

**Affording Deliberation:
Examining Political Discourse in an Online Setting**

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Abstract

This Major Research Paper examines the social media affordances of anonymity, voting, and discussion hierarchy on political discourse in online settings by contrasting examples of discourse from Reddit and Twitter. I begin by establishing a theoretical foundation for my paper by exploring the role of social media platforms as modern public spheres and of existing literature on the impact of affordances on discourse on social media platforms. I follow by performing a mixed-methods analysis of a series of randomly selected discussion chains from Reddit and Twitter in the form of a quantitative scoring system and qualitative analysis of the argumentation schemes utilized by users on both platforms. From these analyses, I conclude that Reddit is a more effective platform for political discourse and that the combination of its affordances of high anonymity, a voting system, and complex discussion hierarchy affords a unique communication space; a result that is largely different from what was expected based on the findings of existing literature.

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Dedication

This research project is dedicated with love to Lauren Sheelagh Coles, an amazing writer and even better big sister.

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Introduction

With the rise of the internet and modern communication technology, the platform upon which political deliberation amongst citizens occurs has shifted from real public forums to those found online. Social media platforms offer their users an unprecedented scale of engagement with others in the political arena by affording them the ability to discuss and debate across time and space with ease. However, not every platform is the same, and the communication space which each site affords its users can have a major impact on the quality of the political discourse which occurs amongst users within its domain. This Major Research Paper explores how political discourse in an online setting is affected by social media platform affordances through their effects on user argumentation. By contrasting discussions on the popular social news site Reddit with another popular platform for political exchanges Twitter, this paper provides a unique insight into how affordances can have a major impact on the quality and type of arguments utilized by users, which in turn affects the overall quality of political discourse which occurs amongst users. Reddit has a unique design and purpose that differs from the rest of the world's most trafficked, and studied, social media sites. It offers insights into how people discuss, debate, and take sides on both salient and niche issues in an online environment that values a user's ability to engage in discussion more than other traits like credibility or authority that come with identity. The lack of identifying information like profile pictures and real

names, combined with the site's comment structure and voting system result in exchanges between users that are significantly different than those created on social media sites which are often based on connections between users' real identities. While these affordances of anonymity, hierarchy, and voting have received significant attention from scholars in recent years due to the exponential rise in the use and popularity of social media, there exists a gap in the existing literature regarding the combined effect they have on political discourse when functioning on a platform at the same time as one another.

Twitter is a platform which affords a lower degree of anonymity to its users and completely lacks a voting system or discussion hierarchy, making it useful as a foil that contrasts Reddit. When examining the argumentation that occurs on a platform and how it is affected by the affordances of that platform, comparing the different discussions which occur on two platforms with different affordances reveals much about what users think is appropriate discourse within the communication space afforded to them. By comparing political discourse carried out on Reddit with that on Twitter, I illustrate the degree to which the affordances of anonymity, hierarchy, and voting impact political discourse in an online setting, how these affordances influence the types of arguments deployed by users to promote their opinions and counter those of others. The ultimate goal of this paper is to analyze the discrepancies that arise in the quality and content of political discussion on both sites due to the differences in their affordances,

thereby revealing how these factors lead to the either stronger or weaker political discourse.

This paper begins with a literature review that examines existing scholarly research on how social media platforms exist and influence the political climate of the digital age. The first subject I explore is Habermas's concept of the public sphere and how its qualities manifest in the political discourse occurring on today's social media sites. Much debate exists over the merits of social media regarding its effect, positive or negative, on the quality of political discussions that users are having on their platforms, however, many scholars believe they fit much of the criteria of a modern public sphere and therefore have been studied extensively. By using the public sphere as a framework, I will examine how the particular affordances of anonymity, hierarchy, and voting influence political discourse. I establish how critical is the need for healthy political debate on social media platforms is in the modern political climate.

I will also examine the literature that discusses affordances of social media sites in particular, as well as their ability to alter how users interact with not only the platform itself, but other users as well. In recent years, the amount of literature dedicated to examining how affordances of these platforms influence user interaction has exploded as their impact on social relationships in the digital age becomes exceedingly pronounced. (O'Leary & Murphy, 2019; Chen, 2018; Liu & Kang, 2017). The affordance of anonymity appears to have the greatest

influence on the likelihood of users engaging in behaviour that risks creating a negative impression of themselves on others, such as identifying with a political view or sentiment. Almost every social media platform affords some degree of anonymity to its users, however, amongst the most popular sites, Reddit affords the greatest degree due to its restrictions on users' ability to choose a profile picture and produce the wealth of self-identifying information that is common on other platforms. I will explore how the function of Reddit's platform is different and how its unique affordances affect user-to-content and user-to-user engagement differently than most social media sites. Besides the high degree of anonymity, it affords its users, Reddit contains two other features, a voting system and hierarchical discussion format, that are found on few other social media platforms; none of which are amongst the most popular and highest trafficked. By analyzing the available literature on these functions, I gain further knowledge on how both functions can impact how content is presented to users and the degree to which users can interact with each other and the content itself. To conclude my literature review, I examine the concept of argumentation schemes and their usefulness as a concept which I use in my analysis as the primary qualitative variable that determines the effect of platform affordances on the content of political discussion itself.

After establishing the scholarly foundation on which this paper is based, as well as the research questions that guide the analytical portion of the paper, I then

outline the methodology of my data collection and the mixed-methods analysis which I use to examine political discourse on both Reddit and Twitter. The findings of my analyses indicate that Reddit functions more effectively as a platform for political discourse, despite having affordances which have been shown by the existing literature to have negative effects on user interactions on platforms which contain them. In addition to this result, I discuss the possible reasons for Twitter's poor functionality as a platform for political discourse, as well as the necessity for future scholarship in the study of social media platforms as public spheres.

