THE USE OF CRITICAL THINKING AGAINST FAKE NEWS

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ABSTRACT

The digital era has determined a very easy creation and propagation of fake news. As a consequence, it has become harder for people to fight this malicious phenomenon. However, the only weapon that can have results in this informational war is critical thinking. But who should use it? The creators of fake news that do this for different reasons? The social platforms that allow the circulation of fake news with ease? Mass media which does not always verify with much attention and rigour the information they spread? The Governments that should apply legal sanctions? Or the consumer that receives all the fake news, him being the final target? Even if critical thinking would be useful for every actor on fake news' stage, the one who needs it the most is the consumer. This comes together with the big responsibility placed on his shoulders. Even if others are creating and spreading disinformation, the consumer must be aware and be careful with the information he encounters on a daily basis. He should use his reasoning and he should not believe everything just because it is on the Internet. How can he do that?

Critical thinking seems to be a quite difficult tool to use, especially for non-specialized individuals. This paper's aim is to propose a simplified model of critical thinking that can contribute to detecting fake news with the help of people's self judgement. The model is based on theories from Informal Logic considering the structure of arguments and on Critical Discourse Analysis theories concerning the patterns found in the content of the information.

Keywords: critical thinking; fake news; disinformation; misinformation

INTRODUCTION

With a simple click on the Internet we are overwhelmed with loads of information of which a big part is fake. We can identify some fake news just by reading the title, but it is quite difficult to distinguish other fake news because the truth and the lie are very well sewn together. Fighting fake news is not easy, especially because the weapons we have are slower and more focused on reason whereas fake news spreads incredibly fast and aims for emotions. However, critical thinking seems to be the only way people can use to try to diminish the effects of disinformation campaigns.

The fake news phenomenon is not new, even if its name started to be heard more often since 2016 US presidential elections. Disinformation has hundreds of years of history, one of the most recent being in soviet Russia. The implications of fake news have always been complex and harmful, but today they are amplified by social platforms which allow the access of targeted messages for targeted audiences. This phenomenon uses cognitive biases in a systematic way that influences the reasoning of the individuals [1].

FAKE NEWS ACTORS

In order to understand who is guilty for it and who needs critical thinking, firstly, this paper reviews the most important actors involved in fake news phenomenon.

Creators of fake news. They are the first to be considered since they are the source of fake news, but it is quite difficult to detect them since they use quite refined technology. However, there are two main identified reasons for which they are creating disinformation. Firstly, it is real that there are some very well constructed strategies of fake news, with political ground, which have the purpose to transmit certain ideologies. Even if it is old, but always updated, propaganda is one of the first scope of this phenomenon. Nowadays, computational propaganda uses algorithms, automated techniques and human resources for transmitting deceiving messages [2]. Another reason for creating fake news is the financial one. On one side, the digital ads make money by the number of clicks from users and they use often clickbait titles with this scope. On the other side, they are entities that offer services of creating from scratch entire campaigns of fake news which can cost up to 400.000 dollars [3].

Platforms of propagation. Social platforms are a favorable environment for the propagation of fake news. The well-known effect of *echo chamber* determines users to consume and to produce the same kind of content. The individuals tend to favor the information they see more often and this repeated exposure of the ideas can determine positive opinions, even on fake news [4]. Social media is also the environment where the digital robots can help at spreading and multiplying the fake news at a very high speed. For a long period of time, the platforms did not manage quite well the propagation of fake news. Lately, after the Cambridge Analytica scandal, Facebook, Twitter and other social networks introduced different automated systems of detecting fake news. The most recent initiative comes from Twitter who introduced the question `Do you really want to share this content you haven't read? `. This new option aims to decrease the large number of people who read just the title of an article and then share it [5].

Mass Media. This entity should be a trustful one, it should have only real news from verified sources, but unfortunately this is not the reality. We are in an era where journalists have to produce news at a fast pace which leads to a poor verification of the information. People are led by instant gratification and this

allows to situations in which even Mass Media spreads fake news. For example, at the middle of June 2020, there was a news spread all over the main official news websites (in Romania, but not only). This news was stating that the coronavirus pandemic is a false alarm. The source of the news was an international website (Global Research.ca) which was stating that this was found in a report of the Ministry of Internal Affairs of Germany. The news has proven fake since this was an opinion of an employee of the Ministry, in a department with no connection to the pandemic problem which intentionally wrote the name of the Ministry in the header of the document [6]. This is a big problem because the credibility of Mass Media institutions decreases and the public does not know what to believe and who to believe and this state of confusion is perfect for fake news.

