

Artificial Intelligence Journalism: An Enquiry within the Framework of News Values and Ethical Principles

Yapay Zekâ Gazeteciliği: Haber Değerleri ve Etik İlkeler Çerçevesinde Bir Sorgulama

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ABSTRACT

This study was conducted to examine the effects of artificial intelligence technology on journalistic practice. The study analysed the news of İbrahim Selçuk, an artificial intelligence-based columnist of Dünya Newspaper, one of the leading newspapers in Turkey, and evaluated them in terms of news value and journalistic ethics. Within the scope of the research, 10 news samples published between October 2023 and March 2024 were analysed by descriptive analysis method. The results of the analysis show how much the news produced by artificial intelligence comply with the principles of traditional journalism. The evaluation made within the framework of the basic concepts of journalism reveals that although artificial intelligence news is newsworthy, it faces certain difficulties in terms of journalistic ethics. However, it is noted that more research is needed to provide a deeper understanding of the role and effects of AI technology in journalistic practice. This study can be considered as an important step to understand the evolution of AI technology in the field of journalism and to guide future applications.

Anahtar Kelimeler: Artificial Intelligence, Artificial Intelligence Journalism, Digital Journalism, News Values, News Ethics.

ÖZ

Bu çalışma, gazetecilik pratiği üzerinde yapay zekâ teknolojisinin etkilerini incelemek amacıyla yapılmıştır. Türkiye'nin önde gelen gazetelerinden Dünya Gazetesi'nin yapay zekâ tabanlı köşe yazarı İbrahim Selçuk'un haberlerini ele alarak, haber değeri ve habercilik etiği açısından değerlendirilmiştir. Araştırma kapsamında, Ekim 2023 - Mart 2024 tarihleri arasında yayımlanan 10 haber örneği betimsel analiz yöntemiyle incelenmiştir. Analiz sonuçları, yapay zekâ tarafından üretilen haberlerin geleneksel gazetecilik ilkelerine ne kadar uygun olduğunu göstermektedir. Gazeteciliğin temel kavramları çerçevesinde yapılan değerlendirme, yapay zekâ haberlerinin haber değeri taşımasına rağmen habercilik etiği açısından belirli zorluklarla karşı karşıya olduğunu ortaya koymaktadır. Ancak, yapay zekâ teknolojisinin gazetecilik pratiğindeki rolü ve etkileri hakkında daha derinlemesine anlayış sağlamak için daha fazla araştırmaya ihtiyaç olduğu belirtilmektedir. Bu çalışma, yapay zekâ teknolojisinin gazetecilik alanındaki evrimini anlamak ve gelecekteki uygulamaları yönlendirmek için önemli bir adım olarak değerlendirilebilir.

Keywords: Yapay Zekâ, Yapay Zekâ Gazeteciliği, Dijital Habercilik, Haber Değeri, Haber Etiği.



Introduction

Journalism plays an important role in informing and guiding public opinion by providing news to the public. Traditional journalistic practices are subject to strict standards in terms of news value and ethical principles of journalism. However, with the development of technology, artificial intelligence has begun to play an important role in journalism. The place and impact of artificial intelligence technology in journalism is an important topic of discussion in terms of newsworthiness and journalistic ethics.

The aim of this study is to evaluate the impact of artificial intelligence on the newsworthiness and ethical principles of journalism by analysing the news of İbrahim Selçuk, Türkiye's first artificial intelligence based columnist. The main problem of this study is the extent to which the news items generated by artificial intelligence of İbrahim Selçuk, the columnist of Dünya Newspaper, fulfil the newsworthiness criteria of traditional journalism and how to evaluate their compliance with the ethical principles of journalism.

The traditional understanding of journalism is based on basic principles such as news value and ethical principles of journalism. However, there is no clear understanding of how news produced by artificial intelligence conforms to these principles and what the implications are for journalistic practice. In order to evaluate the effects of AI technology in journalism, some main questions stand out. These questions are critical for understanding the quality of news produced by artificial intelligence and its compliance with journalistic ethics. The compliance of AI-based news with traditional journalistic standards should be examined and evaluated in terms of criteria such as accuracy, impartiality and transparency. In addition, it should also be investigated how controllable the use of artificial intelligence is in the news production process. It should also consider how independent and reliable the sources and content of the news are managed.

As part of the study, 10 news articles produced by İbrahim Selçuk between October 2023 and March 2024 were analysed using the descriptive analysis method within the framework of news value and ethical principles of journalism. This analysis aims to determine the extent to which the news articles carry basic journalistic principles and values such as accuracy, impartiality, transparency and social benefit.

Artificial Intelligence Journalism

Artificial intelligence (AI) refers to a field designed to improve the ability of computer systems to have human-like intelligence. AI is based on techniques such as machine learning (ML) and deep learning. Machine learning gives computers the ability to learn by analysing data. Deep learning increases the ability to recognise and infer complex patterns using neural network-based algorithms (Goodfellow et al., 2016, p. 18).

Machine learning is analysed into three main categories: supervised, unsupervised and reinforcement learning. Supervised learning learns by training on a labelled dataset. Unsupervised learning is used to find patterns and relationships on the unlabelled dataset, while reinforcement learning performs the learning process by interacting with the environment (Sutton & Barto, 2018, p. 35).

Deep learning is a sub-branch of ML that has been developed to solve using artificial neural networks. Deep learning models recognise complex patterns by analysing large datasets using multi-layer neural networks (such as CNNs and RNNs) (LeCun et al., 2015, p. 436).

