

The Uncanny Valley in Digital Journalism: Analyzing Audience Reactions to AI News Anchors on YouTube

Zehra Özkeçeci * / Assoc. Prof. Dr. 

Necmettin Erbakan University, Faculty of Fine Arts and Architecture, Department of Radio, Television and Cinema

zehra_ozkececi@yahoo.de

Duygu Dumanlı Kürkçü / Assoc. Prof. Dr. 

Istanbul Arel University, Faculty of Communication, Department of Journalism

duygu__dumanli@hotmail.com

Ceren İnan / Res. Asst. 

Istanbul Arel University, Faculty of Communication, Department of Journalism

cereninan@arel.edu.tr

*Corresponding Author

Abstract

This study aims to investigate audience reactions toward artificial intelligence news anchors. In the research, which utilizes a combination of quantitative and qualitative methods, 418 user comments on artificial intelligence news videos on the YouTube platforms of New China TV, CBS Boston, and India Today were analyzed. The obtained data were divided into four main categories: expression of neutral views, showing negative reactions, showing support, and hate speech. The research results indicate that instead of directly accepting AI news anchors, audiences develop a psychological resistance against the design of these digital figures. Viewers question the authenticity of the figure rather than its flawless technological communication; the strong resemblance of AI news presenters to human nature creates an "Uncanny Valley" effect on the audience, causing cognitive discomfort rather than building a sense of trust. This phenomenon can be explained by the

Uncanny Valley hypothesis proposed by Japanese roboticist Masahiro Mori in 1970. According to the hypothesis, as the human-likeness of an entity increases, the sense of affinity and sympathy felt by the audience rises to a critical threshold; however, when this resemblance fails to reach a complete sense of reality, the reaction suddenly plunges into disgust, anxiety, and avoidance. This situation becomes particularly evident in AI-supported visual and speaking entities; digital figures that exceed humanoid design but cannot offer complete human naturalness create both cognitive dissonance and emotional discomfort in the audience.

Keywords: Artificial Intelligence, AI News Anchors, Digital Journalism, Uncanny Valley, Audience Perception.

JEL Codes: O33, L82, L86, D12

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1. Introduction

Journalism practices have undergone profound changes, from the graffiti of centuries past to today's touchscreens. Digital media has changed both the speed and form of information dissemination (Sultan & Amir, 2024). The one-way structure of traditional media has gradually given way to a two-stage flow that is constantly updated and allows readers to actively participate in the process. This digital transition did not just change the platforms where news is published; it also reshaped the work routines of journalists, the structure of the media industry, and the nature of the relationship with the target audience (Okay, 2021). This two-way flow of information between media producers and their target audience has rewritten the rules of traditional journalism and eliminated the one-sided power balance between the two sides (Özkeçeci, 2019).

Human-centered journalism based on traditional field observation is slowly being replaced by a new media model that processes large data sets and is powered by algorithms. Artificial intelligence technologies that largely overcome time and space limitations, reduce costs, and can quickly transform massive amounts of data into meaningful narratives without any human intervention have gradually become an indispensable part of newsrooms (Rinehart & Kung, 2022). At first, these systems were only assistants or search engine algorithms that collected background data. Over time, they became more and more integrated into the media ecosystem, becoming independent actors capable of producing content, constructing narratives, and making decisions on their own. With traditional journalism being replaced by data-driven production, many international media organizations such as the Los Angeles Times and ProPublica now use artificial intelligence-based automation systems to analyze large data sets and turn them into news stories (Dumanlı Kürkçü, 2018).

Among the most recent reflections of artificial intelligence in journalism applications are AI-powered news anchors that have recently begun to gain visibility on screens. In traditional television and journalistic practice, the "news anchor" is not just someone who reads the script but a figure who builds trust with the viewers, can convey emotions, and skillfully uses the subtleties of language (Kars, 2012). Although AI news anchors who are now taking over news broadcasts present a flawless outward appearance, this perfection creates a void in the human communication aspect of journalism. No matter how advanced the technological infrastructure becomes and how human-like the AI news anchors on screen may appear, audiences can still distinguish the fine line between the virtual and the real, which often creates a sense of "discomfort" in the audience. According to (Mori et al., 2012), this discomfort is the eerie sensation people experience when a non-human entity

closely resembles a human in appearance but fails to feel fully real — a response he described as a sudden loss of affinity, where the familiar becomes unsettling rather than trustworthy. This phenomenon is known as the Uncanny Valley.

Focusing on the YouTube platform, this study examines audience reactions to AI-powered news anchors, a new concept in journalism. Using a combination of quantitative and qualitative research methods, this study statistically measured and content analyzed user comments on artificial intelligence news videos from several international media organizations. Based on the obtained findings, audience reactions to AI news anchors and their gender are evaluated and classified into four main categories: neutral opinion, negative reaction, support, and hate speech.

