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**Truth in the Information Age -
Dead or Just Hidden?**

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Introduction

Pokémon Go, iPhone 7, Donald Trump, Prince and Powerball. Those were the top five Google searches in 2016.¹ Although it is hard to get a specific number from Google, it is estimated that Google handles more than two trillion searches per year. When doing the math that makes more than 63,000 searches per second.²

With numbers like these, you can see how important it is for us to gather information and with the right tools we have 24/7 access as well. If it didn't matter what sort of information we receive, then everything would be fine. But in the era where expressions like "fake news" seem to pop up everywhere, the question seems to arise whether anything we read is true, or better yet, "is truth dead in the information age?"

To fully understand all the nuances of this question a few definitions are required.

When looking at the expression "information age" it refers to a period of time starting at the end of the 20th century and continuing into the foreseeable future. It is the change from the industrial to the post-industrial society where a large portion of the economy lies in information technology. It is shaped by the invention of the computer and telecommunication thereby changing how information is spread, managed and saved.³ For this essay, I will be referring to the last three to four decades that include the invention of the internet, allowing information to travel around the world in seconds as well as offering access to more people than ever before.

The term "truth" comes with many different definitions depending on the situation you are looking at. The common definitions found in reputable dictionaries are:

1. Something is true when it aligns with either fact or reality⁴ or 2. "a judgment, proposition, or idea that is true or accepted as true."⁵

To define the term "truth" for the following essay it is very important to differentiate whether you are looking at it from the author's point of view, or rather from a reader's

¹ Google 2016

² Sullivan 2016

³ Bendel 2019 p. 87

⁴ Lexico

⁵ Merriam-Webster (a)

perspective. When looking at information that someone posted online, objectively that information is either true or false. In this case, the first definition fits the situation better.

It gets slightly more complicated when looking at truth from the reader's perspective. Bias and other beliefs play into how a reader interprets the information that they are gathering. That is why in this case truth is something that varies from person to person. This results in people accepting certain statements as true while ignoring others. They build their own reality and thereby their truth, whether that information is factual or fiction is secondary.

By contrast, the adjective "dead" does not leave any room for interpretation. Something is either alive or dead, with dead meaning that something is "no longer alive."⁶ This implies a black and white answer. Such a duality simply isn't possible with the topic at hand. Instead, I will be looking at it as a scale of sorts and analysing which side has more weight on it before coming to a conclusion.

How Authors Help the Death of Truth

Times have changed from minimal sources of information to a never-ending flood of information due to the fact, that spreading information is no longer something only journalists do. Nowadays all you need is an internet access to post things on social media, blogs, forums or in any of the comment sections. Now all you need to do to get information is a quick search online and you have millions of answers at your fingertips but this speed comes at a price. When weighing how fast you want information versus how credible this information is, the validity often takes second place.⁷

The best example of this situation is Wikipedia. The basic idea of Wikipedia is that someone with knowledge of a subject writes a new article or adds to an existing one. These changes can be seen by other members of the wiki community who either accept, delete or adapt your changes. That way vandalism or wrong information can be removed to ensure that Wikipedia does not become a platform that spreads hurtful or wrong information. Unfortunately, not all false information is found and removed.⁸

⁶ Merriam-Webster (b)

⁷ Talvin 2015 (2:57)

⁸ Brain

In 2008 a student edited a post giving the coati, a type of raccoon in South America, the nickname “Brazilian aardvark.” The student later mentions in an interview that due to a missing citation he thought the information would be removed. What happened instead was other websites and newspapers used this new nickname and wrote articles mentioning it. Later these articles were named as sources.⁹ This is known as circular reporting. A piece of false information is posted, then the information is used on a different website that then is added as a source, thereby validating the false information.¹⁰

This spreading of false information can happen deliberately or accidentally. A way to accidentally spread wrong information is by stating an opinion as a fact. Humans tend to believe that everything they think or that is in their minds must be true.¹¹ When someone states something with confidence, even though there is no way to prove this statement, it is often difficult to see how factual this statement is and thus accidentally planting false information in people's heads.