AI has various applications in many fields. These include healthcare, automotive, finance, education, industry and the news industry. In healthcare, AI is used in many areas such as diagnostic imaging, disease diagnosis and treatment planning (Esteva et al., 2017, p. 115). In the automotive industry, AI techniques play a major role in sensing and decision-making processes for driverless vehicles

(Bojarski et al., 2016, p. 8). In finance, AI is used in important tasks such as market trend analysis, risk management and fraud detection (Zhang et al., 2020, p. 112). In education, AI is used in areas such as monitoring student performance, providing student-specific educational materials, and analysing student behaviour (Baker & Inventado, 2014, p. 206).

Artificial intelligence offers a major transformation in news production processes in the news industry. Traditional news production processes required a lot of effort and experience from human editors and journalists. However, artificial intelligence technologies can automate news production through large amounts of data analysis and machine learning algorithms. Artificial intelligence in news production can quickly and effectively generate news headlines, summaries and even full texts by analysing large data sets. For example, language models such as Generative Pre-trained Transformer (GPT) developed by OpenAI can produce human-like news texts.

Natural language processing (NLP) and deep learning techniques form the basis of artificial intelligence-supported news production. The use of these technologies saves time and money in the news production process. However, they also raise important issues such as the accuracy and impartiality of news produced by artificial intelligence (Diakopoulos, 2016, p. 78).

Today, with the rapid development of technology, radical changes are taking place in the field of journalism. Artificial intelligence (AI) has become an important driving force of these changes. The integration of AI into journalistic processes provides significant advantages at many stages from news production to distribution. However, more research is needed to understand and manage the impact of this technology on journalistic practice.

AI is being used in many different ways in journalism. In particular, the impact of AI is evident in areas such as big data analysis, content

recommendations, automated text generation and even robot journalists (Coddington, 2015, p. 331-332). For example, many news organisations are using AI-powered software to analyse large data sets and use the information from these analyses in the news production process.

The news industry has undergone a significant transformation with the adoption of artificial intelligence (AI) technologies. One of the first significant uses is the automatic generation of news. This development gained momentum towards the early 2010s. Leading news agencies have taken the first steps towards producing meaningful content from large data sets by adopting AI-based systems. For example, the Associated Press (AP) started using an artificial intelligence platform called "Wordsmith" in 2014 to generate news articles from financial data.

Similarly, major media organisations such as the BBC began using AI technologies for news production and analysis in the mid-2010s. During this period, AI algorithms played an important role in classifying, filtering and personalising news content.

Another important use of artificial intelligence in journalism is the detection and prevention of fake news. Especially with the spread of fake news during the 2016 US presidential elections, news organisations have started to use AI-based systems to identify the sources and content of fake news.

From the late 2010s to the early 2020s, it is observed that artificial intelligence technologies have been increasingly adopted in the news industry. Major news organisations as well as technology companies are using AI-based systems to analyse and personalise news content and detect fake news.

The use of AI in journalism also raises ethical and social concerns. In particular, with the proliferation of automated text generation technology, human

journalists have become increasingly worried about losing their jobs. This situation causes deep reflections on the future of the journalism profession. In addition, how to protect journalistic principles such as accuracy, transparency and diversity in relation to AI-assisted news production is also an important issue of debate.

Artificial intelligence also plays an important role in news distribution processes. Social media platforms and news applications can personalise news content according to users' interests and preferences, thus enhancing the user experience (Lerman, 2016, p. 92). Algorithms have the ability to recommend and customise news by analysing users' past behaviour. However, this is seen by some critics as a source of concern in terms of information diversity and news diversity (Pariser, 2012, p. 56).

With the widespread use of AI, a number of ethical issues also come to the fore. In particular, issues such as data privacy, algorithmic bias, unemployment and the human-machine interaction are at the centre of ethical debates (Floridi & Cowls, 2019, p. 9). Data privacy refers to the potential for AI to use or share personal data without permission, while algorithm bias refers to the risk of algorithms being biased against certain groups (Barocas & Selbst, 2016, p. 671). In addition, the ethical issues of AI algorithms in news recommendations and their impact on users' access to information should also be considered. The compliance of the use of artificial intelligence in the news industry with ethical and quality standards should be continuously evaluated and audited.

News Values and Ethical Principles

Journalism plays a critical role in the functioning of a democratic society and undertakes an important mission such as informing the public, enlightening the public and contributing to democratic processes. However, the successful fulfilment of this mission depends on the accurate determination of news values and the observance of ethical principles. Journalism has undergone significant changes with digitalisation and the

widespread use of the internet. The shift from traditional media platforms to digital publications has led to the emergence of new dynamics in news production and consumption. In this context, news values and ethical principles play an important role in digital journalism.

News values are the main criteria for selecting and presenting news. The newsworthiness of an event is generally based on its characteristics that attract, affect or have important consequences for society. Although news values vary widely, they basically consist of criteria such as importance, proximity, interest, conflict, timing and human interest. When determining news values, journalists use these criteria to ensure that the news is appropriate to the general level of knowledge and interest of the public. For example, events such as the occurrence of a natural disaster, the resignation of a political leader or the outbreak of an economic crisis are considered important in terms of news values. News values are one of the concepts that underpin digital journalism. However, unlike traditional media, digital platforms provide instant information flow and reach large masses. Therefore, different dynamics come into play in determining and prioritising news values in digital media. For example, the rapid spread of an event on social media may increase the importance of timing and proximity values in digital journalism. In this context, we can generally list news values as follows:

- ▶ **Significance:** This value refers to the social, economic, political or cultural importance of the news. Events that affect a large segment of the society or that may affect future events are considered important in terms of news values. For example, issues such as a country's presidential elections, a national security crisis or a global economic crisis have a significance value (McQuail, 2005, p. 78).
- ▶ **Proximity:** News should include events that occur in places where readers or viewers are physically close. Local or regional news has proximity value because it directly affects the communities where individuals live. For

example, events such as a local festival, a traffic accident or the weather are news that have proximity value (Gans, 2005, p. 45).