2. Conceptual Framework / Theory

2.1 The Digital Transformation of Journalism

There have been many changes in the historical evolution of journalism, both in the content of news and in its target audience and distribution channels. These changes have been constantly transforming the structure of the media field. One of the most important milestones in this process may be the developments in communication technologies in the 21st century and the increasing popularity of the internet in mass communication. The paradigm shift that has taken place has led to the permanent addition of a completely new type of journalism called "electronic journalism" or "internet journalism" alongside conventional (traditional) newspapers in the transmission of cultural heritage across generations, the collection of historical data and its transmission to the next generation, and the formation of public opinion (Gezgin, 2002). Furthermore, media play a decisive role in determining socially relevant decisions and shaping public opinion, acting as the 'fourth estate' whose concentration of power significantly impacts democratic principles (Özkeçeci, 2018).

After the industrialization process that started in the Western world, the technological transformation that gained momentum in the second half of the 20th century opened the doors to the transition to the information society. During this period, the development of computer networks in particular paved the way for the emergence of online journalism, now at the center of news consumption. The widespread use of online journalism has created a shift in the media industry and has given rise to a whole new competitive arena against traditional media (Çetinkaya, 2017).

One of the most important contributions of new communication technologies to online journalism is speed, interactivity, and low cost. The point tech-

nology had reached and the appeal of using multimedia features had placed online journalism in an immensely powerful position against traditional media. As a result, traditional media habits that had persisted for many years were quickly overcome, and the audience adapted to the new pace of technology (Alp & Turan, 2018). The consequences of this fast shift in audience habits toward traditional media have been inevitable. As audiences began to prefer online newspapers over print newspapers for accessing news, print newspapers experienced a significant decline in their daily circulation figures and advertising revenues. As a result of this economic shift, print newspapers have been forced to share their current news online, while also accelerating the establishment of "digital native newspapers" within the journalism ecosystem (Karahan, 2021).

The redefinition of audience habits and broadcasting practices has inevitably reached the center of the newsroom and started to change the practices of journalism. Pavlik, who places the effects of technological change on journalism within a structural framework, states that the new era has created radical results in four main areas of the profession: how journalists do their jobs, the content of the news, the structure of the news industry, and the forms of relationship between news organizations and audiences/public opinion (Pavlik, 2000). More than two decades later, this transformation has accelerated further: digital transformation has caused rapid and significant changes in the media industry, generating content saturation and alterations in consumption patterns, while journalism now faces not only technical challenges but also ethical and social dilemmas that redefine its essence as a profession (Londoño-Proañó & Buele, 2025). Yet the institutional and ethical dimensions of this transformation cannot be fully understood without examining the psychological mechanisms that govern audience responses to artificial figures. If audiences perceive AI anchors as fundamentally unsettling, the practical benefits of automation become moot regardless of their editorial potential.

Instead of the traditional journalist profile, which used to focus only on the next day's news and preparing it after the newspaper went to press, the digital era has seen the emergence of a dynamic journalist who "produces news to update the newspaper's website at any moment" (Karahan, 2021). Such drastic changes in journalistic practices like production speeds, and structural frameworks demonstrate the inadequacy of traditional concepts used in the literature to define the profession and point to the rise of new journalism paradigms. Anderson et al. (2012) address this conceptual limitation, arguing that journalism has moved away from being a more or less consistent single industry and has transitioned into a spectrum of highly diverse and varied practices. According to the authors' assessment, "the journalism

industry in the traditional sense is dead, but journalism continues to live in many different places".

This structural vulnerability has deepened in the AI era: Spyridou and Ioannou (2025) describe a severe sustainability crisis of journalism rooted in growing pressure from platforms and major corporate competitors, changing news consumption habits, and the growing technologization of news media, which they characterize as a "shiny things syndrome" referring to the obsessive pursuit of technology in the absence of clear and research-informed strategies.

The digital transformation described above has reached a new phase with the rise of generative artificial intelligence, which marks a pivotal shift in the institutional coherence of journalism. Unlike previous technological disruptions, generative AI is considered a transformative force that directly intervenes in the core creative processes of journalism, challenging traditional norms of authorship and professional identity (Lewis et al., 2025). This new era necessitates a reconceptualization of how information is filtered, as the news flow is increasingly governed by a hybrid human-AI process known as algorithmic gatekeeping (Voinea, 2025). However, the pursuit of productivity through such technologies carries the risk of introducing an alien intelligence that remains agnostic to the core normative values of journalism (Spyridou & Ioannou, 2025). Consequently, artificial intelligence is best understood as a complementary tool that should enhance journalistic creativity and analytical depth rather than acting as a complete substitute for human editorial judgment (Londoño-Proañó & Buele, 2025).

2.2. Neurocognitive and Emotional Foundations of the Uncanny Valley

The Uncanny Valley (UV) effect is frequently cited as a barrier to audience acceptance of AI news anchors, yet the theoretical literature on its neurocognitive mechanisms, emotional dynamics, and relationship to media credibility remains underexplored. Vaitonytė et al.'s scoping review of neuroimaging studies reveals that the brain's face-processing network is finely tuned to detect subtle deviations from naturalistic human appearance: "agents that are not fully humanlike tend to elicit reduced neural responses in the face-selective brain areas, such as the fusiform gyrus/fusiform face area" (Vaitonytė et al., 2022, p. 12). This reduced activation suggests that the uncanny valley is rooted in the automatic operations of the perceptual system, not merely in subjective preference.