The other possibility is the posting of fake news. This expression could be heard all over the world due to Donald Trump’s use of the expression. Fake news actually has a different meaning than what Donald Trump uses it for. Trump calls any information that doesn’t fit his belief or opinion “fake news” and thereby discredits it. In reality, fake news is the intentional spreading of false information to influence public opinion. These stories are often outrageous or align with existing beliefs so that they are more likely to be shared and accepted. With the help of bots, automated fake accounts that post, comment or share these posts, the stories gain momentum to make them seem more important. Once influential people participate in the reposting, the made up stories gain credibility.¹²

It is unknown how many bots are currently on social media. One statistic claims that up to 270 million accounts on Facebook are fake.¹³ This became an obvious problem in the 2016 US election. It is said the social bots were used on Facebook to influence users in either of the candidates' favour. Another way to manipulate people is by

⁹ Randall 2014

¹⁰ Talvin 2015 (0:57)

¹¹ Lazarus 2017

¹² Kleinman 2018 (0:30)

¹³ Kulp 2017

paying for advertisements. Facebook allows advertisers access to thousands of parameters that go far beyond the gender and location of a person. This way the chances of swaying people's opinion is even bigger due to the targeting of certain groups of people.¹⁴

But social media doesn't stop the manipulation there. They have been perfecting their algorithms with which they try to guess what a user would like to see next. The so-called filter bubble is built to only show information that is similar to other posts, articles or videos that you liked. This can lead to your news feeds only showing one perspective and ignoring the opposing side, thereby only presenting facts from one side or one point of view.¹⁵

One of the convenient aspects of social media is how fast news can travel. This becomes an issue when there is breaking news where not all information is available from the beginning. This can be compared to gossip or a rumour spreading before anything can be validated. However, as it is with rumours, the embellishments of the repeated story are often what do the most damage.¹⁶

How Readers Invent Their Own Truth Despite the Facts

As mentioned before, the way a reader builds his or her truth is entirely different from truth as a fact. This includes several different aspects.

Something very important to having your own reality is the validation of your opinion. A few decades back your opinion was measured against the opinions of people whom you had contact to throughout the day. If you had a different view than your surroundings that meant your opinion wasn't true due to peer pressure and the knowledge of the majority. Nowadays the distance between people has been reduced to the point where you can find likeminded people just by doing a quick web search. A side effect of social media is that we often feel isolated. If we then find people who think alike and can validate our opinion, we can gain a sense of security and confidence in ourselves.¹⁷ This leads to groups, such as the Flat Earth Society, whose

¹⁴ Howard 2018

¹⁵ Lahn 2018

¹⁶ Branier-Phelps 2008

¹⁷ Parker 2019

claims can be disproven, but still stick to their view because they are not alone in thinking the earth is flat.

There is another phenomenon that helps to validate your own opinion even more called the confirmation bias. We are more likely to believe information if it aligns with our thoughts. Add a special algorithm that social media and other search engines apply and you get a ton of information that supports your own belief. An informative video on YouTube on confirmation bias sums it up in the following way: “We tend to like information that we agree with, that means we see more of it, which means we think there’s more of it, which means we must be right.”¹⁸ You end up in a rabbit hole with mostly information that confirms what you believe.

The Pew Research Center has conducted a study with over five thousand US adults. The participants were asked to distinguish if a piece of information was a fact or an opinion. The overall results were that the majority were able to correctly identify more than half of the facts and opinions. Furthermore, the researchers found out that the participants were more likely to call something a fact if it aligned with their belief and call something an opinion if they did not agree with it. An example would be the statement: “President Barack Obama was born in the United States.” This is a factual statement as in something that can either be proven or disproven. 89% of the democratic participants correctly identified this as a fact while only 63% of the Republicans were successful in identifying the fact. But when looking at opinions incorrectly called facts, you can see that left-appealing opinions were more likely called a fact by Democrats and right-appealing opinions called a fact by Republicans.¹⁹²⁰

A public example of this is Donald Trump’s use of “Fake News.” As mentioned before, he uses the expression in the wrong context. Instead of referring to false information, he uses it to discredit information that does not fit his belief.²¹

