

University of Nevada, Reno

Developing a Virtual Constituency

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requirements for the degree of Doctor of Philosophy in
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by

Travis Hagner

Dr. Eric Herzik/Dissertation Advisor

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THE GRADUATE SCHOOL

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, Advisor

, Committee Member

, Committee Member

, Committee Member

, Graduate School Representative

David W. Zeh, Ph.D., Dean, Graduate School

ABSTRACT

These papers examine how the scope of representation has evolved through the development of the social media tool, Twitter. Specifically, I argue that the role of constituents has expanded beyond the four traditional constituencies: geographic, reelection, primary, and personal, due to the creation of social media, to include a new constituency which I have named the virtual constituency. The first paper, *Discovering a New Constituency: A Theoretical Analysis*, theorizes the existence of the virtual constituency and where the virtual constituency fits in the broader scheme of representation as a whole. The second paper, *Congressional Tweets, Discovering a New Constituency*, focuses on candidates running for Congress and how Twitter usage among candidates affects campaign donations. The third paper, *Is the Virtual Constituency Paying Attention? An Analysis of Ideology*, analyzes the role of ideology as it relates to the likelihood of individual donating to twitter subscribing candidates from outside the individual's congressional district.

Discovering a New Constituency: A Theoretical Analysis looks at how representation has been viewed by political science research and builds upon this understanding. In this paper, I theorize that that advancements in technology, specifically the Internet and social media, have created a new constituency: the virtual constituency. *Congressional Tweets, Discovering a New Constituency* compares Twitter subscribing candidates to non-Twitter subscribing candidates from both inside and outside the candidate's Congressional district. The strongest evidence for the existence of the virtual constituency is the subset of non-incumbent candidates. This group was able to use Twitter to look outside their district and earn fewer dollars per donation, but more total

campaign donations, and more total dollars overall than non-incumbents who did not use Twitter in the 2008 congressional campaign season. The final paper, *Is the Virtual Constituency Paying Attention? An Analysis of Ideology*, analyzes the relationship between United States House candidate's ideology and the individual ideology of campaign donors from out-of-district contributions. My findings indicate Twitter is facilitating larger donations from ideologically similar candidates. Instead, virtual constituents are acting like any other group of donors by donating larger amounts per donations to candidates that are most ideologically similar.

For Amanda. Thank you for your patient and unwavering love and support.

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General Summary

These papers examine how the scope of representation has evolved through the development of the social media tool, Twitter. Specifically, I argue that the role of constituents has expanded beyond the four traditional constituencies: geographic, reelection, primary, and personal, due to the creation of social media, to include a new constituency which I have named the virtual constituency. I argue a virtual constituent is an individual who considers herself to be a part of a Member of Congress's constituency while living outside the district and donating money to the member.

I explore how the virtual constituency is represented in three papers. The first paper, *Discovering a New Constituency: A Theoretical Analysis*, theorizes the existence of the virtual constituency and where the virtual constituency fits in the broader scheme of representation as a whole. The second paper, *Congressional Tweets: Discovering a New Constituency*, focuses on candidates running for Congress and how Twitter usage among candidates affects campaign donations. The third paper, *Is the Virtual Constituency Paying Attention? An Analysis of Ideology*, analyzes the role of ideology as it relates to the likelihood of individual donating to Twitter-subscribing candidates from outside the individual's congressional district.

Discovering a New Constituency: A Theoretical Analysis looks at how representation has been viewed by political science research and builds upon this understanding. In this paper I theorize that advancements in technology, specifically the Internet and social media, have created a new constituency: the virtual constituency. The virtual constituent is one who occupies the space outside of the geographic constituency,

but still feels best represented by that candidate. The virtual constituent may reside outside of the geographic constituency, but the virtual constituent is more important than the geographic constituent, because she can provide money, campaigning, advertising, and digital communication, all of which the geographic constituent, as defined by Fenno, does not provide. However, the virtual constituent cannot provide votes, which makes the reelection, primary, and personal constituencies more important to the reelection process. The subsequent papers focus on the role that the virtual constituent plays as he or she relates to campaign donations from the perspective of the candidate and the individual donor.

Congressional Tweets, Discovering a New Constituency compares Twitter-subscribing candidates to non-Twitter-subscribing candidates from both inside and outside the candidate's congressional district. Specifically, I analyze the number of donations, the average donation size, and the total amount of money candidates received. Incumbent and non-incumbent candidates who are registered Twitter subscribers received fewer dollars per donation than candidates who did not have a registered Twitter account in both the 2008 and 2010 Congressional elections. Next, I find that non-incumbent Twitter-subscribing candidates received more individual contributions than their non-Twitter-subscribing counterparts during the 2008 election cycle. However, this finding did not hold when analyzing incumbent candidates. Finally, I discover that non-incumbent Twitter-subscribing candidates received more total campaign contributions from outside their district than non-Twitter users for the 2008 elections. Again, only non-incumbent out-of-district donors mattered.

These findings follow my theory that virtual constituents will donate smaller amounts of money per donation and give more overall donations, resulting in more total money during the course of the election cycle. The strongest evidence for the existence of the virtual constituency is the subset of non-incumbent candidates. This group was able to use Twitter to look outside their district and earn fewer dollars per donation, but more total campaign donations, and more total dollars overall than non-incumbents who did not use Twitter in the 2008 congressional campaign season. Furthermore, the disappearance of the Twitter effect when analyzing the 2010 election results solidifies the virtual constituency's existence, because once more candidates adopted Twitter the affect disappeared.

The final paper, *Is the Virtual Constituency Paying Attention? An Analysis of Ideology*, analyzes the relationship between United States House of Representatives candidates' ideology and the individual ideology of campaign donors from an out-of-district contribution lens during the 2008 and 2010 congressional elections. However, I find no evidence that Twitter-subscribing candidates' out-of-district donors are more ideologically similar to Twitter-subscribing candidates than non-Twitter-subscribing candidates. Twitter has no effect on the likelihood of candidates receiving campaign donations from ideologically similar donors from outside their district during this period of time.

Next, I analyzed how ideology affects the size of individual campaign donations between Twitter-subscribing candidates and non-Twitter-subscribing candidates. Twitter *and* ideological similarity between the candidate and the donor had no effect on the size of the donation. My theory argued that candidates with Twitter should be receiving

smaller donations from ideologically similar donors based on expressive donation patterns, however I discovered the opposite effect. Candidates with Twitter actually received more money per donation from ideologically farther apart donors, not less.

When taking all three papers as a whole, there is some evidence that the virtual consistency exists. Specifically, non-incumbent Twitter subscribers benefitted from having Twitter during the infancy of Twitter creation. However, as more candidates adopted Twitter this result disappeared. Consequently, ideology did not play any role in a virtual constituent's decision-making process as it related to campaign contributions. These findings show that traditional identifiers of campaign donations, like incumbency and length of tenure, continue to predict the likelihood of who will donate to a campaign while newer technologies, like Twitter, fail to capture the electorate's attention.

Traditional representation often occurs with the constituent being represented through promissory representation. For example, lobby groups will donate money to candidates who make promises about what policy they will vote for and implement. This type of representation takes place based on electoral representation. The Burkean model of Trustee versus Delegate forms of representation is also an ex post form of representation, because constituents decide if the MC has represented them over the previous term in office. Traditional constituents are deciding what benefits they may receive by keeping the incumbent in office. Virtual constituents take a different form of representation, because they can observe representational outcomes before deciding whether or not to support that candidate. Virtual constituents have to actively find their preferred candidate and can decide what form of interaction is appropriate.

This dissertation does not tell us everything about virtual constituent representation. One consideration is to ask what virtual constituents expect in return for their virtual support. For example, are virtual constituents expecting promissory representation or proximity representation, based upon the candidates Tweets? One way to determine how the virtual constituent feels represented is to conduct a survey and ask individuals who ‘follow’ candidates on Twitter why they are following the specific candidate. Additionally, asking the virtual constituent what other activities she participates in, in order to promote their preferred candidate will shed light on the virtual constituent’s expectations from the candidate.

A second line of research can determine the kind of representation does the candidate feels she is providing to the virtual constituent. An update of Fenno’s *Homestyle* would be useful by asking candidate’s what kind of representation they are providing for virtual constituents, or even if they are actively targeting virtual constituents. This would help further explain how representation works in a digital age.

Article 1

DISCOVERING A NEW CONSTITUENCY: A THEORETICAL ANALYSIS

1.1 Introduction

This paper examines how the scope of representation has evolved through the development of social media tools such as Twitter and Facebook. Specifically, I argue that the role of constituents has expanded beyond the four traditional constituencies due to the creation of social media¹. Additionally, I will explore how the creation of social media, and its use by Members of Congress (MCs), has altered the importance and relevance of each constituency.

Fenno describes how MCs view various constituencies within the context of reelection. He explicitly points out that MCs use their perceptions of constituents to act differently depending on their current goals. For example, “Congress can vote independently because he or she knows the constituency isn’t looking” (Fenno 1979, 29). I argue that the expansion of social media has allowed MCs to move beyond the traditional constituencies described by Fenno and appeal to a newly recognized group: the virtual constituency.

First, I will explain how the concept of representation is viewed using the Principal-Agent model as described by Pitkin (1967). From there, I will illustrate Burke’s notion of representation using the Trustee-Delegate model. Based upon these approaches to representation, I will expound upon the role of the constituent and how it

¹ The geographic, reelection, primary, and personal constituencies as described by Fenno in 1978.

has drastically changed within a very short time frame since the advent of the World Wide Web, and more specifically, social media.

Next, I shall evaluate the geographic, reelection, primary, and personal constituencies and discuss their roles in defining various forms of constituent representation. Then, I will describe how those roles have changed through the incorporation of the internet and social media into the political realm. Finally, I will present a theoretical analysis detailing how the virtual constituency originated and expanded into its present state of being: the fifth concentric circle of constituent representation.

1.2 Political Representation and the Constituent

A central tenant of democracy is representation, specifically how elected officials are able to best represent their constituents. Weissberg describes a narrower concept of representation by stating that “representation means a high correlation between constituency opinion and rollcall voting on a pairwise basis” (536, 1978). Classic representation has analyzed the Dyadic model, which argues that MCs represent their specific district and nothing beyond this (Weissberg, 1977). However, the Dyadic representation model failed to take into account how the entire electorate could be represented. This led to the idea of Collective representation, which argues that the collective body of Congress represents the collective make-up of the electorate (Weissberg, 1977). A large body of congressional scholarship has discovered that various constituents are constantly able to influence how legislators act (Arnold, 1990;

Bartels, 1991; Fenno, 1978; Fiorina 1974; Jackson and King 1989; Mansbridge, 2003; Mayhew 1974; Miller and Stokes 1963; Wright 1989).

Additionally, scholars have explored surrogate constituencies and found that some surrogate constituencies are more represented by legislators than others (Aldrich et al, 2008; Bafami and Herron, 2007; Clinton, 2006; Fenno, 1978; Pool and Romer, 1993; Stolerak, Rood and Taylor, 1998). However, none of these models of influence take into account the expansion of the Internet and various social media platforms. Before delving into representation and the World Wide Web, first I will explore the evolution of representation and how it is viewed within the American electorate.

Political representation entails how the public interacts with their government, even though those individuals aren't directly acting on their own behalf. Through this conception, Hannah Pitkin defined representation as "making present of something that is nevertheless not literally present" (1967, 144). Pitkin further discusses the role of representation using the Principal-Agent model, which describes the constituents as the principals and the MC as the agent. This approach states that the constituents are represented by the MC, by virtue of being democratically elected. If, however, the agent is not elected using a democratic process, the Principal-Agent model will not be accepted by the constituents and will collapse.

Mansbridge identified promissory representation as another aspect of the principal-agent model (2003). Promissory representation is the idea that individuals running for office make campaign promises and, when elected, these individuals are expected to follow through on their promises. Similar to the problems identified by Pitkin, the problem is that once elected, the principal (constituents) will have a difficult

time forcing the agent (representative) into maintaining the promissory representation (1974). However, promissory accountability by the representative is attainable, because constituents can choose not to vote for that representative in the next election.

The Principal-Agent model dovetails into the Burkean concept of the Trustee versus Delegate models of representation. The Delegate model assumes that MCs are representing only their own constituents, as opposed to the Trustee model which dictates that MCs are representing the entire country and not just their geographically elected district. Burke's observation about the role of MCs as either a trustee or a delegate continues to permeate studies of Congressional representation with nearly all studies concluding that MCs act as delegates over trustees (Miller and Stokes, 1963; Mayhew, 1974; Fenno, 1978; Fiorina, 1989; Cox and McCubbins, 2005). Miller and Stokes demonstrate that the Burkean model is utilized by both Democrats and Republicans for social issues, but civil rights issues were viewed from a delegate lens (1963). This occurred because civil rights issues were regionally located, meaning that southern constituents did not want school integration, for example. Therefore, MCs representing the south took a civil rights position very much in line with their constituents.

This research has focused on the dyadic representation, the relationship between a sub-population of constituents and their individual, elected representative (Weissberg, 1978). This concept assumes that MCs exclusively cast votes based on the preferences of their district. However, employing this method of representation actually lessens the overall representation that an MC provides his or her district (Weissberg 1978). Weissberg used the Miller and Stokes issue domain data from 1958 to demonstrate that

dyadic representation was less representative than collective representation on the aggregate, even discovering that civil rights representation by MCs was improved with collective representation over dyadic representation (1978).

Collective representation explains how the whole of elected officials will represent the entire population better than the concept of one legislator and one constituency (1978). Referring back to the Miller and Stokes issue domain data, Weissberg demonstrates that mean difference between individual MCs and their constituents is larger than the mean difference between all legislators and all constituents on the issues of social welfare, civil rights, and foreign affairs. Therefore, collective representation of the whole electorate produces representation that more closely reflects the overall ideals of a society better than dyadic representation.

Burke also discusses the issue of collective representation when he describes virtual representation as “a communion of interests and sympathy in feelings and desires between those who act in the name of any descriptions of people and the people in whose name they act, though the trustees are not actually chosen by them” (Pitkin 173, 1974). Burke’s example of virtual representation suggests that individuals not directly represented by an individual member of the legislature are still represented by the whole of the legislature.

Mansbridge delves into the idea of collective and virtual representation further when she ties the non-electoral representation to what she labels surrogate representation (2003). Mansbridge labels surrogate representation as “representation by a representative with whom one has no electoral relationship—that is representation in another district” (522, 2003). For example, a constituent could support an MC from another district if that

MC supports a policy that their own MC does not, like a war or environmental policy. Individuals with plentiful income are the most likely candidates to participate in this non-geographic representation, because they are able to donate money to the candidate of their choice. An idea she has labeled “monetary surrogacy.”

Although surrogate representation leaves out a key component of democracy, specifically voting, the surrogate constituents are able to benefit from having an MC represent their interests on the legislative floor. For example, Barney Frank takes a leading role as a surrogate representative for LGBTQ issues, and Nancy Pelosi and Barbara Boxer are able to take leading roles for women’s issues even though these groups are underrepresented. Therefore, non-electoral constituents are able to view Frank, Pelosi, Boxer and others as their surrogate representatives (2003).