Fitzpatrick et al. (2025) demonstrated that this processing occurs in stages: the brain first detects a visual mismatch at an early perceptual level, and subsequently engages higher-order cognitive processes to evaluate the stimulus. As the authors note,

"the early time window likely reflects rapid processing of low-level visual features whereas the later time window may involve higher-level cognitive processes, such as evaluating emotional content or judging authenticity" (Fitzpatrick et al., 2025, p. 6). The uncanny valley is thus not a single "gut reaction" but a layered process in which perception and cognition interact to produce the characteristic feeling of unease.

Diel and colleagues' meta-analysis of 72 studies confirms that the UV effect is a robust phenomenon, particularly when stimuli involve facial distortion or highly realistic renderings. Theoretically crucial is that the UV is not a simple function of increasing realism; rather, "realism increases the perceiver's sensitivity to human features" (Diel et al., 2021, p. 22), meaning that small imperfections become more salient as a stimulus approaches human likeness.

Higgins et al. (2023) found that visual realism alone did not significantly influence uncanny valley metrics such as appeal, eeriness, or familiarity. Emotional valence was the primary driver: "Emotion had the greatest influence on empathic responses to virtual characters at both levels of realism" (Higgins et al., 2023, p. 4). A technically proficient but emotionally flat virtual anchor may therefore be perceived as more unsettling than a less realistic but emotionally expressive one.

Ratajczyk's (2022) analysis of over 220,000 YouTube comments on real robots provides ecological validation: "people use words relating to the concept of eeriness to describe very humanlike robots" (Ratajczyk, 2022, p. 12), with "scary" and "creepy" emerging as the most frequent descriptors for the most humanlike entities. This pattern demonstrates that the uncanny valley is not merely a laboratory artifact but a culturally resonant experience, visible in the spontaneous language of ordinary viewers.

Cihodaru-Ştefanache and Podina's (2025) systematic review reveals that "assigning mental abilities to such agents, such as emotions or decision-making, can exacerbate the risk of the uncanny valley effect, as users tend to become less willing to interact with them when their cognitive and emotional expectations are unmet" (Cihodaru-Ştefanache & Podina, 2025, p. 3). The user comments analyzed in this study, including descriptions such as "soulless" and "creepy," reflect this dynamic: audiences do not merely evaluate visual fidelity but expect emotional authenticity from the figures that deliver their news.

Baake et al., (2025) further demonstrate that while higher realism can enhance trustworthiness in expertise-oriented contexts, "the use of AI avatars has considerable potential to impart knowledge efficiently" yet "may also harbor the risk of arousing mistrust due to the synthetic nature of the avatars" (Baake et al., 2025, p. 3). In news journalism, where trust is built on perceived authenticity and ethical

judgment, visual realism alone is insufficient to establish credibility.

Chen, Zeng and Qiu (2025) demonstrate that audience trust in digital anchors is mediated by psychological distance: human anchors are perceived as closer and more trustworthy, while digital anchors with low anthropomorphism create a wider gap. As the authors conclude, "only through professional cultivation of knowledge dissemination, emotional interaction, and value expression can digital hosts better showcase the unique personality and value of this new communication entity" (Chen et al., 2025, p. 13). Audiences evaluate AI anchors not on visual fidelity alone, but on whether the figure meets their expectations of a credible, emotionally engaged journalist.

Parasocial relationship theory, originally formulated by Horton and Wohl (1956), describes the one-sided emotional bonds that audiences form with media figures. Omeish et al. (2025) demonstrate that these bonds can form even with non-human agents: "AI influencers can foster meaningful emotional connections with followers under certain conditions" through "repeated exposure, perceived intimacy, and responsiveness" (Omeish et al., 2025, p. 17). However, the uncanny valley effect suggests that when the AI anchor falls short of human expectations in appearance or emotional expression, the parasocial bond may be disrupted or never established, producing discomfort rather than connection. Together, these perspectives reveal that audience response to AI news anchors is shaped by an interplay of neuro-cognitive processing, emotional evaluation, audience expectations, and social-cognitive reasoning. Understanding these psychological foundations clarifies why certain AI-driven journalistic innovations succeed in gaining public trust while others fail. The following section traces how artificial intelligence has been progressively integrated into newsrooms, from early algorithmic tools to the virtual anchors that now occupy screens worldwide.

3. Artificial Intelligence in Journalism

Artificial intelligence's conceptual foundations are mostly based on John McCarthy's work in the 1950s. McCarthy defined artificial intelligence in 1955 as "the science and engineering of making intelligent machines" and presented the idea of machines simulating human intelligence at the 1956 Dartmouth Conference (Xue et al., 2022). Originally seen as just a sub-branch of computer science, this field has become a multidisciplinary one over time, turning into a socio-cultural communication technology (Thiraviyam, 2018).

