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FAKE NEWS: POSSIBILITY OF IDENTIFICATION IN POST-TRUTH MEDIA ECOLOGY SYSTEM

Abstract

Information comes as basic good which affects social well-being. A modern society and a modern state – its administration, education, culture, national economy and armed forces – cannot function efficiently without a rationally developed field of information. The quality of the functioning of that system depends on a specific feature of information, that is namely: its reliability which makes it possible for us to evaluate accuracy, completeness, valence and trust towards information. A part of information conveyed in social media is fake news that is namely: distorted signals not correlated with the truth, which may mislead their recipients. Such information comes as an element of info-environment defined by the term of post-truth. The main aim of the article is identification of the attitudes towards the processes of identification and verification of fake news in the environment of digital media. The subject of the research refers to the users' attitudes towards fake news. As indicated by the research, the attitudes towards fake news are not unambiguous. About 2/3 of the respondents claim that they are not able to distinguish fake news from true information; only every twelfth respondent declares that they know tools for verification of information, although the research survey has been carried out among students of media management, journalism and marketing – students who deal with information in social media.

Key words: fake news, social media, information, trust

Fake news, rumours, gossips etc. have been always present in the public and private discourse. Nowadays, fake news are understood as untrue content which has been intentionally developed for a specific purpose and authenticity of which is still to be verified. These are distorted signals not correlated to the truth[1], which may mislead readers. However, their falsehood can be verified. They contain the already mentioned satirical materials which – taken out of their context– may seem true to some people.

A new dimension of the problem appeared during the information revolution, when all kinds of fake news became available 24/7, and the way information was perceived and consumed changed once and for all. Users stopped being just passive receivers, they became producers, acting as gatekeepers in their social circles.

Creation and distribution of fake news for various purposes have already become common and easy noticeable along with technological advance. Such popularity pertains to a definition of media environment which has it as an ecosystem of "post-truth" where facts have less influence on formation of the public opinion than reference to emotions and personal beliefs[2]. This is an

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[1]Allcott, H., Gentzkow, M., *Social Media and Fake News in the 2016 Election*. NBER Working Paper No. 23089, 2017.

[2]*Word of the Year 2016 is...*, Oxford English Dictionary, [https://en.oxforddictionaries.com/word-of-the year/word-of-the-year-2016]

ecosystem where the term *a lie,* referred to information provided by media, disappears, and it is replaced by less negatively laden expressions, such as *misinterpretation, selective presentation* or *information based on facts.*

R. Keyes emphasizes that in the post-truth era, apart from truth and lies there are also some other terms which are parallel to a lie: *enhanced truth, neo-truth, soft truth, false truth* and *light truth*[3]. They are followed by post-true euphemisms (poetic truth, parallel truth, intricacy truth, truth full of imagination, virtual truth, alternative reality, strategic misinterpretation, creative improvement, uncomplete disclosure, selective disclosure, increased reality, almost the truth, nearly the truth, imaginary statements, information based on facts), also by euphemisms for the verb *to lie* (to enhance, to improve, to embellish, to massage the truth, to manipulate the truth, to say more than the truth, to bend, to ease, to shadow, to shave, to stretch the truth, to depart from the truth, to conceal the truth, to present the enhanced truth, to present the truth in favourable light, to make something brighter than the truth, be gentle with honesty, to twist)[4]. Marketing operations and attendant recommendations to avoid lies in development of an image but also to avoid telling the truth become an important context for the above-mentioned observations.

One of the factors which contribute to the fake news generation can be haste and a concept of equalising content attractiveness and content quality. Allcott and Gentzkow explain that growing popularity of fake news results from several factors. First of all, the barriers to media market entry have been decreased, mainly because of the fact that it has become very easy to start one's own news portal in the Internet, and because of the monetisation of the contents through advertising. Furthermore, social media have become a very suitable platform to share fake news content (mainly because of their viral potential), and the number of their users is still growing. Another factor indicated by the scientists is an unfolding crisis of trust in mass media. It comes as both: the reason and the result of the fact that users become more and more attracted by fake news. The fourth significant factor is growing polarisation of social opinions. It results in the fact that generated fake news, which are related to a particular group, become alternative facts to its members[5].