The study also shows that sources attributed to certain information had little impact as to whether the participants identified the facts or opinions correctly. One exception was information that was connected to Fox Channel, a TV channel associated with

¹⁸ Wired (1:02)

¹⁹ Mitchell et al. 2018 p.1

²⁰ Figure 1

²¹ Gendreau 2017

conservative biases. Republicans were more likely than Democrats to credit that information as factual.²²²³

Overall you can differentiate between two types of readers and how they build their reality. One group who somewhat actively pick out information which they believe and ignore the rest. In this case, it doesn't matter whether they accept or dismiss certain facts, the result is still the same. The other group has their truth shaped passively. The beforementioned algorithms play an important role in controlling what a user sees on a day-to-day basis. What makes this a passive shaping of their truth is that most people aren't aware of how influential these filter bubbles are. In both cases, the reader is validated in what they already know.

A Small Glimmer of Truth Is Still There

There are still a few reasons to believe that truth is still portrayed on the internet or in media in general.

Fact-checking is something that takes a lot of resources, whether that is staff, time, money or a combination of all three. However, there are still newspapers that invest in the quality of information and have a whole team of fact-checkers. Take the newspaper The New Yorker as an example. They are said to have a legendary team of fact-checkers that go over every story published. Not only do they need a broad knowledge of current topics, but they also follow up on every source mentioned for a story, even if these are not quoted. Even cartoons are fact-checked to a certain degree. These fact-checkers have no relation to the writers they are checking. The chief fact-checker of The New Yorker explains that his team has doubled over the years, but he also mentions that they wouldn't be able to keep up with the publishing pace without the internet.²⁴

The speed at which information travels can be a handicap when false information is involved, but when that information is necessary or even lifesaving, the benefits outweigh the disadvantages. Due to the increase of natural catastrophes happening

²² Mitchell et al. 2018 p. 6

²³ Figure 2

²⁴ Hepworth 2017

all over the world, mobile apps are being used to spread the right information to the people who are affected to ensure the lowest number of victims as possible. This can also help with the organisation of volunteers, spreading information where resources are located or where victims can find help. This way the information is more likely to reach every place it needs to.²⁵

Those who also seem to benefit from the internet's overall access are people in countries where all forms of media are controlled by the government. Take Turkey as an example. President Erdogan can influence what the radio broadcasts and what TV networks can or can't cover. He has also banned more than 220,000 websites, one of them being Wikipedia. That is due to critical articles claiming Turkey supported ISIS and Al-Qaeda. When censoring what websites the public can access, the places where people can get their information from are limited. Fortunately, there are ways around these sorts of blocks. Sometimes, a "virtual private network" also known as VPN allows an internet user to keep their location anonymous and thereby enabling them to access websites that may otherwise be blocked in the country they live in.²⁶

However, the control of information goes both ways. The governments of some countries do not only control what information gets into the country but are also very controlling of what information leaves the country's borders. A very recent example is a nuclear accident in Russia. On the 8th of August 2019, an explosion was seen at the Nyonoksa testing range. Videos of an explosion were posted online and global monitors for radiation showed peaks in the amount of radiation that was found. Ironically, the video that circulated was a Russian video of a nuclear explosion but from another accident in 2015.²⁷ This video was used anyway to have a larger impact in spreading the story. Russia immediately denied any sort of nuclear explosion although conveniently several local nuclear monitoring stations went offline around the same time. It even went so far, that the doctors treating the injured victims of the explosion were not warned that these people had been exposed to radiation. Doctors and nurses were forced to sign nondisclosure documents and when one of the doctors had radiation in his muscle tissue it was stated that the radiation was from something

²⁵ Yeoh 2019

²⁶ Ahval 2018

²⁷ Echtermann 2019

he ate.²⁸ A nuclear accident isn't something that is limited to a single country. It is unfortunate that Russia tried to cover up the explosion and at first stated that no nuclear radiation was involved when they are not the only ones affected by that sort of accident.²⁹³⁰ Fortunately, the news spread so fast that Russia wasn't able to keep a lid on the information which might have been a possibility during a time when stories were printed several hours later.

