Bridging the Communication Gap: How technology changes the way politicians and constituents communicate.

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction:

Communication between politicians and their constituents is one of the core and oft underlooked pillars of democracy. This paper will look into the ways that we use technology to facilitate this communication through the lens of the STS framework Social construction of technology. Social construction of technology (SCOT) is a theory which argues that technology is shaped by human actions and is a response to societal forces. SCOT is in direct contrast to technological determinism, which states that technology is the driving force in the way society is structured. The idea that technology shapes society makes sense on a shallow level, but SCOT argues that the topic is more nuanced, and that the technological determinism model is too simplistic. This paper will look into how citizens and their representatives communicate currently, determining the effectiveness of the method used presently. The issue is attempting to capture the conflicting desires, goals, and visions of thousands if not millions of constituents. One representative must then attempt to process all of this information, analyze it and form an opinion that is supposed to represent all of this divergent information. This topic has been increasingly relevant as of late, however, the problem of communication has always existed manifesting itself in a variety of ways. In the past, the speed of communication was a limiting factor. For example, if you were a United States senator working in Washington D.C in the early 1800s, you were essentially disconnected from the community you supposedly represented. Travel would take days if not weeks, and you could only communicate through letters, and newspapers. This limited how informed the public and their representatives were on each others' opinions and views, especially as the voices of the poor and illiterate were essentially lost. Events like town halls were limited to those who had the interest, time, and availability to spend hours discussing issues in their

community. Furthermore, there were people who simply did not know how to get in touch with their representative. Today the problem is reversed, where the amount of information we get has become completely over-saturated. We possess the ability to reach out through social media networks including Facebook and Twitter at any time of day. With this resource comes additional problems including who to listen to, whether the message is genuine, and why has this specific voice reached me? Are the algorithms that spread messages through platforms like Twitter and Facebook getting the right people the right message or is there a bias in whose voice gets heard. Does the message that one sends even reach its intended recipient? There are many debates going on about how this issue should be handled. Twitter has recently announced that they will no longer allow political ads on their platform (Dorsey, 2019). Facebook continues to allow all political ads on its platform regardless of if that ad is true or not (Vaidhyanathan, 2019). There is little transparency in these systems, and many social and political factors are at play that make it difficult to trust some of the information that is being conveyed. In considering this problem, analysis will be done through the key components of SCOT: relevant social groups, interpretative flexibility, closure & stabilization, and wider context. (Klein & Kleinman, 2002).

Background:

As social media has become an essential part of the modern world, there has been increasing attention paid to how it allows people to interact with and reach people in ways they have not before. Now anyone can get the attention of one of the most powerful people in the world as we see prominent figures including Presidents of the United States, Barack Obama and Donald Trump, active on social media sites such as Twitter. In fact nearly all members of the US

Congress are active Twitter users, posting at least once per day. (Barberá et Al, 2019) This allows unparalleled access to politicians. We can see in real time how politicians interact with and communicate to their base in examples such as former presidential candidate Andrew Yang, who regularly retweets and replies to his followers on Twitter. For the purpose of this paper I reached out to several politicians on twitter, but have received no comment as of this time. Perhaps this demonstrates a false sense of connection that is created between politicians and their followers as they only have so much time to read and reply to the people who tweet at them. Or perhaps some tweets are simply not reaching them due to Twitter's Algorithm.

With these new avenues for communication comes some serious questions to consider. One such question is whose voices are actually being represented on social media. According to a study done by Pew Research 80% of tweets are made by just 10% of Twitter's users. Furthermore the average twitter user is younger, more educated, and more likely to support the Democratic Party than the average US adult. (Hughes, 2019). If someone were reaching out online to gauge the consensus on certain issues their results would not necessarily be representative of what the average American thinks. An additional problem with relying on social media sites to talk about politics is that a large portion of the users are actually bots, or fake accounts designed to spread a particular agenda. In another study done by Pew Research they found that roughly two-thirds of links tweeted out are done by automated accounts (Messing et Al, 2019). As technology improves users may find themselves in arguments with what they think are humans but are really automated accounts designed to support a particular point of view.

Another important aspect to consider when looking at social media is why certain posts are being displayed to you. In social media's infancy posts were displayed in reverse chronological order with the most recent tweets appearing first. However, as these sites became larger and more sophisticated they began to design new algorithms that display the content that they think you want to see. Sites such as Facebook and Twitter want to keep secret how their respective algorithms work, but that doesn't stop various people from trying to find ways to game the system (Nemeth, 2020). The argument for keeping how posts are displayed comes down to stopping people like in the above example from trying to game the system, where users artificially increase their reach by trying to meet the criteria for a popular post based on that algorithm. However an opaque system leaves little accountability or ability to demonstrate that you are actually operating in a fair or equitable way.