Important factors which contribute to the distribution of fake news include: cognitive simplicity, cognitive dissonance and tribalism[6]. Another important factor of the success won by fake news is a filter bubble[7] and digital echo chambers, where users can see content and posts which are compliant with their beliefs[8] or a similar phenomenon of relevance paradox.

Even if people prefer sharing content of high quality, receivers' limited attention and information overload may prevent social networks from the proper identification of news based on the quality system; information of low quality may be spread as viruses, in the same way as the content of high quality[9]. In this way it is possible to explain growing publicity of fake news in the Internet –

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[3]Keyes, R., *The Post-Truth Era: Dishonesty and Deception in Contemporary Life*, St. Martin's Press, New York, 2004, pp. 15-16.

[4]Keyes, R., *The Post-Truth Era: Dishonesty and Deception in Contemporary Life*, St. Martin's Press, New York, 2004, pp. 15-16.

[5]Allcott, H., Gentzkow M., *Social Media and Fake News in the 2016 Election*, The Journal of Economic Perspectives, Spring, 2017, vol. 31, no. 2, p. 214-217.

[6]Shermer, M., *4 reasons why people ignore facts and believe fake news*, Business Insider, [http://www.businessinsider.com/why-do-people-believe-fake-news-2017-3], (accessed on 10th May 2017).

[7]Pariser, E., *The Filter Bubble: What the Internet Is Hiding from You*, Penguin, New York, 2011.

[8]Pariser, E., *The Filter Bubble: How the New Personalized Web is Changing what We Read and how We Think*, Penguin, 2012.

[9]Qiu, X., Oliveira, D.F.M., Sahami Shirazi, A., Flammini, A., Menczer, F., *Limited individual attention and online virality of low-quality information*, Nature human behavior, Letters, 26 June, 2017, vol. 1, no. 0132.

administrators of social platforms have been not prepared to a crisis related to fake news, and additionally, the problem has never been a pivotal issue for them.

A factor of mass distribution of fake news is application of social bots which considerably affect their circulation[10]. They encourage people to take part in discussions and to share fake news incidentally.

An analysis of bot operations[11] takes an important place in the research studies on the possibilities of identifying fake news. Considering financial motivation, such an analysis suggests that bots are occasionally applied to disseminate fake news. However, if ideological motivation is taken into consideration, bots are applied only for that purpose, and their operation is oriented towards reaching particularly defined target groups of users. In order to define motivation, it is necessary to analyse the behaviour of bots[12].

Protection against fake news

Methods of fake news identification can be divided into algorithmic methods, methods with human participation and hybrid methods which combine these two solutions.

In the research studies on possibilities of identifying fake news based on their content, a verification system has been suggested which applies the Rhetorical Structure Theory (RST). The speed of fake news dissemination has been also studied. Bessi and others indicate that users who often interact with other people are more vulnerable and more affected by intended fake news[13].

Algorithmic identification was already available before 2016, that is namely: before the presidential campaign in the USA. Therefore, it is possible to conclude that the issue took a rather low position on the priority list of the main new media organisations, such as Facebook or Twitter.

The research studies on fake news detection have referred mainly to Twitter[14] which is also identified as an information medium[15], and the interface of which does not require any distribution of information by people. Detection of automatic accounts on Twitter has been initiated first of all to prevent commercial spam[16]. In order to detect bots, relations between users and patterns of their behaviour have been analysed[17]. The research studies have been also focused on the application of

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[10]Shao, C., Ciampaglia, G.L., Flammini, A., Menczer, F., *Hoaxy: A platform for tracking online misinformation*, arXiv: 1603.01511v1, cs.SI, 4 March, 2016.

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[12] Kumar, S., Villa, R. A., & Carley, K. M. Identifying Bots that Spread Fake News.

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[14] C. Castillo, M. Mendoza, and B. Poblete. Information credibility on twitter. In WWW, pages 675–684, 2011.

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[17] Song, J., Lee, S., & Kim, J. (2011, September). Spam filtering in Twitter using sender–receiver relationship. In *Proceedings of the 14th International Symposium on Recent Advances in Intrusion Detection* (pp. 301–317). Menlo Park, CA: Springer.

so called honeypots[18]. Trustworthiness of bots on Twitter has been also analysed[19]. Considering such a context, the operation of informational bots has been analysed at various stages of media content development: curation, data analysis and article writing[20].