Literature Review

The Public Sphere

Much of the existing scholarly research on political discourse in an online setting utilize the concept of the public sphere as a theoretical foundation for analyzing political deliberation amongst private citizens. The public sphere and its ideas are useful in understanding how people interact with one another and engage in the discussion of politics to gather information (Springer, 2015). One of the main ideas of the public sphere is that it is crucial for members of the public to have access to a space in which deliberation on public issues can occur. As a result, many scholars see online political discussion on social media platforms as contemporary parallels to Habermas' (1989) original conception of the public sphere, which is an open and informal place for private citizens to meet and discuss issues of public concern through rational-critical debate. Colleoni et. al (2014) assert that any space which allows public dialog and reasoning through the advancement of claims and information that lead to deliberation can be considered a public sphere, contrary to Habermas' original conception of the public sphere being a singular entity. Therefore, social media sites of all kinds, including Twitter and Reddit, have the potential to become uniquely modern public spheres based on how exactly they mediate political exchanges between users (Colleoni et. al, 2014; Fuchs, 2014). Much debate exists over whether social media sites are reinvigorating the concept of the public sphere due to their effect

of increasing citizens' exposure to political discussion on an equal playing field (Colleoni et. al, 2014), or whether they fail to capture the benefits of face-to-face deliberation due to their inherently impersonal nature which fosters uncivil discourse and group-based stereotyping (Halpern & Gibbs, 2013). These scholars believe that the main problem with social media platforms is their potential to become "echo chambers", where user homophily leads to the punishment of diverse opinion and the reinforcement of dominant perspectives and opinions (Colleoni et. al, 2014); indicating that they are poor platforms on which to base a public sphere. Based upon these positions, it is therefore clear that for most scholars the three measures of the health of an online public sphere are the depth of engagement in political discourse, the civility of political discussions, and the degree to which users engage with others who do not share the same views.

Social media platforms afford users the ability to act together to crowdsource news and formulate a "public" opinion free from the gatekeeping affects of commercial news production, such as economic considerations and advertiser pressures (Mitchell & Lim, 2018; Springer, 2015) However, as I will discuss in subsequent sections, users often actively seek out the content that affirms their opinions, and as a result larger public spheres on sites like Reddit often splinter into collections of communities which are similar in content but different in the stances their members take on given issues (Sunstein, 2002). Fraser (1990) labels these communities such as these as subaltern counterpublics,

publics formed by subordinated social groups, which are “parallel discursive arenas where members of subordinated social groups invent and circulate counterdiscourses, which in turn permit them to formulate oppositional interpretations of their identities interests, and needs.” (p. 67) This phenomenon is common in political communities on Reddit due to its predominant demographic being politically liberal in their views; leading those who dissent with liberal opinions to form their own counterattitudinal communities (Grabe & Hale, 2018). Within these ideologically aligned political communities on Reddit, where opinions and biases are often designated in the very titles of the subreddits themselves, the result of such communities is often one of an echo chamber for its participants (Mills, 2018). In these communities, strict expectations are developed which designate sentiments that are acceptable to be shared and those deemed inappropriate due to their counterattitudinal nature (Mills 2018; Grab & Hale, 2018). Because of this expectation, users within these communities often begin to polarize themselves in a phenomenon described by Sunstein (2002) as the law of group polarization, where those who only hold moderate forms of the community’s sentiments and those who hold those sentiments more strongly begin to group together (Sunstein, 2002; Grabe & Hale, 2018). This is indicative of Reddit functioning poorly as a public sphere due to the tendency for users to avoid engaging in political discourse with others besides those who share the same viewpoint as themselves, and it requires further research to determine

whether this is seen on other platforms which have differing combinations of affordances that offer the potential for echo chambers to form.

Affordances

Much of the literature written on the social functions of online platforms discuss how their affordances facilitate and influence the exchange of ideas and sentiments amongst its users in certain ways. Liu & Kang (2017) outline how affordances form and define the boundary of users' communication space which would otherwise be chaotic and messy due to the amalgamation of many different groups of audiences that used to be separated in offline settings – a phenomenon described as the “context collapse”. In these communication spaces, the number, type, and degree of information at each user's disposal is highly affected by the affordances of the platform they are using, and of these affordances, anonymity is one of the most extensively studied. Anonymity is an affordance of social media that offers users the ability to disassociate themselves from identification with their actions, thereby removing many of the social pressures placed upon them by the presence of their real identity (O'Leary & Murphy, 2019). Studies show that anonymity has a close inverse relationship with another studied affordance, publicness. Publicness is a component of Leary & Kowalski's (1990) conception of impression management, the process by which people control the impressions others form of them, and is defined as the “probability that one's behaviour will

be observed by others and the number of others who might see or learn about it” (p. 30). Many scholars assert that when the degree of publicness that users encounter on a social media platform is relatively high, both in terms of the publicness of their identifying information and the posts they make, they are less likely to act in a way that might put them at risk of leaving a negative impression on others (Chen, 2018) (Liu & Kang, 2017). Consequently, on platforms where anonymity is present at higher levels, publicness is much more likely to be at a lower level and vice versa. Therefore, in circumstances where the level of anonymity is high, and publicness is low, users are less likely to act politely, engage in discussion, and expand their discussions due to a lack of identifying information that allows them to behave without fear of creating a negative impression of themselves. (Halpern & Gibbs, 2013). This relationship has great implications for the study of political discourse on platforms where it is present due to the polarizing social consequences that identifying with or expressing certain political views can have.