The superior performance of artificial intelligence in fields such as information production, problem-solving, and content creation has reached a level that

rivals human capacity, evoking deep admiration and astonishment in society (Çağal & Aslantaş, 2025). Technology has reached a level that blurs the boundaries between scientific reality and fiction, making artificial intelligence more apparent at the very center of the media industry (Chuan et al., 2019). Artificial intelligence's integration into every aspect of human communication through smart algorithms and its profound transformation of consumer relations have paved the way for this technological power to be directly integrated into the newsroom, namely "robot journalism" (Latar, 2018).

Behind the news, these automated systems that function without human intervention are mostly discussed in the literature under the concept of "robot journalism". Robot journalism is described as algorithmic processes that transform raw data into narrative newspaper articles without any human intervention (Carlson, 2015). The technological revolution is being experienced in two distinct dimensions in the field of journalism. On the one hand, algorithmic systems operating in the virtual world with software that scans big data, and on the other hand, robot machine technologies that correspond to physical life are making their presence increasingly felt in the journalism sector (Işık et al., 2022). However, the terminology surrounding AI in journalism lacks consistent definition, which hinders both scholarly discussion and practical implementation. Oh and Jung (2025), in their meta-analysis of 59 empirical studies, note that "the discourse on AI in newsrooms is predominantly divided into optimism and pessimism," while the specific forms AI takes in journalistic practice, ranging from automated news generation to data analysis and content recommendation, remain conceptually blurred. The authors argue that "there is little consensus among news organizations about integrating AI technology with journalistic values," and that journalists "conditionally assessed whether AI would enhance or undermine journalistic values based on specific conditions" rather than treating AI as a monolithic technology. This conceptual ambiguity is significant because different forms of AI, such as fully automated robot journalism, algorithmic content curation, and AI-assisted journalistic tools, carry fundamentally different implications for editorial autonomy, professional identity, and audience trust. Sánchez-García et al. (2023) note that terms such as automated journalism and robot journalism are often used interchangeably in the literature, all referring to the automatic writing of news via a computer with minimal or no human input. However, they emphasize that the application of artificial intelligence in journalism is not limited to news production; it encompasses all stages of the journalistic process, including the gathering and documentation of information, the automated production of content, and the distribution of information and audience relations. Despite the growing availability of AI to-

ols across these stages, their study finds that media adoption remains uneven, with companies reporting "slowness", "distrust" and "lack of knowledge" as key barriers to implementation.

The current layered nature of this structure has been achieved through certain historical breaking points. The first steps in the field of robot journalism were taken in the form of "virtual assistants" (robot agents) that acted as intermediaries between data sets and journalists. The "News On Demand" (NOD) service developed by Lee and Kim (1998), which collects daily news information and provides users with integrated news feeds, is considered one of the leading examples in this context (Lee & Kim, 1998). However, the real leap in this field occurred with the launch of Google News in 2002. By scanning thousands of news sites without human intervention and collating the content of their homepages, this algorithm officially launched the human-machine rivalry, with Google's manager at the time claiming that no human editorial team could compete with robots working 24/7 (Kurtz, 2002).

This process has not been confined to digital algorithms but has also been extended to the real world through artificial intelligence-powered journalism. Matsumoto and his team's wheeled 3D physical robot journalist, which was developed in Japan in 2007, moved the boundaries of journalism much further with its ability to blend into crowds and make autonomous discoveries, take photographs, and produce news articles by calculating the strangeness/relevance level of the data it collected (Matsumoto et al., 2007). Another important milestone proving the competence of software in news production was the "Quakebot" software, which turned the March 17, 2014, Los Angeles earthquake into news in just three minutes with zero human input. This event is considered one of the starting points of artificial intelligence-powered journalism (Carlson, 2015).

First used in sports and finance, these technologies have now become widespread in almost every stage of journalism, turning into a major "human-machine" conflict in the literature in terms of opportunities and threats for the journalism industry. Latar (2018) focuses on the professional advantages of artificial intelligence, arguing that these systems, supported by IoT (Internet of Things) sensors, provide significant savings in labor costs, hardly ever miss facts, never get tired, and can produce completely unbiased content when programmed objectively (Latar, 2014).

In contrast, Işık et al. (2022) provide a different perspective on this situation, highlighting that professional traditions and values are under serious threat. The gradual decline of "human-centered" (shoe-leather) traditional journalism, based on on-site observation and reporting, and its replacement by an algorithm/data-based structure are negatively affe-

cting media professionalism, social representation, and journalism ethics (Işık et al., 2022). Even though software developers declare that their real intention is not to replace journalists but only to assist them, there is a growing concern in the industry that people will be pushed into the background (Latar, 2018).

At a time when machines perform tasks much faster and better than humans, the prediction that machines will take the leading role in nearly every field is one of the most discussed topics in the current literature (Guanah et al., 2020). In fact, Latar (2018) predicts that as a result of this shift, a significant number of news articles will be written directly by robots within the next 5 to 10 years. Dumanlı Kürkçü and Mengü (2025) emphasize that this transformation brings opportunities alongside risks such as fake news, deepfakes, and ethical violations, and argue that "the effective use of artificial intelligence requires a careful approach centred on human control" (p. 58).