The research studies have been also focused on the need to develop an automated system of deceit detection in the Internet[21]. In 2015 S. Vosoughi[22] presented an algorithm of automatic identification and verification of fake news with the use of a speech classifier for Twitter. In order to predict the veracity of information, it identifies the most significant features and style of the information, expressions and characteristics of people who have been involved into dissemination of that information, and then it provides an analysis of propagation dynamics.

A significant dependence of traditional media on new media is suggested by the most popular concept related to the verification of trustworthiness of a particular medium, according to which media organisations should prove that they are a reliable source of information in order to be granted a desired status. As soon as they are granted the status, the content developed by a particular organisation should be assigned with a higher priority in Facebook algorithms.

Another solution is to separate new articles from the content provided again by the third party with the expression of their opinion. Another idea is to add a *fake news* flag to the articles which seem to be unreliable. Such a way of marking the news could inform Facebook users that the particular piece of information is untrue, and it should be confronted with some other sources. Furthermore, readers themselves should have a possibility to report some information as fake news. As a result, there is a chance that a lot of users shall pay more attention to the received content.

Other concepts refer to the cooperation of Facebook with websites which verify facts. In the course of algorithm modification, it is postulated that the analysis of content and news headlines should be provided in order to detect fake news and unreliable sources. There is also an idea to develop some rankings of media reputation which would promote media commonly considered as reliable content providers. We can also find some more radical ideas which suggest that publication of fake news should be punished.

All the above-mentioned solutions, however, involve the problem of proper evaluation of information in terms of the levels of its trustworthiness. In practice, the concepts based on modification of algorithms may turn out to be biased because an algorithm shall not be able to distinguish fake news from satirical or controversial information.

On one hand, the mechanism of crowdsourcing applied in order to create and to distribute fake news is analogical to the mechanism of funding projects through the involvement of a great number of people, except for the fact that the contributions come as the promotion of subscribers' profiles and

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[18] Wang, P., Wu, L., Cunningham, R., & Zou, C. C. (2010). Honeypot detection in advanced botnet attacks. *International Journal of Information and Computer Security*, *4*(1), 30-51.

[19] Edwards, C., Edwards, A., Spence, P. R., & Shelton, A. K. (2014). Is that a bot running the social media feed? Testing the differences in perceptions of communication quality for a human agent and a bot agent on Twitter. *Computers in Human Behavior, 33,* 372–376. Retrieved from http://doi.org/10.1016/j.chb.2013.08.013

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preferences. In such a model there are no entry barriers for dissemination of fake news and manipulation of the public opinion; it also refers to financial barriers[23].

Fake news and a crowdsourcing paradox

On the other hand, however, crowdsourcing is applied to detect fake news. A method of social menace detection with the use of social context has been presented by Rahman, reaching the maximal positive indicator of identification at the level of 97%. The classifier has been able to identify posts in 46ms. Applied during the research, the model has been used for the development of the MyPageKeeper application which is dedicated to the protection of Facebook users against malicious content[24].

By his development of *Design Solutions for Fake News*[25] on Google, E. Pariser has presented verification of fake news which is constantly enhanced with the addition of new ideas, referring not only to changes in algorithms but also to education in the context of the ways in which media are used and to improve social awareness.

At the end of 2016 Facebook started testing its new methods of fighting fake news. It focused on fake news which were disseminated by spammers for their financial benefits. In this case, the responsibility for verification was shifted to the users and third party organisations.

Not only has Facebook asked its users for help, but it has also entered the cooperation with other media organisations. It can be actually considered as low-cost outsourcing. Each piece of information which has been reported by users as fake news is verified by the International Fact-Checking Network (IFCN) run by Poynter Institute for Media Studies[26]. It is a forum for the verification of news from all over the world[27]. The organisations verify facts, public figures' statements, press releases made by large institutions, etc[28]. IFCN was established in September 2015, and then it provided a code of rules approved by organisations which regularly publish independent reports on verbatim quotations of public figures' statements[29]. The code consists of five points: declaration of no bias, declaration of trustworthy sources, declaration of transparency of funding and transparency of the organisation, declaration of transparency of methodology, declaration of open and honest corrections[30].

In January 2017 Facebook launched the Facebook Journalism project. Within the project, Facebook intends to provide verified information and journalists are given opportunities to learn how to use new tools to receive and provide information. The project covers three aspects, namely: cooperation

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[23] Gu, L., Kropotov, V., & Yarochkin, F. The Fake News Machine.

