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Chapter

## Introductory Chapter: Journalism Facing Both Pandemic and 'Infodemic'

Ján Višňovský and Jana Radošinská

#### 1. Introduction

The 21st century once used to be seen as an era when journalism would have to face many new challenges related to digital communication environments; for example, decrease in readership and circulation of the 'traditional press', or digitalisation that would be both user-friendly and progressive. Nevertheless, the third Millennium was also supposed to build a brave new world filled with knowledge, unlimited opportunities and novel, previously unimaginable ways of processing information. As we believe, these anticipations, however accurate and realistic they seemed to appear two decades ago, now need to confront reality. It does not mean that we are hesitant to acknowledge that journalism has, indeed, progressed; we only underline the fact that this confrontation may be important and exciting in terms of academic inquiry, but not entirely pleasant to experience in practice.

While talking about what is new in journalism and how we are supposed to reflect on it, a few years ago we used to discuss a plethora of important topics. Most of these issues are still relevant and anything but resolved. Today, mediadisseminated news and opinions outline how we perceive public authorities and international organisations more than ever [1]. There is also so much left to say about how media outlets and individual journalists cover serious social problems such as racial disparities, manifestations of intolerance, or causes of social misrecognition [2]. Technological aspects are equally important as well, since we are not far from the moment when automatised software will be able to replace at least some people working as journalists. The issue of robot journalism is thus becoming increasingly important to address [3, 4]. Moreover, value-based conflicts between different civilisation frameworks have only grown stronger. As noted by Lipovetsky, we are now able to be informed about anything; even the most remote parts of the world may be a part of the global scene. This "airport cosmopolitism" outlines the everyday experience of the globalised world, which is shaped by ecological threats, swift spread of infectious diseases, market mechanisms, spiralling financial crises, migration waves, acts of international terrorism, world events that ignore any boundaries between nation states and continents, and so on [5]. Let us remind ourselves that Lipovetsky wrote this in 2010, i.e., more than a decade ago. Since then, we have learned to accept these phenomena or, at least, we have acknowledged their existence and seriousness. What has made all the difference is the worldwide spread of the highly infectious disease known as COVID-19 (or the novel coronavirus). Our introductory chapter thus aims to explore the new contexts brought by the pandemic, but without forgetting about the problems journalism has been facing over the last two or maybe three decades.

As 'traditional' journalistic expressions are largely preferred and accessed by middle-aged people and older generations of readers, today's journalism will have to find out how to attract young recipients and, what is even more important, how to fulfil their particular expectations [6]. We may say that anything the media inform us about can be seen as a story. In other words, all pieces of news and opinions are, more or less, driven by their narrative qualities. This is how media audiences establish their parasocial relationships with fictitious or 'everyday' heroes; and this is why we consider media stories to be so attractive and worthy of our attention. However, the moment when the COVID-19 pandemic became a global problem can be seen as a breaking point – suddenly, journalists and other media professionals realised it was necessary to seek new heroes and create new types of stories; all that while trying to process what was happening in a comprehensible manner. Of course, their not-so-professional counterparts, while still making their profit by spreading fake news and disinformation, started to explore the quickly worsening situation in accordance with their own agendas. As a result, a COVID-19 'infodemic' was born.

#### 2. Journalism meeting COVID-19

If anything, the COVID-19 pandemic has shown us clearly that there is a fragile and very blurry boundary between what is systematic and sensible, and what is chaotic, socially pathological and nourished by human fear. Thus, the related 'infodemic' is, according to World Health Organisation (WHO), "too much information including false or misleading information in digital and physical environments during a disease outbreak. It causes confusion and risk-taking behaviors that can harm health. It also leads to mistrust in health authorities and undermines the public health response. An infodemic can intensify or lengthen outbreaks when people are unsure about what they need to do to protect their health and the health of people around them". As further noted by WHO, there are no other ways to eliminate this 'infodemic' but four key activities – listening to community concerns and questions; promoting understanding of risk and health expert advice; building resilience to misinformation; and engaging and empowering communities to take positive action [7]. In other words, what we need is to explore new ways to foster participatory culture [8, 9].