Analysis

Social Construction of Technology originates from an article titled "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other." by Trevor Pinch and Wiebe Bijker (Klein & Kleinman, 2002) . The essence of the theory is that technology is shaped by society. Thus, watching as our current society and government attempt to create a platform for political discourse provides an excellent case study to analyze the ideas of Social construction of technology. There are four key tenets of SCOT as outlined in the introduction: relevant social groups, interpretative flexibility, closure & stabilization, and wider Context.

Interpretive flexibility is the idea "that technology design is an open process that can produce different outcomes depending on the social circumstances of development." (Klein & Kleinman, 2002) In the context of this analysis we see these different outcomes through the difference in policy between Facebook and Twitter on the subject of political ads. Misinformation is a factor that is damaging the connection between politicians and their representatives. Facebook and Twitter each have their own interpretation of the correct response to misinformation campaigns on their platform which has been informed by a variety of social factors. This includes how each company interprets the idea of free speech, how much value they place on this idea, and also how much money they make off of political advertising. Economic analysis shows that Facebook receives much more money from political ads than Twitter (Ivanova 2019) . However Twitter is still walking away from millions of dollars. Perhaps these decisions were made by Twitter in an attempt to gain positive PR at the expense of Facebook. However these completely different approaches lead to widely different outcomes.

We also see differences in the way people can communicate with each other on various social media platforms. Each social media site has their own way of grouping people together ranging from friends to followers. However we can see how people use different social media sites for different purposes. Sites like Facebook attempt to group people together with their friends and families creating more personal space to share information. However on Instagram and Twitter, there is a great emphasis on the amount of followers you have and reaching as wide an audience as possible. This is not to say that any of these sites can not be used however the user wishes, but there is a trend that differentiates how the average person uses these varying platforms.

The second component of SCOT, the relevant social group, states that "all members of a certain social group share the same set of meanings, attached to a specific artifact" (Pinch & Bijker, 1984) . There are a variety of relevant groups in this case: the user, the developers of the product, the advertisers, the government. Each group is attempting to get something different out of the product. The user wants a place to communicate their ideas. The developer wants to make money off their product as they are forced to weigh the value of ad money over the damage to their brands. The advertisers want to limit the rules as much as possible so that they have as much freedom as possible. The government is supposedly attempting to find a balance of regulation that keeps the freedoms of democracy in check. We are currently witnessing the various social groups argue and debate about the social networks that facilitate political discourse until a consensus is reached on the common artifact. The issue is that some of the stakeholders are looking for vastly different things, and for other stakeholders the correct option going forward is unclear. For example, there is a great deal of difficulty for the developers to decide whether banning certain types of posts are against the spirit of free speech if, not the letter of the law. Furthermore, these publicly traded companies have a degree of accountability to the shareholders, such that if a company like Facebook was to give up a line of revenue, like political ads, there would face some backlack. In response to criticism directed towards Facebook about its policy on allowing misleading or false political ads its founder and CEO, Mark Zuckerburg, asserts that "ads from politicians will be less than 0.5% of our revenue next year." (Zuckerberg, 2019). In his statement Zuckerburg remarks that because political ads constitute such a small portion of their revenue, they are clearly not motivated by profit. This value of 0.5 % is worth about 350-400 million dollars based on their Q3 numbers from 2019,

which is no insignificant sum even if merely a small percentage of their revenue. (Constine,

2019). He then further argues that in a democracy it would be irresponsible for a private

company to censor politicians, giving them a large influence over political discourse. The

problem to consider here is whether allowing political ads is helping politicians reach their

constituents as argued by Zuckerburg, or whether it merely adds to the sea of misinformation that

makes true connection on social media difficult. Perhaps through Facebook's inaction in response

to misleading or outright fabricated ads they are creating an environment that is the antithesis of

their stated goal. One must consider how valuable having a platform filled with bots, trolls, and

misinformation actually is. To the users, this sort of platform does not seem particularly useful or

beneficial. Politicians are not able to reliably get their message across because there is an

inherent distrust built into the system, and their constituents have no idea whether the

information they are receiving is actually factual or even represents the opinion of their

representative at all.

Closure and Stabilization is the process in which "a multigroup design process can

experience controversies when different interpretations lead to conflicting images of an artifact."

(Klein & Kleinman, 2002) Using the Facebook and Twitter example, we see how two

companies have conflicting policies. The two companies have different policies regarding how to

handle political ads but also seem to operate differently in their demographic and how they are

used. Less people use a site like Twitter in general, but substantially less old people especially.