Voting systems are another affordance unique to few social media platforms, such as Reddit and Yik Yak (O’Leary & Murphy, 2019), and as such are not as well studied as those affordances more common amongst popular platforms (e.g. anonymity). Voting systems are often designed for scoring posts and comments based on the quality of their contribution to a discussion. However, scholars have noted that they tend to, over time, become a tool which is

commonly used by users to show their agreement or dissent with sentiments that the content expresses (Glenski et. al, 2017; Weninger, 2014; Mesoudi & Priestley, 2014; Horne et. al, 2017). Those who have studied this affordance on Reddit have noted that many users do not browse beyond the surface level of a post which, when combined with Reddit's hierarchical structure that presents the highest scoring content to users first, leads to users developing a false belief that the content being presented to them represents the most valuable knowledge at their disposal (Jürgens & Stark, 2017; Feezell, 2016; Zúñiga et. al, 2017). However, users also tend to seek out information and discussions which confirm their own opinions and biases, often leading to groups of users who share the same viewpoints branching off from a larger, more neutral discussion to create branches of discussion which represent specific interests and opinions (Springer, 2015; Grabe & Hale, 2018; Mitchell & Lim, 2018; Sunstein, 2002). These branches often serve primarily as echo chambers, similar to those experienced on other social media platforms (Colleoni et. al, 2014) which only contain content that affirms group sentiments which are deemed acceptable due to group voting. This behaviour often even further divides discussions into comments of users who strongly share the sentiments of the topic at hand and those who only do so moderately (Grabe & Hale, 2018; Mills, 2018; Sunstein, 2002). Therefore, voting may be an affordance which, when present, influences the degree to which quality discussions can occur between users with differing political views.

User engagement with content on Reddit through its affordance of a hierarchical discussion format is a perfect example of what Weninger (2014) describes as the development of a society which “is increasingly relying on the digitized, aggregated opinions of others to form opinions and make judgements.” (p. 173) Most users are headline browsers who rarely read the content of an article or its comments before voting (Glenski et. al, 2017), and even those who do venture into the comments section often vote based on factors other than the quality of the comment’s contribution (Weninger, 2014; Mesoudi & Priestley, 2014). In most cases, the timeliness of a comment (that is, how soon it was made after the original post was created) is the greatest factor in influencing its salience and score (Weninger, 2014; Horne et. al, 2017) which determines its ranking in the hierarchy of a post’s comment section. In addition, the variation in user voting behaviour across a variety of subreddits due to factors like community norms (Mesoudi & Priestley, 2014), desire to be recognized by others (Weninger, 2014) and cognitive fatigue induced by extended periods of browsing (Glenski et. al, 2017), indicates a lack of awareness on the part of users of the influence of social factors on one’s own behaviour on online social news platforms. Therefore, political discourse on Reddit may be affected by its hierarchical discussion format due to the indirect effects it can have on the comments that users deliberate on simply because of its visibility within a given discussion thread.

Argumentation Schemes

In order to gain a more complete understanding of the role of affordances in dictating the quality of political discourse in online settings, it is important to examine not only the influence of affordances themselves, but the content of the discussions that they work to influence as well. One of the most useful and widely used tools employed by contemporary scholars to analyze multi-agent discussions is argumentation theory – specifically, argumentation schemes. Douglas Walton, a Canadian scholar and expert in argumentation studies, claims that “argument mapping has proved to be a useful tool for designing better products and services and for improving the quality of communication in social media by making deliberation dialogues more efficient” (Walton, 2008). Walton has produced several works in the past two decades which examine the application of argumentation theory in numerous fields and their growing importance in facilitating dialogue and negotiation on the internet; the most prominent of which is one of his collaborative books, *Argumentation Schemes*, based off the concept of the same name. (Walton et. al, 2013). Argumentation schemes are defined as “forms of argument (structures of inference) that represent structures of common types of arguments used in everyday discourse, as well as in special contexts like those of legal argumentation and scientific argumentation” (Walton et. al, 2013).

In *Argumentation Schemes* (2013), Walton et. al create a compendium of over 96 different schemes that have been recorded and deconstructed by scholars,

highlighting those that are most common in day to day deliberations. Of these common schemes, there are a number that prove useful in analyzing political discourse in an online setting due to the frequency of their use as well as the information they provide about their users' feelings about the debate at hand as well as their opponents/fellow advocates. These schemes include argument from expert opinion, argument from position to know, *ad populum* arguments, *ad hominem* arguments, and the many variants of these arguments. Identifying the argumentation scheme being used by an individual within a given deliberation reveals several characteristics about their feelings towards the debate at hand, including what they feel is appropriate in terms of sources and evidence, as well as decorum and depth of engagement in the subject matter. Therefore, utilizing argumentation schemes as a measure for what a user feels is suitable for the communication space afforded to them by the platform should prove useful for identifying the impact that affordances have on the content of the discussions they facilitate, and subsequently the quality of those discussions. By comparing the schemes used by users on Twitter and Reddit, the different patterns of argumentation reveal whether the affordances of both platforms provide a positive or negative influence on the types of arguments used, and subsequently the overall quality of discourse on each platform.

Research Questions

Existing literature on social media affordances schemes tends to address mainly the individual effects of affordances on user behaviour, providing more generalized insights into how each affordance functions on its own rather than in conjunction with others to afford the communication space to users. While there has been much research on how these individual affordances can impact user engagement and discussion online by affording different degrees of publicness and content visibility to users, there remains a gap in the existing literature where the combined effects of affordances on online discourse have yet to be extensively studied. Further research into the effect of affordances on user argumentation would provide a useful insight into how a social media platform's ability to function as an effective public sphere is affected by its affordances.