Beyond the opportunity-threat binary, the arrival of generative AI has introduced a deeper ethical tension into this debate. Liu (2025) argues that "the mechanized production model may result in a loss of in-depth thinking and value judgment in news reporting, and could even lead to the creation of false or misleading content in the pursuit of traffic benefits." The author identifies three core contradictions: first, "the probabilistic nature of algorithm-generated content conflicts with the fundamental requirement for news accuracy, as the phenomenon of hallucination in language models may present fabricated information as fact"; second, "the ambiguity in assigning responsibility in human-machine collaboration makes it difficult to trace accountability when misinformation spreads"; and third, media organizations face "a transparency paradox, where the covert use of AI tools not only undermines the public's right to know but also exacerbates the trust crisis." These findings suggest that the debate can no longer be framed simply as machines replacing or assisting humans, but must account for the structural transformation of editorial responsibility itself. This huge technological pressure is shaking both the practical and philosophical foundations of the profession. As scientists and philosophers discuss whether a machine brain can truly mimic human creativity, the question of "whether artificial intelligence can develop independent cognition beyond algorithms" has become one of the most fundamental questions the journalism industry is seeking to answer (Latar, 2018).

Beyond these philosophical debates, the integration of AI into newsrooms raises concrete ethical concerns that affect journalistic practice. Al-Zoubi et al. (2024), based on in-depth interviews with journalists, identify three main ethical challenges: data bias, privacy violations, and the absence of legislation and international regulations regarding the

use of AI in journalism. Their findings indicate that journalists are aware of these risks and approach AI adoption critically, guided by principles of social responsibility. Lamprou et al. (2025), through a systematic review of 44 sources, further identify recurring tensions between automation and authenticity, and between efficiency and editorial integrity. To capture the hybrid nature of modern news production, they introduce the Human-AI Co-Creation Continuum as a conceptual model for understanding how human and machine agency interact in narrative production. These perspectives suggest that the challenge of AI in journalism is not solely technological but also ethical and institutional.

Recent empirical research from Turkish newsrooms provides concrete evidence for this transformation: Demir and Kılıçgedik (2025), in their interviews with 26 journalists, found that while GenAI tools save considerable time on tasks such as translation, summarization, and fact-checking, they "have not significantly reduced journalists' overall workload" because management demands have increased proportionally. Moreover, journalists consistently emphasized that GenAI is "failing to replace the essential human qualities of emotion, empathy, and contextual understanding that journalists bring to their work," and that these human capacities "remain foundational to practices of meaning-making, credibility-building, and public trust in journalism."

As a result of all this algorithmic production and philosophical discussion, artificial intelligence is no longer just an invisible pile of code working in the background of newsrooms. Artificial intelligence's journey in journalism has not been just limited to robot writers or big data algorithms; it has entered a new phase with virtual reality (VR) applications and 'artificial intelligence news anchors' who meet viewers directly on screen (de-Lima-Santos & Ceron, 2022).

3.1. AI Anchors

Another change brought about by digitalization in the communication field is the active role that artificial figures with human voices and faces now play in the media. In today's media industry, artificial intelligence is no longer just a technical tool; it has become an "active actor" that plays a direct role in content production (Özçelik and Batur, 2025). This active role has also caused a structural break in journalism practices. Artificial intelligence anchors have created new narrative models in human-machine interaction and produced a new media paradigm of "naturalizing the unnatural" through the type of relationship they establish with their audience (Toptaş, 2024). These innovations are fundamentally transforming the conventional understanding of anchoring in technical, representational, and perceptual con-

texts (Eke and Genç, 2023). Furthermore, the impact of realism on trust appears to be highly context-dependent.

Even though AI news anchors create a new media aesthetic as visual and auditory symbols, there is a clear contrast between the human characteristics that are expected from the traditional character presenting the news and the current capacity of machines. The concept of "news anchor" in traditional television is defined not only as a news presenter but also as a professional term recognized both within and outside the industry and an accepted "identity marker" on screen. This identity inherently necessitates a human connection with the audience and strong screen interaction (Kumar et al., 2024). However, AI anchors created with today's technology are still far from fully meeting these human expectations required by the screen. AI anchors used in today's technology have disadvantages such as an inability to express and convey emotions, an inability to make eye contact, and a flat, monotonous tone when reading the news (Sepetci, 2025).