[24] M. S. Rahman, T.-K. Huang, H. V. Madhyastha, and M. Faloutsos. Efficient and scalable socware detection in online social networks. In USENIX Security Symposium, pages 663–678, 2012.

[25] Morris, D. Z., *Eli Pariser's Crowdsourced Brain Trust Is Tackling Fake News*, Fortune, 27 November, 2016, [http://fortune.com/2016/11/27/eli-pariser-fake-news-brain-trust/]

[26] Ibidem.

[27] Vargo, C. J., Guo, L., & Amazeen, M. A. (2017). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *new media & society*, 1461444817712086.

[28] *About the International Fact-Checking Network*, Poynter, [http://www.poynter.org/about-the-international-fact-checking-network/]

[29] *International Fact-Checking Network fact-checkers' code of principles*, Poynter, [http://www.poynter.org/fact-checkers-code-of-principles/]

[30] Ibidem.

with large media corporations on joint development of new products, organisation of training sessions for journalists and support for users in their search for true information[31].

Before the elections in France, Facebook and Google initiated a special project which involved 17 largest media organisations in the market[32]. The programme was operated within the project of Google News Lab arm, which launched a platform for joint verification of facts, CrossCheck. At present, it is run by a non-profit organisation First Draft News, which contributes to the improvement of standards on providing information online.

Also in April 2017 Mark Zuckerberg announced that Facebook was testing a new tool which would help users to detect fake news and would provide them with some guidelines how to do it. In cooperation with First Draft[33], Facebook developed and became fully engaged in a project of News Integrity Initiative.

Google decided to follow a similar path: in October 2016 it announced that it enhanced the interface with a new fact check tag , and it would diligently monitor content published in the Internet with the use of ClaimReviewMarkup scheme. Indeed, in 2017 Google introduced the fact-checking mechanism . Publishers indexed by GoogleNews who wish to obtain the fact check tag must use the same tools which are presented by Schema.org ClaimReview or Share the Facts widget, and to follow Google News Publisher regulations. 115 organisations participate in the process of fact-checking .

Regardless of any inconveniencies related to the verification of content accuracy, not only Facebook and Google have become interested in the fact-checking of information they provide. This fact indicates that there is a real need for such activity in the Internet. In its pursuit of eliminating fake news from the Discover platform, Snapchat has also joined the initiative.

Snapchat could not possibly be criticised for dissemination of fake news because the technology of its platform does not process any reposts, and it does not allow them to be disseminated among other users. Snapchat does not have any user profiles, subscribers, likes or any other possibilities to enter commentaries. Some misleading information on Snapchat could come from the fact that some articles have been provided with photographs which have not matched the character of the articles – an example of an operation aimed at an increase in the number of clicks. In order to protect itself against the fake news crisis, the platform has analysed the mistakes made by their competitors, and it has established a set of criteria to be followed by publishers.

The society based on information cannot function well without any system developed to manage that resource. *A sudden intensification of globalisation tendencies in the world economy, political transformations and dynamic development of the Internet – all these phenomena that we have been particularly able to observe since the beginning of the 1990s – make us aware of the fact that there is no point in convincing anyone any longer about a significant role of information in the life of contemporary societies*[34]. Information is power which can be used for various – good as well as bad - purposes. In such a situation, is it possible to discuss management? And if yes, is it related to quality

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[31]*Facebook Journalism Project*, Facebook, [https://www.facebook.com/facebookmedia/get-started/facebook-journalism-project]

[32]Lomas, N., *Google and Facebook partner for anti-fake news drive during French election*, TechCrunch, 6 February, 2017, [https://techcrunch.com/2017/02/06/google-and-facebook-partner-for-anti-fake-news-drive-during-french-election/]

[33]Mark Zuckerberg, Facebook, 6 April, 2017,
[https://www.facebook.com/photo.php?fbid=10103623499604541&set=a.529237706231.2034669.4&type=3]

[34]Grabowski, M., Zając, A., *Dane, informacja, wiedza – próba definicji*,
[https://www.uci.agh.edu.pl/uczelnia/tad/PSI11/art/Dane_informacje_wiedza.pdf], (dostęp 25.04.2017).

management as well? At present there are at least 34 sources which verify facts in 20 European countries[35].

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