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"Guardians of the truth" - journalists' resistance to the algorithmisation of journalism

Abstract

Regardless of the term used - be it "robot journalism", "automated journalism", "algorithmic journalism" or "machine-written journalism" - the process of automatic content creation and distribution is progressing in the newsrooms. Meanwhile, exercising control over the creation and distribution of news is considered a fundamental element of journalists' professional identity. The article presents the results of research on the perception of algorithmic content creation by journalists in the context of professional values and their own identity. The research was conducted with a qualitative method using a semi-structured interview technique with 18 journalists employed in leading Polish media. According to the study, algorithmic journalism is perceived by journalists primarily in the context of posing a threat to the fundamental journalistic principle of providing true information, because the potential for creating and distributing fake news is brought to the fore. The respondents, defending their journalistic professional identity, compared the disadvantages of algorithmic journalism with the unique competences of "human" journalists, perceiving the latter as advocates of care for the quality standards of social discourse and as "guardians of the truth".

Keywords: truth, post-truth, journalistic identity, algorithmic journalism

Fake news and post-truth

Fake news refers to intentionally designed and presented false information or misleading statements[1] disseminated through planned channels and manipulating the cognitive processes of the recipient. In this interpretation, fake news is a modern version of disinformation related

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[1] Gelfert, Axel. 2018. 'Fake News: A Definition'. *Informal Logic* 38 (1): 84–117. https://doi.org/10.22329/il.v38i1.5068.

to cyberspace and social networks[2], but it differs from disinformation in that its distribution channels are purposefully designed and planned.

Fake news comes in the form of images, texts and videos. Among all these forms, the most difficult to confirm include urgent information with very high propagation, and reports and opinions on socially important issues that fit into conspiracy theories[3]. Fake news is one of the elements that make up so-called post-truth[4]. Post-truth is a term illustrating the falsification of reality in the media space in order to build the popularity of an individual or a political party[5], as well as falsifying other areas of social life. Understood in this way, it reduces the truth to a derivative of popularity, and man to a verifier of content[6].

Truth in journalism in a digital environment

In the light of the rich tradition of scientific research devoted to truth in journalism, post-truth and fake news signal the end of the project of shaping knowledge by promoting the scientific model as the only legitimate one[7]. They also challenge the normative vision of journalism as an important, fact-based and rational element of democratic public life. For decades, this idea was based on the belief in an "open mind" that allows one to take an authoritative position on reality. The consensus of the elites on issues fundamental to the functioning of societies included a "regime of truth" based on scientific knowledge. This post-ideological way of thinking was supposed to supplant totalitarian ideologies and signify the triumph of science[8]. Knowledge was anchored in scientific principles defining truth-telling, and scientific truth was the core of the post-ideological doctrine.

The hegemony of this scientific "regime of truth" was based on the scarcity of information available to the end recipients of media messages. The ideal of "professional journalism", understood as an important part of the truth-forming system, was gaining in

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[2] Tandoc, Edson C., Joy Jenkins, and Stephanie Craft. 2018. 'Fake News as a Critical Incident in Journalism'. *Journalism Practice* 2786. https://doi.org/10.1080/17512786.2018.1562958.

[3] Rubin, Victoria L., Yimin Chen, and Nadia K. Conroy. 2015. 'Deception Detection for News: Three Types of Fakes'. *Proceedings of the Association for Information Science and Technology* 52 (1): 1–4. https://doi.org/10.1002/pra2.2015.145052010083.

[4] Flader, Maciej. 2019. 'Postprawda Jako Efekt Błędnego Poszukiwania Prawdy'. *Teologia i Człowiek* 44 (4): 41. https://doi.org/10.12775/TiCz.2018.038.

[5] 'Post-Truth'. 2023. In *Oxford Learner's Dictionaries*. Oxford University Press. https://www.oxfordlearnersdictionaries.com/definition/english/post-truth.

[6] Flader, 'Postprawda jako efekt błędnego poszukiwania prawdy'.

[7] Waisbord, Silvio. 2018. 'Truth Is What Happens to News'. *Journalism Studies* 19 (13): 1866–78. https://doi.org/10.1080/1461670X.2018.1492881.