In order to guide my research towards the goal of bridging this knowledge gap, the research questions which I will be using to guide my research are designed to examine both the impact of the affordances on discourse in general, as well as the actual content of the discussions occurring on these platforms themselves. My first question is: **how do the affordances of anonymity, voting, and discussion hierarchy influence the quality of political discourse on an online platform?** Answering this question will hopefully provide me with a solid foundation of understanding of the effects of these affordances themselves when present in different degrees on Reddit and Twitter. Once that has been established,

I will then seek to answer the second question: **how do these affordances affect the types of arguments users use in their discussions?** By looking at the actual argumentation schemes being used by users on Reddit and Twitter, I will attempt to explain how affordances impact discourse by examining their effects on user argumentation.

Methodology

To examine the difference in political discourse occurring on Reddit and Twitter and the impact that these platforms and their affordances can have on said discourse, I decided to perform a two-part mixed-methods inductive discourse analysis of discussions which occur on the two platforms between users who are responding to political developments posted or tweeted on said platforms.

This mixed-method analysis begins with a quantitative analysis of discourse quality using a simple binary coding system based on the factors of civility, engagement, and contestation in discussions that occur between users in their deliberation on political events. The coding system for this analysis gives each sampled discussion a score based on the presence or absence of these three factors, allowing me to establish a broad understanding of patterns that occur in the quality of discussions across both platforms. The second half of my analysis features a qualitative analysis of the arguments utilized by discussion participants and their relationship to the overall quality of the discussion. By examining the particular argumentation schemes being used by users on both platforms, I establish an understanding for how affordances are affecting user behaviour on these platforms by influencing their understanding of proper debate decorum on their chosen platform.

To perform these analyses, I selected several discussion “chains” from both Reddit and Twitter which demonstrate an exchange of arguments between

two or more users through comments (in the case of Reddit) and replies (in the case of Twitter) as my units to be analyzed. To focus my data and ensure the subject matter of the discourse being analyzed is both political and of national concern, I selected a salient political topic in Canada that has been the focus of much attention and debate within Canadian public forums and the public at large as the subject of discourse: the SNC-Lavalin affair. The SNC-Lavalin affair was a political scandal that began in February of 2019 when media reports emerged alleging that Prime Minister Justin Trudeau and the Prime Minister's Office had illegally pressured attorney general Jody Wilson-Raybould to not pursue criminal prosecution against SNC-Lavalin Group Inc., a Montreal-based multinational engineering corporation, in the corruption and fraud case opened against them in the fall of 2018 (Gollom, 2019). These allegations lead to multiple investigations, probes, and nationwide debate as more and more information was made public over subsequent months, with many Canadians taking stances on the issue and proposing their own interpretations of the events that transpired. Therefore, the SNC-Lavalin affair serves as an excellent source from which to sample political discourse in Canada as it exists on online platforms today.

Data Collection

The timeframe of data I collected spans from the day the scandal first broke on national news platforms, February 7th, 2019, to the final day of my collection, May 7th, 2019. From this time period, I selected 25 discussion chains

from both Reddit and Twitter which occurred on various dates across the three months. Each “chain” I selected consists of a series of comments/tweets which form a discussion between two or more users in response to an original post/tweet pertaining to the SNC-Lavalin scandal. I decided on four to be the minimum number of comments/tweets between the participating users needed to constitute a discussion, as this allows for participants to both provide their own arguments as well as reply to or rebut those of the other participants. In order to ensure the chains I selected were on neutral foundations of discussion, I only chose chains from posts which did not carry an implied bias in their content or source. For Reddit, this means I selected chains from top posts on r/Canada, the largest subreddit dedicated to Canadian news and discussions, which feature news articles from national news outlets covering updates on the SNC-Lavalin affair. For Twitter, this means I selected chains from tweets made by national news outlets covering updates on the SNC-Lavalin affair. With both platforms I avoided original posts/tweets from regional or interest-focused sources or individuals, instead selecting posts/tweets from national news outlets which are less likely to perpetuate biases.

My instrument of collection of chains from both platforms was largely manual. For Twitter I utilized Sysomos, a social media analytics platform, to filter tweets that contained the keywords “SNC” and “Lavalin” for those created by the accounts of national news outlets. These outlets included the Canadian

Broadcasting Corporation, Globe and Mail, and the National Post. I then selected tweets by these outlets at random and viewed the replies they received, looking for reply tweets which spawned their own discussion. As stated above, I chose discussion chains from these sources that had a minimum of four replies in the chain, which demonstrated the presence of discourse. For Reddit, I utilized the platform's search function and, using the search term "SNC-Lavalin" on the r/Canada subreddit, was presented with all the posts which have SNC-Lavalin related content. From there, I sorted these posts by "top", which puts the posts in an order based on total number of upvotes and comments, and selected posts which received a high number of comments – indicating a high degree of discussion within their comment section. Within the comment section of these posts, I randomly selected discussion chains from various positions within the comment sections discussion hierarchy, following the same criteria that I used for selecting chains on Twitter.