Conclusion

When looking at the question "Is truth dead in the information age?" literally, the answer would be, "no, truth is not dead." Fact-checkers prove that true information can still be found. But when weighing both sides, I would say it depends on how you look at the situation. On the one side, it seems like the quantity of false or non-verified information outweighs the number of reputable sources for information.

On the other side, although it is difficult, a reader can notice the difference between reliable and fake information. The internet is full of fake news, opinions disguised as facts, exaggerated stories or rumours. It is up to every individual to decide what to believe, where they get their information from and to question anything that seems farfetched.

That being said, this was a problem I spent a lot of research time on. When you start thinking about a topic and are set on a certain direction or outcome, research becomes harder. I found myself looking for the definition of truth in several reputable English dictionaries. Of course, they were all very similar but when I found a definition that fit the point I was trying to make, it was easier to simply try to ignore the other possible definitions. Thereby I was tempted to select specific sources and information and ignore the rest.

The other difficult aspect was finding a variety of different sources. Due to limited access to a library with the sort of sources that would help in this essay, I almost completely relied on the internet to give me the information I needed. Ironically, the

²⁸ Pickrell 2019a

²⁹ Pickrell 2019b

³⁰ Robins-Early 2019

internet seemed like the best source about the internet and many of the topics mentioned have developed very recently. During the writing of the essay, I needed to remind myself to take the time and check if the author of an article had any credentials to write about the subject. Though a few sources may not be as credible as I would like them to be, I feel confident that I was not a victim of believing every word written on the World Wide Web.

References

- Ahval. (2018). Turkish activists battle internet censorship in court. Ahval. Source: <https://ahvalnews.com/internet-freedom/turkish-activists-battle-internet-censorship-court> (accessed 16.09.2019)
- Bendel, O. (2019). 350 Keywords Digitalisierung. 1st Edition. Springer Gabler
- Brain, M. How Wikis Work. HowStuffWorks. Source: <https://computer.howstuffworks.com/internet/basics/wiki2.htm> (accessed 16.09.2019)
- Echtermann, A. (2019). Nein, dieses Video zeigt keinen aktuellen „Atomunfall“ in Russland, sondern einen Vorfall von 2015. Correctiv. Source: <https://correctiv.org/faktencheck/militaer/2019/08/19/nein-dieses-video-zeigt-keinen-aktuellen-atomunfall-in-russland-sondern-einen-vorfall-von-2015> (accessed 20.19.2019)
- Gendreau, H. (2017). The Internet Made 'Fake News' a Thing—Then Made It Nothing. Wired. Source: <https://www.wired.com/2017/02/internet-made-fake-news-thing-made-nothing/> (accessed 16.09.2019)
- Google. (2016). Das war 2016 angesagt – Weltweit. Google. Source: <https://trends.google.com/trends/yis/2016/GLOBAL/> (accessed 15.09.2019)
- Granier-Phelps, C. (2008). The Pros and Cons of Twitter as News Source. SocialMediaToday. Source: <https://www.socialmediatoday.com/content/pros-and-cons-twitter-news-source> (accessed 15.09.2019)
- Hepworth, S. (2017). The New Yorker's chief fact-checker on how to get things right in the era of 'post-truth'. CJR. Source: https://www.cjr.org/the_delacorte_lectures/new-yorkers-fact-checker-post-truth-facts-fake-news-trump.php (accessed 15.09.2019)
- Howard, P. (2018). How Political Campaigns Weaponize Social Media Bots. IEEE Spectrum. Source: <https://spectrum.ieee.org/computing/software/how-political-campaigns-weaponize-social-media-bots> (accessed 16.09.2019)