However, Arnold argues that there is a way for the principal (constituents) to overcome this problem of promissory representation (1993). Arnold states that legislators act as *controlled agents* by attempting to anticipate what policy preferences their constituents will desire during the next election cycle in an attempt to maintain their power through reelection. This can be accomplished by providing the majority of constituents with diffuse benefits without potentially ostracizing a concentrated group of constituents (Arnold, 1992). For example, MCs provide tax breaks to their constituents without alienating those individuals who will lose funding due to the tax decrease.

Weissberg expanded on Burke’s concept of virtual representation by stating that individuals are better represented by Congress from the aspect of collective representation, in which the collective actions of Congress will represent the majority of individuals (1978). Using a model that details issue domains of social welfare, civil

rights, and foreign affairs, Weissberg demonstrates that constituents are better represented as a whole in each of these issue domains than they are when just analyzing the position of one legislator and one constituency. For example, applying Weissberg's model of collective representation demonstrates that African-Americans are able to be more fully represented while using single member districts and first past the post elections, because collectively African-American MCs are able to represent the needs of the African-American community as a whole even though some African-Americans live in districts sociologically represented by non-African-Americans.

These theories of representation have been able to explain how constituents are represented by their representatives until the creation of the Internet, and more specifically the development of social media. The expansion of social media and other "online" tools of communication have created a gap in the area of non-electoral representation that previous scholars have not addressed. Specifically, constituents are now able to directly and instantaneously communicate with their representative and in some situations receive an equally fast response. Additionally, the Internet age has allowed additional constituents who felt they were not being adequately represented by their district representative to look elsewhere in an attempt to feel collectively represented.

I posit that the adoption of social media by MCs has created a new constituency that was previously non-existent: the virtual constituency. A virtual constituent is an individual who considers herself to be a member of an MCs constituency while maintaining a presence in which the effects are felt within a virtual medium and not an electoral medium. A virtual constituent does not reside within the geographic boundaries

of an MCs district, but she does reside within the virtual realm. For example, the virtual constituent is able to engage with the MC by visiting their website, communicating via email, and participating in Internet chat forums. Additionally, a virtual constituent can visit the MC's social media sites, such as Facebook, Twitter, YouTube, and Instagram.

A virtual constituent may not be able to provide votes, but she is able to provide an MC with resources such as time, social media exposure, and money. For example, the virtual constituent can post a picture of support for their desired representative or retweet something that the representative posted on Twitter. The virtual constituent is also able to donate money to a once unknown representative, due to the presence of these online social networks. The end goal of the virtual constituent is to use those resources to help the candidate achieve election and re-election, which will in turn create an environment in which the virtual constituent will maintain their presence within the virtual realm of the MCs constituency in order to feel a sense of both dyadic and collective representation simultaneously.

1.3 The Four Constituencies and the Mode of Communication: Geographic, Reelection, Primary, and Personal

Table 1-1. Constituencies and their Benefits

	Geographic	Reelection	Primary	Personal
DESCRIPTION	Encompassing all voters and regions	Likely voters	Individuals willing to work for and donate to a campaign	Candidate's immediate friends and family
BENEFITS FOR CONSTITUENTS	Representation in Congress	Able to vote and be represented by their preferred candidate	Able to work and campaign for their preferred candidate	Able to have an intimate relationship with MC
BENEFITS FOR MEMBER OF CONGRESS	A place to represent. Often described by its homogeneity/ Heterogeneity characteristics	The ability to attain reelection by catering to this constituency	Able to receive time and resources from their most loyal constituents	A fuller understanding of the comings and goings of her district
MODE OF COMMUNICATION	Telephone or mail; limited and informal	Advertising, rallies, fundraisers	Formally in person	Face-to-face with the capability to be personal and frank

Richard Fenno, in *Homestyle: House Members and their Districts*, argues that MCs view their constituents through a lens of four concentric circles: geographic constituency, reelection constituency, primary constituency, and personal constituency (1978). The largest constituency, encompassing the entire district, is the geographic constituency. Therefore, geographic constituencies are often defined by their social, economic, or demographic qualities (Krehbiel, 1993). For example, many districts contain a multitude of religious denominations, income levels, and ethnicities while other districts have little heterogeneity and are often composed of individuals with very similar socio-economic and ethnic backgrounds. Additionally, the prospect of a district being re-districted can potentially divide the constituents along even more drastic heterogeneous lines.

The constituent within the geographic district is looking for their MC to represent their interests in Congress. However, this representation is often superficial, because there is little room for specific issues as specific issues only serves the purpose of potentially dividing the largest constituency (Fenno, 1978). The MC spends very little time trying to appeal to the entire district, because this constituency is often paying little attention to the actions of their representative. This means that MCs spend effort focusing their time and resources on the geographic constituency only insofar that this is the district that the MC represents.

Additionally, MCs communicate with their geographic constituency sparingly. The geographic constituent may see their MC on a television commercial, a billboard, or pass by a local rally during campaign season, but geographic constituents do not go out of their way to meet their representative or communicate with their representative. Therefore, any communication is often informal and is only done when an issue arises and nothing more. For example, a geographic constituent may call their MC when they have a passport issue, or their social security check did not arrive on time.

The next largest concentric circle is the reelection constituency. This constituency is described as the members of the district whom the representative thinks will vote for her. For example, MCs differentiate their various reelection constituencies within their geographic constituency by arguing that “I do well here” or “I run poorly here” (Fenno, 1978, 8).

This portion of the constituency is where the MC is able to draw her policy decisions by catering to those constituents that will vote for her. Therefore, the

benefit to the reelection constituent is that their ideas will be represented within Congress when they vote for their representative in the general election.

Additionally, the benefit to the MC is that the reelection constituency will in turn create a platform of policies and campaign strategies that the MC will use to run for election or reelection. By identifying those policies desired by the reelection constituency, the MC is able to accomplish her number one goal of running for Congress, re-election (Mayhew, 1974).

The most common form of communication between the MC and the reelection constituent is through targeted advertisements and campaign events. For example, an MC will air a radio ad in a town that is likely to vote for her during the general election but will not spend the money to air the same ad in the next town over, because the MC does not earn votes there. This same concept applies to campaign rallies; the MC will spend money to hold a campaign rally in a town that is likely to support her but will not hold the same rally in a town less likely to support her reelection bid. Furthermore, these rallies also allow the reelection constituents to communicate their policy wants and desires to the MC thereby helping the MC create their policy platform and solidifying the communication loop between the reelection constituency and the MC.

Within the reelection constituency resides the primary constituency. Where the reelection constituency allows the MC to differentiate between the supporters and non-supporters, the primary constituency is an even more refined division between weak supporters and strong supporters. Weak supporters are those constituents who will support the candidate until a better one comes along, and strong supporters will always

support the candidate. The primary constituency consists of the MCs strong supporters: those who are willing to provide time and resources to the MC.

The benefit the primary constituency receives from the MC is the ability to influence policy by being able to talk face-to-face with the MC. The primary constituent will be involved in attending private meetings that only select individuals may attend. For example, the MC may give a speech to the local business bureau that supports her or attend a meeting with the local chapter of the Lions Club. At these gatherings that primary constituent will be allowed to directly speak to the MC and give her opinion and stance on an important campaign issue.

The benefits that the MC receives from the primary constituency are time and resources. Dovetailing off the previous example, after these meetings the primary constituents will take what they have learned and campaign on behalf of the MC. This campaigning fulfills the time benefit to the MC. The resource benefit intersects when the primary constituent donates money to the campaign, which allows the MC to buy the necessary items required to move forward with a campaign, such as television ads, radio ads, signs, and buttons.

In order for the MC and the primary constituent to receive the benefits from their relationship, the mode of communication must be face-to-face in a formal setting. This allows the MC to know the primary constituent on a more intimate level, while the primary constituent will have a strong feeling of belonging to the campaign. This relationship positively benefits both parties, because the primary constituent is able to give their time and resources to the MC, and in turn the MC will allocate those resources to help promote the ideas held by the primary constituency.

Finally, the smallest circle within the constituency relationship is the personal constituency. This constituency consists of close personal friends and family that the MC completely trusts. This constituency is able to be the proverbial eyes and ears for the MC, letting her know if there is an overall change to the other constituencies or the make-up of the district in general. This relationship allows the personal constituency to be key players in the reelection campaigns of MCs. Additionally, the personal constituency receives the most one-on-one attention from the MC.

In return for this position within the MCs circle, the MC receives information. For example, the personal constituency can let the MC know if local community leaders still support her campaign or if there is an influx of new voters that can potentially help or harm the MC's reelection chances. In order to acquire this information, MCs and their personal constituencies will often have weekly meetings in their district.

Fenno's (1978) research demonstrates that it is not possible to view an MC's district as one constituency; it is much more nuanced with each constituency residing within the next. However, it is clear that MCs communicate with each constituency differently in order to attain their goal of reelection. The next section will explore how the dynamics of these constituencies have altered with the expansion of technology, specifically the Internet and Social Media.

1.4 Social Media and the Reshaping of Constituencies

The creation of social media has allowed MCs to create new and different ways to reach their constituents and has augmented both the constituency itself and how MCs communicate with constituents. First, social media has created a new constituency, the

virtual constituency. Second, this new form of communication has caused Fenno's classic constituencies to be re-ranked in order of importance (1976). I will discuss this aspect later in this section. In other words, by changing the nature of communication between MCs and their constituents, social media has created a new constituency and re-ordered the importance of the previous constituencies. Additionally, research has identified that MCs are using the Internet and social media to reshape the way they utilize constituency services, campaigning, and ongoing communication with constituents.

Adler, Gent, and Overmeyer analyze the way in which MCs utilized the Internet and discovered that younger legislators and those legislators from more affluent districts are more likely to have an Internet presence (1998). This occurs because younger legislators have a higher likelihood of accepting new technologies than older legislators (1998). Therefore, younger MCs are able to utilize a new form of communication for reaching out to constituents that older MCs are not adopting. Additionally, legislators from more affluent districts are more likely to use the Internet, because more of their constituents will be able to access the Internet than constituents from less affluent districts (1998).

Furthermore, Owen, Davis, and Strickler discover that MCs facilitated the use of the Internet and email to connect with constituents as an extension of constituency services (1999). The implication is that MCs are using these technologies as a means of improving their standing within the reelection constituency in order to enhance their chances of reelection. For example, many Congressional websites contain pictures of the

MC's home district or state along with information regarding "how to order a flag flown over the capitol or how to apply for a service academy" (1999, 23).

Looking beyond constituency services and Internet usage, Herrnson, Strokes-Brown, and Hindman analyze under what conditions state legislators utilize the Internet for campaign purposes (2007). They discover that state legislators were more likely to use the Internet as a campaign tool when their constituents were more educated and when a greater percentage was under the age of fifty-five. These findings confirm that state legislators look beyond their geographic constituency and focus their campaign resources where they can have the most impact.

In addition to email and website use, legislators have embraced various applications that reside within the online world. MCs are communicating with constituents through online town hall style meetings, online videos, and social networking sites. Glassman, Straus, and Shogan analyze MCs' use of Twitter and Facebook from August to October of 2011 (2013). MCs use their social media tools to communicate about a number of issues including: position taking, district or state affairs, official Congressional action, policy statements, media, and personal (2013). Based upon this assumption, it is important to reevaluate the constituencies proposed by Fenno and determine if those constituencies have changed, and if so, in what way (1978).

As noted above, Fenno's ranking of the classic constituencies (1976) has been reordered by the introduction of the Internet and social media as an avenue of MC-constituency communication. Table 1-2 show the constituencies ranked by importance before and after the creation of the Internet and social media.

Table 1-2. Constituencies and their Importance, Ranked

Constituency	Ranking prior to creation of the Internet & social media	Ranking after creation of the Internet & social media
VIRTUAL	n/a	4
GEOGRAPHIC	4	5
REELECTION	3	3
PRIMARY	2	1
PERSONAL	1	2

Fenno ranks the geographic constituency least important of all the constituencies, because it provides very few tools to help the MC achieve reelection (1978).

Traditionally, MCs reach their geographic constituencies by advertising, such as airing television commercials, but little else is done (Mayhew, 1974). The advent of social media sites creates the potential for a large effect on how these constituents can be communicated with, because this constituency is now able to communicate directly with the MC via websites, Twitter, Facebook, and email. The problem is that the geographic constituency is paying little attention to their MCs, so new technology has little effect on the constituency. However, the communication has allowed for MCs to pay more attention to local politics and problems within the geographic constituency than ever before. This allows MCs to address those smaller problems before they become larger issues, even though the geographic constituency has not noticed the MC's presence. Due to the lack of attention, even with the injection of Internet and social media, the geographic constituency remains the least important of the constituencies.

According to Fenno, the reelection constituency is the third most important constituency, because these individuals provide a valuable electoral tool: votes.

Typically, these constituents have been sought out through door-to-door campaigns or

through flyers in the mail. The importance of the reelection constituents ends with attaining votes, because this group will not provide any additional support for a reelection campaign. Social media positively affects this constituency, because MCs can now use targeted social media campaigns to remind constituents the date of the election. For example, one study found that during the 2010 Congressional Elections, a constituent was 2.08% more likely to say that he/she voted, by clicking on the *I Voted* button provided, if that constituent received the targeted advertisement on their Facebook page (Bond et al., 2012). Additionally, 0.099% of “close friends” were more likely to express that they voted who saw that their “friend” had expressed voting (2012).

This form of campaigning is a very cost-effective way of getting voters to the polls that may have otherwise forgotten to vote, specifically the younger crowd. This implies that it is possible to influence the reelection constituency through social media; therefore, social media has allowed this constituency to grow in importance in comparison to the geographic constituency. These factors make the reelection constituency the third most important constituency since the advent of social media.

Next, Fenno ranks the primary constituency as the second most important group, because it provides important electoral tools: money and time (1978). Along with votes, this group will provide infrastructure at the local level for the MC. For example, members of the primary constituency will help organize fundraising events and get out to vote campaigns for the MC. This is an invaluable resource, since infrastructure allows for time to be allocated most efficiently. Social media is an important tool to this group, because it allows for nearly instantaneous communication between the MC and the primary constituency in order to pass along time-sensitive information. For example, an MC may

be able to notify thousands of people at a moment's notice regarding an unplanned campaign stop in order to have supporters show up at an event in a timely manner. This capability was previously unavailable before social media was utilized as a political tool. This added capability of the primary constituency due to the use of social media is why the primary constituency remains the second most important constituency.

Internet applications related to banking, like PayPal, have also allowed MCs to obtain a faster and easier way of receiving donations. Additionally, as Fenno previously discussed, the primary constituency is the group that will donate the largest amount of money, prior to the creation of social media (1978). This ability to instantaneously fundraise has the largest impact on the primary constituency, because instead of holding time-consuming fundraisers, MCs can now have donations made online while using their time in a different manner. The creation of social media has allowed for the primary constituency to rise in importance from the second most important constituency to the most important constituency.

Finally, prior to the advent of social media, the most important constituency was the personal constituency, because these constituents are the proverbial 'ear to the ground' for the MC. Traditionally, this group provided the electoral tool of knowledge by keeping the MC updated on the day-to-day happenings within the district and alerted the MC of any potential shift in public opinion among any of the constituency circles. The implementation of social media into electoral politics has shifted the importance of this group, because the MC no longer has to rely on friends and family to communicate the day-to-day happenings in the district. Instead, any member of the constituency circles can communicate directly with the MC using social media and the MC has the ability to

instantaneously reply, eliminating the need for personal constituents to keep the MC in touch with their district.

