Why individuals seek diverse opinions (or why they don’t)

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ABSTRACT

Being exposed to polarized sources, consumers of news do not fully trust reporting and increasingly feel the need to check facts. Fact checking has been hard enough to do in traditional settings, but, as news consumption is moving on the Internet and sources multiply, it is almost unmanageable. To solve this problem, researchers have created applications that expose people to diverse opinions and, as a result, expose them to balanced information. The wisdom of this solution is, however, placed in doubt by this paper. Survey responses of 60 individuals in UK and South Korea and in-depth structured interviews of 10 of respondents suggest that exposure to diverse opinions would not always work. That is partly because not all individuals equally value opinion diversity, and mainly because the same individual benefits from it only at times. We find that whether one looks for diverse opinions largely depends on three factors - one’s prior convictions, emotional state, and social context. Moving away from generic news aggregating solutions and focusing on technological solutions that incorporate those three factors should alleviate the ominous consequences of a polarized media landscape.

INTRODUCTION

An outrage industry is easy to find on television, radio, and the Internet. Fox News is a news organization in US that often gets things wrong in an effort to appeal conservative viewers. In 2004, Britain’s media regulator Ofcom censured the channel for failing to show “respect for the truth” [5]. More recently, a poll on health-care reform clearly shows Fox viewers are much more misinformed than the remaining TV viewers [16]. One product of the outrage industry is a series of false, or at least misleading, opinions being spread.

To fix this problem, researchers and practitioners alike have been proposing technological solutions that expose people to diverse opinions and balanced information. The two sites Politifact.com and FactCheck.org are the most popular examples of sites that gather politicians’ public statement and dig out their potential lies. Munson and Resnick run several experimental studies in which they exposed individuals to a variety of political opinion items and found that participants did not equally value exposure to opinion diversity [10] - they can be clustered into three distinct subgroups: challenge-averse users seek out affirming opinions but rejects the idea that they avoid challenging items, support-seeking users are primarily interested in opinions that are similar to their own, and diversity-seeking users are interested in considering opinions that challenge their own. Orthogonal to this study, few visualization techniques that expose news readers to diverse news items and comments have been recently proposed (e.g., NewsCube [12], BLEWS [8], and Diversity Donut [17]). A question left unexplored is whether exposing individuals to diverse opinions is an effective solution to the spreading of misleading rumors or, as The Economist has recently claimed: “with the web increasingly divided into like-minded echo chambers, it’s not clear whether such a flood of factuality would inform people better - or just reinforce their convictions about what a lying bunch the other lot are” [6].

To answer that question, we try to understand why (or why not) people currently seek diverse opinions on news media outlets and, in so doing, we make the following contributions: 1) We distribute a survey online and learn how 60 Facebook and Twitter users in UK and South Korea read news in those platforms; 2) To interpret those responses, we then build a reasoning framework upon the vast literature of opinion spreading; and 3) We supplement survey results with structured interviews of 10 individuals, whose comments offer new insights on how social media sites have changed the ways people find news.

SEEKING OPINIONS: A SEEKER-CENTRIC VIEW

From the literature on opinion spreading, we find that three main factors affect the process of pro-actively seeking opinions. That is, whether one seeks diverse opinions depends on one’s: 1) prior knowledge/beliefs; 2) emotional state; and 3) social context.

Factor 1: The seeker’s prior knowledge/beliefs. Individuals often agree with opinions that fit with, and support, what they already know. In 2008, US liberals were prepared to believe that Governor Sarah Palin thought that Africa was a country rather than a continent, while US conservatives were rejecting the same rumor as baseless [11]. The same situation here called for radically different beliefs. After developing strong beliefs, people approach whatever they hear later with those beliefs. This is often called biased assimilation: people process information in a way that fits with their own preconditions [15]. Biased assimilation is partly produced by people’s desire to reduce cognitive dissonance [7], i.e., people tend to deny claims that contradict their beliefs. Cognitive dissonance occurs under two conditions: 1) strong prior beliefs; and 2) skewed trust. When those two conditions do not hold,
that is, when people’s beliefs are weak and when they trust both sides of an argument, people will seek diverse opinions and potentially learn from what they read and hear. Liberals were prepared to accept Palin’s confusion about Africa because: 1) the confusion fitted what they already thought about the Governor (prior belief); 2) the news was reported by the trustworthy and liberal New York Times (trusted source).