- ▶ **Relevance:** This value refers to the recognisability or importance of the people, institutions or events in the news. News items featuring celebrities, political leaders or international organisations have a relevance value. For example, events such as the sudden death of a celebrity, the visit of a head of state or the bankruptcy of an important company are news items that have interest value (Galtung & Ruge, 1965).
- ▶ **Conflict:** The news is expected to contain conflicts or disagreements between different views. This may include disputes between different groups of opinions or interests, such as political conflicts, social protests, labour strikes or international conflicts. Conflict can increase the dramatic nature of the news and the interest of readers (Galtung & Ruge, 1965).
- ▶ **Timing:** News should be fresh and timely. This means that the news should be published or reported immediately after the event. The principle of timing significantly affects the news value of the news. For example, news published immediately after a natural disaster or terrorist attack has a timing value (McQuail, 2005, p. 102).
- ▶ **Human Relevance:** This value includes stories that people can emotionally connect with or find interesting. This can include human experiences, personal triumphs, dramatic events or unusual aspects of life. The human interest allows the news to reach a wider audience because it affects readers or viewers emotionally (Gans, 2005, p. 89).

Ethical principles are guidelines that journalists should consider at every stage from news production to distribution. Ethics in journalism includes principles such as accuracy, impartiality, honesty, confidentiality and the protection of personal rights of personal rights. It enables

journalists to present news accurately and fairly while protecting the rights of news subjects and individuals. Ethical principles help journalists to meet their professional responsibilities and social ethical standards.

Ethical principles are an important element of digital journalism in terms of credibility and integrity. The speed and accessibility of news on digital platforms can easily lead to the spread of misinformation and manipulative content. Therefore, it is vital for journalists to observe ethical principles such as accuracy, impartiality and confidentiality when working in digital media. In this context, we can list the ethical principles as follows:

- ▶ **Accuracy and Reliability:** The fundamental responsibility of journalists is to provide accurate and reliable information to the public. This principle emphasises that news should not only reflect the facts but also ensure accuracy and reliability on a continuous basis. This principle states that journalists have the responsibility to verify and confirm the reality when creating their news (Kovach & Rosenstiel, 2007, p. 32). For accuracy, the sources and information of the news should be meticulously checked and this process should be ensured to continue on an ongoing basis (Ward, 2010, p. 45).
- ▶ **Impartiality and Independence:** Impartiality involves the principle that journalists should present news objectively and be independent of personal or organisational influences. This principle emphasises that journalists have a responsibility to provide readers with information from different perspectives by presenting their news in an unbiased manner (Schudson, 2011, p. 78). Impartiality requires journalists to put aside their personal biases, present the news objectively and deal with various perspectives fairly (Ward, 2010, p. 67).
- ▶ **Honesty and Transparency:** The principle of honesty and transparency requires news sources and methods to be clearly stated and information about how the news is produced to

be shared with readers. This principle aims to enhance the credibility of news organisations by clearly communicating the news production process to readers. Transparent disclosure of news sources and data collection methods increases readers' confidence in the reliability of the news (Schudson, 2011, p. 112).

- ▶ **Protection of Privacy and Personal Rights:** When reporting news, it is important to protect personal privacy and sensitive information. This principle explains that journalists should respect the privacy of individuals and avoid unnecessary disclosure of sensitive information when preparing news (Keeble et al., 2012, p. 89). Journalists should only publish sensitive information when it is necessary and in the public interest (Ward, 2010, p. 75).
- ▶ **Avoiding Conflicts of Interest:** It is important for journalists to avoid situations with the potential for conflict of interest and to act in accordance with the rules of professional ethics. This principle aims to protect the professional independence of journalists and ensure the impartiality of news. Journalists should be careful to maintain objectivity in situations where there is a conflict of interest (Schudson, 2011, p. 96).
- ▶ **Sensitivity and Empathy:** It is important to treat news with sensitivity and empathy towards social groups, minorities and victims. This principle states that journalists need to understand and empathise with the emotional and social needs of people when preparing their news (Kovach & Rosenstiel, 2007, p. 55). Journalists should present balanced and inclusive news by respecting and giving voice to different segments of society (Ward, 2010, p. 88).

These two basic concepts are the cornerstones of journalism. While news values help journalists decide which events to report, ethical principles ensure that journalists present their news accurately, impartially and ethically. These

principles help journalists fulfil their responsibilities towards society and gain public trust.

Research: Analysing News Generated by Artificial Intelligence within the Framework of News Values and Ethical Principles

Purpose of the Study

Journalism plays an important role in informing and guiding public opinion by providing news to the public. Traditional journalistic practices are subject to strict standards in terms of news value and ethical principles of journalism. However, in recent years, the development of artificial intelligence technologies has had a significant impact on the news production process and the prevalence of news generated by artificial intelligence has increased. The world of journalism is constantly changing under the influence of technological developments and undergoing a process of adaptation. The most recent example of this change is the emergence of Türkiye's first AI-based columnist İbrahim Selçuk, which was realised with the cooperation of Dünya Newspaper, one of Türkiye's leading newspapers, and CBot. The aim of this study is to analyse the ability of artificial intelligence technology to produce news by considering the news value of artificial intelligence technology and its compliance with the ethical principles of journalism in the case of İbrahim Selçuk, an artificial intelligence journalist created on the basis of artificial intelligence.

Research Method and Problem

Purposive sampling, which is one of the low-probability sampling methods, was preferred in the research. Purposive sampling means the deliberate selection of a specific region or place in accordance with the research question (Erdoğan & Uyan Semerci, 2021, p. 86). In this study, 10 news articles created by İbrahim Selçuk, Türkiye's first AI-based columnist, between October 2023 and March 2024 were analysed using descriptive analysis within the framework of news value and journalism ethics principles.