Method of Analysis

To record my selected chains from both platforms as data to be analyzed quantitatively, I coded each chain based on their platform and selection, using "R" for Reddit (e.g. R1, R2, R3, etc.) and "T" for Twitter (e.g. T1, T2, T3, etc.). I then scored each chain in three categories based on the three factors of healthy political discourse mentioned above in my literature review: civility, engagement, and

contestation. Each chain received a score of either “0” or “1” in each category based on the content of the comments/tweets made by users, as well as their arguments. A 0 in the “civility” category indicates the discussion was uncivil, meaning it contains inflammatory, impolite, and/or insulting language and/or sentiments directed towards another user, users, or community people. A one in this category indicates the discussion does not include any of the above language or sentiments and therefore is considered civil. In the “engagement” category, a discussion would be scored a 0 if the discourse is incoherent, the exchanges between users do not respond to statements, opinions, or propositions put forward by others, and/or responses are short and do not contribute to the discussion. A discussion is given a one in this category if the discourse is sound, contains well-developed arguments, and demonstrates an exchange of ideas between users who contribute to the discussion equally. Since Reddit may seem to have a pre-emptive advantage in this category due to its lack of a character limit such as exists on Twitter, this factor was taken into consideration when scoring both platforms for their engagement and the criteria for what is considered a short or long discussion is relative to the average comment length that occur on each respective platform. In the final category, “contestation”, chains were given a 0 if the discourse functions as an echo chamber, where users are not engaging with opponents and are only responding to proponents of the opinions and arguments they themselves are putting forward. A chain scored a one in this category if the

discussion involved users engaging with opponents who openly express differing opinions or sentiments than their own. Following these criteria, I scored each chain and calculated each chain's score out of three, the average score for chains across each platform, as well as the total score out of 75 for each platform.

In addition to this scoring system, which provides insight into broad patterns found in political discourse on both platforms, I decided to take note of specific factors which may indicate specific relationships between the scores a chain receives and the presence of certain affordances. For Reddit, I took note of the score that the original comment which spawned the discussion (the first comment in the chain) received, as well as the position of said comment within the overall discussion hierarchy of the comment section – using the codes of top, high, middle, low, and bottom to indicate its positioning. These two attributes were chosen as indicators for the impact that a discussion's score and hierarchical position will have on the quality of that discussion. For Twitter, with each chain selected I noted the number of users participating in the discussion who had either their real name or a profile picture of themselves attached to their user profile and visible to other users participating in the discussion. The presence or absence of personal identifying information such as real names and profile pictures is a factor that heavily influences the anonymity of participants in a discussion on Twitter, and therefore I decided to record the presence or absence of these variables to better assess the relationship between anonymity and discourse quality.

Table 1.1 – Sample Reddit Chain Score

Code	Votes	Position in Thread	Civility	Engagement	Contestation	Total
R1	852	Top	1	1	0	2/3

Table 1.2 – Sample Twitter Chain Score

Code	Favourites	Profile Picture	Real Name	Civility	Engagement	Contestation	Total
T1	6	1 of 2	1 of 2	1	0	0	1/3

After I finished recording the quantitative characteristics of my data, I then proceeded to tally the scores for both platforms and take note of any notable patterns that recurred amongst discussions on either platform. With this foundational understanding of the state of political discourse on both platforms established, I then performed a qualitative analysis of the contents of each discussion chain to examine the factors that may influence or be influenced by the way users engage in political discussion with one another. This analysis involved examining the argument schemes utilized by users in their exchanges in order to

better understand the relationship between the content of these online political discussions, the information afforded by the affordances of their platform, and the resulting discussion quality. The argument schemes that users choose to employ reveal a great deal about their understanding of what is considered appropriate decorum within the communication space constructed on these platforms for them by the affordances present, and therefore provide useful insight into the effects that affordances can have on user behaviour regarding political discourse.

Findings and Discussion

Quantitative Analysis

At face value, the data collected suggests that Reddit is overall a moderately better platform than Twitter for conducting political discourse in an online setting; despite affording a higher degree of anonymity, a voting system, and complex discussion hierarchy to its users. The average score of the 25 Reddit discussion chains selected for analysis was 2.12 (out of a possible 3) and the total score of the all the chains from the platform was 53 (out of a possible 75). This is a marginally better outcome compared to the average Twitter chain score of 1.72 and total platform score of 43, indicating that there is significant difference in the quality of political discourse occurring on the two platforms.

The most notable difference in categorical scores for the two platforms occurred in the civility category. A surprising 22 of the 25, or 88%, of Reddit chains selected were scored civil – almost double the number of civil Twitter chains, which was 12. Furthermore, there was no correlation between the score of a Reddit chain and its civility, nor was there a correlation between its position within the discussion hierarchy and its civility. This result runs contrary to my original assumption based on existing literature that social media sites which utilize a voting system and discussion hierarchy should see greater levels of uncivil discourse due to the tendency for less popular or inflammatory opinions to be downvoted and sent to the bottom of the thread where they are likely to meet

intense opposition. The high percentage of Twitter chains which were scored as uncivil (52%) indicates that, despite affording lower levels of anonymity to its users through the presence of personally identifying information, there is some factor leading to a higher frequency of impolite and inflammatory discourse on Twitter. One possible reason for this might be the high degree of contestation on the platform, which will be discussed in a subsequent section, but lack of correlation between the presence of personally identifying information (profile pictures and real names) and the civility of a chain runs counter to what I expected to find on a platform where lower anonymity and higher levels of publicness occur.

Reddit received a higher overall score in the engagement category as well, though not by a discrepancy as large as in the civility category. 16 out of the 25 Reddit chains were scored as engaged, compared to 10 out of 25 chains for Twitter. While Reddit's score in this category is larger, it should be noted that the scores for both platforms are still moderately below what could be considered a satisfactory rate of high engagement for healthy political discourse on an online platform. For Reddit, engagement scores appear to remain consistent regardless of a chain's position in its thread's hierarchy, with seven out of ten chains near/at the top, five out of nine chains in the middle, and four out of six chains near/at the bottom being scored as engaged. This result can be interpreted in one of two ways: either a chain's place in its thread's hierarchy has no immediately

noticeable effect on its quality of engagement, or users are not utilizing the scoring system properly to downvote unengaged discussions to the bottom of the thread. In the case of the latter, were the voting system being utilized as designed, we would expect to see the discussions occurring at the bottom of the thread as unengaged, since the purpose of the system is to remove off-topic or unsubstantial comments from the thread.