[8] Cohen-Cole, J. 2013. *he Open Mind: Cold War Politics and the Sciences of Human Nature.* Chicago: University of Chicago Press. https://doi.org/10.7208/9780226092331.

popularity. The professional aspirations of journalists grew at that time, and the hierarchical division of knowledge flowing from the elites and experts consolidated the status of journalists as selectors and providers of information and its interpretation[9].

This post-ideological order is no longer valid. The crisis of the technocratic liberal order consists, among other things, of an erosion of trust in facts and in journalism and the politicisation of science. Moreover, the popularity of the Internet has destroyed the vertical structure of knowledge production and dissemination. The frontiers of knowledge have become fluid, and dispersed communities, anchored in beliefs and ideologies, have unlimited opportunities to communicate, free of journalistic intervention. In the digital environment, the presence of fake news and post-truth shows that truth is the result of the social interpretation of reality, and collective sense-making in an environment of digital platforms and social media, and only a fraction of the content passes through the filters of modern journalistic "arbiters of truth"[10]. Such general conditions are conducive to destabilising the narrative of truth dissemination by professional journalists, and concepts of factual and reasonable truth-telling are challenged or simply ignored.

Algorithmic journalism

Today's technological innovations contribute to an uncontrolled and virtually infinite stream of information[11]. Artificial intelligence algorithms are able to create readable content through data analytics (deep data analysis, data mining)[12]. Their potential is growing, not least because access to data is constantly increasing; every day mankind produces more than 2.5 quintillion bytes of data[13]. To a large extent, algorithms can autonomously create textual and visual journalistic content in many formats, including long articles, headlines, tweets and industry reports with graphic visualisations, as well as multiple versions of the same article for specific client needs.

In practice, then, we are dealing with a new type of journalism - algorithmic journalism, in which the content is created and distributed using algorithms, various types of data and

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[9] Waisbord, 'Truth Is What Happens to News'.
[10] Waisbord, 'Truth Is What Happens to News'.
[11] Kreft, Jan. 2019. *Władza algorytmów*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego w Krakowie.
[12] Latar, N.L. 2015. 'The Robotic Journalist in The Age of Social Physics: The End of Human Journalism?' In *The New World of Transitioned Media*, edited by Gali Einav, 65–80. The Economics of Information, Communication, and Entertainment. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-09009-2.
[13] Marr, Bernard. 2018. 'How Much Data Do We Create Every Day? The Mind-Blowing Stats Everyone Should Read'. *Forbes*, 2018. https://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/?sh=6ab9ca4c60ba.

natural language generation and processing techniques. This type of journalism is referred to as "robot journalism"[14] or "automated journalism"[15]. For the purposes of further argument, it is assumed to be "the advanced use of computing, algorithms and automation to gather, evaluate, compose, present and distribute news"[16].

Algorithmic journalism and journalistic identity

Although people may consider themselves to be part of many different social groups, social identities often manifest themselves in occupations and professions[17]. This is no different in the media environment, where the practised profession seems to form the basis of a large part of the identity of journalists[18]; an occupation is understood as a set of characteristics, beliefs and values that people use to define themselves in specialised, skill- and education-based activities[19].

This professional identity determines work-related attitudes and ethical behaviour. It includes self-acceptance based on traits, beliefs, values, motives and experiences[20] and is built around normative practice, professional boundary-setting and the concept of roles[21]. In this context, it should be emphasised that journalists are very proud to be members of their own professional community and strongly guard the definition of who can and cannot be part of this group[22]. Research also confirms that the professional identity of journalists is not very flexible[23].

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[14] Dalen, Arjen van. 2012. 'The Algorithms behind the Headlines: How Machine-Written News Redefines the Core Skills of Human Journalists'. *Journalism Practice* 6 (5–6): 648–58. https://doi.org/10.1080/17512786.2012.667268.

[15] Carlson, Matt. 2015. 'The Robotic Reporter: Automated Journalism and the Redefinition of Labor, Compositional Forms, and Journalistic Authority'. *Digital Journalism* 3 (3): 416–31. https://doi.org/10.1080/21670811.2014.976412.

[16] Thurman, Neil, Konstantin Dörr, and Jessica Kunert. 2017. 'When Reporters Get Hands-on with Robo-Writing: Professionals Consider Automated Journalism's Capabilities and Consequences'. *Digital Journalism* 5 (10): 1240–59. https://doi.org/10.1080/21670811.2017.1289819.