**Expectation 1:** We expect that individuals tend to seek diverse opinions on issues they are not sure about, and they do so by consulting trustworthy sources.

**Factor 2: The seeker’s emotional state.** Because of cognitive dissonance, people deny claims that contradict their beliefs. This is especially true if those claims contradict their deepest beliefs - people do not give up their beliefs especially when they are strongly and emotionally committed to them [9].

**Expectation 2:** We expect that people would seek diverse opinions on issues that people deeply care about and issues that survive “emotional selection” (i.e., issues that are able to tap emotions common across individuals, emotions like disgust, anger, and outrage [9]).

**Factor 3: The seeker’s social context.** The decision of whether to seek diverse opinions is also affected by social context - it is well-know that we are less driven by independent thought than we would like to believe, and more by peer influence [4]. Indeed, opinions spread through two different but overlapping processes:

1) **Social Cascade.** A necessary condition for the circulation of opinions is that “susceptible individuals must be in touch with one another” [1]. During World War II, “the rumor that all men over thirty-five years of age were to be discharged travelled like lightning - but almost exclusively among men over that age” [1]. That is because, whenever a critical mass of people hold the same opinion, a social cascade starts: people form their opinions by increasingly relying on others and decreasingly checking the facts.

2) **Group Polarization.** Not checking facts results into conformity cascades. In a conformity cascade, people do not question their group’s judgment but go along with the group to maintain the good opinion of others or to avoid social sanctions [3]. The result is that people’s beliefs are a product of social networks working as echo chambers, and those who live in diverse echo chambers end up with radically different beliefs on the same issue. Widespread acceptance of falsehoods is inevitable in echo chambers. Racial segregation and discrimination on the basis of sex are good examples of bad ideas supported by long-lasting conformity cascades.

**Expectation 3:** We expect that individuals who seek diverse opinions are those who are not embedded in echo chambers but span a variety of social contexts in which people hold different and possibly opposing views.

**WHY PEOPLE (DON’T) SEEK DIVERSE OPINIONS**

Based on the literature, we have put forward three main expectations on how people would seek diverse opinions. Now the question is whether such expectations still hold today. News readers are increasingly shifting from traditional news sources (e.g., newspapers, television) to the Internet (e.g., news sites, social media sites). One consequence of this shift has been that news readers, especially those on social media sites like Twitter, are starting to be exposed to diverse information and opinions in new ways [2].

To get a preliminary understanding on how people consume news everyday, how and where they seek or get exposed to diverse opinions, and whether such an exposure has any impact on changing their minds, we distributed an online survey on the two social media sites Facebook and Twitter in November 2011 1. We gathered responses from sixty individuals (forty five males and fifteen females). We then supplemented survey responses with structured interviews of ten out of the sixty individuals (6 males and 4 females). The structured interviews were recorded, and each of them took, on average, forty five minutes. Next, we report percentage results from the survey, and quotes from the structured interviews.

The age range of our participants is from 18 to 49 years old. Twenty seven live in Europe, and thirty three in South Korea. 80% are graduate/postgraduate of different majors (e.g., CS/EE(32), science(5), the humanities and cultural sciences (7), medicine(2), others (4)), and all of them are very active users of social media sites: 97% have a Facebook account and frequently visit the site; 75% have a Twitter account but only 43% actively use it. As one might expect, being active online users, our participants read, on average, 17.46 news articles on the Internet every day; their news sources were mainly both online newspaper sites and social media sites.