Even though current technology has some gaps in basic human communication aspects like conveying emotions, it offers unique visual flexibility because it can be designed entirely in a digital environment; but this visual flexibility hits unexpected psychological barriers on the audience's side. These psychological barriers are often linked to the violation of user expectations regarding how digital entities should think, feel, or act. This situation is discussed in the literature from two different perspectives. While technical flexibility in digital design is often highlighted as a professional advantage, recent systematic research underscores a persistent "empathy gap" in human-AI interaction. Guo et al. (2025) argue that despite technological progress in synthetic media, this gap maintains restricted audience approval rates, as viewers increasingly resist synthetic presenters in news settings and demand higher authenticity and transparency. Chhipa & Dixit (2024) view the ability of virtual characters to successfully simulate the appearance of real humans and the fact that companies don't need to invest in elements such as hair, clothing, and makeup in the digital environment as a major economic advantage. Moreover, the assumption that increased visual realism in AI anchors automatically enhances their communicative effectiveness has been empirically challenged. Simfa et al. (2025), using qualitative comparative analysis across 45 empirical studies, found that human-likeness does not function as a universal driver of effectiveness; instead, its influence is context-dependent. They argue that "the appearance of effectiveness may reflect familiarity, politeness, or entertainment value" and that "anthropomorphism functions as a heuristic that may distort evaluations if not carefully contextualized." This suggests that the ongoing pursuit of visual realism in AI news anchors

may be guided more by assumed audience preferences than by evidence of actual communicative success.

On the other hand, Yang (2025) disagrees with this optimistic perspective, offering a different view from the perspective of the audience. According to Yang (2025), although virtual characters can closely resemble real people and have natural expressions with current technology, audiences can still tell the difference between the virtual and the real. This creates a feeling of "discomfort" and even "fear" (the uncanny valley effect) in viewers, significantly reducing the appeal and believability of virtual characters.

The uncanny valley theory claims that as a robot's resemblance to a real human increases, people's sense of closeness to it also increases. However, just before this resemblance reaches a point of perfection, that sense of closeness suddenly drops and is replaced by a feeling of unease (Mori et al., 2012). When we look at how this theory relates to AI-powered, human-like robots and news anchors, we see that it has two different effects on the audience. When social media comments about human-like robots were analyzed, it was found that negative attitudes reflecting the uncanny valley effect, such as "fear, fright, and unease," were quite common among the audience (Saç, 2024).

However, several empirical studies challenge the predominance of negative audience reactions and suggest a more nuanced picture of AI news anchor reception. Huang and Yu (2023), in a survey of 598 participants, found that "the ratio of users who hold a positive attitude and a negative attitude is about 6:4, which suggests an overall positive continuance intention for AI news anchors". Similarly, Li and Yang (2023) reported that "anchors powered by AI routinely exhibited superior levels of accuracy and decreased the incidence of errors and omissions" compared to human-generated content. Gerlich (2023) further demonstrated through a sample of 357 respondents that "virtual influencers are perceived as more trustworthy, credible, and relevant to customers' preferences". Moreover, Chen et al. (2025), based on three online experiments with 839 participants, found that "a high degree of anthropomorphism can narrow the gap between the psychological distance of digital and human anchors". These findings indicate that while the uncanny valley effect is a real phenomenon, positive audience reactions can emerge when AI anchors are designed with high anthropomorphism, strong credibility endorsements, and proven informational accuracy.

4. Purpose of the Study

In this study, user comments on news presentations made by AI-powered anchors on YouTube, which

is seen as an alternative news medium and actively preferred for news tracking, are collected using MAXQDA 2020 software. The data obtained within the scope of the study are analyzed using quantitative research methods for statistical measurement purposes. Additionally, data obtained within the scope of the study to measure the trends in users' reactions to AI-powered news anchors are classified into four categories—neutral opinion, negative reaction, support, and hate speech—and analyzed. The emergence of AI-powered news anchors and the use of artificial intelligence in journalism as a new phenomenon, and the fact that news followers experience a news presentation they are not accustomed to, make this research important. The study of user comments on AI-assisted journalism is important in measuring opinions on the use of AI tools in journalism without the influence of AI-assisted robot news anchors.

5. Methodology and Scope

The research universe consists of all news videos presented by AI-powered news anchors on the YouTube platform. This research, which employs a mixed-methods design combining qualitative and quantitative approaches, determined the sample with the aim of assessing the size of the population and conducting an in-depth examination of the research topic; searches were conducted on the YouTube platform using the keywords "AI Anchors," "AI Journalism," and "AI-powered journalism" in both Turkish and English, and news videos featuring female and male AI news anchors—selected according to the criterion sampling method—were analyzed within the scope of this study. Criteria sampling is defined as the analysis of all cases that meet a set of criteria listed in advance by the researcher. In criteria sampling, the time variable or any situation related to the research topic can be established as a criteria sampling criterion (Baltacı, 2018, p. 254). Critical cases identified by the researcher to explain the phenomenon under study are used for criterion sampling. In this study, a search was conducted on the YouTube platform using the keywords "AI Anchor," "AI Journalism," and "AI-Supported Journalism," and videos meeting the following criteria determined by the researcher were included in the study:

1. The news videos to be analyzed must be presented directly by AI news anchors,
2. User comments under the news videos to be analyzed must be visible,
3. User comments on the news videos must be sufficient to conduct content analysis,
4. The news videos must provide data on the media systems of different countries in the global media landscape,