[17] Kreiner, Glen E., Elaine C. Hollensbe, and Mathew L. Sheep. 2006. 'Where Is the "Me" Among the "We"? Identity Work and the Search for Optimal Balance'. *Academy of Management Journal* 49 (5): 1031–57. https://doi.org/10.5465/amj.2006.22798186.

[18] Carlson, 'The Robotic Reporter'.

[19] Tajfel, Henri, and John C. Turner. 1986. 'The Social Identity Theory of Intergroup Behavior'. In *Psychology of Intergroup Relations*, edited by S. Worchel and G. Austin, 2nd ed., 7–24. Chicago: Nelson-Hall.

[20] Tajfel and Turner. 'The Social Identity Theory of Intergroup Behavior'.

[21] Deuze, Mark. 2008. 'The Changing Context of News Work: Liquid Journalism for a Monitorial Citizenry'. *International Journal of Communication* 2: 848–65.

[22] Ferrucci, Patrick, and Tim Vos. 2017. 'Who's in, Who's out?: Constructing the Identity of Digital Journalists'. *Digital Journalism* 5 (7): 868–83. https://doi.org/10.1080/21670811.2016.1208054.

[23] Lasorsa, Dominic L., Seth C. Lewis, and Avery E. Holton. 2012. 'NORMALIZING TWITTER'. *Journalism Studies* 13 (1): 19–36. https://doi.org/10.1080/1461670X.2011.571825.

As for ethics, in the context of the expansion of algorithmic journalism, the "shifting of responsibility" is noteworthy. The single human journalist is no longer the only "moral agent". Numerous other actors (journalists and non-journalists) are involved in creating content, such as media users and algorithms, programmers, data collectors and managers[24]. Still, journalists claim a special position and power in establishing the truth[25], although such claims are increasingly difficult to defend. Many platforms shape communities, which in turn determine the meaning and veracity of messages without the help of conventional truth-keepers. Journalists and their weakening institutions are confronted with governments and opinion-makers waging propaganda wars and fighting for control over news, and making sense of it. Above all, however, they are confronted with users creating and sharing content, and platforms managing the main streams of information[26]. The old information order is collapsing.

Truth and the normative practice of journalism

The core of journalistic identity remains the basic normative practice, namely the verification of veracity before publication. This underlies the status of authority in describing and defining reality. The commitment to telling the truth is also part of journalists' discursive strategy when presenting their expertise. It is the "essence of journalism", distinguishing it from propaganda, entertainment and art[27]. Commitment to the pursuit of truth is the first criterion for evaluating any work described as journalism. It is a basic "principle of journalism"[28] and an ethical duty[29].

However, as Bill Kovach and Bill and Tom Rosenstiel note in their classic work on the basics of journalism, it is a peculiar truth because truths are subject to revision, but meanwhile we act on them because they are necessary, and therefore journalism seeks a practical and functional form of the truth. This is not true in an absolute, philosophical or scientific sense,

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[24] Milosavljević, Marko, and Igor Vobič. 2019. 'Human Still in the Loop: Editors Reconsider the Ideals of Professional Journalism Through Automation'. *Digital Journalism* 7 (8): 1098–1116. https://doi.org/10.1080/21670811.2019.1601576.

[25] Broersma, Marcel. 2010. 'The Unbearable Limitations of Journalism'. *International Communication Gazette* 72 (1): 21–33. https://doi.org/10.1177/1748048509350336; Zelizer, Barbie. 2004. 'When Facts, Truth, and Reality Are God-terms: On Journalism's Uneasy Place in Cultural Studies'. *Communication and Critical/Cultural Studies* 1 (1): 100–119. https://doi.org/10.1080/1479142042000180953.

[26] Kreft, Jan. 2022. *Władza Platform. Za Fasadą Google, Facebooka i Spotify*. Kraków: Universitas.

[27] Kovach, Bill, and Tom Rosenstiel. 2007. *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect*. New York: Three Rivers Press.

[28] Chyliński, Marek. 2014. 'Prawda Jako Zasada Dyskursu Dziennikarskiego [The Truth as a Principle of Journalistic Discourse]'. *Zarządzanie w Kulturze* 15 (2): 151–67. https://doi.org/10.4467/20843976ZK.14.013.2221.

