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Humanities V

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### A Missed Opportunity: Analysis of Partisanship Through Internet Personalization Algorithms

In the late 90s, the widespread commercialization of the internet was seen with wonder and excitement, as some called it “a revolution one can neither resist nor evade”(Prasier). The benefits of this new technology induced great anticipation in the world of political science and democracy, due to its capability in connecting individuals on an unprecedented scale. The possibilities of limitless expression, discussion, and consumption of information were sure to develop our political scene in positive directions.

However, the revolution did not happen in the way the optimists had expected, as the new medium of communication came with new restrictions. The internet became a platform of personalization algorithms: lines of code that analyzes individuals on their interests and preferences in a desperate attempt to keep the attention fixed in an endless sea of information. The technology that was expected to endorse discussion, became a place of separation, as every single experience online became unique between every user. Such recommendation algorithms and information tailoring services from online domains restrict a significant amount of data and information based on an individual’s digital profile, and this in turn aggravates partisanship as the platforms only provide a lopsided view of an issue. In order to mitigate such issues, corporations in ownership of such online platforms must first, be more transparent on how such

tailoring services work, and second, adjust some parts of the algorithm so that it is mostly applied for topic preferences, not preferences of opinions on matters as controversial as politics.

On December 4th, 2009, Google, corporation in ownership of the most-used search engine online, updated their service terms that in turn, sparked an irreversible change in how online domains behaved. After that day, Google was able to track its users on the locations they were logging in from, the browser they were using, and 57 other input signals to determine who the user is, and what kind of websites he or she likes (Pariser). This update brought an end to what used to be a “universal Google search result” between users. There was no more “standard Google” (Pariser).

Other corporations were quick to follow suit. Facebook now analyzes its users on the number of friends, the type of people one befriends, the amount of time one spends on a friends’ page, and other input data points that exceed 500 in its number (Song). Youtube, the biggest video sharing platform owned by Google, analyzes user behavior down to the amount of time one spends on a video before exiting to understand which part of the video one found to be interesting, and why (Song). According to research from the *Wall Street Journal*, there are on average 64 cookies and individual behavior tracking software installed in the top 50 news websites including CNN and Yahoo News (Pariser).

Personal profiling information gathered by these online services—and countless others such as Netflix and Instagram—are permanently stored on a database, ready to be used whenever the specific user logs in again on the platform, providing the most personalized experience that does not waste his or her time with materials that they wouldn’t be interested in. Such extreme personalization can be detrimental when it comes to controversial topics such as politics, since

the users are not merely recommended similar viewpoints and opinions, but actively restricted from exposure to opposing arguments that could have broadened one's perspective.

The internet has flooded the public in a sea of information and data. It is estimated that humans have, up until this point in the 21st century, have produced about 5 billion gigabytes of information throughout history: the same amount we currently produce in just two days (Pariser). The incomprehensibly large amount of data led to a completely different approach in communicating these materials compared to mediums of the past such as newspapers or television, which were allowed no more than 10 pages or an hour of screen time in the evening. Unlimited time in accessing the vast pile of information meant that it became necessary for online domains to have a firm grasp of one's attention—not on the front page headline, not in the very first news story, but repeatedly throughout his or her time online. Attention became a commodity, as well as it became the economy of the internet (Unver).

The attention span of individuals have been reduced to mere seconds (Song), and the attempts in capitalizing on it have manifested itself as increasing amounts of content in alignment with one's views, as well as increasing proportions of sensational and radical content for consumption. This revolution in data consumption has incredible potential for both benefit and harm, as it could provide an endless amount of useful information at one's fingertips, while it could also lead one into a rabbit hole of tailored, and subsequently limited amount of information: a "filter bubble" (Pariser). The significance of this is rooted in the ubiquity of the internet. Acxiom, a leading corporation in the market of consumer profile databases, holds on average 1500 different information on 96 percent of Americans regarding their online activities

(Pariser) that are sold to countless websites and online service domains. The universality of this phenomenon is clear, and most citizens are affected one way or another.

This Personalization of the internet and online services has harmful implications on the political climate by going against the fundamentals of democracy. When users are deprived of specific information regarding a topic, it can worsen the already existing psychological tendency of humans to listen to groups or individuals who validate one's own worldviews—also known as “confirmation bias” (Lee). This idea has recently been demonstrated by Cass Sunstein and Tali Sharot in October, 2018. After providing some profile information of individuals, they asked “who the participants would turn to for advice in categorizing geometric shapes—an obviously non-political task.” The results showed that “participants preferred people who held similar political views, deciding that they must be more competent” (Lee), showing how we inherently search out for people who possess similar backgrounds and opinions, and neglect ones who do not.

While the internet could have provided an apt solution through access to millions of others' expressions, the personalization of exposure to information only acted to exacerbate the problem. The influence of the recommendation algorithms led to “news feeds and posts tailored according to the user's past digital behaviors” (Unver), as Pariser himself, possessing left-leaning opinions, noticed the disappearance of Facebook posts from his conservative friends on his daily feed (Pariser). The filter bubble surrounds us with familiar information that could provide us with dangerous amounts of certainty towards an issue (Pariser). Such certainty with one's opinions pose threats to the foundations of democracy and political participation: the willingness to accept and discuss with differing views. Democracy ultimately functions the moment an

ordinary citizen is capable of transcending the personal bias on an issue, and is able to think from others' perspective (Pariser). However, when one is presented with one's own unique sea of information, it becomes increasingly difficult for the individual to even think of the possibility of differing perspectives.