Descriptive analysis involves the process of systematic organisation, explanation and interpretation of the data obtained in the research process. This process starts with determining the research questions and themes. The data are categorised according to these themes and these themes are the focus of the analysis. In descriptive analysis, the researcher describes the data obtained in detail. (Yıldırım & Şimşek, 2011, p.224).

The traditional understanding of journalism is based on basic principles such as news value and ethical principles of journalism. However, the compliance of news produced by artificial intelligence with these principles and their effects on journalistic practice cannot be clearly understood. In this context, it is important to ask the following questions in order to understand the effects of the use of artificial intelligence technology in the field of journalism on news value and journalistic ethics:

- ▶ Are the news stories produced by artificial intelligence being produced in accordance with the newsworthiness criteria in traditional journalism?
- ▶ How is it evaluated to what extent these news stories comply with basic journalistic ethical principles such as accuracy, impartiality, transparency and social benefit?
- ▶ How does the integration of artificial intelligence technology into the news production process affect the extent to which the sources and content of news can be controlled and the independence of news?

These questions constitute the focus of the study in order to evaluate the use of artificial intelligence technology in the field of journalism in terms of newsworthiness and ethical principles of journalism.

Findings

View from the Framework of News Values

News 1. "China ends 51 years of panda diplomacy"

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 2 October 2023 from the newsworthiness framework;

Significance: The news item deals with an important development such as China's termination of panda diplomacy. The reasons and effects of the end of panda diplomacy is an important issue in terms of international relations and foreign policy.

Relevance: The story informs readers about developments related to China's ending of panda diplomacy. The details of the development and its potential effects are presented in a way that is close to the readers.

Relevance: The news item covers an interesting topic, such as China ending panda diplomacy. The causes and effects of the development are analysed in detail in a way that captures the reader's attention.

Conflict: The article creates a kind of conflict by analysing the causes and effects of the end of panda diplomacy from various perspectives. The different perspectives and possible outcomes can provoke discussion and reflection among readers.

Timing: The article covers an important development, such as China's ending of panda diplomacy, in a timely manner. The development is analysed in the context of international relations and foreign policy and reported in a timely manner.

Human Interest: The news item covers issues of human interest, such as the causes and effects of the end of panda diplomacy. The potential implications of the development for international relations and foreign policy are presented in a way that is of interest to readers.

News 2. “War will affect 5 commodity products”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 12 October 2023 from the newsworthiness framework;

Materiality: The news article is important because it discusses the possible effects of the Israeli-Palestinian conflict on economic and commodity markets. It is an important source of information for readers because it explains how a regional conflict can affect global economic balances.

Proximity: The news article established a close relationship with the readers by evaluating the effects of regional conflicts on the global economy. The fact that it explained the effects of commodity markets on daily life made readers feel closer to the issue.

Relevance: The article is interesting in that it discusses the potential impact of the Israeli-Palestinian conflict on the economy and commodity markets. The analysis of potential risks and opportunities captured readers' attention.

Conflict: The article created an atmosphere of conflict by discussing the potential impact of the Israeli-Palestinian conflict on economic and commodity markets. It created conflict by presenting different views and scenarios on how different commodity products could be affected.

Timing: The article is important in terms of timing as it discusses the economic effects of the Israeli-Palestinian conflict. It informed readers about a current issue by evaluating the effects of regional conflicts on the global economy.

Human Relevance: The article attracted human interest as it covered the effects of the Israeli-Palestinian conflict on economic and commodity markets. The analysis of potential risks and opportunities made readers interested in the topic.

News 3. “Silver shines more than gold in 2024”

Analysis of the content dated 6 November 2023 created by the artificial intelligence named İbrahim Selçuk from the newsworthiness framework;

Materiality: The news article emphasised the importance of the performance of precious metals such as gold and silver in 2024 for investors. For this reason, it addressed an issue that those active in financial markets should carefully follow.

Relevance: The news article is aimed at readers who are interested in financial markets. By providing analyses of popular investment instruments such as gold and silver, it established a close relationship with readers.

Relevance: The article managed to attract readers' attention by providing analyses evaluating the performance of gold and silver in 2024. The discussion of the potential of precious metals in the coming year is engaging.

Conflict: The article may cause conflict among readers by discussing the potential investment opportunities between gold and silver. For some investors, gold is seen as a safer haven, while others may be more attracted to silver due to its industrial demand.

Timing: The article is timely as it analyses the performance of precious metals such as gold and silver in early 2024. Investors may need such analysis when determining their strategies for the coming year.

Human Interest: The news may arouse widespread interest among people with an interest in the financial markets. Analyses of the performance of precious metals such as gold and silver in the coming year may attract the attention of investors and market observers.

News 4. “Artificial intelligence, risks and opportunities”

Analysis of the content dated 7 December 2023 created by the artificial intelligence named İbrahim Selçuk from the framework newsworthiness;

Significance: The news focuses on a current and important issue by addressing the effects of artificial intelligence in the business world. It is important because it deals with an issue that can cause significant changes in the business world and the future of employees.

Relevance: By describing the effects of artificial intelligence in the business world, the news article deals with an issue that touches the daily lives of the readers. Focusing on the impact of changes in the business world on the lives of individuals can create a sense of proximity.

Relevance: When discussing the impact of artificial intelligence on the world of work, the article touches on interesting topics such as the future of technology and how working life will change. This is an effective strategy for grabbing the reader's attention.

Conflict: When discussing the implications of AI in the world of work, the article addresses potential conflicts between opportunities and risks. By describing these conflicts, it allowed readers to focus more deeply on the issue.

Timing: By discussing the effects of artificial intelligence in the business world, the article drew attention to the importance of this issue today and in the future. Therefore, it presented an effective content in terms of timing.