[29] Konarska, Katarzyna. 2011. 'Media i Prawda — Czy Mit Prawdy?' *Colloquia Anthropologica et Communicativa* 3: 203–12.

but is rather a pursuit of truth that can be acted upon in everyday life. Therefore, journalistic truth is a process that begins with the professional collection and verification of facts, then journalists try to provide a reliable description of their meaning[30]. Such fact-checking gives the profession a unique status as one that confers a special kind of authority on journalism and establishes professional jurisdiction over news (although in practice there is no clear-cut procedure for consistently checking information)[31]. Along with authority and expertise, journalistic identity is related to the central role of journalists in directing media production and circulation processes[32].

Journalists towards algorithmic journalism: resistance conservatism and encouragement to change

Research on journalists' attitudes towards algorithmic journalism interprets journalistic identity as a source of resistance, but also encouragement towards change under the pressure of efficiency, and as a resource for coping with uncertainty[33].

Algorithmic journalism was perceived as particularly destructive to journalistic professional activity, especially to journalists' sense of job security[34]. In addition, journalists generally reject solutions that undermine their exercise of control over media content and they appear to be a conservative community that protects its professional boundaries and rejects solutions that violate the principle of the journalist deciding what the audience sees, hears and reads[35]. Information created by a machine is therefore seen as a threat to the profession itself, as well as to journalists' employment, and fears of technology are inherent in editorial work[36].

In defending their identity, journalists put professional values such as objectivity to the fore and argue that people are better than machines in view of cognitive, affective and moral

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[30] Kovach, B., and T. Rosenstiel. 2021. *The Elements of Journalism, Revised and Updated 4th Edition: What Newspeople Should Know and the Public Should Expect*. New York: Crown Publishing Group.

[31] Schudson, M., and Ch. Anderson. 2009. 'News Production and Organizations: Professionalism, Objectivity and Truth-Seeking'. In *The Handbook of Journalism Studies*, edited by K. Wahl-Jorgensen and T Hanitzch, 88–101. New York: Routledge.

[32] Lewis, Seth C. 2012. 'The Tension between Professional Control and Open Participation: Journalism and Its Boundaries'. *Information Communication and Society* 15 (6): 836–66. https://doi.org/10.1080/1369118X.2012.674150.

[33] Witschge, Tamara, and Gunnar Nygren. 2009. 'Journalistic Work: A Profession under Pressure?' *Journal of Media Business Studies* 6 (1): 37–59. https://doi.org/10.1080/16522354.2009.11073478.

[34] Dalen, 'The algorithms behind the headlines'.

[35] Carlson, 'The Robotic Reporter'.

[36] Boczkowski, Pablo J. 2015. *Digitizing the News: Innovation in Online Newspapers*. Cambridge: Mit Press.

abilities[37]. They emphasise that algorithms are data-driven and inherently error-prone, resulting in unexpected and unintended results and, in general, that algorithmic journalism is low-quality journalism[38]. Other research shows that journalists also underestimate the importance of algorithmic journalism[39]. Furthermore, journalists take it for granted that society needs them as journalists to speak the truth and act ethically[40].

Research problem and method

With the emergence and spread of expansive automated journalism, the role of the journalist is fundamentally changing. In these circumstances, the following general research questions were formulated:

- How do journalists perceive algorithmic journalism in the light of professional values?
- How do journalists identify their identity in the face of algorithmic journalism?
- What arguments do they give for their reasons?

Other issues, such as economic pressures and the possibility of journalists losing their jobs in the face of the expansion of algorithmic journalism, were not considered in the study. Despite the awareness of their importance, it was recognised that these issues go beyond the established research framework.

A semi-structural interview was chosen as the research technique. The choice was dictated by the need to access data not available through indirect observation[41]. In addition, interviews are a time- and economically efficient way of investigating complex and subtle phenomena. The choice of an interview allowed for the open exploration of the topic and the possibility for the interlocutors to express their opinions and ideas in their own words, and to control the course of the conversation while being free to continue individual threads, and to ask the same questions to all interlocutors[42]. The interview data were transcribed verbatim and

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[37] Susskind, Richard, and Daniel Susskind. 2015. *The Future of the Professions: How Technology Will Transform the Work of Human Experts*. New York, NY: Oxford University Press.