The Governments. The involvement of the governments is needed especially from the point of view of legislation. They can prevent and sanction the creation and propagation of fake news. Some states are quite harsh wereas some states just proposed recommendations. For example, the Singapore officials imposed fines up to 47.000 dollars or even jail time for creating and sharing false and fake news [7]. However, even if it is good that the governments apply legislation for misinformation and disinformation, it becomes quite dangerous if the governments have a big control and they get to decide what is the truth.

The Consumer. The target of this phenomenon is the population, the consumer who lays on the couch, it scrolls through Social Media and he sees on Facebook that a friend shared a news about the fact that coronavirus is false and that wearing masks will make us slaves. Triggered by the title, the user shares the post on his Facebook wall and in this way, at least other 200 people will see it. Is the consumer to blame since he is just a victim of disinformation? This paper's position considers the consumer being quite guilty. The reader is responsible for what he will do after he reads this kind of content. It is not acceptable to consume content without critically assesing it. Firstly because this is a sign of respect for ourselves, if we are aware of what we are eating, we must be aware of what we are reading. Secondly, sharing this kind of fake news affects the others and it is not about personal beliefs anymore. At a macro level, this creates some mental models in society that are dangerous and far from truth. Gérald Bronner says that the development of the Internet and social networks did not transform us. It just augmented what we already have: a collective mediocrity, an intellectual stinginess, a natural disposition for credulity [8].

Fake news is effective because people lack critical thinking. Having a critical thinking means being aware of the information we encounter on a daily basis, it means evaluating this information to see if it is real, if it has good arguments, if it is not misleading. Critical thinking means rational thinking, it means taking evidences into considerations, it means looking for other sources. Critical thinking is also reflective thinking, when the individual assesses his own thinking and accepts the mistakes and he is willing to correct them.

The success of fake news is due to a low cognitive potential, due to the fact that people cannot accept that they are wrong, due to the fact that people are overwhelmed by the emotions and their reasoning is numb. There are also the cognitive biases that allow some shortcuts to the brain that can deceive us. How can critical thinking specifically help combating fake news?

METHODOLOGY

Critical thinking is quite a large concept which developed in many directions: philosophy, logic, cognitive psychology. Because of its complexity, one single method of applying critical thinking is not enough. That is why, in the following part this paper proposes a model of the application of critical thinking concerning fake news based on contribution from two methods: Informal Logic and Critical Discourse Analysis.

Informal Logic is itself a method whose purpose is to accept or to reject a conclusion that draws from an argumentation. Critical thinking literature presents some common points that can be applied. The starting point is the argument. There are usually three steps, three actions that must be taken: the identification of the argument, the analysis of the argument and the evaluation of the argument. In the case of fake news, these steps are very important and needed to help in truth identification.

Concerning the first step, the identification of the argument, the argument's definitions differ in their complexity, but the main idea is the same. The argument is a combination of assertions (premises) that support another assertion (conclusion) [9]. Recognizing an argument means first recognizing these assertions. A lot of fake news present arguments that seem to be real, but they are not and these mislead the readers. The next step, the analysis of the argument is very important. At this stage the argument is broken down and its components are analyzed in two ways: through schematization where, in short arguments, the premises and the conclusion are identified by the connectors and then a schemata is drawn to illustrate the argument; and through standardization that applies for longer arguments which first need a summarization and then the application of the method of schematization [10]. The last step is argument's evaluation which is related to the kind of support that the premises give to the conclusion. There are the two types of reasoning: deductive and inductive. Each type has different rules of validation and they can be applied when checking a news that has the suspicion of being fake.

Informal Logic also takes into consideration the fallacies or the apparent arguments. Plenty of fake news present reasoning errors which easily mislead people who do not have basic knowledge in argumentation. Some fallacies are quite hard to detect even for the specialized individuals. But, most of the time, people feel that something does not make sense, that something is not right. Our mind gives us a signal that it does not usually reason in this way. This is why is

recommended to always have a list of different types of fallacies that is in our proximity and try to check them when we are not sure about some arguments.