Besides taking lives and throwing our public authorities into turmoil, which is deepened by delayed reactions, repeated lockdowns and contradictory decisions, the pandemic has shown that it is not only our bodies and health systems that are vulnerable. Our minds and the values we stand for are in danger as well. Moreover, 'infodemic', this invisible threat, that infects our minds and leaves us both confused and stricken by panic, is often spread across the essential communication space we turn to when we are not exactly sure what is happening around us and how we are supposed to react – the sphere of journalism. Our communication system has been 'infected' by fake news, hoaxes and disinformation, which stand in our way, effectively disabling any attempts to return journalism to where it truly belongs – to the information exchanges saturated by relevant issues, essential public discussions and the idea of progress. Nowadays, it is not rare to encounter harmful social actors such as social media bots, hostile secret services and their intelligence officers, paid trolls, websites spreading fake news that is absolutely convincing and elaborated to the smallest detail, or conspiracy theorists, who intentionally distort other people's worldviews and challenge or openly contradict scientific knowledge. Feeding fake news to people, who may be, in their nature, very suspicious and cautious, and yet so inclined to believe various absurdities, these actors (ab)use online social media

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services, once believed to be the greatest achievement in human communication, to actually rob journalism off the most precious, absolutely irreplaceable feature it possesses – people's trust.

In 2017, when Collins English Dictionary picked the term "fake news" as the word of the year, its editors primarily referred to public speeches and social media postings of the (now former) American President Donald Trump, who used this expression excessively, mainly to discredit or otherwise eliminate his political opponents and critics of his administration. Even though "fake news" was nothing new back then, Trump's tendency to label any critical or unfavourable reactions to his tweets as "fake news" certainly made its mark. The phrase started to resonate across all media industries and communication spheres. According to Collins English Dictionary, in 2017, the use of the phrase "fake news" in the media increased by more than 365% – compared to 2016 [10]. However, the situation has escalated since then. The processes of labelling news as 'fake' or, vice versa, insisting that fake news is actually up-to-date and genuine, have become inherent parts of the mainstream media discourse. It does not help that today's media culture is saturated by resourceful (real and fictitious alike) stories about corruption, medical misconducts and arrogance expressed by the rich and powerful. Narratives, which depict various forms of the end of the world and destruction of humanity, or anti-utopic visions of the future, have been excessively popular as well. The formal attributes of creating and presenting these stories are so realistic that media audiences sometimes see them as 'more real' than any objective facts [11]. It may be presumed that the given disorientation and anxiety of media recipients have only become more intense since spring 2020, when the media started to massively disseminate real as well as specious pieces of news on the COVID-19 global pandemic.

It is only natural that the moment the world was struck by the coronavirus SARS-CoV-2, social and media discourses started to acknowledge that this unprecedented pandemic walks hand-in-hand with the 'infodemic' built upon disinformation, hoaxes, dangerous half-truths and propaganda. At present, there can be no doubt that the pandemic caused by the coronavirus is the first large media pandemic of the 21st century, which has been, to a large extent, determined by the media themselves. As outlined by Deuze, "it is perhaps also not surprising, from this point of view, that most of the debates and discussions about the pandemic do not just concern the virus and its impact, but focus especially on the roles of expert information provision, news coverage, government communications, and social media. It is clear that the coronavirus pandemic is a mediatized event as much as it is a virus that infects millions of people around the world" [12].

As expected, one of the first inauthentic pieces of news on COVID-19 was spread via social networking sites. The message claimed that wearing personal protection equipment, such as masks and respirators, slows down our reflexes and cripples our senses due to constantly inhaling one's own exhaled carbon dioxide. Another case can be classified as a conspiracy theory, since the information claimed that the novel coronavirus had been created artificially and purposefully, in Chinese laboratories. Reacting to this rapidly spreading allegation, the United States of America blamed China for creating COVID-19, while, in turn, Russians and Iranians blamed the U.S. Moreover, a number of hoaxes could be identified – for instance, those saying that COVID-19 is spread via 5G networks and can be 'eliminated' by drinking alcoholic beverages; or those claiming that testing for COVID, also called swabbing, as the sample is collected by inserting a swab into a person's nasopharyngeal cavity, is, in fact, a hidden method of infecting (in another version, damaging) the tested person's brain; or those insisting that coronavirus does not exist at all [13]. There are hundreds of different pieces of disinformation and hoaxes related to COVID-19. Their influence is quite obvious if we consider how many people question the ways,

