	2.9%
<i>Hobbies</i>	1.1%	1.1%	1.2%	0.2%	0.8%	0.9%
<i>Family</i>	5.6%	6.4%	5.4%	4.8%	0.4%	4.8%
<i>Religion</i>	1.8%	1.7%	2.1%	1.0%	0.0%	1.6%
<i>Political Topics Sum</i>	74.2%	72.2%	78.4%	53.9%	29.4%	71.6%
<i>Political Topics Average</i>	9.3%	9.0%	9.8%	6.7%	3.7%	9.0%
<i>Non-Political Topics Sum</i>	13.7%	14.7%	14.2%	8.0%	1.2%	11.5%
<i>Non-Political Topics Average</i>	2.7%	2.9%	2.8%	1.6%	0.2%	2.3%
<i>Total Tweets Analyzed</i>	380378	127348	166605	20925	304	65196

Appendix Table XIX: By Retweets

Weighted Ratio of Terms to Tweets from Top 25 Percent Quantile of Tweets Based on Retweets (Tweets with more than 17 Retweets)

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	22.6%	16.3%	24.6%	9.2%	3.4%	30.1%
<i>Economy / Finance</i>	17.3%	21.3%	18.0%	17.6%	6.6%	10.4%
<i>Disaster Prevention / Infrastructure</i>	15.2%	23.9%	14.1%	5.6%	2.1%	9.5%
<i>Welfare / Employment</i>	15.1%	13.0%	16.0%	13.1%	2.1%	16.5%
<i>Society</i>	5.7%	5.1%	6.3%	3.6%	3.0%	5.8%
<i>Energy</i>	12.4%	15.4%	13.8%	6.7%	6.4%	6.7%
<i>Political / Administrative Reform</i>	3.7%	5.0%	3.1%	3.3%	2.7%	3.7%
<i>Protests</i>	3.4%	2.3%	3.7%	6.7%	2.1%	3.1%
<i>Food & Restaurants</i>	1.5%	1.6%	1.6%	0.9%	0.5%	1.4%
<i>Leisure</i>	3.3%	3.5%	3.6%	1.0%	0.0%	3.0%
<i>Hobbies</i>	0.8%	0.8%	0.8%	0.2%	0.5%	0.8%
<i>Family</i>	6.5%	7.4%	6.0%	7.0%	5.5%	6.2%
<i>Religion</i>	1.6%	1.4%	1.9%	1.0%	0.5%	1.1%
<i>Political Topics Sum</i>	95.4%	102.3%	99.6%	65.8%	28.4%	85.8%
<i>Political Topics Average</i>	11.9%	12.8%	12.5%	8.2%	3.6%	10.7%
<i>Non-Political Topics Sum</i>	13.7%	14.7%	13.9%	10.1%	7.0%	12.5%
<i>Non-Political Topics Average</i>	2.7%	2.9%	2.8%	2.0%	1.4%	2.5%
<i>Total Tweets Analyzed</i>	41788 4	110257	198640	24748	439	83800

Weighted Ratio of Terms to Tweets from Bottom 25 Percent Quantile of Tweets Based on Retweets (Tweets with no Retweets)

	Total	Pre-Election Law Change	Post-Election Law Change & Pre-2014 Campaign	2014 Campaign	2014 Election Day	Post-2014 Election
<i>Foreign Policy</i>	6.8%	6.1%	7.6%	2.1%	4.2%	7.9%
<i>Economy / Finance</i>	7.5%	8.3%	7.0%	8.2%	7.7%	5.6%
<i>Disaster Prevention / Infrastructure</i>	8.2%	10.7%	6.4%	1.9%	0.0%	6.1%
<i>Welfare / Employment</i>	5.7%	6.2%	5.2%	2.8%	0.0%	6.5%
<i>Society</i>	2.6%	2.6%	2.6%	1.4%	0.0%	2.5%
<i>Energy</i>	3.9%	4.7%	3.4%	1.2%	12.7%	2.3%
<i>Political / Administrative Reform</i>	1.4%	1.9%	1.0%	1.0%	0.7%	1.3%
<i>Protests</i>	1.0%	1.1%	0.9%	2.6%	0.0%	1.0%
<i>Food & Restaurants</i>	2.0%	2.4%	1.9%	0.5%	0.0%	1.5%
<i>Leisure</i>	3.0%	3.2%	2.8%	0.6%	0.7%	2.6%
<i>Hobbies</i>	1.1%	1.2%	1.1%	0.2%	0.0%	0.7%
<i>Family</i>	4.5%	5.5%	4.0%	1.7%	2.1%	3.3%
<i>Religion</i>	1.9%	1.8%	1.9%	0.5%	0.0%	1.9%
<i>Political Topics Sum</i>	<i>37.1%</i>	<i>41.6%</i>	<i>34.1%</i>	<i>21.2%</i>	<i>25.3%</i>	<i>33.2%</i>
<i>Political Topics Average</i>	<i>4.6%</i>	<i>5.2%</i>	<i>4.3%</i>	<i>2.7%</i>	<i>3.2%</i>	<i>4.2%</i>
<i>Non-Political Topics Sum</i>	<i>12.5%</i>	<i>14.1%</i>	<i>11.7%</i>	<i>3.5%</i>	<i>2.8%</i>	<i>10.0%</i>
<i>Non-Political Topics Average</i>	<i>2.5%</i>	<i>2.8%</i>	<i>2.3%</i>	<i>0.7%</i>	<i>0.6%</i>	<i>2.0%</i>
<i>Total Tweets Analyzed</i>	<i>33119</i> <i>3</i>	<i>148924</i>	<i>147033</i>	<i>6351</i>	<i>142</i>	<i>28743</i>

VITA

Joshua Arnold Williams' doctoral research focuses on the intersect of politics, communications, and Internet studies as it relates to Japan. His fascination with and knowledge of Japan has come largely through living, studying, and working in the country for over six years. His interest in online political communication developed primarily through political-oriented web-based work experiences in both Japan and the United States prior to beginning his doctoral research. Mr. Williams also holds a Bachelor's in International Relations from Boston University and a Master's in International Public Affairs from the University of Wisconsin-Madison.

During his doctoral program, Mr. Williams earned a Statistics Concentration in International Studies Letter of Recognition from the University of Washington Center for Statistics and the Social Sciences and a Certificate in International Negotiation and Crisis Management from the University of Washington Henry M. Jackson School of International Studies. He was an International Policy Institute Cybersecurity Fellow at the University of Washington's International Policy Institute, and a Global Leaders Program Fellow at the Slade Gorton International Policy Center (in conjunction with the National Bureau of Asian Research) in Seattle, Washington. He also earned the Kitto Scholarship for Japan Studies and a Foreign Language and Area Studies (FLAS) Fellowship for Japanese at the University of Washington.