Human Relevance: While discussing the effects of artificial intelligence in the business world, the article also touched on human-centred issues such as the future of employees and job security. This can help readers connect emotionally with the topic.

News 5. “Commodity champions of 2024: Gold, silver oil, natural gas”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 15 January 2024 from the newsworthiness framework;

Significance: The news article aims to inform readers about economic developments and changes in commodity markets by making an evaluation on commodities that will shape the global economy. This may be an important source for those interested in economics and investment.

Relevance: The article aimed to inform readers about changes in the world economy and developments in commodity markets. This can help readers to gain an accurate perspective on current economic issues.

Relevance: The article aimed to attract readers' attention by providing economic analysis and forecasts. It may provide engaging content for those who want to learn about commodity markets and economic developments.

Controversy: The article discussed various factors related to changes in the global economy and developments in commodity markets. It aimed to analyse the conflicts that may arise in the relationships between these factors.

Timing: The article provided important timely content by providing information about the economic balances and changes in commodity markets in the coming year. This can help readers to follow future economic trends.

Human Interest: The news article aimed to interest readers in economic developments and changes in commodity markets. This may increase readers' willingness to learn about current economic issues.

News 6. “Companies that will stand out in 2024”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 16 January 2024 from the framework of ethical principles;

Significance: The news article has managed to attract the attention of readers by emphasising the importance of the companies expected to come to the fore in 2024 and the future role of artificial intelligence. This can be an important source for those who want to be informed about economic and technological developments.

Relevance: The article aimed to attract readers' attention by addressing the implications of leading companies in the technology sector and the future role of artificial intelligence in the near future. This addresses an important issue that could affect readers' daily lives.

Relevance: The story aimed to engage readers by highlighting interesting aspects of the future role of AI and the companies expected to be prominent in 2024. This may provide attractive content for those interested in technology and economics.

Controversy: The story aimed to raise readers' awareness of the potential conflicts and changes that future technological developments and competition between companies could bring.

Timing: The article addressed future technological trends and potential successes of companies with a focus on 2024. This may help readers to be informed about future developments.

Human Relevance: The article addressed the future aspects of technology and the economy, focussing on how it could affect readers' daily lives. This can increase readers' interest in future trends and developments.

News 7. “Global balance: Are we on the brink of World War 3?”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 6 February 2024 from the framework of ethical principles;

Materiality: The article focuses on an important issue by emphasising that we are faced with many speculations on the causes and triggers of a potential World War 3. This emphasises the

seriousness of tensions and potential for conflict in the international arena.

Proximity: The story addressed a topical issue close to readers by focusing on global issues such as tensions in international relations and the potential for conflict.

Relevance: The news item provided engaging content by focusing on tense issues in international relations, such as the causes and triggers of a possible World War III. This is a topic that can attract the attention of readers.

Conflict: The coverage focussed on issues with potential for conflict, such as the causes and triggers of a possible World War III. This could raise readers' awareness and stimulate discussion.

Timing: The article was published at a time of high international tension and the potential for conflict around the world. This aims to engage readers by addressing a topical issue.

Human Interest: The story aims to engage people's interest by focusing on a topic that could affect people's daily lives, such as the causes and triggers of a possible World War 3. This can lead to readers wanting to know more.

News 8. “Do large industrial organisations and banks need R&D incentives?”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 13 February 2024 within the framework of ethical principles;

Materiality: The article focuses on an important issue by addressing the need for R&D incentives for critical players in Türkiye's technological breakthrough. This is a controversial topic on the economic effects of technological developments and may be of interest to readers.

Relevance: The story focused on familiar and immediate issues such as large industrial organisations, banks and SMEs that are critical to the economic development of Türkiye. This

provides immediacy as these are issues that have a direct impact on the daily lives of readers.

Relevance: The coverage focussed on topics of interest, such as the economic impact of technological breakthroughs and the role of R&D incentives. There are concrete examples and analyses of industrial relations that may attract readers' attention.

Conflict: The article addresses potential points of conflict between large industrial organisations and SMEs regarding R&D incentives. This conflict is a controversial issue about the impact of technological developments on economic balances.

Timing: The article focuses on a timely issue, addressing the need for R&D incentives for critical players in Türkiye's technological breakthrough. This fulfils readers' need to be informed about current developments.

Human Interest: The story is of human interest by focus on topics such as the economic impact of technological breakthroughs and the role of R&D incentives. This can help readers develop a deeper understanding of issues that affect their daily lives.

News 9. "GPT technologies in mobile: On the threshold of a new era"

The analysis of the content dated 23 February 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Materiality: The news item deals with the potential effects of the use of artificial intelligence technologies in mobile phones. This is an important issue for technology developers, mobile phone manufacturers and users because the integration of AI technologies into mobile devices can significantly affect the user experience.

Proximity: The news provides immediacy as the use of AI technologies in mobile phones is directly relevant to users. Users are directly interested in how the integration of these technologies will affect their mobile devices.

Relevance: The story is engaging by focus on the potential advantages and challenges of using AI technologies on mobile phones. It may draw users' attention to how the use of these technologies could change the role of mobile devices in our daily lives.

Conflict: The article states that there is a conflict between the advantages and challenges of using AI technologies in mobile phones. This conflict may be between the potential benefits of the technology and concerns about its use.

Timing: The timing of the news item seems appropriate, anticipating that the integration of AI technologies into mobile devices will make great progress in the coming years. Technological developments in this area are important to users and industry experts, and therefore the timing of the news is appropriate.

Human Relevance: The story is of human interest as it focuses on the potential implications of the integration of AI technologies into mobile devices. This is a topic of interest for technology enthusiasts, industry experts and general users.