in which vaccines preventing the disease were created, tested and/or approved for emergency use. In Slovakia, the Ministry of Health established its informationbased portal *www.slovenskoproticovidu.sk* very late, in January 2021. The portal's main purpose is to inform the general public about vaccination, its benefits and also possible side effects. The website also introduces publicly known personalities who have decided to participate in Slovakian information campaign related to vaccination, which is titled 'Vaccine Is Freedom' [14]. The presence of various celebrities with good personal reputation, as well as Slovak President Zuzana Čaputová, is starting to strengthen the campaign's initially low reach.

Social media, especially social networking sites, are not only exceptionally efficient tools for spreading disinformation and hoaxes, but also the necessary precondition of their further dissemination across all aspects of social life [15]. Generally, the level of critical thinking and the willingness to verify information from multiple sources are relatively low, making the recipient inclined to trust and disseminate disinformation and conspiracies – whether consciously or unconsciously [16]. According to the survey Globsec Voices of Central and Eastern Europe conducted in June 2020, 56% of Slovak citizens believe that disinformation and conspiracy theories are, in fact, genuine news. Slovakia thus reached the worst percentage of all surveyed countries, taking the last place after Bulgaria, Romania and Hungary [17]. During the pandemic, people's interest in online and television news has increased significantly; on the other hand, weaknesses of media organisations have been revealed concurrently. These include incompetence and unprofessionalism in relation to informing about medical topics due to the absence of qualified reporters that would be interested specifically in this area. Moreover, many 'mainstream' media outlets have decided to take the easiest and least demanding route towards increasing their readership; by publishing disinformation and hoaxes, which is now reflected in the above-mentioned decline in the credibility of news as such. According to Digital News Report 2020, published by Reuters Institute for the Study of Journalism, only 28% of respondents living in Slovakia deem news trustworthy, while the trust level fell by 5% compared to 2019 [18]. And this trend was not visible only in case of Slovakia, but also in other European countries.

#### 3. Fighting disinformation and hoaxes

The first step we need to take in order to eliminate disinformation and other kinds of distorted or fraudulent images of reality is acknowledging that this is a systemic problem. That is why the related issues are addressed by multiple international organisations. The European Commission and its executive bodies, as well as the Member States, are obviously aware of the need to combat disinformation and hoaxes. The European Commission stated that "the coronavirus pandemic has been accompanied by a massive wave of false and misleading information, attempts by foreign actors to influence domestic debates in the EU, breeding on the fertile ground of people's most basic anxieties and the rapidly changing news cycle. Misleading healthcare information, dangerous hoaxes with false claims conspiracy theories and consumer fraud endanger public health" [19]. In recent years, the European Union institutions have developed several strategic documents that have defined the basic outlines of anti-disinformation activities at the European level, including the documents 'Tackling Online Disinformation: A European Approach' and 'Action Plan against Disinformation'. These are framework documents that have identified specific steps that need to be taken to preserve democratic values in Europe. At the same time, they serve as a starting point for the subsequent creation of strategic documents that would specify how to deal with disinformation, in

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particular 'The European Democracy Action Plan' and 'The Digital Services Act' [19]. In its joint statement presented on 26th March 2020, The Council of the European Union claimed that "the COVID-19 pandemic constitutes an unprecedented challenge for Europe and the whole world. It requires urgent, decisive, and comprehensive action at the EU, national, regional and local levels. We will do everything that is necessary to protect our citizens and overcome the crisis, while preserving our European values and way of life". The declaration contains 22 different statements. The fourth statement declares: "We will resolutely counter disinformation with transparent, timely and fact-based communication on what we are doing and thus reinforce the resilience of our societies" [20]. Considering the facts mentioned above, we may confirm that the European Union has taken the outlined problems quite seriously. However, finding solutions to the identified issues is a long-term process that will be very hard to go through with successfully.