The contestation category is where the most interesting results arose, as it was the only category where Twitter had a significantly higher score than Reddit. For Reddit, only 15 out of 25 chains were scored as contested compared to Twitter which saw 21 out of 25 chains as contested. Reddit's low contestation score may be explained by the fact that, of the five chains selected that were at the top of their thread's discussion hierarchy, only one was scored as contested. This is a stark contrast from those Reddit chains which were selected at or near the bottom of their thread's hierarchy, of which five out of six were scored as contested. This result is consistent with my expectation that Reddit would see lower rates of contestation when discussions occurred towards the top of the thread since, as mentioned in my literature review, users have a tendency to use a voting system to bring comments to the top of the thread which run most consistent with the platform's popular opinion and therefore are less likely to meet opposition. The reason behind Twitter's outstanding rate of contestation amongst users may lie in the type of arguments being made by participants, as

discussed below, that are the product of the lack of anonymity afforded by the platform. Of the 21 contested chains on Twitter, there were only four which saw none of the users involved include any kind of identifying information in their profile. Compared to the uncontested chains, of which two out of four saw users having no identifying information, this indicates that the lack of anonymity on the platform is in some way contributing to the high degree of contestation amongst users.

Based on these findings from the qualitative data collected, it appears that Reddit functions as a better platform for discourse overall, however, it has the tendency to function as an echo chamber. This is especially evident in the discussions which occur at the top of the threads on the platform. Twitter functions differently than Reddit, affording users a type of discussion which might encourage debate that is often not polite or productive. Based on these initial findings, it seems that the results of my analysis may differ in its findings from existing literature regarding the effects of anonymity as a social media affordance. Reddit, an almost entirely anonymous platform, fosters higher rates of civil debate than Twitter, which affords users the ability to be identified with their more impolite and unproductive engagements. In the next section, I identify the types of arguments being utilized by users on both platforms through an analysis of their argument schemes, which illustrates the feelings users have towards the communication space afforded to them by each platform.

Qualitative Analysis

Analyzing the contents of the selected discussion chains themselves reveals characteristics of the arguments being employed which give valuable insight into what users believe the implicit purpose and decorum of the communication space afforded to them by their platform looks like. The type of argumentation scheme employed by a user can reveal what they believe to be the main goal of their participation in discussion on their platform, such as to participate in a critical political debate or to simply share their opinion with others without consequence. By examining the argumentation schemes used, patterns are revealed which assist in explaining the core results of the quantitative analysis above which suggests that anonymity, voting, and a complex discussion hierarchy may not necessarily lead to poor political discourse. According to Walton et. al (2013), presumptive argument schemes (that is, argument schemes which really on implicit premises in order to present a conclusion) are defeasible and can only properly be attacked through two ways: an attack the premise of the argument or the provision of a counterargument, or rebuttal, with an opposite conclusion to the original one presented. Therefore, in the selected discussion chains, I look for users both providing arguments which rely on less assumptions and more tangible evidence, as well as countering fallible arguments with supported attacks or rebuttals, as the standard for quality discourse and all other argumentation schemes as insufficient.

The greatest difference in the commonly used argumentation schemes on Reddit and Twitter lies in what users believe to be a sufficient argument and how they counter and critique arguments from others they believe to be insufficient. For Reddit, where a lack of personally identifying information leaves users with only the content of their opponent's argument to form counter arguments or rebuttals, there is a great deal of emphasis placed on the burden of proof to provide evidence of one's claims. Instances where users make unsubstantiated claims are often immediately called out based on their lack of evidence or unstable premises. A good example of this can be seen in chain R12 where user u/Karmawasforsuckers attempts to use the position-to-know *ad populum* argumentation scheme, which relies on using a group of people in a special position to know something as true to present a conclusion (Walton et. al, 2013, p. 311), saying "I've heard reliable reports that open bribery was taking place at that meeting. People are talking. It's all over Ottawa and [Calgary] circles. Smart people, big people, are saying it." This claim spawned several responses asking clarification on the sources being referred to by u/Karmawasforsuckers as well as providing evidence that no reports have surfaced which substantiate these claims, thus both attacking the premise of the scheme and offering counter arguments which with evidence that support the opposite conclusion.

To avoid being challenged and subsequently downvoted by opponents in scenarios such as these, Redditors provide links to evidence supporting their

arguments very frequently and at a much higher rate than Twitter. Chain R25 provides an excellent example of this where user u/OxfordTheCat uses an argument from expert opinion scheme (Walton et. al, 2013, p. 310) by hyperlinking a part of their statement – “a deferred prosecution agreement seems like the best decision for all involved” – to an article from the globe and mail which itself contains a long and elaborate argument for the conclusion that u/OxfordTheCat is trying to make. This type of argumentation occurs frequently across the Reddit chains and comments which utilize fallible or defeasible argumentation schemes and do not provide sufficient evidence to support them are frequently downvoted to the bottom. However, that being said, for the chains that were positioned at the top of their thread which were scored as uncontested, the arguments put forward by users participating in the discussion consistently went unchallenged and maintained their high scores despite many of them utilizing schemes which relied on unsupported premises. This is indicative of the echo chamber functionality, which was discussed in the quantitative analysis, reaffirming the notion that Reddit works well as a platform for political discourse when users are challenging one another, but not when they share the same sentiments. In these scenarios, the results are counterproductive as they allow the most dominant opinions and sentiments go unchallenged and perpetuated without restraint.