5. The news videos must allow for the examination of comments directed at both female and male AI news anchors.

The four videos identified based on this list of criteria are considered critical examples representing the global development of AI news anchors. The news videos published by New China TV were included in the study because they feature the world's first male and first female AI news anchors and offer an opportunity to examine the impact of the gender variable on user comments. In the history of global AI journalism, this video is significant because it marks the beginning of AI news anchors. The video published by CBS Boston was included in the sample because it serves as an example of the use of AI news anchors in media systems outside of China and provides an opportunity to examine the reflections of AI journalism in Western media systems and the interactions Western audiences have with this form of journalism. The video published by India Today was included in the study because it demonstrates the level of development of AI news anchors in South Asian media systems and represents the current stage of maturity of AI news anchors. The interactive exchange between India Today's AI anchor, Sana, and a real actor (Shahrukh Khan) is significant because it offers the opportunity to analyze current user expectations and reactions in the context of "human-machine interaction." Therefore, the study provides an opportunity to conduct a comparative analysis of user feedback on AI news anchor applications implemented by news organizations across different regions, media systems, and time periods.

Within the universe, searches are conducted on the YouTube platform in Turkish and English using the keywords "AI Anchors," "AI Journalism," and "Artificial intelligence-supported journalism," and the news videos of female and male news anchors with the most user comments and views are analyzed within the scope of the study. Within the scope of the study, a total of four videos belonging to New China TV, CBS Boston, and India Today are analyzed using quantitative and qualitative research methods. Within the scope of the study, a total of 447 user comments on news presentations made by artificial intelligence news anchors on the YouTube platform are obtained using MAXQDA 2020 software. Within the scope of the study, user comments related to artificial intelligence news anchors that consisted of meaningless words and emoji expressions, as well as users' unrelated conversations among themselves, were excluded from the study. Thus, a total of 418 user comments on the four news videos analyzed within the scope of the study were analyzed using SPSS and Excel software packages.

Additionally, within the scope of the study, content analysis, one of the data analysis methods used in qualitative research, is conducted on user com-

ments received by AI news anchors to obtain more explanatory results from the data obtained on the topics of AI use in journalism, the use of AI news anchors in news presentation, and gender differences among AI news anchors. To uncover relationships that are not immediately apparent in the dataset obtained within the scope of the research but emerge through conceptual coding and classification, the content analysis method should be used (Saruhan & Özdemirci, 2013). As part of this study, a categorical coding guide was developed using a deductive approach, in line with the research problem and hypotheses, to classify the 418 user comments collected using the MAXQDA 2020 software. The coding guide was tested by two researchers before the coding process began, and any ambiguities were resolved. In this context, data obtained to measure the trends in users' reactions to AI news anchors and to obtain explanatory findings are classified into four categories: expressing neutral opinions, giving negative reactions, showing support, and hate speech, and content analysis is performed. The coding process is carried out by two independent coders who have received a detailed briefing on the study's hypotheses and the coding guide. During the coding phase, all 418 comments are coded independently by the two coders. Comments are coded text-based using MAXQDA 2020 software; if a single comment is assigned to more than one category (for example, comments that contain both a negative reaction and hate speech), the dominant category is used as the basis. To test the agreement between coders, Cohen's Kappa coefficient was calculated for 100 randomly selected comments (23.9%). The calculation

resulted in a Kappa value of $\kappa = 0.86$. This value falls within the range of 0.81–0.99, corresponding to a level of “near-perfect agreement” (Landis & Koch, 1977).

5.1 Research Hypotheses

Based on the research problem, the hypotheses of the study are formulated as follows:

H1. Among user comments regarding the use of artificial intelligence in journalism, the percentage of neutral opinions exceeds the percentage of negative reactions.

H2. In news broadcasts, the percentage of user comments expressing neutral opinions about AI news anchors is higher than the percentage of those expressing negative reactions.

H3. The proportion of hate speech in user comments regarding AI news anchors' news presentation is lower than the proportions of the other categories.

H4. User comments directed at female AI news anchors exhibit a lower rate of negative reactions compared to those directed at male AI news anchors.

Research Findings

Within the scope of the study, the video profile is analyzed based on information related to the four news videos analyzed, including metadata such as the video title, video web address, video upload date, number of views, number of likes received from users, and number of user comments received.

Table 1. Profile of the News Video Titled “World's First AI News Anchor Makes China Debut

Title	World's first AI news anchor makes China debut
URL	https://www.youtube.com/watch?v=h_OetRQI2s0
Duration	30 seconds
Upload Date	Thursday, November 8, 2018
Publisher / Channel	New China TV
View Count	248.171
Like Count	440
Comment Count	122

The news video titled “World's First AI News Anchor Makes China Debut” belongs to the first male artificial intelligence news anchor used by Xinhua News Agency on New China TV (Table 1). Among the news videos analyzed in the study, it is the first video uploaded to the YouTube platform in terms of upload date. Xinhua News Agency broadcast the related

news video as “The World's First Artificial Intelligence News Anchor” on New China TV on November 8, 2018. Just three months later, on February 20, 2019, Xinhua broadcast the video presented in Table 2, introducing the “World's First Female Artificial Intelligence News Anchor.”