[38] Jung, Jaemin, Haeyeop Song, Youngju Kim, Hyunsuk Im, and Sewook Oh. 2017. 'Intrusion of Software Robots into Journalism: The Public's and Journalists' Perceptions of News Written by Algorithms and Human Journalists'. *Computers in Human Behavior* 71: 291–98. https://doi.org/10.1016/j.chb.2017.02.022.

[39] Young, Mary Lynn, and Alfred Hermida. 2015. 'From Mr. and Mrs. Outlier To Central Tendencies: Computational Journalism and Crime Reporting at the Los Angeles Times'. *Digital Journalism* 3 (3): 381–97. https://doi.org/10.1080/21670811.2014.976409.

[40] Lewis, 'The Tension between Professional Control and Open Participation'.

[41] Patton, M. Q. 2002. *Qualitative Research and Evaluation Methods*. 3rd ed. Thousand Oaks, CA: Sage; Kaczmarek, Mirosława, Iwona Olejnik, and Agnieszka Springer. 2018. *Badania Jakościowe - Metody i Zastosowania*. CeDeWu.

[42] Esterberg, K. 2002. *Qualitative Methods in Social Research*. Boston: McGraw Hill.

grouped, then analysed for common patterns and themes. Some of the interviewees asked to remain anonymous.

The research was conducted among 17 people from media organisations located in Poland. The interlocutors were journalists with over 10 years of experience in the media. The interviews were conducted in 2020-2021 (the full list of interviewees is included in Appendix 1). The interlocutors were assigned reference designations with consecutive numbers.

Before the study, journalists were informed about the possibilities of content creation and distribution as part of algorithmic journalism. Based on the initial conversations, most of the interlocutors have heard about the work of advanced technologies based on artificial intelligence. They had general knowledge of the technological possibilities of innovation, and knew about the existence of simple algorithms or templates for content such as the weather forecast, the stock market or sports. The journalists had no programming skills.

Results

Data analysis allowed for the identification of key topics, which were divided into three broad categories: 1) the potential for creating and distributing fake news, 2) defending the status quo: the strengths of a journalist vs. the disadvantages of algorithmic journalism, 3) journalists on their superiority: a catalogue of features. Each of these categories is summarised below.

1. Fake news creation and distribution potential

Algorithmic journalism is presented by journalists primarily in the context of posing a threat to the fundamental journalistic principle, which is to provide true information. The potential for the creation and distribution of fake news is in the foreground:

"Artificial intelligence, all mechanisations and robots are able to generate more harmful and false content, such as fake news, than reliable content, i.e., that which is verified by the human mind, not an algorithm. I believe that a machine cannot be taught morality and ethics." (Int. Int.).

There were also references to specific mechanisms affecting an increase in the risk of disinformation:

"If artificial intelligence begins to "suck" information, for example, from publicly available sources, it may also find out that the cellular network is carrying the Covid pandemic virus. If

it is not able to sift out this type of information, it can become a source of disinformation in a moment." (Int. GN).

"If some information appears very often, such an algorithm could say that this is true (...) the algorithm may not distinguish between truth and lies, and take some false theory, but one strongly sponsored in posts, and cause disinformation." (Int. Rz).

Deepfake was considered as a serious danger:

"This is a much more convincing and dangerous phenomenon than falsifying a text itself. From what I read, it may be a major problem for journalism in the coming years." (Int. Onet).

Another threat is that regarding responsibility with posted and distributed fake news, especially that from a significant social influence. As one of the interlocutors notes:

"The main disadvantage is the issue of ethical responsibility for material generated by artificial intelligence. This may have social consequences, because, for example, it will change people's behaviour. Providing false information will lead to the fact that someone can make a bad decision or it may cause panic, an artificial threat, etc. Who is responsible for it then? Not a machine, not artificial intelligence. Is it the man who pressed the Enter key or the man who is the head of a given media organisation? This is a fundamental problem for me - the danger that in ethical issues we will be dealing with a situation in which a question will arise about the responsibility for the effects of artificial intelligence." (Int. F1).

2. Defending the status quo: the advantages of a journalist vs. the disadvantages of algorithmic journalism.

Referring to the ideal of a journalist's profession, the interlocutors compared what they considered to be human qualities, which testify to the advantage of journalists, with the defects of algorithmic journalism they identified. They indicated, as their basic competence, critical thinking and action meeting the standards of relevance and adequacy, which they compared with the unreflective thinking of a machine, which they described as "thoughtless", "deprived of the ability to connect cause and effect."