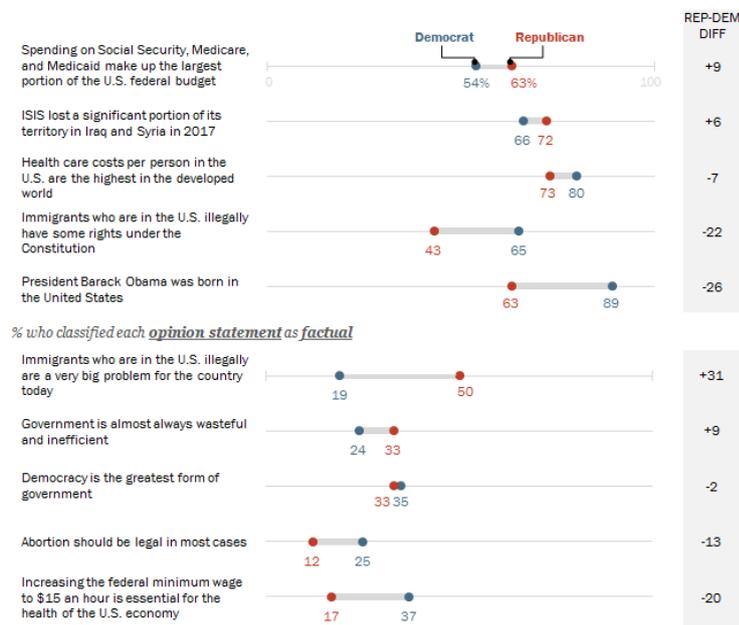
- Kleinman, Z. (2018). What is fake news and how can you identify it?. BBC. Source: <https://www.bbc.com/news/av/technology-46149888/what-is-fake-news-and-how-can-you-identify-it> (accessed 16.09.2019)
- Kulp, P. (2017). Facebook admits to nearly as many fake or clone accounts as the U.S. population. Mashable. Source: <https://mashable.com/2017/11/02/facebook-phony-accounts-admission/?europa=true> (accessed 16.09.2019)
- Lahn, N. (2018). „Das könnte Dich interessieren“ – Wie die Filter Bubble unsere Wahrnehmung bestimmt. Humboldt Institut für Internet und Gesellschaft. Source: <https://www.hiig.de/wie-filter-bubble-unsere-wahrnehmung-bestimmt/amp/> (accessed: 16.09.2019)
- Lazarus, C. (2017). Facts, Truths, Beliefs, Opinions, and "Alternative Facts". Psychology Today. Source: <https://www.psychologytoday.com/us/blog/think-well/201703/facts-truths-beliefs-opinions-and-alternative-facts> (accessed 16.09.2019)
- Lexico. Definition of truth in English. Lexico. Source: <https://www.lexico.com/en/definition/truth> (accessed 13.09.2019)
- Merriam-Webster (a). Definition of truth. Merriam-Webster. Source: <https://www.merriam-webster.com/dictionary/truth> (accessed 13.09.2019)
- Merriam-Webster (b). Definition of dead. Merriam-Webster. Source: <https://www.merriam-webster.com/dictionary/dead> (accessed 13.09.2019)
- Mitchell, A., Gottfried, J., Barthel, M., Sumida, N. (2018). Distinguishing Between Factual and Opinion Statements in the News. Pew Research Center. Source: <https://www.journalism.org/2018/06/18/distinguishing-between-factual-and-opinion-statements-in-the-news/> (accessed 15.09.2019)
- Parker, M. (2019). Conspiracy theories and cognitive dissonance...and how to combat them. CSO Online. Source: <https://www.csoonline.com/article/3335757/conspiracy-theories-and-cognitive-dissonance-and-how-to-combat-them.html> (accessed 15.09.2019)