Fake news is also about the language that it is used to catch attention and to transmit an intentional wrong conclusion. Critical thinking focuses on defining concepts, on the careful use of the words, on the clarity of the language and lack of ambiguity. Language manipulation uses words that trigger intense emotions as fear or anger. As a critical thinker, the individual must be aware and in control of his feelings and assess carefully the information.

Fake news use quite often numbers in order to appear more trustful. Critical thinking literature focuses lately on this topic trying to offer different ways in which people must be aware of the numbers. When an information has numbers, it gives a false impression that the information is real, that it is based on evidences, therefore they should believe it. There are a lot of situation when the numbers are not representative, when they are from another context or when they are used in graphics and statistics [11].

The second method which can contribute to the creation of the model of the application of critical thinking against fake news is **Critical Discourse Analysis** (CDA). This method is based on interdisciplinarity using theories from discourse, epistemology, linguistics, social theories, socio-cognitive theories in order to integrate a complex analysis of different types of discourses [12]. The fake news type of discourse can be analyzed based on some concepts from socio-cognitive perspective of CDA: the context, the mental models and the *us and them* pattern.

The context can be understood from two points of view. Firstly, the ordinary meaning of the context tells that it means a set of events that determine a certain action. At this level, the context is seen as being objective and is seen as creating the connection between the discourse and the environment where the discourse appeared. Even this meaning is quite easy to understand, there are a lot of people that don't take it into consideration when they make judgements. Especially in fake news, the public gets easily tricked by the content of an information because they don't asses the context that determined the event the information is presenting.

The second meaning of the context, which is given specifically by CDA perspective is a subjective context. The context is here a mental representation of the social structures which are relevant for the creation and the interpretation of the discourse. This concept is composed out of: an overview of the situation, place and time, the discourse itself, the participants in the communication act, the mental models of the participants [13]. Concerning fake news, the context must be analyzed from both perspectives of the context: subjective and objective at a micro and macro level.

The second concept from CDA that can be useful in fake news analysis is represented by mental models. The mental models are an interface between the discourse and the society. The creation and the interpretation of the discourse are made throughout mental representations which help us to create and understand an image about the world and to face the environment we live in. While we are receiving a discourse or we are reading a fake news, our thinking calls upon existent representations which are social constructed to make sense of what we are reading. The problem is risen when fake news is built on mental representations that are known by the creators. The other side of the coin regards that in the same time, people are building mental models based on the big amount of information they encounter daily, information which can be fake. Most of the time, the consumers of fake news build their mental models of the events they read about by activating relevant parts of their knowledge and in this way, they fill their mental model with the information from the news [14].

The last concept relevant for fake news analysis endorsed by Critical Discourse Analysis is the binary pattern structure of *us and them* in the discourse [13]. Most of the fake news have a common way of representing the world, of breaking the story apart in two parts: good and evil, us and them. Usually *they* are the enemies that want to hurt us and *we* are the victims. The readers should be aware that this black and white representation is quite dangerous and this should be a signal that the news is not quite objective.

THE FAKE NEWS ANALYSIS MODEL

The model proposed in this paper is based on questions that can be carefully asked when someone encounters a suspicious piece of information. Each question is drawn from the methodology discussed above. This is a simplified model which has the essential points that must be addressed by the consumer who wants to find out if a content is fake news or not. This model can be decomposed in more detailed parts, with more questions, but its efficiency would decrease. The individual does not have time to apply a complex schema of analysis.

Figure 1. Fake news analysis model
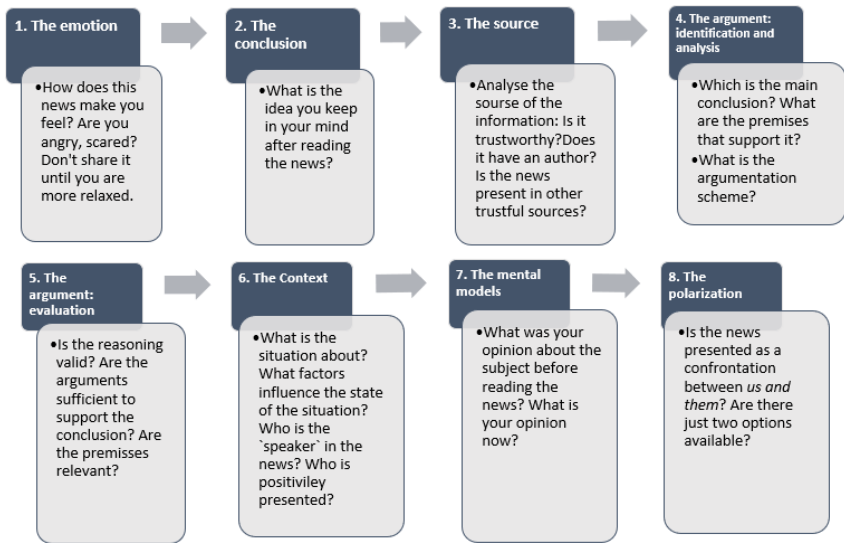
CONCLUSIONS