Additionally, MCs can use Twitter to see what is currently *trending* both nationally and locally and determine if action is needed. Potentially, MCs can also use this information in order to Advertise, Credit Claim, or Position Take in an effort to attain campaign dollars or grow their primary constituency. However, the personal constituency is not obsolete since they still provide the valuable service of being able to directly communicate with the MC at any moment, which no other constituency can accomplish. Accordingly, this has lowered the level of importance of the personal constituency from the most important constituency to the second most important constituency.

Therefore, social media has changed the dynamic between the various constituencies. In addition, social media's use as a fundraising tool for the primary constituents has opened the door for a fifth constituency that MCs have previously been unable to communicate with on a large scale. I call this group the virtual constituency. The virtual constituency, as previously stated, is a constituent who maintains a presence within the virtual realm but does not exist physically in any of an MC's other constituencies. Not only have the advent of the Internet and social media been able to create a space for this constituency to thrive, but this constituency can provide valuable resources to any MC: money, campaigning, and advertising. These resources, which will be further explored in the next section, make the virtual constituency the fourth most important constituency, ahead of the geographic constituency and behind the reelection constituency. This virtual constituency resides in this position because this

group provides resources of money and advertising that the geographic constituency does not provide. However, this constituency is less important than the reelection constituency, because they cannot provide votes, which is the most important aspect of being elected in the first place.

1.5 A New Constituency: The Virtual Constituency

The virtual constituency occupies the space outside the geographic constituency and encompasses those individuals who feel represented by a different MC than their geographic MC. There are two specific characteristics that differentiate the virtual constituent from a traditional constituent. First, both must utilize online communication tools. Second, the virtual constituent cannot live inside the district that their preferred MC physically represents, and therefore cannot offer them support in the form of a vote. The virtual constituent most closely resembles the primary constituent, because the virtual constituent is able to donate, campaign, advertise, and digitally communicate with their desired candidate.

The virtual constituent and the MC must be active participants on social media. This requirement is essential, so that the virtual constituent and the MC are able to communicate within the virtual realm. Without these online communication platforms, like Facebook and Twitter, the virtual constituent would not be able to digitally connect with their preferred MC and the relationship could not exist. This online communication implies a two-way relationship between the virtual constituent and the MC. For example, virtual constituents who use Twitter are able to directly communicate with their virtual representative and the communication can be instantly reciprocated.

In order to be considered a virtual constituent of an MC, one must first reside outside the physical district actually represented by the MC. In doing so, the virtual constituent cannot vote for their desired candidate. This aspect is a key factor that distinguishes the virtual constituent from the other four constituencies, because the constituents who reside within the geographic, reelection, primary, and personal constituencies all have the ability to cast a vote for their desired candidate. This is not the case for a virtual constituent, since she will not be able to ever vote for her representative as long as elections remain first past the post. However, the virtual constituent is still able to contribute to a campaign using non-electoral tools. Money, campaigning, and online communication are the three largest tools that virtual constituents have at their disposal.

Money is the most precious resource for a person running for Congress, and social media has opened up a new avenue for these individuals to acquire this resource. Virtual constituents, who may not have donated to political campaigns in the past because they did not feel that their donations would contribute to their representation, can now give money to a candidate they do think represents their ideals, even if that candidate does not actually represent their physical district, electronically through the Internet. This has allowed for previously disenfranchised constituents to become more politically engaged by providing benefits to the representative they feel closely represents their values. Prior to the creation of social media, sending money to one's non-geographic representative was difficult, because finding the information regarding where to send the money was not easy. Furthermore, the advance of the Internet has made

donating money extremely quick and easy. With the touch of a button, a virtual constituent can donate money to a candidate anywhere in the country.

Campaigning in the virtual world is a fast-growing sector that allows for candidates to provide targeted ads specifically to individuals that fit the profile of the likely voter for that candidate. However, campaigning is a two-way street that allows virtual constituents to use their social media tools to advocate for a specific individual as well. For example, a virtual constituent is able to 'like' a candidate on Facebook or Twitter in order to express their pleasure for that candidate. Additionally, members within the online social communities of Facebook or Twitter can post statements supporting specific candidates and post images of support as well. Virtual constituents can also re-post or re-Tweet a candidate's statement so frequently that the statement "trends" and ultimately achieves even greater visibility.

These symbols of expression have become the electronic yard sign to demonstrate one's support for a candidate through online advertising. While research by Green et al. concluded that actual yard signs do increase the total number of votes a candidate will receive though those votes will not be enough to alter an election outcome, this is the case because not enough individuals view the physical yard sign due to lack of traffic (2016). However, the electronic yard sign has the ability to be seen by millions more people and could potentially affect an election's outcome. Plus, everyone who is a 'friend' or 'follower' of the virtual candidate on social media is also receiving these positive cues about the candidate. These additional announcements of support have the ability to reach thousands of people, even reaching potential voters who reside within the geographic constituency of the candidate in question. This action creates the

opportunity for that geographic constituent to move out of their current constituency and become a primary constituent by becoming a campaign donor. These expressions of support, plus the potential to facilitate a new primary constituent make the virtual constituent a vital part of the constituency eco-system.

Digital communication is another tool the virtual constituent uses in order to be represented by their non-geographic representative. For example, a virtual constituent, who is also a member of Twitter, can Tweet a message to an MC and can receive an immediate response. This constituency was non-existent to MCs prior to the creation of online communication, because MCs had no ideal or cost-effective way of interacting with it. Social media's introduction into the political landscape has changed this, because it is now possible for a virtual constituent to directly communicate with an MC via a Tweet, Facebook post, or another social media tool.

Moreover, it was much more difficult for virtual constituents to stay attuned to the day-to-day workings of MCs in their own district, let alone other MCs. Now, the virtual constituent has the ability to "friend" or "follow" their preferred candidate. This allows the virtual constituent to receive instantaneous updates about what the candidate is doing in their geographic district or in Washington. This communication provides a level of representation to the non-geographic constituent that had not existed in the past.

The next question is: why would a geographic constituent from one district go through all the trouble of 'following' or 'friending' an MC from another district? The most obvious answer is that the geographic constituent does not feel adequately represented by their geographic legislator and is looking for a different representative

who holds similar views in order to feel better represented. Without social media this constituency would not be able to follow and politically connect with their virtual MC.

Additionally, once this virtual constituent feels that he or she is being better represented by this virtual MC, they will feel much more motivated to participate in the political process. Since the virtual constituent cannot vote for their preferred politician, the virtual constituent will do the next best thing: donate money, campaign, advertise, and digitally communicate. Without the advent of social media this new and diverse constituency would have never existed.

1.6 Conclusion

The perception of representation and constituency has continued to evolve as our understanding of how we construct these concepts also matures. This research strives to synthesize the work of previous scholars into an updated concept that takes into account advancements in technology, which have facilitated a new constituency: the virtual constituency.

Initial research focused on the Burkean theory of the Trustee versus the Delegate forms of representation when analyzing an MC's district. Over time, this led to Weissberg's work of Collective and Dyadic representation (1978). Both the Burkean model and Weissberg's concept look at how constituents are represented, either through their individual MC or through the collective work of all the MCs together. From here, their research dovetailed into other scholarly analyses of various forms of representation (Mansbridge, 2003; 2011; Pitkin, 1967; Rehfeld, 2006).

Promissory representation analyzes representation based on how well MCs are able to keep promises made to constituents. This is based on the idea that if the MC is unable to keep their promise, then there will be electoral consequences (Mansbridge, 2003). However, surrogate representation, which focuses on representation of the constituent by a non-geographic representative, veers away from the promissory aspect of representation, because of the focus on non-electoral representation.

This research takes its cue from surrogate representation to argue that advancements in technology, specifically the Internet and social media, have created a new constituency: the virtual constituency. The virtual constituent is one who occupies the space outside of an MC's geographic constituency, but still feels best represented by that MC. This idea of the virtual constituency expands upon the research of Fenno's constituencies: geographic, reelection, primary, and personal (1978). The virtual constituent may reside outside of the geographic constituency, as described by Fenno, but the virtual constituent is exponentially more important than the geographic constituent, because she can provide money, campaigning, advertising, and digital communication, all of which the geographic constituent does not provide. However, the virtual constituent cannot provide votes, which makes the reelection, primary, and personal constituencies more important to the reelection process.

Money, campaigning, advertising, and digital communication are the cornerstones of the presence of the virtual constituent. Forthcoming research will examine the veracity of these claims in order to demonstrate the unequivocal existence of the virtual constituent. Specifically, I will analyze the relationship between campaign donations and the use of Twitter to establish the link between the virtual

constituent and the MC. Furthermore, I will provide support to the existence of the virtual constituent by examining the relationship between the ideology of the MC and the ideology of the virtual constituent.

Article 1 Works Cited

- Adler, E. Scott, Chariti E. Gent, and Cary B. Overmeyer. "The home style homepage: Legislator use of the World Wide Web for constituency contact." *Legislative Studies Quarterly* (1998): 585-595.
- Aldrich, H. John, Michael Brady, Scott de Marchi, Ian McDonald, Brendan Nyhan, David Rohde, and Michael W. Tofias. "The Concentric Circles of Constituency."
- Arnold, R. Douglas. *The logic of congressional action*. Yale University Press, 1992.
- Arnold, R. Douglas. "Can Inattentive Citizens Control Their Elected Representatives?." In *Congress Reconsidered*, vol. 5, pp. 401-416. Washington, DC: Congressional Quarterly Press, 1993.
- Bartels, Larry M. "Constituency Opinion and Congressional Policy Making: The Reagan Defense Buildup." *American Political Science Review* 85, no. 02 (1991): 457-474.
- Bond, Robert M., Christopher J. Fariss, Jason J. Jones, Adam DI Kramer, Cameron Marlow, Jaime E. Settle, and James H. Fowler. "A 61-million-person experiment in social influence and political mobilization." *Nature* 489, no. 7415 (2012): 295-298.
- Clinton, Joshua D. "Representation in Congress: constituents and roll calls in the 106th House." *Journal of Politics* 68, no. 2 (2006): 397-409.
- Cox, Gary W., and Mathew D. McCubbins. *Setting the agenda: Responsible party government in the US House of Representatives*. Cambridge University Press, 2005.
- Fenno, Richard F. *Home style: House members in their districts*. Pearson College Division, 1978.
- Fiorina, Morris P. *Representatives, roll calls, and constituencies*. Lexington Books, 1974.
- Fiorina, Morris P. *Congress, keystone of the Washington establishment*. Yale University Press, 1989.
- Glassman, Matthew Eric, Jacob R. Straus, and Colleen J. Shogan. "Social Networking and Constituent Communications: Members' Use of Twitter and Facebook During a Two-Month Period in the 112th Congress." In *Washington DC: Congressional Research Service, CRS Report for Congress*. 2013.

- Green, Donald P., Jonathan S. Krasno, Alexander Coppock, Benjamin D. Farrer, Brandon Lenoir, and Joshua N. Zingher. "The effects of lawn signs on vote outcomes: Results from four randomized field experiments." *Electoral Studies* 41 (2016): 143-150.
- Herrnson, Paul S., Atiya Kai Stokes-Brown, and Matthew Hindman. "Campaign Politics and the Digital Divide Constituency Characteristics, Strategic Considerations, and Candidate Internet Use in State Legislative Elections." *Political Research Quarterly* 60, no. 1 (2007): 31-42.
- Jackson, John E., and David C. King. "Public Goods, Private Interests, and Representation." *American Political Science Review* 83, no. 04 (1989): 1143-1164.
- Krehbiel, Keith. "Constituency characteristics and legislative preferences." *Public Choice* 76, no. 1-2 (1993): 21-37.
- Miller, Wakken E., and Donald E. Stokes. "Constituency influence in Congress." *American political science review* 57, no. 01 (1963): 45-56.
- Mansbridge, Jane. "Rethinking representation." *American political science review* 97, no. 04 (2003): 515-528.
- Mayhew, David R. *Congress: The electoral connection*. Yale University Press, 1974.
- Owen, Diana, Richard Davis, and Vincent James Strickler. "Congress and the Internet." *The Harvard International Journal of Press/Politics* 4, no. 2 (1999): 10-29.
- Pitkin, Hanna Fenichel. *The concept of representation*. Univ of California Press, 1967.
- Straus, Jacob R., Matthew Eric Glassman, Colleen J. Shogan, and Susan Navarro Smelcer. "Communicating in 140 Characters or Less: Congressional Adoption of Twitter in the 111th Congress." *PS: Political Science & Politics* 46, no. 01 (2013): 60-66.
- Weissberg, Robert. "Collective vs. dyadic representation in Congress." *American Political Science Review* 72, no. 02 (1978): 535-547.
- Wright, Gerald C. "Policy Voting in the US Senate: Who is Represented?" *Legislative Studies Quarterly* (1989): 465-486.

Article 2

CONGRESSIONAL TWEETS: DISCOVERING A NEW CONSTITUENCY

2.1 Introduction

Political representation delves into how the public interacts with their government, even those individuals who aren't directly acting on their own behalf. Through this conception, Hannah Pitkin defined representation as "making present of something that is nevertheless not literally present" (1967, 144). Additionally, Burke's observation about the role of a member of Congress (MC) as either a trustee or a delegate continues to permeate studies of Congressional representation, with nearly all studies concluding that MCs act as delegates over trustees (Miller and Stokes, 1963; Mayhew, 1974; Fenno, 1978; Fiorina, 1989; Cox and McCubbins, 2005). Miller and Stokes demonstrate that the Burkean model is utilized by both Democrats and Republicans for social issues, but civil rights issues were viewed from a delegate lens (1963). Therefore, an MC represents their constituents differently depending on the situation.

Weissberg deviates from the previous literature, which argues that representation is a dyadic relationship. This is the concept that a constituent can only be represented by an MC from their own district (1978). Instead, Weissberg argues that representation is a collective phenomenon, meaning to some extent the institution of Congress represents the American people as a whole. Mansbridge takes this concept a step further with what she describes as *surrogate representation*, a concept in which representation exists, but there is no formal electoral relationship (2003). For example, a constituent may support an MC

who represents a different district, because they share the same foreign policy views. Although this constituent cannot provide a vote, they may provide financial support.

This paper will fit together with the work of Weissberg (1978) and Mansbridge (2003) by exploring how the constituent relationship has evolved since the creation of social media, specifically focusing on MCs' use of Twitter. I argue that the realm of constituents has expanded beyond the four traditional constituencies (geographic, reelection, primary, and personal) as previously described by Fenno (1978) due to the creation of social media generally, and Twitter specifically, creating a new constituency known as the virtual constituency.

The virtual constituent "is an individual who considers herself to be a member of an MC's constituency while maintaining a presence, in which, the effects are felt within a virtual medium and not an electoral medium" (Hagner 2016, 8). The virtual constituent does not inhabit the geographic boundaries of the MC's district, but she is located within the virtual realm. For example, the virtual constituent can "follow" her desired representative via Twitter.