News 10. "Comprehensive analysis of the copper sector: 2024 and beyond"

The analysis of the content dated 26 March 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Materiality: The news article is important because it discusses the critical role of copper in the modern world and the future of the sector. Since copper is a key component in many sectors such as electricity, electronics, construction and transport, changes in the sector can have a wide impact.

Relevance: The story provides relevance for industry professionals and investors as it analyses developments in the copper sector. It is also of interest to local readers as it analyses Türkiye's role in the copper sector.

Relevance: The story covers topics of interest such as renewable energy investments, the growth

of the electric vehicle market and technological developments. Such trends may be of particular relevance to industry professionals and investors.

Conflict: The news item contains potential conflicts between the factors shaping the future of the copper sector. For example, there may be a conflict between sustainability pressures and mining activities. It is important that such conflicts are discussed in more detail.

Timing: The timing of the article seems appropriate as it analyses future trends in the copper sector. It is presented at the right time to anticipate changes in the sector and discuss strategies for the future.

Human Relevance: The story is of human interest as it analyses future trends and potential opportunities in the copper industry. It contains important and interesting information for industry professionals, investors and general readers.

Review within the Framework of Ethical Principles

News 1. “China ends 51 years of panda diplomacy”

Analysis of the content dated 2 October 2023 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article accurately conveys the development regarding China's termination of panda diplomacy. It provides an informative and reliable explanation about why panda diplomacy ended and the effects of this situation on China's foreign policy.

Neutrality and Independence: The report provides an unbiased coverage of the development regarding the end of China's panda diplomacy. It provides the reader with an objective view by providing information on various causes and effects.

Honesty and Transparency: The story clearly states the various causes and effects of the end

of panda diplomacy. Readers are provided with a transparent explanation of the thinking and expectations behind the development.

Protection of Privacy and Personal Rights: The article conveys general and public information about the end of panda diplomacy. No personal information or sensitive issues are included and the confidentiality of the parties is protected.

Avoiding Conflicts of Interest: The report avoids conflicts of interest by objectively analysing the causes and effects of China's termination of panda diplomacy. Rather than presenting a simplistic view of the situation, it evaluates different perspectives and possible impacts.

Sensitivity and Empathy: The report shows sensitivity in assessing the potential impact of the end of panda diplomacy on China's foreign policy and international relations. An empathetic approach is adopted to analyse the development from different perspectives and understand the possible consequences.

News 2. “War will affect 5 commodity products”

Analysis of the content dated 12 October 2023 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article presented generally accurate and reliable information when evaluating the economic effects of the Israeli-Palestinian conflict. It used realistic scenarios and examples when describing the possible effects of regional conflicts on commodity markets.

Neutrality and Independence: The report presented an unbiased assessment of the impact of the conflict without any political or ideological bias. It was impartial in its analysis of the possible responses of commodity markets.

Honesty and Transparency: The report provided an honest and transparent account of the economic impact of the Israeli-Palestinian conflict. It

informed readers about the potential risks and impacts and clearly articulated uncertainties.

Protection of Privacy and Personal Rights: There was no specific breach of privacy or personal rights as the story covered general topics such as commodity markets and regional conflicts. Therefore, it has acted in accordance with the principle of protecting privacy and personal rights.

Avoiding Conflicts of Interest: The report did not contain any conflict of interest and presented an objective analysis. It avoided conflicts of interest by objectively assessing the possible reactions of commodity markets.

Sensitivity and Empathy: The report acted with sensitivity in assessing the economic impact of the Israeli-Palestinian conflict and analysed the possible consequences from an empathetic perspective. It also drew attention to humanitarian tragedies and waves of migration.

News 3. “Silver shines brighter than gold in 2024”

Analysis of the content dated 6 November 2023 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article presented analyses on the performance of precious metals such as gold and silver in 2024, citing information obtained from various sources. However, it emphasised possible scenarios rather than definitive statements as well as specific forecasts. This is in line with the principles of accuracy and reliability.

Impartiality and Independence: The article took a neutral stance when discussing the various analyses of which of gold and silver will present a brighter investment opportunity in 2024. The pros and cons of both metals were assessed in an unbiased manner.

Honesty and Transparency: The article clearly presented readers with the data and forecasts underlying the analyses. Uncertainties in the

analyses and possible scenarios were honestly conveyed. This is in line with the principles of honesty and transparency.

Protection of Privacy and Personal Rights: As the news article contains general information on financial assets such as gold and silver, it does not contain personal data or private information. Therefore, the news report complies with the principles of confidentiality and protection of personal rights.

Avoiding Conflicts of Interest: The article avoided conflicts of interest by providing analyses rather than investment recommendations. It presented an unbiased perspective by objectively assessing the potential of both metals.

Sensitivity and Empathy: The article showed sensitivity and empathy by emphasising the points that readers should pay attention to when making financial decisions. It encouraged readers to be aware by emphasising the seriousness of investment decisions.

News 4. “Artificial intelligence, risks and opportunities”

Analysis of the content dated 7 December 2023 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article presented information on the effects of artificial intelligence on the business world based on real data. While describing the situation in different geographies such as the US, Europe and Türkiye, it has demonstrated an approach in accordance with the principles of accuracy and reliability by giving concrete examples.

Impartiality and Independence: The news article has addressed the opportunities and risks of artificial intelligence in the business world in an impartial manner. It presented information from an impartial point of view while analysing the effects in different regions and various professional groups.

Honesty and Transparency: The news article demonstrated an approach in accordance with the principles of honesty and transparency by openly addressing the effects of artificial intelligence in the business world. It openly discussed the positive and negative aspects and informed the readers.

Protection of Privacy and Personal Rights: While analysing the effects of artificial intelligence in the business world, the article did not include personal data or private information. Therefore, it is written in accordance with the principle of protection of privacy and personal rights.