The argumentation schemes utilized frequently on Twitter provide a valuable insight into how the affordance of low anonymity may affect the quality of political discourse negatively through an unexpected way. As might be expected, in the majority of uncivil Twitter chains selected, the *ad hominem* argumentation scheme (an attack on the character of an opponent) (Walton et. al, 2013, p. 146) was used by users when attacking opponents' arguments. This type of argumentation scheme, while not entirely fallacious in all circumstances, is regarded by Walton (2008) as a scheme that is "inherently dangerous and emotional in argument, and is rightly associated with fallacies and deceptive tactics of argumentation" (p. 170). A good example of this type of argument can be seen in Twitter chain T8 in which two users, Rick Hewat (@kidrickhewat) and B Guirguis (@canadian_uk) are debating back and forth about the impact of the SNC-Lavalin affair on SNC-Lavalin employees' employment. Both users employ *ad hominem* argumentation schemes both as their main form of argumentation and to supplement other schemes they use to support their conclusion. In one section of the exchange, Hewat uses the argument from cause to effect scheme (Walton et. al, 2013, p. 328) by saying "the work is there. the workers are there. there are other Cdn engineering firms that would pick up the work and the employees" which, while failing to provide enough evidence to support the premises it acts upon, is enough of an argument in and off itself. However, Hewat concludes his statement by saying "you a bot? your profile kinda [*sic*] looks that

way! Watch out! We'll send Mike Meyers after you!" Here we see Hewat believing that the addition of an *ad hominem* argument that contains the implicit conclusion that, based off the lack of personally identifying information in Guirguis' profile, his opponent is a "bot" (computer-controlled account) and therefore his arguments are invalid. Guirguis then responds to both of Hewat's arguments with two *ad hominem* arguments of his own, saying "Written clearly by someone who knows nothing about the labour market. You seriously think that thousands of workers would be able to find jobs at the snap of their fingers? Perhaps you should start taking your meds again." This type of exchange occurs fairly regularly amongst the Twitter chains which we scored as uncivil, and though they are not entirely absent from Reddit, the frequency of their occurrence on Twitter indicates that there is a difference in the two platforms in terms of what type of information users use to construct their arguments.

Ad hominem argumentation schemes are not the only instances where Twitter users employed personal information to construct their arguments in the selected Twitter chains; there were also many cases of users using their *own* personal information and experiences to support their conclusion(s). In chain T24, Shelley (@Theshells1111) uses a variation of the common folks (group subtype) *ad populum* argument scheme while debating with Ron Young (@RonYoung666) about the implications that the SNC-Lavalin affair has for Canada's middle class, states "I can't afford to grow my business ... growing my business means the

more money I make the more I pay in taxes thus it's not worth my while to hire or work harder. That is what happens when socialist countries adopt communist fiscal policies.” Another example of the utilization of personal information and experience in argumentation can be seen in chain T9, where user oilngas (@oilngas007), while debating with user Eustachy (@EustachyNorth) about the competency of Conservative Party leader Andrew Scheer, says “If you don't like Trudeau, you're not The Lone Ranger. I live in Calgary too. That duzn't [sic] mean one has to think this is a zero-sum game. But u go ahead.” In this instance, user oilngas has clearly studied the identifying information available on his opponents' profile and used what he found, along with his own information, to construct his argument. This type of argumentation, using personal identity and experiences while engaging in discourse, is much more common across the selected Twitter chains than the Reddit chains, which suggests that the affordance of low anonymity has a negative impact on the types of arguments used by users by making debate much more of a personal, and subsequently ineffective, endeavour.

Discussion

Based on both the results of the quantitative and qualitative analyses, I conclude that Reddit's unique combination of the affordances of anonymity, voting, and discussion hierarchy afford a communication space that is a more

efficient platform for political discourse than Twitter due to the combined effect that Reddit's aforementioned affordances have on the type of argumentation schemes utilized by users. This provides an answer to both my research questions, which sought to explain the combined effect that affordances can produce, and how that effect influences user behaviour.

In addition to having an overall higher score, Reddit's discussion chains showed more consistent levels of civility and engagement and the arguments used by its users', though not always constructive, were more frequently sound and supported with explicit evidence. This runs contrary to the what I expected to find as an answer for my first research question regarding the effect of the three observed affordances due to the existing literature's suggestion that platforms which high levels of anonymity are more likely to be uncivil due to the reduced publicness of each user, and that platforms which utilize voting systems and discussion hierarchies will see its users engaging on a very superficial level. The high frequency of the use of evidence and supported arguments on Reddit also suggests that the presence of these affordances does not necessarily negatively impact discussion, as the communication space they afford seems conducive to healthy argumentation. This being said, Reddit is not without its faults, and the literature which discusses the high probability for platforms with voting systems and discussion hierarchies to become echo chambers does ring true – as can be seen in Reddit's low contestation score and the high score and lack of challenge

given to defeasible arguments supporting a popular opinion at the top of a thread. This factor is important to consider when engaging in political discourse on the platform, as even though it does produce more productive and healthy discourse on average, Reddit's tendency to function as an echo chamber is a considerable danger to its ability to be a successful public sphere.

Twitter, based on my analyses, functions almost opposite to Reddit and challenges the existing literature's claims that lower anonymity and high publicness leads to more polite user interactions. In terms of my research questions, Twitter provides a different answer to both through the unexpected effect that Twitter users' low anonymity has on their argumentation. Its higher levels of uncivil and unengaged discourse which involves users using the personal information afforded to them by the platform's low anonymity to both attack opponents and (fallaciously) support their own conclusions indicates that low anonymity can in fact afford the opposite results. Despite the high frequency of these inflammatory and inefficient interactions, Twitter does demonstrate a remarkable ability to bring users together who are eager to debate with those who share opposing views as their own. The lack of complex discussion hierarchy and voting system may be the reason behind this high rate of contestation, since all users' replies have equal visibility, however, more research on this phenomenon is needed before any concrete conclusions can be drawn.