Additionally, much of the previous social media research has been purely a-theoretical. Through an exploration of the use of Twitter by candidates specifically, this research will move beyond the a-theoretical research platform of social media research and develop a theoretical framework based upon the virtual constituent, which future research can build upon. In order to achieve this, I will lay out testable hypotheses that will confirm or reject the existence of the virtual constituency.

2.2 Literature Review

The creation of the Internet, along with the various social media tools that have accompanied this creation, have allowed MCs to create new and different ways to reach their constituents. Adler, Gent, and Overmeyer (1998) analyzed the way in which MCs utilized the Internet and discovered that younger legislators and those legislators from more affluent districts are more likely to have an Internet presence. This occurs because younger legislators have a higher likelihood of accepting new technologies than older legislators (1998). Additionally, legislators from more affluent districts are more likely to use the Internet, because more of their constituents will be able to access the Internet than constituents from less affluent districts (1998).

Furthermore, Owen, Davis, and Strickler (1999) discover that MCs facilitated the use of the Internet and email as a way to connect with constituents as an extension of constituency services. The implication is that MCs are using these technologies as a means of improving their standing within the reelection constituency in order to enhance their chances of reelection. For example, many Congressional websites contain pictures of the MCs home district or state along with information regarding “how to order a flag flown over the capitol or how to apply for a service academy” (1999, 23).

Looking beyond constituency services and Internet usage, Herrnson, Strokes-Brown, and Hindman (2007) analyze under what conditions state legislators utilize the Internet for campaign purposes. They discover that state legislators were more likely to use the Internet as a campaign tool when their constituents were more educated and when a greater percentage was under the age of fifty-five. Scholars have moved beyond

Internet usage and analyzed how MCs are utilizing social media for political use, specifically Twitter.

Twitter is an online blogging tool that allows users to post statements of 280 characters or fewer (140 characters or fewer prior to November 2017). According to statisticbrain.com, there are currently 645 million Twitter subscribers around the world. This rapidly expanding microblogging site allows for scholars to analyze large amounts of data touching upon a multitude of topics. However, due to the sudden rise of Twitter's popularity, there is currently ample data, but limited research analyzing its impact on society. Although research on the impact of social media in the political realm is limited, political scientists have already utilized Twitter to present evidence regarding voting and elections, mobilization, and Congressional communication (Ammann, 2011; Glassman, Straus, Shogan, 2011; Hemphill, Otterbacher, and Shaprio 2013; Mergel, 2012).

There are two distinct characteristics that make Twitter a unique form of representative communication: limited number of characters to post information, and non-members can view the posts. This dictates that candidates must prioritize what they post, which allows scholars to determine what a candidate deems as important enough to post in a limited space. Additionally, unlike other social media sites, individuals do not have to have their own account to view the accounts of others. This creates a larger pool of constituents who are able to observe the posts of the candidates, while Facebook and Instagram limit what non-members are able to view.

Since the number one goal of an MC is reelection (Fenno, 1978), it should come as no surprise that candidates will utilize every tool at their disposal to win an election. Ammann was able to demonstrate that each Tweet generated 0.02% increase in voter

eligible turnout (2011). Therefore, in closer elections candidates will maximize voter turnout, and via the tool of sending out more Tweets. These findings demonstrate that candidates appear to be aware that a link exists between social media communication and the ability to gain an electoral advantage over their opponent. However, I posit the purpose of these Tweets goes beyond just vote counting and is also used to improve one's financial standing as well. Furthermore, Twitter can also be used to convey information and create a personal connection between the candidate and the constituent through Tweets.

The groundbreaking article, by Golbeck, Grimes, and Rogers, suggests that MCs use Twitter to disperse information about news articles in addition to Tweeting about their daily activities (2010). Additionally, Twitter is used to communicate with constituents (2010). This is important, because it allows MCs to communicate directly with their constituents in a manner that will allow the MC to either credit claim, advertise, or take a position in an effort to gain reelection. Glassman, Straus, and Shogan determine that Congress member communication can be divided into eight categories: position taking, policy, district or state activities, official congressional action, personal, media, campaign activities, and other (2011). Drawing from in person interviews and Twitter posts, Mergel finds that initial Tweets by members of Congress were used to advocate for existing positions (2012). Hemphill, Otterbacher, and Shaprio also find that members of Congress use Twitter to advertise their own positions, but hardly ever ask constituents for action in return (2012; 2013). Barbera et al. take the constituent communication a step further by determining if legislators are responsive to constituent

communication (2013). They demonstrate that legislators are responsive to their more politically interested constituents and those constituents from the same party.

Another direction of Congressional Twitter research is determining who adopts Twitter and for what reasons. Chi and Yang use the adoption delay learning model to state that members of Congress will adopt Twitter after those members witness adoption success by fellow members of Congress (2011). Peterson goes beyond the work of Chi and Yang (2011) to analyze the make-up of MCs who were using Twitter during the 111th Congress (2012). Furthermore, Republicans are more likely to use Twitter along with members at the ideological extremes of the political spectrum (Peterson, 2012; Williams and Gulati, 2010). Straus et al. also discover that the more ideologically extreme members of Congress were more likely to adopt Twitter than their more ideologically centrist colleagues (2013). This research indicates that the farther a candidate strays from the ideological middle, the more likely that candidate will adopt newer tools sooner in an attempt to gain an electoral advantage on their ideologically centrist counterparts.

Next, Peterson found that district level demographics had no effect on Twitter adoption (2012). Straus et al. also demonstrate that district level factors have no bearing on members adopting Twitter, except for the urban variable, which finds that the more urban a district is, the more likely that member of Congress will adopt Twitter (2013). Conversely, Lassen and Brown analyze Twitter adoption and determine that members of Congress are more likely to join Twitter if they are in the minority party, party leaders advocate their adoption, young, and if they are members of the US Senate (2011).

Veering off the communication and adoption path, Hong analyzes the effects of Twitter usage and fundraising (2013). Hong discovers that adopting Twitter will increase

political donations from outside one's state level constituency, but not from one's own constituents. Additionally, candidates will Tweet more during competitive elections (Ammann, 2011). The political ramification is that the increased funds may lead to continued uneven distribution of economic capital during a campaign.

The research presented has analyzed how candidates use Twitter in order to gain electoral advantages, communicate with one's constituents, and connect with one's constituents. However, much of this research uses an approach that forsakes theory for information. This analysis will attempt to identify a relationship between this vast field of information and the underlying concept which links them together.

2.3 Theory

I posit that the adoption of social media by MCs has created a new constituency that was previously unavailable by MCs: the virtual constituency. A virtual constituent is an individual who considers herself to be a member of an MC's constituency by maintaining a presence in a virtual world. A virtual constituent is unable to provide votes, but she is able to provide an MC with resources such as time and money spent promoting the favored MC.

Weissberg first postulated the idea of a virtual constituent in 1978 when he argued that Congress as a whole better represents the American people than one individual MC in a specific district. Beer (1966) argued that constituents "virtually represented not only the city, but also all other places that did not have actual representation" when discussing British politics (18). Additionally, in 1978 Fenno took this discussion a step further and conceptualized the geographic, reelection, primary, and personal constituency in order to

demonstrate how MCs planned their reelection strategy. I postulate that the virtual constituency is the largest concentric circle within this realm that allows both candidates and MCs to recalculate how they approach elections.

MCs are single-minded seekers of reelection, and therefore devote most of their time to advertising, credit claiming, and position taking (Mayhew, 1974). Therefore, candidates and MCs must pay close attention to how they allocate their time and resources. Bauer, Pool, and Dexter observed that the MCs fundamental quandary is “not how to vote but what to do with his time, how to allocate his resources, and where to put his energy” (1963, 405). In other words, any time spent boasting about advertising, credit claiming, and position taking by attending campaign events is time away from actually achieving those goals.

Some MCs will often concentrate their time on legislative duties that are far away from the public spotlight while other MCs will often shirk their legislative responsibilities while seeking public attention (Hall, 1996). This means that the opportunity costs of foregoing chances to achieve policy goals are thwarted by the time that must be spent chasing the goal of reelection and vice versa. This is a delicate balance that MCs must constantly battle in order to ensure that both their needs, along with their constituencies needs, are met. This battle is forcing MCs to create new ways to maximize their time and resources with minimal energy expended. This has incentivized both candidates and MCs to cultivate a relationship with the virtual constituency due to the minimal time and resources needed to establish a relationship compared to other constituencies.

Candidates are continuously trying to capture more of these constituencies in the form of money and votes. While virtual constituents are not capable of providing votes,

they are a rich new source of potential campaign donations that was previously not available. Candidates constantly look to venues that can provide the largest financial impact to their campaign coffers. This typically means speaking engagements, phone calls, and expensive fundraising dinners. The link between all these fundraising ventures is the amount of time that candidates use to garner these donations. While these fundraising tactics are still used today, the creation of social media has opened more doors to fundraising avenues that require less expenditure of time.

Essentially, candidates are looking for ways to maximize gains while minimizing effort and costs. However, this is easier said than done. As Al Franken discussed, he would often spend three to four hours at a time endlessly making phone calls to supporters in an effort to acquire campaign donations (Franken, 2017). Additionally, during election season, sometimes Franken would spend up to eight hours in the call center raising money (2017). This time allocation is an approach that requires both maximum effort and maximum cost to achieve fundraising, because the time commitment is very large with no guarantee of actually raising money.

In an effort to veer away from this time-consuming approach, candidates have adopted social media in order to create a low cost, high return approach to fundraising. However, on its face this may appear counterintuitive, because social media use does not garner large campaign donations. So, why would candidates waste their time when the payoff is so small? First, candidates would do this because the amount of time required to ask for a donations through social media is nearly insignificant. Second, even though that one individual donation will not out-fundraise a more time consuming effort like a speech or dinner, the overall donations received over a series of Tweets will in the aggregate

have to potential to out-fundraise those larger and more time consuming campaign practices. In other words, a large number of small donations can add up to more than a single large donation. We have also seen this approach play out in actual campaigns since we now see every candidate and MC use social media in order to fundraise. I predict that candidates are utilizing social media in order to maximize financial benefits with minimal costs. Specifically, candidates who use Twitter will receive fewer dollars per donation but will receive more total donations, and therefore more total dollars, than their non-Twitter counterparts.

2.4 Research Design

The dataset used for this research is The Database on Ideology, Money in Politics, and Elections (DIME) (Bonica, 2013). This dataset contains information about each individual campaign donation made to any candidate running for state or federal office in the specified years. Using this dataset, I will analyze all campaign contributions made to Democrats and Republicans running in the general election for the United States House of Representatives.

Hypothesis 1: Amount of Money per Donation

H1: Candidates who are Twitter subscribers are more likely to receive fewer dollars per donation than their non-Twitter counterparts during the 2008 and 2010 Congressional elections.

The dependent variable for these models is amount of money received from each donation. This dependent variable coincides with the work of Gimpel et al. (2008), who

also measured individual campaign donations from both inside and outside an MC's district from 1996-2004.

Hypothesis 1 will determine what effect a Twitter account has on individual campaign donations from outside the district. A positive finding for Hypothesis 1 will strengthen the theory of the virtual constituent, because this will indicate that Twitter usage among candidates leads to fewer dollars per donation. In essence, candidates who are Twitter subscribers will be able to reach a vast number of virtual constituents, without contacting the more traditional deep pocket donors that non-Twitter candidates have commonly relied on. Thus, the Twitter subscribing candidates will generate few dollars per donation from virtual constituents. Although fewer dollars per donation appears counterintuitive, I expect to find that candidates with Twitter will receive more total contributions, as stated in Hypothesis 2.

Hypothesis 2: Total Contributions Received during Campaign

H2: Candidates who are Twitter subscribers are more likely to receive more individual contributions from outside their own district than their non-Twitter counterparts during the 2008 and 2010 Congressional elections.

The dependent variable for these models is total number of contributions a candidate received during the campaign cycle.

Hypothesis 2 will help determine the presence of the virtual constituent by examining if candidates with Twitter accounts are able to obtain more overall contributions from outside their districts. A positive finding for Hypothesis 2 will reinforce the latency of the virtual constituent, by illustrating that candidates with Twitter

accounts are able to facilitate a relationship with virtual constituents that manifests itself in the form of more contributions than the candidate's non-Twitter compatriots.

Hypothesis 3: Total Amount of Money Received during Campaign

H3: Candidates who are Twitter subscribers are more likely to receive more money over the course of the entire campaign from outside their own district than their non-Twitter counterparts during the 2008 and 2010 Congressional elections.

The dependent variable for these models is total amount of money a candidate received during the course of the entire campaign election cycle.

Hypothesis 3 will analyze the effects of total campaign contributions for candidates with Twitter accounts. Theoretically, candidates with Twitter accounts will receive more total dollars from outside their district, indicating virtual constituents are providing the resource of money at a greater rate to Twitter-subscribing candidates than to non-Twitter candidates. A positive result for Hypothesis 3 will provide further evidence of the existence of the virtual constituent. When connecting these findings with Hypotheses 1 and 2, candidates with Twitter accounts will receive smaller donations, but more donations and more total dollars. Thus, reinforcing the theoretical argument that the virtual constituent exists and can be discovered through the contributions being made to one's preferred candidate through campaign donations.

Additionally, the relationship between incumbency effect and campaign donations has been thoroughly demonstrated, indicating that incumbents receive more money than challengers (Abramowitz, 1991; Jacobson, 1978; Green and Krasno, 1988). Abramowitz analyzed the relationship between incumbent and challenger when he demonstrated that "more than 40% of the difference between the average vote margins of winning and

losing incumbents is directly attributed to the challenger's campaign spending" (47, 1991). Since the disparity between incumbency and non-incumbency contributions is empirically strong, I have created separate models in order to tease out the link between Twitter users and contributions within each subset of candidates.

Independent Variables

The key independent variable in each model is whether or not the candidate had a Twitter account prior to that year's election. This variable is coded 1 if the candidate had a Twitter account and 0 if the candidate did not have a Twitter account. In order to create this variable, I first created a continuous variable based on the month that the individual created their Twitter account. For example, if the individual created their Twitter account in January of 2008, I coded that variable as 2008.08. The control variables for the incumbent models are Leadership, Party, Gender, Length of Tenure (years), and Competitiveness of District. The control variables for the non-incumbent models are Party and Gender.

The research of Hall and Wayman demonstrated that MCs in leadership positions received more political action committee (PAC) donations than those MCs who are not in leadership position (1990). This analysis moves beyond committee leadership and examines floor leadership positions. Additionally, the work conducted by Glassman, Straus, and Shogan (2011) analyzed how MCs were utilizing Twitter by party; my research will analyze both party and leadership. Similar to incumbency, name recognition has positive effects on an MC's leadership status. If an incumbent is in a leadership position, that individual is coded as a 1 and a 0 if the incumbent is not in a leadership

position. A positive result for the Leadership variable will strengthen my claim regarding the presence of a virtual constituency, because virtual constituents looking for MCs to support will turn their attention to their preferred party's leadership.