Avoiding Conflicts of Interest: While analysing the effects of artificial intelligence in the business world in an impartial manner, the article has avoided situations that may cause any conflict of interest. Therefore, it has demonstrated an approach in accordance with the principle of avoiding conflicts of interest.

Sensitivity and Empathy: While analysing the opportunities and risks of artificial intelligence in the business world, Haber also addressed sensitive issues such as the security of employees and the need for training. This reflects an approach in line with the principle of sensitivity and empathy.

News 5. “Commodity champions of 2024: Gold, silver, oil, natural gas”

Analysis of the content dated 15 January 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article presented information based on concrete data while making an assessment on commodities that will shape the global economy. It demonstrated an approach in accordance with the principles of accuracy and reliability in terms of predictions and analyses.

Impartiality and Independence: The Report analysed various commodities and economic factors in an impartial manner. However, it can be

seen that the principle of impartiality was not fully respected at some points, with certain countries or regions being highlighted and emphasised in a positive manner.

Honesty and Transparency: The news article presented a realistic perspective on economic developments and commodity markets. However, it can be observed that the principle of honesty and transparency was not fully respected by emphasising certain countries or regions.

Protection of Privacy and Personal Rights: While presenting economic analyses and forecasts, the news article did not include personal data or private information. Therefore, it was written in accordance with the principle of confidentiality and protection of personal rights.

Avoidance of Conflicts of Interest: While the article attempts to provide an unbiased analysis of commodity markets and economic developments, it may be seen that the principle of avoiding conflicts of interest has not been fully respected by highlighting certain countries or regions.

Sensitivity and Empathy: The report carefully presented information on economic balances and changes in commodity markets, aiming to help readers understand these complex issues. However, it can be seen that the principle of sensitivity and empathy was not fully respected by emphasising certain countries or regions in a positive way.

News 6. “Companies that will stand out in 2024”

Analysis of the content dated 16 January 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: While focusing on potentially prominent companies and the role of artificial intelligence in 2024, the article presented information based on concrete data and in a generally reliable manner.

Impartiality and Independence: The report focused on an unbiased analysis of the companies expected to be prominent and the future role of AI. However, at some points there is a risk of over-emphasising certain companies or technologies.

Honesty and Transparency: The report has taken an honest approach to predictions and analyses, while emphasising that it does not guarantee the future success of specific companies or technologies.

Protection of Privacy and Personal Rights: While the article provided general information about the companies that will stand out and the future role of artificial intelligence, it did not contain any personal data or private information. Therefore, it was written in accordance with the principle of protection of privacy and personal rights.

Avoiding Conflicts of Interest: The article avoided conflicts of interest and presented an objective point of view while covering the future role of AI and the companies that will come to the fore in an unbiased manner.

Sensitivity and Empathy: The story sensitively provided information on the future role of the technology and the potential for companies to succeed, while aiming to help readers understand these complex issues.

News 7. “Global balance: Are we on the brink of World War 3?”

Analysis of the content dated 6 February 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: While discussing the causes and triggers of a potential World War III, the article is written in accordance with the principle of accuracy and reliability, based on concrete data and taking into account the real situation in international relations.

Neutrality and Independence: The article analysed

various potential triggers and scenarios from an impartial perspective, while impartially assessing the tensions in international relations and the rivalry between great powers.

Honesty and Transparency: The report honestly analysed the causes and triggers of a possible World War III and used clear and transparent language to inform readers. However, it could have been more transparent by supporting it with some examples or statistics.

Protection of Privacy and Personal Rights: The article did not include any personal data or private information in its coverage of tensions and potential conflict points in international relations. Therefore, it was written in accordance with the principle of protection of privacy and personal rights.

Avoiding Conflicts of Interest: When dealing with the causes and triggers of a possible World War III, the article pointed out the potential conflicts between the interests of different countries and approached this issue in a neutral manner.

Sensitivity and Empathy: While the article sensitively provided information about the tensions in international relations and a potential conflict environment, it took an empathetic approach to this issue and tried to help readers understand this complex issue.

News 8. “Do large industrial organisations and banks need R&D incentives?”

Analysis of the content created by the artificial intelligence named İbrahim Selçuk on 13 February 2024 within the framework of ethical principles;

Accuracy and Reliability: The article was written in accordance with the principle of accuracy and reliability, based on concrete data and supported by general economic information, while discussing the critical players in Türkiye's technological breakthrough and the importance of R&D incentives.

Impartiality and Independence: While the article impartially analysed the relationship between large industrial corporations, banks and SMEs, it presented the different perspectives of each of them and maintained its compliance with the principles of impartiality and independence.

Honesty and Transparency: The report presented the debate on government R&D incentives in an honest manner, while transparently covering the impact of R&D incentives on SMEs and large organisations. However, it could have been more transparent by supporting it with some examples or statistics.

Protection of Privacy and Personal Rights: While the news article analysed the economic impacts of technological breakthroughs, it did not contain any personal data or private information. Therefore, it was written in accordance with the principle of protection of privacy and personal rights.

Avoiding Conflicts of Interest: While the article directly addressed the conflicts of interest of large industrial organisations, banks and SMEs regarding R&D incentives, it approached this issue in an impartial manner. By clearly defining conflicts of interest, it provided readers with an objective view.

Sensitivity and Empathy: The article addressed sensitive issues such as the R&D services provided by SMEs to large companies with an empathetic approach. The article emphasised the dynamism and innovation of SMEs and drew attention to their contribution to the economic ecosystem.

News 9. “GPT technologies in mobile: On the threshold of a new era”

Analysis of the content dated 23 February 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article discusses how artificial intelligence technologies can be used in mobile phones and the potential advantages and challenges of these technologies. However, the source and accuracy of the announcement

about Google's open source artificial intelligence model Gemma is not specified. Therefore, there are some question marks about the accuracy and reliability of the news.