- Pickrell, R. (2019a). New details on Russia's mysterious missile disaster suggest a nuclear reactor blew up. Business Insider. Source: <https://www.businessinsider.de/russian-missile-disaster-shows-signs-nuke-reactor-blew-up-experts-2019-8?r=US&IR=T> (accessed: 16.09.2019)
- Pickrell, R. (2019b). It looks like the Russians are trying to hide the truth about that nuclear accident in Nyonoksa. Business Insider. Source: <https://www.businessinsider.de/russia-covering-up-nuclear-accident-at-nyonoksa-2019-8?r=US&IR=T> (accessed 16.09.2019)
- Randall, E. (2014). How a Raccoon Became an Aardvark. The New Yorker. Source: <https://www.newyorker.com/tech/annals-of-technology/how-a-raccoon-became-an-aardvark> (accessed 15.09.2019)
- Robins-Early, N. (2019). First Came A Mysterious Explosion, Then The Russian Denials. HuffPost. Source: https://www.huffpost.com/entry/russia-nuclear-explosion-putin_n_5d5329c8e4b0cfeed1a4b9d6?guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlmNvbS8&guce_referrer_sig=AQAAAHGQ1PyJMWNM2GN6BcXN7nzovcaBFbhc0dxa8qA8dxYZoC9hv9qft-8p0Lsld2m113yvb2U2c-KJJORpD1Qkm7tPNDzCImvyWe7an4we6Tsn5epSFG1In7QoIHwVEM69C5NDAudqseRYquJk7Dxb3r6ar65bfxfhFmuX6YiJyIQ&_guc_consent_skip=1568834460 (accessed 16.09.2019)
- Sullivan, D. (2016) Google now handles at least 2 trillion searches per year. Searchengineland. Source: <https://searchengineland.com/google-now-handles-2-999-trillion-searches-per-year-250247> (accessed 15.09.2019)
- Talvin, N. (2015). How false news can spread. TED-ed. Source: <https://ed.ted.com/lessons/how-false-news-can-spread-noah-tavlin> (accessed: 15.09.2019)
- Wired. (2017). How the Internet Tricks You Into Thinking You're Always Right. Wired. Source: <https://www.wired.com/video/watch/how-the-internet-tricks-you-into-thinking-you-re-always-right> (accessed: 15.09.2019)
- Yeoh, N. (2019). A Surprising Solution To Surviving Natural Disasters: Mobile Apps. Forbes. Source: <https://www.forbes.com/sites/neilyeoh/2019/05/23/a-surprising-solution-to-natural-disasters-mobile-apps/#620bc6bf1158> (accessed 16.09.2019)

Figure 1

Republicans and Democrats more likely to see factual and opinion news statements as factual when they favor their side

% who classified each factual statement as factual

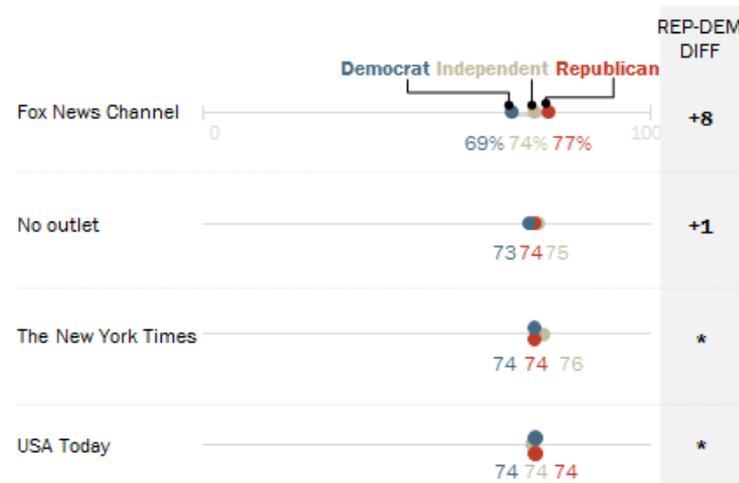


Note: Independents not shown. Republicans and Democrats significantly differ on all statements except for "Democracy is the greatest form of government."
 Source: Survey conducted Feb. 22-March 4, 2018.
 "Distinguishing Between Factual and Opinion Statements in the News"
 PEW RESEARCH CENTER

Figure 2

Democrats' and Republicans' ability to correctly identify factual statements modestly influenced when attributed to Fox News

% of the time Republicans, Democrats and independents correctly classified a factual statement as factual when it was attributed to each outlet



Note: Skipping a statement was counted as not correctly identifying it as factual or as opinion.
 Source: Survey conducted Feb. 22-March 4, 2018.
 "Distinguishing Between Factual and Opinion Statements in the News"
 PEW RESEARCH CENTER