"No automated tool can reach the level reached by real journalists who write the truth." (Int. TVN).

The interlocutors only attributed credibility to humans. It was described as a "precious currency", which "cannot be automatically obtained, because it is something that journalists

work for years." (Int. R.). Among the advantages of journalists (and the disadvantages of automatic content creation), the unique possibility of the verification of content was emphasised:

"It seems to me, however, that verification by a real journalist and sticking to the basic rules regarding information verification, taking responsibility for these publications - this cannot be done by any machine, automaton or program." (Int. TVN).

3. A "catalogue" of the uniqueness of human performance journalism

A catalogue of the uniqueness of human performance journalism emerged from the analyses of the data on the characteristics that interviewees believe determine the superiority of traditional journalism over algorithmic journalism. These characteristics were repeated in the statements:

a. Sensitivity and empathy:

"Humanity, after all, has a greater possibility of feeling, and some sensitivity, which I don't think even the greatest machine will ever acquire. A machine will be able to be entrusted with a number of different tasks, but certainly not questions of judging the world, of sensitivity, of empathy, of making analyses that are peculiarly human." (Int. KAI).

b. Spirituality:

"A true journalist is not only a sensitive person, but a specifically spiritual person. By this I mean that he or she is a creator of cultural goods and at the same time has a mission to change the world for the better, simply guided by a higher good. It may sound pathetic, but I believe that this is something unique that makes this profession different from others." (Int. TVP).

c. Following the truth:

"The very idea of truth seems to me to be unique to journalism. I can't imagine that algorithms will follow it. Maybe one day, but I hope I won't live to see it, because it would shatter my whole world." (Int. RZ).

d. Morality and ethicality, which algorithms "cannot be taught." (Int. Int.).

e. Operating with particular stylistic devices:

"When writing articles or books, a machine will not replace certain forms. After all, it is not able to convey energy, a joke, humour, a certain writing style." (Int. R).

f. Creativity:

"Creativity is needed in journalism, but also sensitivity, and probably no machine will have this." (Int. TK).

"I believe that this is something that a computer will not be able to do - it is about human creativity. The intention with which Shakespeare wrote Macbeth, for example." (Int. Onet).

g. Social engagement:

"Robots will create a message and maybe it will even be perfect in form, it will have commas well inserted, because algorithms are really capable of creating a lot, but they will never create a socially engaged text." (Int. WP).

h. Imagination:

"(A machine) will never replace the products of human imagination. It is not about creating fiction, especially in agency journalism, but about imagination understood as a certain predisposition and sensitivity attributed only to man." (Int. KAI).

The above mini-catalogue consists of unique characteristics, according to journalists, of the profession practised by a "human" journalist. Since individual journalists gave different justifications for their position, in individual cases, more than one statement related to the individual feature was presented.

Discussion

In previous studies relating to the potential of artificial intelligence in creating and identifying information, both threats and opportunities were noticed[43]. Our interviewees focused on the disadvantages, especially the potential for creating and distributing fake news. Such interpretations seem natural, because the development of algorithmic journalism concerns the most important element of journalists' professional identity - the verification of veracity before publication. In addition, the use of hard-to-analyse algorithmic systems in content creation and distribution leads to problems with transparency as a key principle of journalistic ethics[44].

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[43] Young and Hermida. 'From Mr. and Mrs. Outlier To Central Tendencies'.

[44] Diakopoulos, Nicholas, and Michael Koliska. 2017. 'Algorithmic Transparency in the News Media'. *Digital Journalism* 5 (7): 809–28. https://doi.org/10.1080/21670811.2016.1208053.

These issues were approached from different perspectives - the journalists looked for further arguments that would sanction the preservation of the status quo, i.e., professional identity built around control over content and defining what is the truth. This relates, for example, to responsibility (including moral responsibility) for the content produced, which is one of the most significant problems of the gradual delegation of moral influence to artificial intelligence.