Party is included as an independent variable, based on the research conducted by Williams and Gulati, who discovered that Republicans were more likely than Democrats to utilize Twitter as a mode of constituency communications (2010). This analysis will determine what affect party has on campaign donations for Twitter adopters. Since Republicans were earlier adopters of Twitter than Democrats, party could influence the donation results. However, since majority control switched from Democrats to Republicans in 2010, this result could be nullified. A significant result for this variable will strengthen my claim of the virtual constituency, because voters donate to MCs who more closely represent their ideology regardless of district affiliation.

Research indicates that women receive less campaign money than men (Baxter and Lansing, 1980; Buchanan, 1978; Burrell, 1995; Carroll, 1994; Roberts, 1983). Uhlaner and Schlozman state that for every \$5 a woman raises, a man will raise \$6 (1986). Based on this previous research, this analysis controls for gender in order to determine gender's effect on campaign donations. A significant result would indicate that virtual constituents follow similar donation structures as geographic constituents, meaning that women will receive fewer donations and fewer total dollars from their virtual constituents.

Seniority, specifically length of tenure, has been found to have significant effects on campaign donations (Rocca and Gordon, 2010; Snyder 1992). The variable Length of Tenure is a continuous variable, coded in years. Additionally, competitiveness of the

election has significant effects on campaign donations (Gimpel et. al, 2008). The election is considered competitive if the previous election results were within ten percentage points. If the results were competitive, then the variable is coded as 1. If the election was not competitive, then it received a 0. Furthermore, to avoid endogeneity issues, the variable is lagged by one election cycle.

2.5 Analysis

Table 2-1 displays OLS regression results for the amount of dollars received per campaign contribution to incumbents during the 2008 and 2010 House elections from outside the candidate's district. This table confirms Hypothesis 1, that incumbent candidates who are Twitter subscribers will receive fewer dollars per donation from outside their district than incumbent candidates who do not have Twitter accounts during the 2008 and 2010 election cycle. Additionally, each of the control variables are also statistically significant in the expected directions. The large N can be attributed to the significance of these variables as well. Furthermore, the r-squared is very weak, indicating that the predictive power of these variables is weak.

Table 2-1

	Incumbents from Outside District	
	2008	2010
Twitter User	-89.11***	-173.9***
Leadership	386.7***	339.6***
Democrat	196.6***	-154.6***
Male	125.8***	57.52***
Length of Tenure	5.428***	5.42***
Competitive District	152.4***	-204.2***
Constant	273.8***	636.9***
Observations	328294	518988
R-Squared	0.036	0.060
*p<.05, **p<.01, ***p<.001		

Table 2-2 shows the OLS regression for the amount of dollars received per campaign contribution to non-incumbents during the 2008 and 2010 House elections from outside the candidate's district. Non-incumbents who were Twitter subscribers during either the 2008 or 2010 Congressional campaign received fewer dollars per contribution from having Twitter over their non-Twitter user counterparts, confirming Hypotheses 1. Similar to models for hypotheses related to incumbents, the large N is the major contributor to the statistical significance of the entire model. The r-square values for the model also remain small, indicating that these models are not necessarily the best fit.

Table 2-2

	Dollars Per Contribution to Non-Incumbents from Outside	
	2008	2010
Twitter User	-205.5***	-65.98***
Democrat	-23.73	-238.2***
Male	83.12***	188.4***
Constant	573.1***	410.9***
Observations	166423	298622
R-Squared	0.020	0.012
*p<.05, **p<.01, ***p<.001		

Taken together, both incumbents and non-incumbents received fewer dollars per contribution than their non-Twitter using counterparts. This is the first step towards demonstrating the existence of the virtual constituency as it links campaign donations and candidates who are Twitter users. Since Twitter candidates received fewer dollars per donation than their non-Twitter counterparts across each of the four models, it is clear that Twitter-using candidates are not receiving the larger donations that come along with campaigns that do not make a concerted effort to reach outside one's district. The next set of tables will analyze the total number of individual contributions to determine if candidates who use Twitter will receive more individual contributions than non-Twitter using candidates.

Table 2-3 fails to confirm Hypothesis 2, that incumbent candidates with Twitter will receive more campaign contributions than candidates without Twitter during the

2008 and 2010 election seasons. This non-finding indicates that incumbents who did use Twitter during the 2008 and 2010 campaign season did not gain an advantage over candidates who did not use Twitter. The only significant finding from this model occurs during the 2010 campaign season, where candidates in competitive districts receive 2,812.7 more individual contributions than candidates in non-competitive districts. However, similar to the previous models, the r-square values remain small, suggesting that the models are not capturing the full effects.

Table 2-3

	Total Number of Individual Contributions to Incumbents from Outside District	
	2008	2010
Twitter User	77.27	730.3
Leadership	218.8	160.5
Democrat	-317.3	902.7
Male	-55.69	-270.3
Length of Tenure	1.29	-22.4
Competitive District	300.7	2812.7***
Constant	1016.6	366.3
Observations	388	383
R-Squared	0.002	0.066
*p<.05, **p<.01, ***p<.001		

Analysis of Table 2-4 paints a different picture from its incumbent counterparts, by confirming that non-incumbent Twitter users receive more individual contributions from outside their districts than non-Twitter users during the 2008 congressional election.

The finding that non-incumbent Twitter users received an additional 1300 individual contributions than non-Twitter users implies that the Twitter-using candidates were able to use their social media presence to earn more contributions. Taken in conjunction with Hypothesis 1, Twitter-using non-incumbents are getting fewer dollars per contribution, but more contributions. This is more evidence that social media using candidates are accessing the virtual constituency in order to raise money. However, this finding did not appear during the 2010 congressional elections. This may have occurred because more candidates were using Twitter during the 2010 campaign season, essentially washing out significant effects. Along with the 2008 results, this non-finding indicates that early adopters of social media gain financial advantages over their non-adopters and when more candidates utilize social media the effects disappear.

Table 2-4

	Total Number of Individual Contributions to Non-Incumbents from Outside	
	2008	2010
Twitter User	1315.3***	269.2
Democrat	158.4	399.0
Male	-319.8*	-285.5
Constant	589.0***	728.1
Observations	336	398
R-Squared	0.156	0.018
*p<.05, **p<.01, ***p<.001		

Table 2-5 fails to confirm Hypothesis 3, that incumbent candidates with Twitter will receive more dollars than candidates without Twitter during the 2008 and 2010 election seasons. This reveals that incumbent candidates with Twitter accounts did not attain more money during election season than non-Twitter using candidates. Although this is a negative finding, this finding is reversed when analyzing non-incumbents during this same period.

Table 2-5

	Total Dollar Amount of Individual Contributions to Incumbents from Outside District	
	2008	2010
Twitter User	31933.1	47700.5
Leadership	102568.5	688399.9***
Democrat	-13363.3	141961.8
Male	30689.4	-5531.4
Length of Tenure	4116.3	-900.1
Competitive District	323337.5*	475934.0***
Constant	355363.7*	330504.3**
Observations	388	388
R-Squared	0.012	0.113
*p<.05, **p<.01, ***p<.001		

Table 2-6 demonstrates the relationship between non-incumbent Twitter users and the total dollars received over the course of the 2008 and 2010 congressional election periods. This model establishes that non-incumbent Twitter using candidates earned

\$431,786.00 more dollars than non-Twitter using non-incumbent candidates. This significant finding follows the pattern demonstrated by the previous hypotheses, that non-incumbent Twitter users attain fewer dollars per contribution, but more contributions and more total dollars than non-incumbent, non-Twitter candidates. Together this fits the overall idea that early adopters of social media are able to access the virtual constituency before non-Twitter candidates. Even though the 2010 Congressional election does not have significant results, it indicates that signs of existence of the virtual constituency disappear as more candidates adopt Twitter, not the virtual constituency itself. Therefore, even with the effects of Twitter users being washed out in the 2010 congressional campaign, this strengthens the argument for the existence of the virtual constituency.

Table 2-6

	Total Dollar Amount of Individual Contributions to Non-Incumbents from Outside District	
	2008	2010
Twitter User	431786.0***	76430.0
Democrat	91112.1*	-51927.5
Male	-103798.3	103665.6
Constant	289580.1***	201688.6**
Observations	336	398
R-Squared	0.104	0.018
*p<.05, **p<.01, ***p<.001		

2.6 Conclusion

Analysis of data regarding Twitter users among candidates running for Congress allows a starting point for discovering evidence of the latency of virtual constituents. Overall, the existence of the virtual constituent appears to materialize when analyzing the totality of evidence from the key independent variable (Twitter subscriber) when analyzing incumbents and non-incumbents alike. Furthermore, leadership, party, gender, and competitive district variables followed established paths set forth in previous research.

The models affirm the first hypothesis that incumbent and non-incumbent candidates, who are registered Twitter subscribers, received fewer dollars per donation than candidates who did not have a registered Twitter account in both the 2008 and 2010 Congressional elections. These results held even after the control variables were incorporated into the model. Although the r-squared values are consistently low across all models for Hypothesis 1, the substantive dollar values are substantial. The 2008 Congressional elections saw incumbent candidates for Congress with Twitter accounts receive \$89.11 fewer dollars per donation when applied to the entire model, thus illustrating that those candidates are reaching out to non-geographic constituents with shallower pockets rather than large donors with deeper pockets. During the 2010 Congressional elections this amount jumped to \$173.90 for incumbent candidates. These findings lend credence to the existence of the virtual constituency.

The results for Hypothesis 2 also yield evidence supporting the theory of the virtual constituent, specifically when evaluating non-incumbent candidates during the 2008 congressional election. Although the r-squared is .15, substantively those candidates

were able to attain 1,315.3 more individual contributions than their non-Twitter using counterparts. However, this effect disappeared from this group when evaluating the 2010 congressional election. I believe this occurs because once enough candidates adopt Twitter, the overall impact of Twitter diminishes. This bears out in the data as well; in 2008 only 6% of non-incumbents used Twitter and that number grew to 42% in 2010. Additionally, when analyzing the total amount of money raised during the 2008 and 2010 elections, non-incumbent candidates with registered Twitter accounts received more total dollars than non-incumbent candidates without Twitter.

Hypothesis 3 bears the most substantive effect; non-incumbent Twitter users during the 2008 Congressional elections received \$431,786 more total dollars from outside their district than non-Twitter users. Even though the r-squared sits just above .1, this vast dollar discrepancy surely makes a positive impact for those candidates receiving this extra influx of cash. Thus, these extra donations have the ability to affect the overall funding direction of the campaign in an effort to overcome the incumbency advantage that consistently plagues non-incumbents.

Therefore, the strongest evidence for the existence of the virtual constituency lies within the subset of non-incumbent candidates. This group was able to use Twitter to look outside their district and earn fewer dollars per donation, but more total campaign donations, and more total dollars overall than non-incumbents who did not use Twitter in the 2008 congressional campaign season. Furthermore, the disappearance of this effect when analyzing the 2010 election results only solidifies the virtual constituency's existence, because so many non-incumbent candidates adopted the social media tool so quickly.

The same positive results were not discovered when analyzing the incumbents. In addition to the r-squared displaying minimal effect, the amount of dollars per contribution was found to be significant, but that can be attributed to the large number of observations. However, leadership and competitive districts were significant in various models when looking at number of individual contributions and total amount of money received. Incumbent members of the leadership earned \$688,399.90 more than incumbents not in leadership positions from outside their districts during the 2010 congressional election. Although this is not tied to Twitter usage, it still demonstrates that outside district individuals were willing to donate money at a statistically significant level. This establishes an indirect link between members of the leadership and virtual constituents.

Another indirect channel establishing a relationship between the candidate and the virtual constituent can be witnessed through competitive districts. Incumbent candidates who ran in competitive districts in the preceding election received \$323,337.50 more than incumbents who ran in non-competitive districts in 2008. In 2010, incumbents in competitive districts acquired \$475,934.00 more than their corresponding safe district members. This constitutes another indirect link between the virtual constituent and the candidate, because those House members in unsafe districts are able to reach outside their geographic constituency to raise additional funds.

When analyzing the link between the virtual constituent and the members of leadership and those incumbents in competitive districts it helps to look at this through the eyes of a virtual constituent herself. Since constituents look to be represented by people of similar values, virtual constituents who live in a district represented by an

individual who does not hold their values can look outside their district to find this representation. These virtual constituents will target members of the leadership to give their donations, knowing that these individuals wield the most influence and are therefore most likely to implement public policy that most closely resembles that which the virtual constituent desires.

Virtual constituents will also look for the best way to donate their money to political campaigns, and one way is to donate their money to races that were previously competitive. These virtual constituents will donate money to incumbents they feel that they share the same beliefs and ideals with but are not assured of reelection. This is one aspect to why competitive districts receive more total dollars from donations outside the district from individual donors than those members in safe seats.

Next, it is clear that early adopters of Twitter were able to gain a financial advantage over their non-adopting counterparts, but this advantage mostly disappeared during the 2010 election cycle. This can be attributed to candidates seeing the benefits of maximizing the financial advantage while minimizing the time capital that previous non-Twitter users had to expend. This leads to candidates using more of their time to convince a voter to vote for him or her and less of the candidate's time being spent raising money. Therefore, candidates are attempting to gain more, smaller donations while using their time in a more effective manner than just focusing on larger donations that take more of the candidate's time each day.

This research has established a link between social media usage, specifically Twitter, by congressional candidates and receiving more campaign dollars and contributions, while receiving fewer dollars per donation. This demonstrates that virtual

constituents are able to use social media to find congressional candidates and donate to their campaigns. Furthermore, as more candidates adopt Twitter this significance vanishes, which drives home the point that more and more candidates are recognizing the financial gains of creating an avenue to communicate with virtual constituents.

Additionally, it appears virtual constituents go beyond Twitter users and also target incumbents in competitive districts as well as members of leadership. These findings illustrate that virtual constituents are able to have their presence felt within the electoral medium in a multitude of ways without having to leave their own district. Thus, this provides support of my overall theory that a new constituency in addition to those characterized by Fenno is emerging. Though it has perhaps been difficult to directly connect the virtual constituency to congressional candidates, these analyses indicate that it may exist, and it is no longer inconspicuous.

While this research serves as the first step in identifying the existence of the virtual constituency, additional evidence is required. Further research will analyze the ideological leanings of candidates and their campaign donors outside their districts in an attempt to find additional evidence of the existence of the virtual constituency. Specifically, this project will utilize Bonica's DIME data in order to consider if ideological convergence exists between donors and recipients, comparing in-district donors and outside-district donors. Coupled with the research presented in this paper, positive results from the next project will strengthen the theory of a virtual constituency.