Use of different online platforms by demographic groups
% of U.S. adults who say they ever use the following online platforms or messaging apps

	YouTube	Facebook	Instagram	Pinterest	LinkedIn	Snapchat	Twitter	WhatsApp	Reddit
U.S. adults	73%	69%	37%	28%	27%	24%	22%	20%	11%
Men	78	63	31	15	29	24	24	21	15
Women	68	75	43	42	24	24	21	19	8
White	71	70	33	33	28	22	21	13	12
Black	77	70	40	27	24	28	24	24	4
Hispanic	78	69	51	22	16	29	25	42	14
Ages 18-29	91	79	67	34	28	62	38	23	22
18-24	90	76	75	38	17	73	44	20	21
25-29	93	84	57	28	44	47	31	28	23
30-49	87	79	47	35	37	25	26	31	14
50-64	70	68	23	27	24	9	17	16	6
65+	38	46	8	15	11	3	7	3	1
<$30,000	68	69	35	18	10	27	20	19	9
$30,000-$74,999	75	72	39	27	26	26	20	16	10
$75,000+	83	74	42	41	49	22	31	25	15
High school or less	64	61	33	19	9	22	13	18	6
Some college	79	75	37	32	26	29	24	14	14
College+	80	74	43	38	51	20	32	28	15
Urban	77	73	46	30	33	29	26	24	11
Suburban	74	69	35	30	30	20	22	19	13
Rural	64	66	21	26	10	20	13	10	8

Note: Respondents who did not give an answer are not shown. Whites and blacks include only non-Hispanics. Hispanics are of any race.
Source: Survey conducted Jan. 8-Feb. 7, 2019.

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(Perrin, & Anderson, 2019). This is important to consider, because of how the sites are used.

Twitter,as demonstrated earlier, is dominated by a minority of users. This isn't a problem in it of

itself except that the site is also particularly loved by journalists and politicians who in turn will

get a perspective that is unrepresentative of the average population. Basing your opinion on such

a narrow perspective leaves those in positions of power with a distorted perspective on both the things that matter to their constituents and how divisive things are. (Reilly, 2020.). In a study on a Canadian election in 2011 the findings demonstrated that people did tend to cluster with those who shared their opinions, and suggested that debates online only furthered partisan loyalties. (Gruzd & Roy, 2014) This is not particularly helpful for politics and their constituents as they each engage in a feedback loop where politicians only listen to the people that support them, and people only trust the representatives that share their views. A study on poltics on Twitter found that only 20% of the political tweets made by hardcore Republicans are on the topics that matter to Democratic Congressman, whereas around 40% for Republican congressman. (Barberá et Al, 2019) Compared to Twitter, Facebook has different users and policies, with an older demographic and a different policy for misleading ads. In a study on Facebook users, researchers found that " On average, users over 65 shared nearly seven times as many articles from fake news domains as the youngest age group." (Guess, Nagler, J, & Tucker, 2019) We can see that with an older demographic Facebook's differing policy can prove even more influential. The difference in how social media sites are used demonstrates the wide and divergent issues that exist as different images attempt to solve the same problem.

Finally the fourth tenant of SCOT is wider context. Through this we can examine the various factors that are driving this debate. In recent times there has been increasing attention paid to how social media is used to influence politics and the general opinion of the public. There has been numerous studies and attention paid to the attempts of foreign agents to manipulate the 2016 presidential election through social media. (Allcott & Gentzkow, 2017) However, there are so many factors and variables to account to ensure that finding a definitive conclusion seems

unlikely. We even see founder and CEO of Facebook, Mark Zuckerburg, forced to appear before Congress to in part answer questions about said election. (Wichter, 2018) We can see that there is a great deal of focus on how politics and politicians can use social media, but little consensus on its impact. We do know that further analysis will be made, and more stakeholders will try to gain and wield as much influence as possible.

Conclusion

We are currently in a time of flux, with a great deal of unknown before us. There is little precedence for how social media will affect political discourse between politicians and their constituents, and in a way we will simply have to watch it unfold. As technology adapts to the needs of society we may begin to understand the benefits and costs of this form of communication. Perhaps we can even refine it to an optimal state. Or we could see even further disruption as social media becomes corrupted and more partisan. Continuing research will be vital in the coming years. A changing population that grows more tech savvy, and diverse may also influence the general discourse, as politicians and constituents learn to navigate the pitfalls of this new communication channel. What we can see in this period of transition is the attempt of politicians and their constituents to use the new avenues of communication available to them. While it is not perfect we do see unparalleled access to politicians at every level. We as a society are aware of the shortcomings and flaws present on these platforms and are working towards a solution. This is important as it demonstrates that the public is aware there are problems with these platforms and don't place blind faith in a system that has not earned it.

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