Our respondents value exposure to diverse opinions yet feel it is cumbersome to look for different points of view. 63% of them have been exposed to diverse opinions without looking for it. The sources of exposure have not been major news sites but largely Facebook and Twitter. For 74% of our respondents who have been exposed to views different than their own, no change of opinion resulted from the exposure. Participant 4 said: “I came across diverse opinions while reading my friends’ status updates, but that has never changed my mind.”

We thus asked participants with which of the three definitions (diversity-seeking, support-seeking, and some challenge-averse) they would identify themselves [10]. It turned out that 43% felt to be diversity-seeking, 35% support-seeking, and 22% challenge-averse:

**Diversity-seeking.** Diversity-seeking respondents actively seek news articles that cover different points of views for the same issue. There are a variety of reasons for seeking diversity: to fulfill their curiosity, to broaden their views, or to strengthen their arguments. Participant 2 commented: “I follow lots of different blogs to see different arguments and if you want to fight the enemy, you need to know him.” Interestingly, diversity-seeking respondents do not read more news than what support-seeking and challenge-averse respondents do - the level of activity remains fairly constant.

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across the three user categories.

**Support-seeking.** Support-seeking individuals enjoy reading articles that contain views different than their own but do not actively look for different points of view mainly because it is hard to do so. Participant 3 mentioned: “Mainstream sites are not good at covering different points of views and don’t cover certain stories at all.”

**Challenge-averse.** Challenge-averse respondents did not put much effort into finding diverse opinions. In participant 4’s words: “I usually read political news and do so from a major news site. However, If I realize that an article reflects views different than my own, I wouldn’t bother to read any further”. However, few challenge-averse individuals have also reported to value diverse opinions. For example, participant 7 said: “I look for diverse opinions only about specific issues”.

All three user types value exposure to diverse opinions, and yet they feel it is difficult to attain. After we have analyzed our preliminary results, it became clear that a single individual does not constantly belong to one user type but changes his/her attitudes depending on three main factors.

**Factor 1: The seeker’s prior knowledge/beliefs**

We found that the main factor that determines whether one looks for diverse opinions or not is the strength of one’s prior belief. Weak beliefs on an issue generally call for reading a variety of articles, especially if the issue is something readers deeply care about (this latter aspect reflects factor 2, which is discussed next). By contrast, strong beliefs are often associated not only with avoiding different points of view but also with keeping prior convictions untouched. The challenge-averse participant 7 said: “If I’m opinionated about something, no article would change my mind”. It is interesting that some participants are not prepared to change their minds after reading articles they find reputable. These participants belong not only to the challenge-averse category, but also belong to the support-seeking category. For example, participant 3 mentioned: “For issues about which I have strong opinions, I don’t care about different points of view”.

However, when our participants changed their minds, they did so because they received news from trusted sources. The good news is that, 31.6% of Facebook users and 65.2% of Twitter users have changed their minds after coming across news articles with views different their own, mainly news coming from friends and from trusted news outlets (e.g., BBC news). The bad news is that this does not happen regularly, as participant 4 said: “I read articles containing diverse opinions, and these articles often came from friends: but, to be honest, it has not happened very often”. As one might expect, people do not consider all their Facebook friends to be equally trustworthy. The same applies to traditional media outlets. UK respondents seem to generally trust BBC and distrust what they consider to be biased reporting. For example, participant 10 said: “I do read right-wing sources but don’t trust them - they are generally too biased”.

**Factor 2: The seeker’s emotional state**

Our participants tended to pro-actively look for news about issues they deeply cared about. Our European respondents repeatedly mentioned 2011 issues they strongly related to - UK riots, Greece’s financial situation, and the “Occupy Wall Street” movement against social and economic inequality. The most recurrent issue among our Korean respondents was, instead, FTA (Free Trade Agreement) with US. It has also been mentioned that, initially, the “Occupy Wall Street” movement was not widely covered by traditional media outlets, and social media offered an alternative way of finding news about it, as participant 4 reported: “When Occupy Wall Street was happening, only few mainstream media articles were covering it, so I looked for and found plenty of blog posts and tweets about it.”

