Algorithms and Their Influence on News Sources: How algorithms affect our online experience

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Algorithms have become essential in our daily online life. They are used by nearly every online news source for filtering, sorting and deciding what to display to the user. These news articles often are composed of political and social values that may be biased to one area of a spectrum. Articles that an algorithm decides to show a user can shift a their political, social, and economic opinions towards or against a certain bias. In this paper I will argue that news sites (CBC, CTV and Global) and news aggregators (Facebook, Reddit, or Google News) can have a persuasion on their users and that algorithms are not appropriate for all types of online news.

An algorithm is a series of instructions that take inputs and modifies them to provide a useful output that a user can interact with. Applications of algorithms include finding the shortest path in a maze or sorting a series of numbers. In respect to online news aggregators an algorithm might be used to decide what articles a user sees on the home page and what articles are displayed as "trending". Since most major news sites and social media sites keep their algorithms secret, for the sake of this paper algorithms must be defined depending on their platform and intended use. Since news sources such as Facebook and Twitter only determine what topics are trending and not the core content of their website, we can say that their algorithms are less impactful towards the users participation in public life. However Reddit's algorithm determines the entire content of its website, and as such we can state that it has a much greater effect on participation in public life. Similarly to Facebook and Twitter, in the case of online news sources it is rare that an algorithm would be used to decide what is on the front page. That often falls in the arms of an editor or team of market specialists that determine what the most relevant story is and how to display it appropriately. This can be used to explain the bias respects of a news source since an algorithm would theoretically provide no bias.

Online news sources are visited by hundreds of millions of people a day. It goes without saying that these news sources have a great influence on people's perspectives of the public and the world around them. News sources such as CBC, CTV and Global all have political biases towards one area of a spectrum and as such, their algorithms will be weighted appropriately towards their specific biases. However since news aggregators have much larger user bases, they are relatively more neutral towards what is decided to be shown. Often you can see both sides of a bias within a few posts of most news aggregation sites. This is why a majority of youth and developing people will visit these sites more, the objectivity appeals to them and allows them to derive better perspectives of the world.

Algorithms have observably influenced massive events in the past few years, the most recent and notable of these being the 2016 US Election between Donald Trump and Hillary Clinton. During the election, news sources on both sides of the spectrum were producing news articles with biased content towards their opinions. These articles contained the ability to persuade their audience's vote in the election depending on how the article portrayed a certain view of the candidate. Often titled with very exaggerated headlines, articles such as these were written to scare or mislead their readers to believe in the bias of the source. While having articles such as these on news sites alone would not have a major effect on the voting population, however these articles were often spread on news aggregation sites such as Reddit which greatly expanded their exposure. Since both Trump and Hillary supporters are active on Reddit, they were both subjected to the extreme stories that were shared on it. The algorithms that helped select the top posts were written to be as neutral as possible and follows a mathematical formula based on time and the net amount of votes (Springer, M). However due to a bug in the algorithm, the website's front page was spammed with an unusual amount of bias towards the Donald Trump articles. Later admitted to be unintentional by staff (Jain, R.). Due to this bug, hundreds of millions of people saw posts that could

have persuaded their opinions and changed how they may have voted in the election and altering their participation in public life.

Modern online news sources are including more and more aggregator based features such as voting and commenting and it is up to argument whether this would be a beneficial thing for users and news consumers. As news is growing ever more popular and the youth generation is progressively putting less trust in the media and news, it makes sense why online news sources might be implementing these features (Fingerhut, H.). However if the shift continues, there is a high chance that these sources would fall victim to the same flaws that news aggregation sites have.

Since the site would rely more on user input, online news sources would require algorithms to sort through data and determine what a user wants to see on the homepage of the website. This would lead to a greater amount of bugs and potential misuse of information. Most news sites are trusted and their articles are taken at face value, sometimes just the headline is enough to shift a user's perspective. Having a bug in a system that is so trusted could be devastating as fake or misleading news can spread fast in today's online environment.

News aggregators and news sources both have places where algorithms affect their users participation in public. News aggregation sites and online news sources have a large impact on their users perspectives due to the reliance on news for political information. However, since algorithms can be flawed, they do not belong on the front pages of large and trusted online news sources and instead should only be used on news aggregation sites. Due to their potential harmful impact in spreading false and misleading news they should be refined before their use is global on a more global scale.

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