The fake news phenomenon is increasing and its consequences are more and more dangerous: manipulated voting, people that don't vaccinate their children, people that do not wear masks during a pandemic, people that try suspicious treatments, the hate increasing etc. Disinformation and misinformation harm the society. Because there are so many parts involved in this, it is hard to fight with this malicious information virus. However, it is necessary to invest in the education of the consumers, even if this is a battle on the long run. They are responsible, but they must be helped.

This model is a short version of analysis. It includes the necessary points that an individual should look at when facing a suspicious content. The limit of this model is that critical thinking is a heavy, difficult weapon which is based on rationality whereas fake news is quite easy to digest, it spreads quickly and it is based on emotions. The key is practice, the key is repeatedly applying rational analysis on this kind of news until it becomes a habit, until it becomes almost automated and, in this way, people will have fewer chances to be manipulated.

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REFERENCES:

[1] Gelfert Axel, „Fake News: A Definition`, *Informal Logic*, Vol. 38, No.1, pp. 84-117, 2018.

[2] Woolley Samuel C. and Philip N. Howard, „Automation, algorithms, and politics| political communication, computational propaganda, and autonomous agents—Introduction.", *International Journal of Communication*, 10, pp. 4882-4890, 2016.

[3] Gu Lion, Vladimir Kropotov and Fyodor Yarochkin, *The Fake News Machine. How Propagandists Abuse the Internet and Manipulate the Public*, TrendMicro, 2017.

[4] Shu Kai et al, „Fake News Detection on Social Media: A Data Mining Perspective", *SIGKDD Explorations*, Vol. 19, Nr.1,pp. 22-36, 2017.

[5] Hern Alex, Twitter aims to limit people sharing articles they have not read, disponibil la: https://www.theguardian.com/technology/2020/jun/11/twitter-aims-to-limit-people-sharing-articles-they-have-not-read, accessed at 15 june 2020.

[6] Vițu Valeria, RFI România, „Coronavirus ”alarmă falsă", un fake-news internațional care a prins în România și R.Moldova", disponibil la: https://www.rfi.ro/social-122088-coronavirus-alarma-falsa-un-fake-news-international-care-prins-romania-si-rmoldova, accessed at 16 june 2020.

[7] Funke Daniel and Daniela Flamini, A guide to anti-misinformation actions around the world, disponibil la https://www.poynter.org/ifcn/anti-misinformation-actions, accessed T 15 june 2020.

[8] Hirschhorn Monique, « Ce n'est pas la post-vérité qui nous menace, mais l'extension de notre crédulité » : conversation avec Gérald Bronner, 54-57, in *The Conversation France*, Fake news et post-vérité : 20 textes pour comprendre et combattre la menace, 2018, e-book.

[9] Bieltz Petre, Bazele gândirii critice, Editura Academiei Române, București, 2018.

[10] Bassham Gregory et al., *Critical Thinking. A Student's Introduction*, Forth Edition, McGraw Hill, New York, 2011.

[11] Epstein Richard L., Carolyn Kernberger, *Critical Thinking*, Thomson Wadsworth, 2006.

[12] Weiss Gilbert and Ruth Wodak, „Introduction: Theory, Interdisciplinarity and Critical Discourse Analysis", in *Critical Discourse Analysis. Theory and Inderdisciplinarity*, Palgrave Macmillan, pp. 1-32, 2003.

[13] Van Dijk Teun A., „Critical Discourse Analysis", in *The Handbook of Discourse Analysis*, Second Edition, Wiley Blackwell, pp. 466-485, 2015.

[14] Van Dijk Teun A., *Discourse and Context. A Sociocognitive Approach*, Cambridge, 2008.