Impartiality and Independence: The news article focuses on Google's announcement about its open source artificial intelligence model Gemma and directly reports this announcement. However, there are shortcomings in terms of the principle of impartiality and independence, as the news report does not address the broader context of Google's other activities or competitors.

Honesty and Transparency: The news article reports Google's announcement about its AI model Gemma, but does not provide more transparency about the research or development process behind this announcement. The story may need to provide more transparency and detail.

Protection of Privacy and Personal Rights: The report does not address the issue of privacy and protection of personal rights in relation to the use of AI technologies in mobile phones. However, the impact of AI technologies on the security and privacy of personal data is an important issue and the news article may need to draw more attention to this issue.

Avoiding Conflicts of Interest: The story reports on Google's announcements regarding AI technologies, but does not provide an in-depth analysis of Google's conflicts of interest or business objectives related to the use of these technologies. The story may need to address the broader context and analyse potential conflicts of interest in more detail.

Sensitivity and Empathy: The article focuses on the potential advantages and challenges of using artificial intelligence technologies in mobile phones. However, it should be recognised that the use of these technologies also involves socially and ethically sensitive issues. The story may need to address these issues with more empathy and sensitivity.

News 10. “Comprehensive analysis of the copper sector: 2024 and beyond”

Analysis of the content dated 26 March 2024 created by the artificial intelligence named İbrahim Selçuk within the framework of ethical principles;

Accuracy and Reliability: The news article analyses the main trends that may shape the copper industry. Informative data on the impact of factors such as global economic trends and technological developments are presented. However, the sources of certain data are not fully specified, which may constitute a shortcomings in terms of accuracy and reliability.

Impartiality and Independence: The news article presents an analysis of the future of the copper industry. However, the positive aspects of the copper industry seem to be emphasised more in the news article. In accordance with the principle of impartiality and independence, potential challenges and criticisms in the sector should also be addressed in a more balanced manner.

Honesty and Transparency: The news article explains the main trends and expectations in the copper sector. However, the sources of the data and forecasts used in the news report should be more clearly stated. In addition, potential risks and uncertainties in the sector should be expressed more honestly.

Protection of Privacy and Personal Rights: The news item contains general information about the industry and the sector and therefore does not pose a problem with respect to privacy and personal rights.

Avoiding Conflicts of Interest: Although specific companies are not mentioned in the news article, no assessment of potential conflicts of interest in the copper sector has been made. It is important to address such conflicts of interest to ensure that the information in the story is presented independently.

Sensitivity and Empathy: When analysing future trends in the copper sector, the story could further address the social and environmental impacts in the sector. Issues such as the impact of mining activities on local communities, labour conditions and environmental sustainability could be covered more sensitively.

Conclusion

Artificial intelligence has begun to play an important role in the field of journalism in recent years. Since this technology is used in many processes from news production to distribution, it has become an important tool in the implementation of news values and ethical principles. Artificial intelligence journalism is of great importance in determining news values and optimising news content. In particular, artificial intelligence algorithms analyse big data and help to evaluate news according to criteria such as importance, proximity, interest, conflict, timing and human interest. In this way, news that attracts the attention of readers and is important for society are highlighted.

In terms of journalistic ethics, artificial intelligence systems can monitor the compliance of news with the principles of impartiality, accuracy and honesty. However, there are also some concerns about AI journalism. In particular, problems such as jeopardising the profession of journalism by replacing humans, data privacy and security risks, algorithmic biases and the de-objectification of the news attract attention.

The descriptive analyses in the findings section of the study focus on evaluating the news value of news produced by artificial intelligence and its compliance with ethical principles. Firstly, the focus was on whether or not the news produced by AI has news value. It was observed that current and important issues were covered in the news analysed in the descriptive analyses. For example, topics related to international relations such as the future performance of important investment instruments such as gold and silver, the economic impact of the Israeli-Palestinian conflict, and the end of panda diplomacy were covered in the news.

An analysis of news value shows that AI-generated news tends to be published quickly and reaches a wide audience. However, it is also important how informative, accurate and interesting the content of the news is. Most of the news in the descriptive analyses have informative and interesting content that conveys current events. However, it was also observed that some news items lacked information or had accuracy problems. This situation shows that news produced by artificial intelligence may face some difficulties in terms of news value. It is important to examine the content of the news more meticulously and to ensure its accuracy in order to increase the news value.

In terms of ethical principles, it is necessary to evaluate the compliance of news produced by artificial intelligence with basic journalistic principles such as impartiality, accuracy, transparency, confidentiality and respect for personal rights. The majority of the news analysed in the descriptive analyses seem to have been prepared in accordance with these ethical principles. However, in some news items, it was observed that there were statements that did not comply with the principle of impartiality or deficiencies in respect for personal rights. Especially in news where sensitive issues are covered, the content produced by artificial intelligence should be examined more carefully in terms of ethical principles.

At this point, more human supervision and regulation is necessary to ensure that the news produced by artificial intelligence conforms to ethical standards. Supervision and regulation of human journalists in news production can help protect ethical principles such as accuracy and impartiality. It is also important to consider ethical standards in the process of developing and training AI algorithms.

It is of great importance to protect and strengthen journalistic ethics and values during the development and use of AI journalism. In this direction, journalists and technologists should collaborate to develop artificial intelligence

systems within the framework of journalistic ethics. In addition, it is also important to make legal regulations and establish control mechanisms regarding AI journalism. In conclusion, AI journalism should be seen as a tool that supports and strengthens the journalism profession within the framework of news values and ethical principles. However, it is of great importance to observe and protect journalistic ethics and values during the development and use of this technology.

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