There is no doubt that modern technologies, which are able to help us with debunking disinformation shared across the Internet, are amongst the most efficient tools for progressive elimination of fake news and disinformation. The European Research Council (ERC) and the Horizon 2020 research strategy recognise several actions, which are supposed to lead us towards better understanding of disinformation circulating online. However, the most difficult challenge to tackle is to develop new, more efficient tools for content verification. The ERC projects Comprop and Botfind thus aim to find out how automated systems for spreading and targeting propaganda impact public discourse in Europe. Another ERC project, Debunker, reflects on the problem of misperceptions around societal issues within the European population and possible strategies to reduce their impact. Moreover, the Horizon 2020 project Invid focuses on developing tools to verify audio-visual content. As it seems, these tools are essential, considering that technologies able to tamper with video and create deepfakes are increasingly easy to access and use. Another Horizon 2020 project, Fandango, seeks solutions that should help 'traditional' media to detect false narratives, that are spread online, more easily [21].

In case of Slovak Republic, a few months ago the government pushed 'The Security Strategy of the Slovak Republic', according to which Slovakia's strategic security interests need to include the readiness of the state and society to respond to hybrid threats (such as disinformation) effectively and in a coordinated manner. Maintaining a functioning cybernetic, information and communication security system is a priority. The strategy thus responds to the general need to address global as well as local security challenges and threats. We may identify a growing number and wider scope of subversive and coercive activities of various actors using disinformation and propaganda in order to disrupt or manipulate decision-making mechanisms within the state, influence public opinion in their favour and destabilise the political situation. The document also acknowledges that the general public is exposed to an increasing amount of disinformation and conspiracy theories that can and will endanger human health, disrupt the cohesion of society or provoke public violence and social unrest. Probably the most significant hybrid activity is manifested by the targeted dissemination of propaganda and disinformation attacking the country's democratic establishment and Slovakia's membership in the North Atlantic Treaty Organisation and the EU. That is why it is absolutely necessary to cope with early identification and evaluation of disinformation, and then respond to it by implementing systemic measures. There is no other way to do so than through the development of critical thinking [22]. Given the used terminology and the manner, in which the document reflects on possible risks emerging within the global communication system, this field of interest reaches far beyond the boundaries of media production and journalistic profession.

In April 2020, the analytical department of the Ministry of Defence of the Slovak Republic published an analysis titled 'Infodemic. Disinformation and COVID-19'. The analysis openly admits the information space of the Slovak Republic is prone to the spread of disinformation, conspiracies and fake news [23]. Most of these pathological communication phenomena aim to question the Euro-Atlantic orientation of Slovakia, challenge the European Union's ability to function at all levels and portray various countries, that are ideologically and politically incompatible with the U.S. and its allies, as 'victims' of the evil West. These communication processes are driven by so-called alternative media as well as by some politicians.

#### 4. Conclusion: rebuilding trust in journalism

Even though our notes on 'infodemic journalism' born in the time of the pandemic are by no means comprehensive and absolute, we believe that we have outlined what needs to change, and why. As remarked by Martinisi and Lugo-Ocando, we might even assert that this 'infodemic' has quickly developed into what they call 'datademic'. Struck by the pandemic, countries all around the world are competing with each other, in an unhealthy manner, on "who has the lower number of deaths and whose ideological and power model is the best to face such a pandemic" [24]. Moreover, today's journalism often depresses people instead of enriching their lives. This loss of trust in the media is further stimulated and deepened by the recipients' perceptions of media bias and the opinion and value polarisation of society. Most audience members tend to relate only to media organisations that disseminate information consistent with their own beliefs; other sources of information providing different views of the same problems are automatically ignored. According to Bell, it is therefore a shocking paradox that the Internet, once considered a miraculous technological tool that can break down the barriers between people, that is able to carry an unprecedented amount of information accessible in a few seconds, does not actually connect people. Instead, digital media drive us to our own corners. In Bell's words which, in the context of the above-mentioned statements, do not seem to be exaggerated at all, one of the most fundamental problems of journalism is its current internal organisation in relation to the recipients: "We have a broken media industry because we have broken the confidence of our audience." [25]. To put it differently, it feels unpleasant to admit that media outlets, both online and offline, unknowingly or willingly, adopt the practices perfected by conspiracy media just because it is economically convenient; just because that is what some of their audiences expect.