**Factor 3: The seeker’s social context**

Whether an issue is popular or not, our respondents did seek diverse opinions on it only if the issue was repeatedly mentioned by more than one of their online friends. For example, participant 8: “News coming from my friends tend to be far more interesting than those coming from popular news sites”. As nice as it might sound, reading news preferentially from friends might well result into people sorting themselves into echo chambers. However, in reality, that is not what our respondents felt their use of Facebook and Twitter translated into. Only few respondents felt their Facebook accounts were echo chambers, and those included participants 6 and 4: “I have few friends who posts a lot of news links on Facebook, but they’re usually about stuff I already read before”; and “Usually my friends tend not to differ in their opinions”.

However, many respondents looked for news on social media sites for the very fact that these sites tend to broaden their views. 7 out of 12 challenge-averse individuals were prepared to loose their reticence and read articles with views different than their own, but only if the articles came from their friends. Participant 3 voiced: “If an article with views different than my own has been posted by friends online, then it is a very different story. I’d read it. It is not just about the article itself, but it’s about being aware of what your friends think and read”. Similar comments were echoed, to a greater degree, by Twitter users who strongly felt they got diverse opinions on the site (see Figure 1 for a comparison between Facebook and Twitter users). However, they also acknowledged that what they got depended on their choices of who to follow, in that,
they carefully picked who they followed depending on the amount of diversity they desired. On a tangentially related note, participant 2 mentioned: “I follow very few friends on Twitter and, as a result, I come across diverse information and opinions”. Few respondents also mentioned they have used Twitter’s search tool to go beyond their usual ‘news diet’. Participants 3 and 4 said: “In twitter, if you search for the right keywords, you get things you wouldn’t expect to get. I don’t search for keywords everyday, but I enjoy doing it from time to time”; and “When I became interested in the ‘London Occupy’ movement, the first thing I did was to search for it on Twitter. Just to understand what the general public made of it”.

Summary
As one might have expected, the need for diverse opinions varies across individuals and, for the same individual, it is not static but is constantly changing, mainly depending on the issue at hand (emotional issues attract more attention) and on prior beliefs. The stronger the belief, the less likely a change of mind and, as a result, the less likely to look for alternative points of view. Yet, our respondents have changed their minds, and they often done so after serendipitously receiving news articles from sources they considered trustworthy (e.g., traditional outlets like BBC, reliable Facebook contacts).

IMPLICATIONS
Theoretical Implications. Our work suggests that classifying people into the static categories of diversity-seeking, support-seeking, and challenge-averse is oversimplified. The same person might change his/her own category over time, likely because of his/her: 1) prior knowledge/beliefs; 2) emotional state; and 3) social context. These are general factors, each of which deserves to be explored in the future.

Practical Implications. It is tempting to believe that exposing people to balanced information can reduce the risks that cascades and polarization will lead people to accept falsehoods. In reality, we have seen that showing diverse opinions to individuals might well strengthen unreasonable positions and increase polarization. That is in line with previous studies, both sides reported that their beliefs had shifted toward a stronger commitment to what they thought before they had done so. In short, exposing people to balanced information produced a more intense belief in what they had thought before” [14]. The same effect has been observed in subsequent studies [11]. Our work suggests that, to expose people to diverse opinions, researchers and practitioners should build news aggregating tools with very specific features. These tools should: 1) Cover issues people deeply care about and about which they have weak beliefs (e.g., initially, the emotional topic of the UK riots was not widely covered by general media outlets); 2) Aggregate news from sources individuals personally find reputable (e.g., BBC news or trustworthy friends’ status updates); and 3) Have ways of aggregating news that encourage people to get out of their social echo chambers (by, e.g., having user interfaces that emphasize search tools over news streams).

CONCLUSION
Technological solutions that aim at making the news more reliable by exposing people to diverse opinions have proved ineffectual. That is not to say that exposing people to diverse opinions is worthless; but merely that, as this paper has detailed, it could work only in specific situations. Polarized news reporting might be inevitable; but news aggregation that is user-tailored could surely attract fresh consumers of news; and that is a good thing.

REFERENCES