Conclusion

In this paper, I have demonstrated that Reddit functions more efficiently as a platform for political discourse than Twitter through its unique combination of affordances and the discussion culture that arises in the communication space afforded by them. This result runs contrary to the findings of existing literature which have largely studied social media affordances' individual effects on discourse, but not how combinations of some of them can function when altogether present. As such, this paper will hopefully serve as a valuable insight from which further scholarship can examine how individuals are interacting online and which factors, beyond the individual affordances themselves, are influencing the contents of these interactions. It is important that, as global use of the internet and social media platforms expands and evolves, the way people utilize the communication spaces afforded to them by the technology is constantly re-evaluated. The potential for social media sites to function as efficient and highly accessible modern public spheres is precisely the reason why further investigation must be conducted into how they can hinder or enhance political discourse carried out by their users.

References

- Chen, H. (2018). Spiral of Silence on Social Media and the Moderating Role of Disagreement and Publicness in the Network: Analyzing Expressive and Withdrawal Behaviors. *New Media & Society*, 20(10), 3917–3936.
- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo Chamber or Public Sphere? Predicting Political Orientation and Measuring Political Homophily in Twitter Using Big Data. *Journal of Communication*, 64(2005), 317–332.
- Feezell, J. T. (2016). Predicting Online Political Participation: The Importance of Selection Bias and Selective Exposure in the Online Setting. *Political Research Quarterly*, 69(3), 495–509.
- Fraser, N. (1990). Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy Author. *Social Text*, 25(26), 56–80.
- Fuchs, C. (2014). Social Media and the Public Sphere. *Communication, Capitalism & Critique*, 12(1), 57–101.
- Glenski, M., Pennycuff, C., & Weninger, T. (2017). Consumers and Curators: Browsing and Voting Patterns on Reddit. *IEEE Transactions on Computational Social Systems*, 4(4), 196–206.
- Gollom, M. (2019, February 13). What you need to know about the SNC-Lavalin affair. *CBC News*. Retrieved from <https://www.cbc.ca/news/politics/trudeau-wilson-raybould-attorney-general-snc-lavalin-1.5014271>.
- Grabe, M. E., & Hale, B. J. (2018). Visual War: A Content Analysis of Clinton and Trump Subreddits During the 2016 Campaign. *Social Media Uses and Content*, 95(2), 449–470.
- Habermas, J. (1989). *The Structural Transformation of the Public Sphere: An Inquiry Into a Category of Bourgeois Society*. Cambridge, Mass.: The MIT Press.
- Halpern, D., & Gibbs, J. (2013). Computers in Human Behavior Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression. *Computers in Human Behavior*, 29(3), 1159–1168.

- Horne, B. D., Adali, S., & Sikdar, S. (2017). Identifying the Social Signals that Drive Online Discussions: A Case Study of Reddit Communities. *ICCCN*, 26, 1–9.
- Jürgens, P., & Stark, B. (2017). The Power of Default on Reddit: A General Model to Measure the Influence of Information Intermediaries. *Policy and Internet*, 9(4), 395–419.
- Leary, M. R., & Kowalski, R. M. (1990). Impression Management: A Literature Review and Two-Component Model. *Psychological Bulletin*, 107(1), 34–47.
- Liu, B., & Kang, J. (2017). Computers in Human Behavior Publicness and Directedness: Effects of Social Media Affordances on Attributions and Social Perceptions. *Computers in Human Behavior*, 75, 70–80.
- Mesoudi, A., & Priestley, M. (2015). Do Online Voting Patterns Reflect Evolved Features of Human Cognition? An Exploratory Empirical Investigation. *PLoS One*, 10(6), 1–16.
- Mills, R. A. (2018). Pop-up Political Advocacy Communities on Reddit.com: SandersForPresident and The Donald. *AI & Society*, 33(1), 39–54.
- Mitchell, S. S. D., & Lim, M. (2018). Too Crowded for Crowdsourced Journalism: Reddit, Portability, and Citizen Participation in the Syrian Crisis. *Canadian Journal of Communication*, 43(3), 399–419.
- O’Leary, K., & Murphy, S. (2019). Moving Beyond Goffman: The Performativity of Anonymity on SNS. *European Journal of Marketing*, 53(1), 83–107.
- Springer, N. J. (2015). *Publics and Counterpublics on the Front Page of the Internet: The Cultural Practices, Technological Affordances, Hybrid Economics and Politics of Reddit’s Public Sphere*. University of Colorado.
- Sunstein, C. R. (2002). The Law of Group Polarization*. *The Journal of Political Philosophy*, 10(2), 175–195.
- Walton, D. N. (2008) *Informal Logic*. Cambridge: Cambridge University Press.
- Walton, D. N. (2013) *Methods of Argumentation*. Cambridge: Cambridge University Press.

- Walton, D. N., Reed, C., & Macagno, F. (2013). *Argumentation Schemes*. Cambridge: Cambridge University Press.
- Weninger, T. (2014). An Exploration of Submissions and Discussions in Social News: Mining Collective Intelligence of Reddit. *Social Network Analysis and Mining*, 4(1), 1–19.
- Woolley, S. C. (2016). Automating Power: Social Bot Interference in Global Politics. *First Monday*, 21(4).
- Zúñiga, H. G. De, Weeks, B., & Ardèvol-abreu, A. (2017). Effects of the News-Finds-Me Perception in Communication: Social Media Use Implications. *Journal of Computer-Mediated Communication*, 22, 105–123.