The outlined parallels between the COVID-19 pandemic and the 'infodemic' tell us that the only true 'cure' is, in both cases, a systemic, long-term strategic plan that would be easy enough to follow and, what is even more important, accepted by media professionals and their audiences alike. This may sound like a *cliché*, but we need to be careful and patient. These problems are so complex, so deeply rooted, that we are simply unable to cover them (let alone, *solve* them) by populist measures, guerrilla marketing strategies or easy action plans. The good news is that the current political situation suggests the pandemic does not 'suit' populists, who have emerged and risen to power in good times, thanks to catchy phrases, strategically flawless online campaigns or the ability to 'ride on the waves' of common people's emotions.

Despite everything, journalism still preserves its capability of being more than just a watchdog of societal progress, more than just a mirror of the late modern society, in which we can clearly see our cynicism, value emptiness and little to no Introductory Chapter: Journalism Facing Both Pandemic and 'Infodemic' DOI: http://dx.doi.org/10.5772/intechopen.98263

empathy, lack of solidarity with the weakest and the most vulnerable. Journalism needs to rebuild its position of a socially and culturally progressive driving force that offers objective and complex information, competent opinions and comprehensible, yet professionally processed analyses. All these pillars need to withstand the pressure of diverse external factors. One of them is the cacophony of critical voices. They mostly belong to media audiences, who are familiar with all technical and technological principles of multiplatform communication, but rarely interested in reconsidering their rigid worldviews. Nevertheless, we believe now is the right time to seek a new way to confront the relentless economic imperatives of the media industry, the pressures of various interest groups, and the essential need to offer quality, adequately processed information and opinions. Based on what we already know about the pandemic and its tragic consequences, perhaps it is not too bold to claim that what journalists publish, and how it is processed, may change much of what we will experience in the near future. The last years have shown that multiplatform journalism might be as progressive as it gets, technologically superior and easy to access, but also vulnerable when it comes to wider social controversies that mistake politics for popularity contests, science for a matter of individual opinion, or truth for something to deny, refuse or distort.

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#### References

[1] Greguš Ľ, Kačincová Predmerská A. The foreign news and media image of the European Union in current television news production. Communication Today. 2020;**11**(2): 84-102. s1338-130X

[2] Solík M, Mináriková J. Sociálne uznanie v globálnom priestore: možnosti a limity mediálnej reflexie.
Communication Today. 2014;5(2):21-31. s1338-130X

[3] Višňovský J, Kubíková, K. Robotická žurnalistika ako výzva pre redakčnú prax. In: Sámelová A, Stanková M, Hacek J, editors. Fenomén 2019: Súčasná Profesionálna Žurnalistika a Jej Reflexie. Bratislava: Comenius University; 2019. pp. 15-22. ISBN: 9788022347556

[4] Moravec, V et al. The robotic reporter in the Czech News Agency: automated journalism and augmentation in the newsroom. Communication Today. 2020;**11**(1): 36-52. s1338-130X

[5] Lipovetsky, G. Vláda hyperkultury: kosmopolitismus a západní civilizace.
In: Lipovetsky, G, Juvin, H, editors.
Globalizovaný Západ. Polemika o
Planetární Kultuře. 1<sup>st</sup> ed. Praha:
Prostor; 2012. ISBN: 9788072602650.
Chapter 1

[6] Švecová, M. Journalism on social media: how to tell stories and news to young people. AD ALTA: Journal of Interdisciplinary Research.
2017;7(2):216-218. s1804-7890

[7] Infodemic [Internet]. 2020. Available from: https://www.who.int/healthtopics/infodemic#tab=tab\_1 [Accessed: April 22, 2021]

[8] Jenkins H, Ito M, boyd d.
 Participatory Culture in a Networked
 Era: A Conversation on Youth, Learning,
 Commerce, and Politics. 1<sup>st</sup> Ed.