The journalists focused their statements on the uniqueness of a human journalist, an attribute which, in their opinion, is to ensure protection against being replaced by an "automaton/robot". Sensitivity and empathy were emphasised as well as other features (the mini-catalogue) that journalists consider to be only human. One of the key strengths is the ability to distinguish the truth, because in their opinion, the distinction of truth from lies is beyond the reach of artificial intelligence and seems to be the greatest challenge.

Conclusion

With the development of algorithmisation, the processes of content selection, filtration and dissemination are evolving. While earlier journalists had a key influence on above mentioned processes, they gradually lost control over the process of creation, and even more so distribution, to programmers and managers of digital organisations, especially platforms. The loss of this control also contributes to an evolution from "fact-checking journalism" to the deprofessionalisation of journalism[45]. Users and programmers play an increasingly important role, professional journalists - a smaller and smaller one, and algorithmic journalism is generally free from the obligation to prove the credibility of sources.

At the same time, a discourse is emerging around issues such as content quality, access to and provenance of data, the authority of algorithms and their objectivity[46], and responsibility for algorithmically created and distributed content[47]. These and other issues, for example, the accuracy of the reported facts, constitute the ethical challenges of algorithmic journalism. The algorithmisation of journalism shifts the responsibility for content. The journalist is no longer

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[45] Kovach and Rosenstiel. *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect*.
[46] Carlson, Matt. 2019. 'News Algorithms, Photojournalism and the Assumption of Mechanical Objectivity in Journalism'. *Digital Journalism* 7 (8): 1117–33. https://doi.org/10.1080/21670811.2019.1601577.
[47] Diakopoulos, Nicholas. 2015. 'Algorithmic Accountability'. *Digital Journalism* 3 (3): 398–415. https://doi.org/10.1080/21670811.2014.976411.

the primary moral actor, as other agents[48], journalistic and non-journalistic, such as, for example, algorithms, media organisations, NLG programmers/service providers, and data managers are involved in news creation at various levels. Thus, the importance of the individual decreases, while the importance of media organisations and the media system as moral agents increases.

Although qualitative research does not allow for generalisations, the interviews reveal tendencies to defend journalistic professional identity in the face of the expansion of algorithmic journalism. This defence, on the one hand, focuses on emphasising the shortcomings of algorithmic journalism, and on the other hand, on emphasising the unique competences of a "real" journalist. Importantly, none of the interviewees mentioned fake news created by journalists. What emerges from the research is a picture of high competence (and good intentions) of "human truth journalism", and potentially flawed algorithmic "fake news journalism".

The identity of journalists in the context of their profession was constructed by our interlocutors around the declared care for the standards of social discussion, including, above all, care for presenting the truth. Journalists identified themselves as guardians/advocates of the quality of discourse, alluding to the role the (imaginary) role of "journalists as guardians of the truth" and depositaries of unique professional competences.

References

Annex 1

In text reference	Media	Journalistic specialisation
Television		
(Int. TVP)	Telewizja Polska (TVP)	News journalist
(Int .Polsat)	Polsat	News journalist
(Int. TVN)	TVN	News journalist

[48] Trybulec, Barbara. 2020. 'Podmiot Czy Agent? Rozumienie Podmiotowości w Erze Artefaktów Poznawczych [The Subject or Agent? Understanding Subjectivity in the Cognitive Artefacts Era]'. *Filozofia i Nauka* 2 (8): 89–115. https://doi.org/10.37240/FiN.2020.8.2.6.

News service		
(Int. Onet)	Onet	Cultural journalist
(Int. WP)	Wirtualna Polska	News journalist
(Int. Int.)	Interia.pl	News journalist
Press/website		
(Int. R)	Rzeczpospolita	News journalist
(Int. GW)	Gazeta Wyborcza	News journalist
(Int. TK)	Tygodnik Katolicki	Religious journalist
(Int. GN)	Gość Niedzielny	Science journalist
(Int. E)	Eurosport	Sports journalist
Radio		
(Int. RZ)	Radio Zet	News journalist
(Int. RMF)	RFM FM	News journalist
News agency		
(Int. IAR)	Informacyjna Agencja Radiowa	News journalist
(Int. KAI)	Katolicka Agencja Informacyjna	News journalist
(Int. PAP)	Polska Agencja Prasowa (PAP)	National journalist
Freelancer		
Int. F1	Freelancer	Religious journalist
Int. F2	Freelancer	Cultural journalist

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