Appendix 1: Correlation Tables

Figure 2-1: Correlation Table - Amount per Contribution, 2008

	amount2	twi~2008	leader~p	democrat	male	lengt~rs	compet~t
amount2	1.0000						
twitter~2008	-0.0080	1.0000					
leadership	0.0116	0.0638	1.0000				
democrat	0.0035	-0.0235	0.0297	1.0000			
male	0.0063	-0.0768	0.0046	-0.2104	1.0000		
lengthoft~rs	0.0002	-0.0571	0.1402	-0.1125	0.1701	1.0000	
competitiv~t	0.0290	-0.0361	-0.1076	0.1082	-0.0924	-0.4450	1.0000

Figure 2-2: Correlation Table - Amount per Contribution, 2010

	amount2	twi~2010	leader~p	democrat	male	lengt~rs	compet~t
amount2	1.0000						
twitter~2010	-0.0133	1.0000					
leadership	0.0263	0.1299	1.0000				
democrat	-0.0407	-0.0476	-0.0401	1.0000			
male	0.0233	-0.0456	0.0334	-0.0371	1.0000		
lengthoft~rs	0.0195	0.0850	0.2745	0.0983	0.0161	1.0000	
competitiv~t	-0.1183	0.1628	-0.2237	-0.0092	-0.0974	-0.4958	1.0000

Figure 2-3: Correlation Table - Total Number of Individual Contributions, 2008

	number~t	twi~2008	leader~p	democrat	male	length~s	compet~t
numbercont~t	1.0000						
twitter~2008	0.0500	1.0000					
leadership	-0.0058	0.0943	1.0000				
democrat	-0.0120	-0.0893	0.0605	1.0000			
male	-0.0212	-0.0157	-0.0325	-0.1579	1.0000		
lengthofte~s	0.0274	0.0026	0.1606	0.0752	0.0671	1.0000	
competitiv~t	0.0257	-0.0050	-0.0840	-0.0478	0.0248	-0.3454	1.0000

Figure 2-4: Correlation Table - Total Number of Individual Contributions, 2010

	number~t	twi~2010	leader~p	democrat	male	length~s	compet~t
numbercont~t	1.0000						
twitter~2010	0.0778	1.0000					
leadership	0.0138	0.1540	1.0000				
democrat	0.0899	-0.0417	0.0803	1.0000			
male	-0.0467	-0.0458	-0.0220	-0.1316	1.0000		
lengthofte~s	-0.0168	0.0995	0.1765	0.1875	0.0134	1.0000	
competitiv~t	0.2242	0.0147	-0.1222	-0.0624	0.0001	-0.3062	1.0000

Figure 2-5: Correlation Table - Total Dollar Amount of Individual Contributions, 2008

	totala~t	twi~2008	leader~p	democrat	male	length~s	compet~t
totalamoun~t	1.0000						
twitter~2008	0.0683	1.0000					
leadership	0.0351	0.0943	1.0000				
democrat	0.0248	-0.0893	0.0605	1.0000			
male	-0.0195	-0.0157	-0.0325	-0.1579	1.0000		
lengthofte~s	0.0778	0.0026	0.1606	0.0752	0.0671	1.0000	
competitiv~t	0.0982	-0.0050	-0.0840	-0.0478	0.0248	-0.3454	1.0000

Figure 2-6: Correlation Table - Total Dollar Amount of Individual Contributions, 2010

	totala~t	twi~2010	leader~p	democrat	male	length~s	compet~t
totalamoun~t	1.0000						
twitter~2010	0.1074	1.0000					
leadership	0.2176	0.1540	1.0000				
democrat	0.0710	-0.0417	0.0803	1.0000			
male	0.0110	-0.0458	-0.0220	-0.1316	1.0000		
lengthofte~s	0.1004	0.0995	0.1765	0.1875	0.0134	1.0000	
competitiv~t	0.2072	0.0147	-0.1222	-0.0624	0.0001	-0.3062	1.0000

Article 2 Works Cited

- Abramowitz, Alan I. 1991. "Incumbency, campaign spending, and the decline of competition in US House elections." *The Journal of Politics* 53, 1: 34-56.
- Adler, Scott, Chariti Gent, and Cary Overmeyer. 1998. "The Home Style Homepage: Legislator Use of the World Wide Web for Constituency Contact." *Legislative Studies Quarterly* 23, no. 4: 585-95.
- Ammann, Sky. 2011. "Why Do They Tweet? The Use of Twitter by U.S. Senate Candidates in 2010."
- Bauer, Raymond, Ithiel de Sola Pool, and Lewis Anthony Dexter. 1963. *American Business and Public Policy*. New York: Atherton Press.
- Barbera, Pablo, Richard Bonneau, John Jost, Jonathan Nagler, and Joshua Tucker. 2013. "Is There Anybody out There? The Effects of Legislators' Communication with Their Constituents."
- Bonica, Adam. 2013. Database on Ideology, Money in Politics, and Elections: Public version1.0 [Computer file]. Stanford, CA: Stanford University Libraries. <<http://data.stanford.edu/dime>>.
- Bond, Robert M., Christopher J. Fariss, Jason J. Jones, Adam DI Kramer, Cameron Marlow, Jaime E. Settle, and James H. Fowler. 2012. "A 61-Million-Person Experiment in Social Influence and Political Mobilization." *Nature* 489 (7415): 295-298.
- Beer, Samuel. 1966. *British Politics in the Collectivists Age*. New York: Alfred Knopf.
- Baxter, Sandra, and Marjorie Lansing. 1980. *Women and Politics: The Invisible Majority*. Ann Arbor, MI: University of Michigan Press.
- Buchanan, Christopher. 1978. "Why Aren't There More Women in Congress?" *C. Q. Weekly Weekly Reports*. August 12, pp. 2108-2110
- Burrell, Barbara C. 1995. *A Woman's Place is in the House: Campaigning for Congress in the Feminist Era*. University of Michigan Press.
- Carroll, Susan J. 1994. *Women as Candidates in American Politics*. Indiana University Press.
- Chi, Feng, and Nathan Yang. 2011. "Twitter Adoption in Congress." *Review of Network Economics*. 10, no. 1.

- Fenno, Richard. 1978. *Home Style: House Members in Their Districts*. Longman.
- Franken, Al. 2017. *Giant of the Senate*. Hachette Book Group, Inc.
- Gimpel, J. G., Lee, F. E., & Pearson-Merkowitz, S. 2008. The check is in the mail: Interdistrict funding flows in congressional elections." *American Journal of Political Science*, 52,2: 373-394.
- Glassman, Matthew, Jacob Straus, and Colleen Shogan. 2011. "Social Networking and Constituent Communications: Member Use of Twitter During a Two-Month Period in the 111th Congress." *Journal of Communications Research*. 2, 1-2: 219-33.
- Golbeck, Jennifer, Justin Grimes, and Anthony Rogers. 2010. "Congress, Twitter Use by the U.S." *Journal of the American Society for Information Science and Technology*. 61, 8: 1612-21.
- Green, Donald P., and Jonathan S. Krasno. 1988. "Salvation for the Spendthrift Incumbent: Reestimating the Effects of Campaign Spending in House Elections." *American Journal of Political Science*. 32: 884-907.
- Hagner, Travis. 2016. "Congressional Tweets: Why Bother? A Theoretical Analysis." Presented at the Pacific Northwest Political Science Association annual meeting. Bend, OR: 9-11 Oct. Unpublished.
- Hall, Richard. 1996. *Participation in Congress*. Yale University Press.
- Hall, Richard L., and Frank W. Wayman. 1990. "Buying time: Moneyed interests and the mobilization of bias in congressional committees." *American Political Science Review*. 84, 3: 797-820.
- Hemphill, Libby, Jahna Otterbacher, and Matthew Shapiro. 2013. "What's Congress Doing on Twitter?" in *Ideology, Politics and Social Curation: Recent Work on Twitter*. San Antonio, Texas.
- Hemphill, Libby, Jahna Otterbacher, and Matthew Shapiro. 2012. "Relationships among Twitter Conversation Networks, Language Use, and Congressional Voting." Paper presented at the International Communication Association conference. Phoenix, AZ: 24-28 May.
- Herrnson, Paul, Atiya Kai Stokes-Brown, and Matthew Hindman. 2007. "Campaign Politics and the Digital Divide: Constituency Characteristics, Strategic Considerations, and Candidate Internet Use in State Legislative Elections." *Political Research Quarterly*. 60, no. 31.

- Hong, Souman. 2013. "Who Benefits from Twitter? Social Media and Political Competition in the U.S. House of Representatives." *Government Information Quarterly*. 30: 464-472.
- Jacobson, Gary C. 1978. "The Effects of Campaign Spending in Congressional Elections." *American Political Science Review*. 72:469-91.
- Lassen, David and Adam Brown. 2011. "Twitter: The Electoral Connection?" *Social Science Computer Review*. 29, no. 4: 419-36.
- Mansbridge, Jane. 2003. "Rethinking representation." *American Political Science Review*. 97, 4: 515-528.
- Mayhew, David R. 1974. *Congress: The electoral connection*. Yale University Press.
- Mergel, Ines. 2012. "Connecting to Congress": The Use of Twitter by Members of Congress." *Aufsatz*. 3: 108-114.
- Miller, Warren and Donald Stokes. 1963. "Constituency Influence in Congress." *American Political Science Review*. 57:01 45-56.
- Owen, Diana, Richard Davis, and Vincent Strickler. 1999. "Congress and the Internet." *The Harvard International Journal of Press/Politics*. 4, 10.
- Peterson, Rolfe. 2012. "To Tweet or Not to Tweet: Exploring the Determinants of Early Adoption of Twitter by House Members in the 111th Congress." *The Social Science Journal*. 49: 430-38.
- Shapiro, Matthew, Libby Hempwill, and Jahna Otterbacker. 2012. "Doing What I Say: Connecting Congressional Social Media Behavior and Congressional Voting." Paper presented at the Midwest Political Science Association annual meeting. Chicago, IL: 12-15 April.
- Roberts, Steven V. 1983. *Women are Shunning Senate Races*. New York Times, Dec. 19
- Rocca, M. S., & Gordon, S. B. 2010. "The position-taking value of bill sponsorship in congress." *Political Research Quarterly*, 63, 2: 387-397.
- Straus, Jacob, Matthew Glassman, Coleen Shogan, and Susan Smelcer. 2013. "Communicating in 140 Characters or Less: Congressional Adoption of Twitter in the 111th Congress." *PS: Political Science & Politics*. 46, 1: 60-66.
- Uhlener, Carole Jean and Kay Lehman Schlozman. 1986. "Candidate Gender and Congressional Campaign Receipts." *The Journal of Politics*. 48, 1: 30-50.

Weissberg, Robert. 1978. "Collective vs. Dyadic Representation in Congress." *American Political Science Review*. 72, 2: 535-547.

Williams, Christine and Girish Gulati. 2010. "Communicating with Constituents in 140 Characters or Less: Twitter and the Diffusion of Technology Innovation in the United States Congress." Paper presented at the Midwest Political Science Association annual meeting. Chicago, IL: 22-25 April.

Article 3

IS THE VIRTUAL CONSTITUENCY PAYING ATTENTION? AN ANALYSIS OF IDEOLOGY

3.1 Introduction

The literature on campaign finance in Congress is both wide and deep due to the vast amount of data available from the Federal Elections Commission. However, most research focuses on Political Action Committees (PACs) (Ansolabehere et al, 2003; Bonica, 2013a; Milyo et al 2000), with little attention paid to the individual donors (Ensley, 2009). It is important to focus on the motivations of individual donors over PACs, because individual donors comprise the largest source of campaign donations for congressional candidates (2009).

This research investigates the link between candidates with Twitter accounts and constituents as it pertains to donations from out-of-district constituents. I argue that these out-of-district donors, otherwise referred to as virtual constituents, will be ideologically more similar than to those candidates without a virtual presence, such as Twitter. I claim that candidates with Twitter accounts will have an easier time accessing the virtual constituency, because virtual constituents will be ideologically more similar than are candidates without Twitter.

Building upon my previous research (Hagner, 2016), the virtual constituent is an individual who feels represented by a candidate residing outside the candidate's voting district. So instead of providing votes, the virtual constituent is able to provide the next best thing, money. This paper evaluates whether or not candidates with Twitter accounts

will receive campaign donations from ideologically similar constituents from outside their district compared to candidates without Twitter.

Since reelection is the primary goal of members of Congress (Fenno, 1978), candidates will do their best to align their policies with all of their election constituents, even their virtual constituents, in order to gain a financial advantage over their opponent. Therefore, it is important to study individual campaign donations from outside the candidates' geographic districts. The results could have implications for candidate advertising, position taking, and credit claiming that passes beyond Fenno's (1978) classic four constituencies. Additionally, these results could have implications regarding how candidates take strategic positions beyond their election and primary constituency and potentially align themselves with their virtual constituency in order to gain a financial advantage.

It is important to understand how ideology affects individual donors' decisions, because understanding these ideological motivations may help predict who will donate in given scenarios. For example, what tools are ideologically similar individuals using to better understand a candidate's ideology, and what affect will those interactions have on the likelihood of future donations? Similarly, which characteristics, such as holding a leadership position or having a social media account, increase the likelihood of an ideologically similar donor donating to a specific candidate? Understanding how ideology affects campaign donations will help researchers better understand the dynamics at work between ideology and candidate preference.

The goal of this paper is to investigate a *potential link* between donor ideology and candidates who use Twitter. This link is assessed by analyzing the ideology of donors

as it relates to their donation patterns; specifically, are ideologically similar donors giving to candidates with a Twitter presence? The next analysis will attempt to establish how those ideologically similar donors will donate based upon a candidate's Twitter presence. When combined, this research will be able to demonstrate that ideologically similar donors will donate to ideologically similar candidates with Twitter accounts, and I will be able to demonstrate those donations in real dollar amounts.

However, this research fails to establish my hypothesized link between donor ideology and candidate Twitter use. Additionally, ideologically similar donors donated more money, not less, to ideologically similar candidates with Twitter. Twitter is actually facilitating larger donations from ideologically similar candidates. Although this analysis rejects my hypotheses, circumstantial evidence exists to argue for the existence of the virtual constituency. The implications of these findings are that Twitter use by candidates is affecting donation patterns by donors. However, more research is needed to determine what extent Twitter is affecting these donations.

3.2 Literature Review

The literature regarding campaign finance in US Congressional elections is far-reaching; this includes an enormous amount of theoretical and empirical studies. One area of study in particular which has been overlooked is campaign contributions from individual citizens, even though campaign financing from individual citizens has increased (Barber, 2016). While the academic community has established that individual contributions comprise a majority of both House and Senate contributions (Jacobson and Carson, 2015), little attention is given to the individual level contribution (Francia et al,

2005). Based on the research that is available, there are four facets of individual campaign research that have emerged: the incentives of contributing, comparing donors to non-donors, comparing donor preferences to legislative voting, and comparing ideology of donors to candidates.

The incentives for contributing to a congressional campaign appear to reside in two categories: policy positions and ideological objectives with the overall goal of tipping competitive elections. Individual donors are more likely to donate to a campaign if their preferences fall in line with the candidate's positions (Barber et al, 2017). Individual donors are able to achieve the purposive goal of supporting the policy goals of the candidate (Gimpel et al, 2006). Additionally, donors are more ideologically polarized than the average voter (Francia et al, 2003). Taken together, individuals are donating to campaigns with the goal of influencing an election for the purposive benefit of achieving their own personal or policy goal.

The individual donor accounts for nearly half of all money raised by House and Senate candidates (Herrnson, 2015). Additionally, individual donors are more likely to be white, male, highly educated, and overwhelmingly wealthy compared to the average voter (Francia et al., 2003). Even though individual donors are elite, the issues that compel these individuals to donate to a campaign vary. Put a different way, "Donors may sing with an upper class accent, but they sing different songs" (Francia et al. 2003, 16). Conversely, Crespín and Deitz (2010) discovered that women who are supported by donor networks, like EMILY's List or WISH list, receive a jump in campaign fundraising not experienced by either their male counterparts and women not associated with donor networks. This research indicates that there should be an increase in female

representation in Congress beyond the 2008 election cycle and the results have borne that out since more women were elected to Congress than ever following the 2018 congressional election.