In Song's study on the Youtube recommendation algorithms, the video searches on political content differed drastically between two bot accounts that have been each fed with search keywords that signify a certain political bias, either conservative or liberal. As they followed the recommendations of Youtube, they found out that each video led to another of a similar political opinion, with increasingly radical and partisan tone (Song). Considering that 70 percent of all viewership on the platform is from recommended videos (Song) and one in five of all users of Youtube use it as a source of news (Smith), the study above imply significant effects of online domains on the political climate. In fact, "the share of Americans who express consistently conservative or consistently liberal opinions have doubled over the past two decades, and the share of republicans who hold very unfavorable opinions of the democratic party has jumped from 17% to 43%, and 16% to 38% for the democrats towards republicans" (Doherty).

While it is difficult to say all of these statistics point towards the personalization of the internet as the sole reason for the partisanship, it is significant that all of these effects took place during the time period where online social domains such as Facebook and Youtube boomed. This fact provides grounds that these new online mediums played a substantial role in altering the political climate. It becomes clear that the internet is providing endless opportunities to

“bond,” but not enough to “bridge” individuals: what Pariser believes to be critical in one’s process of transcending their own narrow vision of the world (Pariser).

The effect of such political polarization not only has effects on the overall domestic political climate, but also on the Congressional level as well. “In 1994, just 8 percent of politically-engaged Democrats were consistent liberals. In 2014, these strong liberals made up 38 percent of party activists” (Stokes). Furthermore, “consistent conservatives made up just under a quarter of politically-engaged Republicans” 20 years ago, while they represent one-third in the current day (Stokes), demonstrating the growing partisanship among active political participants alongside with the increase of polarization of citizens. For a more relevant insight, from the 2016 U.S. presidential election to his current presidency, Donald Trump, experts say, has been “uniquely effective in making the American politics divide more about him, rather than the policies or the ideas he espouses” (Milligan). Similar tones of extreme partisanship is clearly indicated in the labeling words for the candidates of the 2020 presidential election : “Socialist, acolyte of Hitler, old and doddering, mentally ill, racist” (Milligan). It would not be farcical to assume that such negative sentiments towards the “other side” led to two government shutdowns in the current presidency, increasing the inefficiency of governance within Congress.

The number of bi-partisan legislation also provides new evidence to this claim. The Regan administration had 667 legislations enacted for its duration, when the Obama administration—seen as one of the most intransigent partisan divisions of the post war period—only passed 283 in total (Grynaviski). The aforementioned lack of discussion seems to fuel tribalism not only in the public, but also politicians who are under great influence of the political climate that the citizens experience.

Besides the influences on the partisanship of the public and the Congress, the personalization of news sources online could also greatly degrade the trust in media from individuals. In his article “Is Everything Wrestling?”, Gordon illustrates how the antagonist—in other words, the “bad guy”—of the script of an episode of professional wrestling provides the fake narrative a sense of realism through tension and drama. He proceeds to link this idea with how the political media is similarly shifting towards creating a facade of an “opponent” to satiate the increasingly shortening attention span of the audience created by new forms of media (Gordon), such as the internet. Such phenomenon is manifested itself as, for example, the demonization of Trump supporters, and the creation of words such as “libtards”, where they serve to create a narrative structure interesting for the audience to watch, instead of an actual discussion or a debate that is a lot more nuanced, and in turn, a lot less interesting for the public with a shortened attention span. This alludes towards the fact that media and news coverage now serves to provide a narrative, rather than hard facts and discussions on complex issues that does not necessarily have a clear cut between good or bad.

In the past, the media used to be the source of information for the public necessary for enlightenment. In the 1920s, the government was a lot less transparent than it is now which limited democratic participation, but the journalists and media outlets played a pivotal role in allowing the public access to information that ultimately "woke" the mass to the world (Pariser). As the online media increasingly leans away from such responsibilities, the attention-grabbing personalization of information could lead to the loss of faith in media from the citizens. This is a grave change as such media in the past have been the voice of reason and truth, which pushed democracy forward.

Not many solutions to such an issue have been suggested, as it came into light comparatively recently than other problems regarding politics. Many scholars and activists have taken notice of the problem, but no real attempts at altering such trends have been made. There have been studies regarding algorithmic governance, but these were more focused on the security implications than specifically taking a stance on the harm done in the political scene. A suggestion can be made that the government must regulate such algorithms. However, others would argue that such government interventions could lead to censorship, which would be an even bigger problem than the original.

The most important issue is that algorithms edit out and recommend information without consulting the user. In Song's research, it was found that almost 30 percent of Youtube users are oblivious to the existence of the recommendation algorithms, and 88 percent have never thought about the effects of such recommendations (Song). When watching the television or picking up a newspaper in the morning, one actively makes a decision on which filter to use to look at the world. However, one does not decide to enter the filter bubble (Pariser). Digital mediums and online news sources must provide the users more sovereignty over their data (Unver), by either providing an option to use a non-filtered version of the software, or practicing complete transparency of their algorithms and communicating them publicly to all who are online. However, these should not be necessary for domains that do not deal with controversial issues and topics, such as online shopping malls.

The supporters of internet personalization argue for the virtual world where everything is tailored perfectly for the individual (Pariser). Such a digital experience would be safe and pleasant, without the need for arguments and disagreements. It will never bore us, nor it will ever

waste our time. It is a space that will be populated with people that we like, agree with, and most importantly, without anything or anyone that could make things uncomfortable. However, these benefits come with a cost: a cost of discussion, perspective, and insight. Without these, it will not only affect politics as this paper discussed, but our overall experience as a social animal in the increasing significance of the virtual space. The internet must be mature enough to show the audience some things that are uncomfortable or challenging, not merely relevant. It must develop into a place where it not only shows what we want to see, but what we need to see.

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