Cambridge/Malden: Polity Press; 2016. 160p. ISBN: 978-0-7456-6071-4

[9] Škripcová L. Participative culture in community media. European Journal of Media, Art & Photography. 2017;5(1):98-101. s1339-4940

[10] Flood A. Fake News Is 'Very Real'
Word of the Year for 2017 [Internet].
2017. Available from: https://www.
theguardian.com/books/2017/nov/02/
fake-news-is-very-real-word-of-theyear-for-2017 [Accessed: April 22, 2021]

[11] Radošinská J, Višňovský J. Aktuálne Trendy v Mediálnej Kultúre. 1<sup>st</sup> ed. Trnava: Faculty of Mass Media Communication UCM; 2013. 154p. ISBN: 9788081055164

[12] Deuze M. The role of media and mass communication theory in the global pandemic. Communication Today. 2020;**11**(2):4-16. s1338-130X

[13] Kačincová Predmerská A.
 Koronahoaxy. In: Kvetanová Z, Graca M, editors. Megatrendy a Médiá 2020: On the Edge. 1<sup>st</sup> ed. Trnava: Faculty of Mass Media Communication UCM; 2020. pp. 46-55. ISBN: 9788057200635

[14] Slovensko proti COVIDU [Internet].2021. Available from: https://www.slovenskoproticovidu.sk/sk/ [Accessed:April 22, 2021]

[15] Kapec M. The media manipulation initiative: it is helpful to clearly differentiate between fake news intended to be satire from hyperpartisan news sites. Media Literacy and Academic Research. 2018;**1**(2):80-82. s2585-8726

[16] Hossová M. Fake news and disinformation: phenomena of postfactual society. Media Literacy and Academic Research. 2018;1(2):27-35. s2585-8726 Introductory Chapter: Journalism Facing Both Pandemic and 'Infodemic' DOI: http://dx.doi.org/10.5772/intechopen.98263

[17] Hajdu D, Klingová K. Voices of Central and Eastern Europe – Perceptions of Democracy & Governance in 10 EU Countries
[Internet]. 2020. Available from: https://www.globsec.org/publications/ voices-of-central-and-eastern-europe/ [Accessed: April 22, 2021]

[18] Smith S. Digital news report 2020. Slovakia [Internet]. 2020. Available from: https://www.digitalnewsreport. org/survey/2020/slovakia-2020/ [Accessed: April 22, 2021]

[19] Tackling coronavirus disinformation [Internet]. 2020. Available from: https:// ec.europa.eu/info/live-work-travel-eu/ coronavirus-response/fightingdisinformation/tackling-coronavirusdisinformation\_en [Accessed: April 22, 2021]

[20] Joint statement of the Members of the European Council [Internet]. 2020. Available from: https://www.consilium. europa.eu/media/43076/26-vc-eucostatement-en.pdf [Accessed: April 22, 2021]

[21] Action Plan against Disinformation [Internet]. 2018. Available from: https:// ec.europa.eu/info/sites/default/files/ eu-communication-disinformationeuco-05122018\_en.pdf [Accessed: April 22, 2021]

[22] Bezpečnostná stratégia Slovenskej republiky [Internet]. 2021. Available from: https://www.mosr.sk/data/ files/4263\_210128-bezpecnostnastrategia-sr-2021.pdf [Accessed: April 22, 2021]

[23] Štepanovič D. Infodémia.
Dezinformácie a COVID-19 [Internet].
2020. Available from: https://www.
mosr.sk/data/files/4005\_2020-k-01infodemia-new.pdf [Accessed: April
22, 2021]

[24] Bell M. Viewpoint: We Broke the News Media, How Can We Fix Them? [Internet]. 2017. Available from: http:// www.digitalnewsreport.org/ survey/2017/viewpoint-we-broke-thenews-2017/ [Accessed: April 22, 2021]

[25] Martinisi A, Lugo-Ocando J. Statistics and the Quest for Quality Journalism. 1<sup>st</sup> ed. London/New York: Anthem press; 2020. 206p. ISBN: 9781785275333