When comparing donor preferences to legislative voting, Barber et al. (2017) discovered that the policy agreements between the donor and the Senator's roll-call votes drastically increase the likelihood of a campaign donation. Fellowes and Wolf (2004) studied House members and found that non-expenditure business bills increased the likelihood of a donation by individuals employed by those businesses. However, campaign contributions have much less influence on government expenditures (2004). These findings indicate that businesses that donate to congressional campaigns are attempting to influence a congressional candidate, but in a much more subtle manner than blatantly seeking votes for contributions.

A final facet that has seen limited research is the impact of the individual donation as it relates to the partisan ideology of both the candidate and the donor. Denzau and North describe ideology as "the shared framework of mental models that groups of individuals possess that provide both an interpretation of the environment and a prescription as to how the environment should be structured" (1994, 4). An individual's ideology can often drive one to seek representation that falls outside their electoral boundaries in search of a candidate who better represents their values.

Gimpel et al. (2008) revealed that non-resident contributions are driven by partisan motivations. Specifically, individuals are driven to participate for expressive reasons. Brennan and Hamlin (1998) lay out an expressive model for voting. This is followed by Shieh and Han (2009), who create a theoretical model for expressive

donations from individuals. In this model individuals participate in order to achieve their policy goals through donations to candidates that most ideologically align with themselves.

Taken together, it can be theorized that members of Congress with a virtual presence will most closely align with out-of-district donors. My contribution to this research is analyzing what role Twitter plays in facilitating this relationship. This research will attempt to connect these facets together by analyzing the ideological alignments of individual's donations with the candidates they donate to in order to better understand the relationship that candidates have with out-of-district donors.

3.3 Theory

I posit that the creation of social media and its subsequent use by candidates has forged a new constituency that was previously unavailable to the candidates: the virtual constituency. A virtual constituent is an individual who considers herself to be a member of a Member of Congress' (MCs) constituency while maintaining a presence in a virtual world. A virtual constituent is unable to provide votes, but she is able to provide an MC with resources such as time and money spent promoting the favored MC. In providing these resources, virtual constituents align themselves with candidates that are ideological closer to themselves than geographic candidates.

The concept of a virtual constituent was first introduced by Beer when he made the claim that constituents are “virtually represented not in only the city, but also all other places that did not have actual representation” (1966, 18). Fenno (1978) expanded this argument by developing the various constituencies that candidates used to outline their

election tactics. From largest to smallest, these constituencies are the geographic, reelection, primary, and personal. The creation of the Internet has allowed candidates to reevaluate the roles of the constituencies and to embrace what I am calling the virtual consistency.

More than two-thirds of individual campaign donations originate outside the district (Gimpel et al, 2008). These donors are typically highly educated and live in wealthy congressional districts (Gimpel et al, 2008). Candidates will often connect to these donors through phone calls, dinners, speaking engagements, and more. Former Senator Al Franken stated that he would often spend between three and eight hours per day, depending on the time of year, in call centers seeking donations (Franken, 2017). These donors often give to parties in general along with targeting highly competitive districts, regardless of the geographic proximity to the individual (Francia et al., 2003; Gimpel et al., 2008).

The goal of Al Franken and others when targeting these specific donors is to maximize their interaction by acquiring the highest donation possible from each donor. The candidate is engaging in a strategic interaction with the donor, with the goal of creating a personal connection that can then be used for electoral purposes. This one-on-one interaction is utilized so that the candidate can maximize time with the donor with the expectation that the donor will donate the maximum amount to the candidate.

While these high dollar donors give money to highly competitive races (Francia et al., 2003; Gimpel et al., 2008), less affluent donors are much more selective about which candidate they contribute to. Their donations are much more expressive (Shieh and Pan, 2010), meaning that donors give to candidates whom they feel will best represent their

views in order to achieve goals (Gimpel et al., 2006). Therefore, the personal relationship that candidates develop with large money donors does not exist for small amount donors. This is especially the case for small money donors, since ideological agreement with a candidate is an important factor when donating to a candidate (Barber, 2016a). Due to the different interactions that candidates have between large and small amount donors, an easier interaction avenue for small amount donors to utilize is through online engagement. The social media platform Twitter is a low-cost tool for facilitating these interactions.

Twitter is a tool that makes impersonal political engagement easier for small amount donors, because individuals can get to know a candidate without having to personally interact with the candidate. Additionally, individual donors can view all candidates at once and compare those candidates across states and districts. Using Twitter, candidates are able to make campaign statements that appeal to a broader audience while making strategic appeals for support. If the individual donor feels that this candidate best represents their values, then the individual is just one click away from donating to the candidate. This means that small amount donors are able to utilize Twitter to find like-minded candidates who also have Twitter, because this is a low-cost way to find ideologically similar candidates. Schlozman et al. (2010) find the average offline donations is larger than the average online donation. Therefore, small amount donors expressively give more to ideologically similar candidates that have Twitter accounts than candidates who do not have Twitter accounts. Conversely, potential donors who are researching candidates without Twitter may not be able to find their preferred candidate without this low-cost tool. This means that candidates without Twitter accounts should

have an ideologically wider donor pool. Based on these findings, I expect congressional candidates who are Twitter subscribers to receive campaign donations from ideologically similar donors, while receiving smaller donations as well.

Hypothesis 1: Twitter-subscribing candidates' out of district donors are more ideologically similar to them than non-Twitter subscribing candidates.

Hypothesis 2: Out of district donors will donate smaller individual donations to ideologically similar Twitter subscribing candidates.

3.4 Research Design

Data

The dataset utilized for this research is The Database on Ideology, Money in Politics, and Elections (DIME) (Bonica, 2013). This dataset contains information about each individual campaign donation made to any candidate running for state or federal office in the specified years. This analysis includes all campaign donations to Democrats and Republicans in the 2008 and 2010 U.S. House of Representatives elections made by individual donors from outside the candidates' district.

Poole and Rosenthal (1985, 1991) developed a measurement for ideology for legislators using roll call votes called NOMINATE scores. This measurement led to the further development of dynamic estimation (McCarty et al. 1997) and the eventual development of PAC-NOMINATE scores (1998), which incorporated contribution data into an ideology score. Bonica (2013b 2014) further refined the PAC-NOMINATE score by treating contributor-candidate pairs as an individual unit of observation rather than a binary vote. This analysis uses Bonica's refinement of Poole and Rosenthal's PAC-NOMINATE data.

Hypotheses

Hypothesis 1: Ideologically Similar Donors

H1: Twitter-subscribing candidates' out of district donors are more ideologically similar to them than non-Twitter subscribing candidates.

A positive, significant, finding for this hypothesis will demonstrate that the average virtual constituent is more ideologically aligned with their preferred candidate if that candidate is a Twitter subscriber.

Dependent Variable for Hypothesis 1

The dependent variable is the ideological distance between the mean donor ideology and the candidate's ideology, or ideological distance. The dependent variables come from Bonica's ideology scale that ranges from -6 to 6 and integrates party identification and ideological intensity. To create this score, first I calculated the mean donor ideological score for all out of district contributors for each candidate. Next, this value is subtracted from the candidate's ideological score. Since the scores can be negative or positive, I took the absolute values, 0 through 12, of the calculated scores². A score of 0 indicates complete ideological congruency between the candidate and the average out of district donor. A score of 12 indicates that the candidate and the average ideological donor are the maximum ideological distance apart. This score, the ideological distance score, is the dependent variable. In practical terms, if the candidate and the out

² The formula for the dependent variable is: Ideological Distance= |Mean Donor Ideology – Candidate's Ideology|

of district donor (ODD) are ideologically the same, the score will be a 0 and if they are the most different possible ideologically the score will be 12. Therefore, using standard OLS regression, a negative coefficient indicates the candidate and ODD are ideologically more similar than the average outside district donor and a positive coefficient reflects that the candidate and the ODD are ideologically farther apart than the candidate's average donor.

Independent Variable for Hypothesis 1

The key independent variable for Hypothesis 1 is whether or not the candidate had a Twitter account prior to that year's election. In order to create this variable, I first created a continuous variable based on the month that the individual created their Twitter account. For example, if the individual created their Twitter account in January of 2008, I coded that variable as 2008.08. Then, if the candidate owned a Twitter account prior to Election Day the variable is coded as a 1, and if the candidate did not the variable is coded as 0. A positive result for the variable Twitter will have a negative coefficient and be statistically significant. Practically, a positive result will indicate that Twitter using candidates are receiving donations from virtual constituents that are ideologically similar than the average ideological donor.

Control Variables for Hypothesis 1

MCs in leadership positions receive more donations than those MCs who are not in leadership positions from outside their districts (Gimpel et al., 2008). Leadership positions include party House leaders, both majority and minority, and whips along with

speaker, floor leaders, and committee chairs and ranking members. Leaders are scored as 1 and non-leaders as 0. I expect to find that members of the leadership will receive larger donations from ideologically similar individuals, as well.

Party is included as an independent variable, based on the research conducted by Williams and Gulati (2010), who demonstrated that Republicans were more likely than Democrats to utilize Twitter as a mode of constituency communications. Republicans were earlier adopters of Twitter than Democrats (2010), hence as Republicans tend to be more conservative than Democrats, party could affect the donors' ideological distance and consequently the size of the individual donation. However, since majority control of the House of Representatives changed from Democrats to Republicans in 2010, this result may be nullified due to the mid-term election effect in which the majority party historically loses House seats.

Next, several studies have found that women receive less campaign money than men (Baxter and Lansing, 1980; Buchanan, 1978; Burrell, 1995; Carroll, 1994; Roberts, 1983). Uhlaner and Schlozman show that for every \$5 a woman raises, a man will raise \$6 (1986). Based on this previous research, this analysis controls for gender in order to determine gender's effect on campaign donations. Men are scored as 1 and women as 0.

Seniority, specifically length of tenure, has been found to have significant effects on campaign donations (Rocca and Gordon, 2010; Snyder 1992). Length of Tenure is a continuous variable indicating the MCs length of service in years. I expect to find that newer MCs will receive donations from more ideologically farther away donors than MCs with a longer tenure in office.

Next, competitiveness of the election has significant effects on campaign donations (Gimpel et. al, 2008). The election is considered competitive if the previous election results were within ten percentage points. If the results were competitive, then the variable is coded as a 1. If the election was not competitive, the margin of victory is greater than 10 percentage points, the score is 0. Finally, to avoid endogeneity issues, the variable is lagged by one election cycle to account for autocorrelation with the dependent variable. Finally, the variable year is included to differentiate between each of the Congressional elections. Year is coded as 0 for the 2008 election and 1 for the 2010 election.

Hypothesis 2: Ideologically Similar Donors will Donate Smaller Amounts of Money

H2: Out of district donors will donate smaller individual donations to ideologically similar Twitter subscribing candidates.

A positive, significant, finding for the hypothesis will demonstrate that ideologically similar donors give smaller amounts per donation, because these donors are expressively donating. Expressive donors give smaller donations to candidates whom they feel best represent their goals. Therefore, Twitter is being used to reach virtual constituents who donate in an expressive fashion.

Dependent Variable for Hypothesis 2

Hypothesis 2's dependent variable is the size, in dollars, of the individual donation. This is not the average donor, which was used for Hypothesis 1. Multiple donations from the same individual are treated as separate donations, because the unit of

analysis is the candidate. The dependent variable is similar to the work of Ensley (2009), who used the log of total amount of money donated to congressional campaigns from individual donors. The dependent variable is measured in real dollar amounts, meaning that the coefficients can be discussed in a practical financial sense. For example, a positive coefficient of 79 for the gender variable demonstrates that men received \$79 more per donation than women. Conversely, a negative coefficient indicates less money per donation.

Independent Variable for Hypothesis 2

The key independent variable for Hypothesis 2 measures the interaction between Twitter and the ideology difference score jointly on the donation. Twitter is a binary variable and is coded as a 1 if the candidate had Twitter prior to the election and a 0 if the candidate did not have Twitter. The ideology distance score is created by subtracting the candidate's ideology score from the individual donor's ideology score and converting the absolute value of the result. The absolute value is taken to indicate ideological similarity. This is measured on a 0-12 scale with 0 being ideologically the same and 12 is ideologically farthest apart. The ideology distance score is different than the mean donor ideology distance score created for Hypothesis 1. The ideology distance score has an individual value for each donation and does not integrate a mean donor ideology, like Model 1. The control variables Democrat, Gender, Leadership, Competitive District, Length of Tenure, Incumbent, and Year used for Model 1 are also controlled for in Model 2.

I expect expressive donations from out of district donors to be positively related to the candidates' use of Twitter and ideological distance between the candidate and the donor. A positive result illustrates a Twitter subscribing candidate ideologically similar to the ODD will receive smaller individual donations from expressive donors. Conversely, non-Twitter subscribing candidates who are ideologically distant from the ODD will receive larger donations. The sign of the interaction coefficient indicates the direction of the interaction; the significance of the interaction is determined in the standard fashion. A positive finding, one in the predicted direction and statistically significant, will provide evidence that expressive giving is associated with the adoption of Twitter.

3.5 Analysis

Table 3-1 shows the OLS regression results for the relationship of the ideological difference score between the average donor and the candidate during the 2008 and 2010 congressional campaigns. The results fail to confirm Hypothesis 1, that Twitter-using candidates are more likely to receive donations from out of district, ideologically similar donors than are non-Twitter using candidates. However, some of the control variables are both in the predicted direction and statistically significant.

Table 3-1

	Ideological Distance
Twitter User	-0.005
Democrat	0.034***
Male	-0.012
Leadership	-0.014
Competitive District	-0.005
Length of Tenure	-0.001**
Incumbent	-0.026***
Year	-0.009
Constant	0.162***
Observations	1501
R-Squared	0.071
*p<.05, **p<.01, ***p<.001	

Twitter usage by the candidate does not predict ideological similarity between the candidate and the average out of district donor, or the receipt of donations during the 2008 and 2010 congressional elections. Twitter usage did not capture how constituents are finding and donating to ideologically similar candidates. This null finding will be discussed in the conclusion.

The direction of the coefficient indicates an ideological closeness between the candidate and the donor. A negative coefficient indicates that donors and candidates are ideologically more similar than the ideological distance between the average donor and the candidate. A positive coefficient demonstrates that candidates and donors are ideologically farther apart than the mean candidate/donor ideological distance. Republicans are also more likely to receive contributions from ideologically similar constituents than Democrats. The longer a candidate was an MC the more likely that

individual would receive a campaign donation from ideologically similar donors.

Incumbent candidates also received donations from ideologically similar donors.

Although each of these variables has a very small coefficient, the variables do not appear to have substitutive effects. For example, being a Republican increased the likelihood of receiving a donation from an ideologically similar donor by 0.03% over Democrats. Incumbents are 0.02% more likely to receive a donation from an ideologically similar candidate than non-incumbents. Length of tenure by an MC only increased the chances of a donation from an ideologically similar donor by 0.001%. None of the percentages for these statistically significant variables are large enough to make a substitutive difference for increasing the likelihood of a donation.

Table 3-2 shows the OLS regression results for the amount of money each candidate received from outside their district during the 2008 and 2010 congressional campaigns. This result fails to confirm hypothesis 2, that out of district donors will donate smaller individual donations to ideologically similar Twitter subscribing candidates. However, due to the large number of observations, 1,174,697, all of the control variables were found to be statistically significant, but some are not in the expected direction.

Table 3-2

	Amount Donated per Donor
Democrat	-108.37***
Male	79.65***
Leadership	184.75***
Competitive District	-66.09***
Length of Tenure	5.64***
Incumbent	-21.28***
Year	-139.25***
Twitter User	-44.88***
Donor Ideology Difference	124.61***
Twitter*Donor Ideology Difference	-93.86***
Constant	563.43***
Observations	1174697
R-Squared	0.055
*p<.05, **p<.01, ***p<.001	

Although significant, donor ideology interacted with Twitter negatively. This indicates that candidates with Twitter who are ideologically farther away from their average donor receive \$93 less per donation. This is in the opposite direction of the expected result. Therefore, donors from outside the candidate's district with similar ideologies to candidates with Twitter actually gave \$93 more money per donation when controlling for all other variables. Virtual constituents are acting like typical donors and giving to candidates most like themselves and Twitter subscribing candidates are reaping the rewards of these targeted donations.

The variable Twitter User identifies a unique situation that does not exist in my data. The findings state that when a candidate has Twitter and the ideology between to candidate and the donor is an exact match, then the candidate will receive \$44 less per

donation. Since ideological exactness does not exist in this dataset, this result cannot be taken at face value. The Donor Ideology Difference variable, meaning the ideological distance between the donor and the candidate, is expressed as the maximum ideological difference between the donor and the candidate when the candidate does not have a Twitter account. Candidates in this uncommon situation received \$124 more per donation than candidates without Twitter and donors with an exact ideological match to the candidate.

To determine the amount of money candidates received per donation, I calculated the starting dollar amount of \$563, the constant, which each candidate received. Then I added or subtracted the dollar amounts as necessary to determine the amount of money each candidate would receive while controlling for the other variables in the model.

Democrats received \$108 fewer dollars per donation than Republicans from outside their district, decreasing their average donation from \$563 to \$455 while controlling for all other variables. Individual Republican voters tend to be more affluent than typical Democrat voters, so Republicans receiving larger individual donations than Democrats falls in line with previously established research.

Men received \$79 more than women from outside their district as well, an increase from \$563 per individual donation to \$642 when holding all else constant. Additionally, as expected, MCs in leadership positions received \$184 more per individual donation than candidates not in leadership positions. Holding all other variables constant, members of the leadership received \$747 per donation. MCs in leadership positions carry more name recognition and are typically better known to the public, so receiving larger

donations than non-leaders fits with previous research. Men have historically received larger amounts of campaign donations than women, so this too makes intuitive sense.

However, candidates, with or without Twitter, running in competitive districts received \$66 less than candidates running in non-competitive districts. Also, for each year of Congress a member has served, that candidate receives an additional \$5 for every year the MC is in office. This amount only increases the average donation, for this model, from \$563 to \$573 for a one term MC. Incumbents also received \$21 less from individual donors. All else being equal, incumbents received \$541 per donation, compared to non-incumbents, who received \$563 per donation. Although these variables are statistically significant, this small amount change per donation is not a substantively significant amount of money.

3.6 Conclusion

This research analyzed the relationship between United States House candidates' ideology and the individual ideology of campaign donors from an out-of-district contribution lens during the 2008 and 2010 congressional elections. The first model analyzed the ideological distance between campaign donors and congressional candidates, specifically those candidates with Twitter accounts. The second model went deeper by looking for a relationship between candidate and donor ideological differences and how that manifests itself in size of campaign donations.

Model 1 focuses on the relationship between individual campaign donors and whom they donated to during the congressional campaigns. Specifically, it looks for a relationship between their ideology and the likelihood of donating to Twitter subscribing

candidates who are ideologically similar to themselves. This model fails to confirm Hypothesis 1 that Twitter subscribing candidates' out-of-district donors are more ideologically similar to them than non-Twitter subscribing candidates. Twitter had no effect on the likelihood of candidates receiving campaign donations from ideologically similar donors from outside their district during this period of time. This implies that candidates with Twitter were not being embraced by the virtual constituency when individual donors were evaluating candidate preference during the 2008 and 2010 congressional election cycles. Additionally, the model failed to capture any substantive differences between donor and candidate ideology as it related to the likelihood of donating to a candidate's campaign.

Model 2 analyzes what factors drive individual donations. Candidates with Twitter actually received more money per donation from ideologically closer donors, not less. This failed to confirm Hypothesis 2 that out-of-district donors will donate smaller individual donations to ideologically similar Twitter subscribing candidates. My findings indicate Twitter is facilitating larger donations to ideologically similar candidates. The virtual constituency does not appear to be as expressively driven as first thought. Instead, virtual constituents are acting like any other group of donors by donating larger amounts per donations to candidates that are most ideologically similar. These findings show that traditional identifiers of campaign donations, like incumbency and length of tenure, continue to predict the likelihood of who will donate to a campaign. However, independent of these traditional factors, Twitter is positively affecting campaign donations. The virtual constituency is utilizing tools that were not previously available to

past generations, like Twitter, in order to reach out and donate to their preferred candidate.

Further research focusing on establishing a link between the virtual constituency and the role of ideology is needed. The presence of a Twitter account does denote a social media platform; this research does not analyze how often the candidate sent a Tweet, nor the content of that Tweet. Additionally, it is unknown how many Twitter Followers candidates had during the election cycle. Along this same vein, Twitter was relatively new to the social media realm and had yet to develop into the social media giant it is today.

Previous research (Hagner) demonstrated that non-incumbent Twitter candidates benefitted financially from outside district donors by receiving fewer dollars per donations, more overall donations, and more overall money than their non-Twitter using counterparts. The research demonstrates how non-incumbent Twitter candidates were receiving expressive donations, because the non-incumbent Twitter subscribing candidates received smaller donations per donation. However, the research attempting to find a link between ideology and Twitter usage relating to campaign donations failed to establish an ideological link between candidates on Twitter and the likelihood of receiving donations from ideologically similar donors. Future research should move beyond a candidate's Twitter presence and analyze the content of the candidates Tweets. This can be accomplished, because nearly every candidate for Congress has a Twitter account at this point in time, so the existence of a Twitter account has become moot.

While analyzing the content of those Tweets across a timeline, I would collect month by month campaign donation data. Then a content analysis of the types of Tweets

being generated would be overlaid with outside district campaign donations to determine how effectively campaigns are reaching the virtual constituency. This will allow researchers to further understand how virtual constituents interact with their desired MCs and what affect that has on the way in which candidates use social media to campaign.

Article 3 Works Cited

- Ansolabehere, Stephen, John M. De Figueiredo, and James M. Snyder Jr. 2003. "Why is there so little money in US politics?" *Journal of Economic perspectives* 17, 1:105-130.
- Barber, Michael. 2016a. "Donation motivations: Testing theories of access and ideology." *Political Research Quarterly* 69, 1: 148-159.
- Barber, Michael J. 2016b. "Representing the Preferences of Donors, Partisans, and Voters in the US Senate." *Public Opinion Quarterly* 80, 1: 225-249.
- Barber, Michael J., Brandice Canes-Wrone, and Sharece Thrower. 2017. "Ideologically sophisticated donors: Which candidates do individual contributors finance?" *American Journal of Political Science* 61, 2: 271-288.
- Barberá, Pablo. "Birds of the same feather tweet together: Bayesian ideal point estimation using Twitter data." *Political Analysis* 23, no. 1 (2015): 76-91.
- Barberá, Pablo, John T. Jost, Jonathan Nagler, Joshua A. Tucker, and Richard Bonneau. 2015. "Tweeting from left to right: Is online political communication more than an echo chamber?" *Psychological science* 26,10: 1531-1542.
- Baxter, Sandra, and Marjorie Lansing. 1980. *Women and Politics: The Invisible Majority*. Ann Arbor, MI: University of Michigan Press.
- Beer, Samuel. 1966. *British Politics in the Collectivists Age*. New York: Alfred Knopf.
- Bonica, Adam. 2013a. "Ideology and Interests in the Political Marketplace." *American Journal of Political Science*, 57, 2:294-311.
- Bonica, Adam. 2013b. *Database on Ideology, Money in Politics, and Elections: Public version1.0* [Computer file]. Stanford, CA: Stanford University Libraries.
- Bonica, Adam. 2014. "Mapping the ideological marketplace." *American Journal of Political Science* 58, 2:367-386.
- Brennan, Geoffrey, and Alan Hamlin. 1998. "Expressive voting and electoral equilibrium." *Public choice* 95,1-2: 149-175.
- Buchanan, Christopher. 1978. "Why Aren't There More Women in Congress?" *C. Q. Weekly Weekly Reports*. August 12, pp. 2108-2110
- Burrell, Barbara C. 1995. *A Woman's Place is in the House: Campaigning for Congress in the Feminist Era*. University of Michigan Press.

- Carroll, Susan J. 1994. *Women as Candidates in American Politics*. Indiana University Press.
- Claassen, Ryan L. 2007. "Campaign activism and the spatial model: Getting beyond extremism to explain policy motivated participation." *Political Behavior* 29, 3: 369.
- Conover, M. D., Gonçalves, B., Flammini, A., & Menczer, F. 2012. Partisan asymmetries in online political activity. *EPJ Data Science*, 1, 1–19.
- Crespin, Michael H., and Janna L. Deitz. 2010. "If you can't join'em, beat'em: the gender gap in individual donations to congressional candidates." *Political Research Quarterly* 63, 3: 581-593.
- Denzau, Arthur T., and Douglass C. North. 1994. "Shared mental models: ideologies and institutions." *Kyklos* 47, 1: 3-31.
- Ensley, Michael J. 2009. "Individual campaign contributions and candidate ideology." *Public Choice* 138, 1-2: 221-238.
- Fellowes, Matthew C. and Patrick J. Wolf. 2009. "Funding Mechanisms and Policy Instruments: How Business Campaign Contributions Influence Congressional Votes." *Political Research Quarterly* 57, 2:315-324.
- Fenno, Richard. 1978. *Home Style: House Members in Their Districts*. Longman.
- Francia, Peter L., John C. Green, Clyde Wilcox, Paul S. Herrnson, and Lynda W. Powell. 2003. *The financiers of congressional elections: Investors, ideologues, and intimates*. Columbia University Press.
- Francia, Peter L., John C. Green, Paul S. Herrnson, Lynda W. Powell, and Clyde Wilcox. 2005. "Limousine liberals and corporate conservatives: The financial constituencies of the democratic and republican parties." *Social Science Quarterly* 86, 4: 761-778.
- Franken, Al. 2017. *Giant of the Senate*. Hachette Book Group, Inc.
- Gimpel, James G., Frances E. Lee, and Joshua Kaminski. 2006. "The political geography of campaign contributions in American politics." *The Journal of Politics* 68, 3: 626-639.
- Gimpel, James G., Frances E. Lee, and Shanna Pearson-Merkowitz. 2008. "The check is in the mail: Interdistrict funding flows in congressional elections." *American Journal of Political Science* 52, 2: 373-394.

- Glassman, Matthew, Jacob Straus, and Colleen Shogan. 2011. "Social Networking and Constituent Communications: Member Use of Twitter During a Two-Month Period in the 111th Congress." *Journal of Communications Research*. 2, 1-2: 219-33.
- Hagner, Travis. 2016. "Congressional Tweets: Why Bother? A Theoretical Analysis." Presented at the Pacific Northwest Political Science Association annual meeting. Bend, OR: 9-11 Oct. Unpublished.
- Hagner, Travis. Congressional Tweets: Discovering a New Constituency. Unpublished.
- Hall, Richard L., and Frank W. Wayman. 1990. "Buying time: Moneyed interests and the mobilization of bias in congressional committees." *American Political Science Review*. 84, 3: 797-820.
- Herrnson, Paul S. 2015. *Congressional elections: Campaigning at home and in Washington*. CQ Press.
- Jacobson, Gary. 2012. *The Politics of Congressional Elections*, 8th ed. Boston, MA: Pearson
- Jacobson, Gary C., and Jamie L. Carson. 2015. *The politics of congressional elections*. Rowman & Littlefield.
- McCarty, N., & Poole, K. 1998. An empirical spatial model of congressional campaigns. *Political Analysis*, 7: 1–30.
- McCarty, Nolan M., Keith T. Poole, and Howard Rosenthal. 1997. "Income redistribution and the realignment of American politics." Washington, DC: AEI Press.
- McCarty, Nolan M., and Keith T. Poole. 1998. "An empirical spatial model of congressional campaigns." *Political Analysis* 7: 1-30.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. 2001. Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 28, 415–444.
- Mellon, Jonathan, and Christopher Prosser. 2017. "Twitter and Facebook are not representative of the general population: Political attitudes and demographics of British social media users." *Research & Politics* 4, 3.
- Milyo, Jeffrey, David Primo, and Timothy Groseclose. 2000. "Corporate PAC Campaign contributions in perspective." *Business and Politics* 2, 1: 75-88.

- Poole, K. T., & Romer, T. 1985. Patterns of political action committees' contributions to the 1980 campaigns for the United States House of Representatives. *Public Choice*, 47: 63-111.
- Poole, K. T., Romer, T., & Rosenthal, H. R. 1987. The revealed preferences of political action committees. *The American Economic Review*, 77: 298-302.
- Poole, Keith T., and Howard Rosenthal. 1985. "A spatial model for legislative roll call analysis." *American Journal of Political Science*. 29, 2: 357-384.
- Poole, Keith T., and Howard Rosenthal. 1991. "Patterns of congressional voting." *American Journal of Political Science*. 35, 1: 357-384.
- Roberts, Steven V. 1983. *Women are Shunning Senate Races*. New York Times, Dec. 19
- Rocca, M. S., & Gordon, S. B. 2010. "The position-taking value of bill sponsorship in congress." *Political Research Quarterly*, 63, 2: 387-397.
- Schlozman, Kay Lehman, Sidney Verba, and Henry E. Brady. 2010. "Weapon of the strong? Participatory inequality and the Internet." *Perspectives on Politics* 8, 2: 487-509.
- Shieh, Shiou, and Wan-Hsiang Pan. 2010. "Individual campaign contributions in a Downsian model: expressive and instrumental motives." *Public Choice* 145, 3-4: 405-416.
- Snyder Jr, James M. 1992. "Long-term investing in politicians; or, give early, give often." *The Journal of Law and Economics* 35, 1: 15-43.
- Uhlener, Carole Jean and Kay Lehman Schlozman. 1986. "Candidate Gender and Congressional Campaign Receipts." *The Journal of Politics*. 48, 1: 30-50.
- Williams, Christine and Girish Gulati. 2010. "Communicating with Constituents in 140 Characters or Less: Twitter and the Diffusion of Technology Innovation in the United States Congress." Paper presented at the Midwest Political Science Association annual meeting. Chicago, IL: 22-25 April.