Table 2. Profile of the News Video Titled “Xinhua Unveils World’s First Female AI News Anchor”

Title	Xinhua unveils world’s first female AI news anchor
URL	https://www.youtube.com/watch?v=5iZuffHPDAw
Duration	30 seconds
Upload Date	Wednesday, February 20, 2019
Publisher / Channel	New China TV
View Count	672,173
Like Count	1200
Comment Count	271

The news video titled “Xinhua Unveils World’s First Female AI News Anchor” belongs to the first female artificial intelligence news anchor used by the China News Agency Xinhua on New China TV (Table 2). Although the videos of female and male artificial intelligence news anchors are exactly the same length, there is a noticeable gender-based difference in user comments. When compared to the profile informa-

tion of the first male AI news anchor broadcast on New China TV (Table 1), the video of the first female AI news anchors (Table 2) received more views, likes, and comments. In this context, it is possible to say that female AI news anchors receive more attention, likes, and support from users compared to male AI news anchors.

Table 3. Profile of the News Video Titled “Artificial News Anchor Debuts in South Korea”

Title	Artificial News Anchor Debuts In South Korea
URL	https://www.youtube.com/watch?v=y1qwdFP3GUo
Duration	44 seconds
Upload Date	Thursday, December 3, 2020
Publisher / Channel	CBS Boston
View Count	12,502
Like Count	48
Comment Count	20

The United States, specifically the CBS television network based in Boston, Massachusetts, aired a news video titled “Artificial News Anchor Debuts In South Korea,” featuring female artificial intelligence news anchors (Table 3). Approximately two years after China’s Xinhua News Agency brought videos of the world’s first male and female AI news anchors to users, on December 3, 2020, CBS Boston in the US

aired a video of AI news anchors in South Korea. It can be seen that videos featuring AI news anchors (Table 1 and Table 2) were uploaded to the platform earlier. In this context, it is observed that the videos first uploaded to the platform on this topic (Table 1 and Table 2) received more views, likes, and comments.

Table 4. Profile of the News Video Titled “Ai Sana & Shahrukh Khan Interaction Promo: AI Anchor Sana Exclusive Conversation with Shah Rukh Khan”

Title	AI Sana & Shahrukh Khan Interaction PROMO: AI Anchor Sana Exclusive Conversation With Shah Rukh Khan
URL	https://www.youtube.com/watch?v=5K-zlaBMXMw
Duration	1 minute 12 seconds
Upload Date	Tuesday, September 5, 2023
Publisher / Channel	India Today

View Count	117,449
Like Count	791
Comment Count	35

The news video titled "Ai Sana & Shahrukh Khan Interaction Promo: Ai Anchor Sana Exclusive Conversation With Shah Rukh Khan," presented by female AI news anchor Sana, aired on India Today, India's leading English-language news channel, on September 5, 2023 (Table 4). Although five years have passed since the video presented by the first male AI news anchors used by Xinhua, the news video

presented by Sana, broadcast in India, has also achieved a significant number of views and likes.

Comments made by users on the four news videos presented by AI news anchors were classified into four categories: neutral opinion, negative reaction, support, and hate speech, and their frequency distributions are shown (Table 5).

Table 5. User Comments on the News Video Titled "World's First AI News Anchor Makes China Debut"

VideoTitle	Neutral Opinion		Negative Reaction		Support		Hate Speech	
	(N)	F (%)	(N)	F (%)	(N)	F (%)	(N)	F (%)
World's First AI News Anchor Makes China Debut	38	35.19%	36	33.33%	24	22.22%	10	9.26%

The news video presented by the world's first male artificial intelligence news anchor (Table 5) received a total of 108 user comments. Although 35.19% of these comments expressed neutral opinions, it is

noteworthy that 33.33% of users reacted negatively. However, the news video and the world's first male artificial intelligence news anchor are supported by approximately a quarter of users.

Table 6. User Comments on the News Video Titled "Xinhua Unveils World's First Female AI News Anchor"

VideoTitle	Neutral Opinion		Negative Reaction		Support		Hate Speech	
	(N)	F (%)	(N)	F (%)	(N)	F (%)	(N)	F (%)
Xinhua Unveils World's First Female AI News Anchor	88	33.08%	69	25.94%	60	22.56%	49	18.42%

The news video presented by the world's first female AI news anchor (Table 6) received a total of 266 user comments. Thirty-three point zero eight percent of user comments tended to express neutral opinions. However, it is noteworthy that the percentage of negative comments (25.94%) and supportive comments (22.56%) were close to each other. In this context, it can be observed that the vast majority of users did not have a clear stance on the female AI news anchor and remained neutral.

When compared to the user comments received by the world's first male AI news anchor (Table 5), it is noteworthy that the world's first female AI news anchor (Table 6) received fewer negative reactions but more user comments containing hate speech (18.42%). In the following sections of the study, content analysis is performed to derive explanatory results from the data obtained regarding gender differences.

Table 7. User Comments on the News Video Titled "Artificial News Anchor Debuts in South Korea"

VideoTitle	Neutral Opinion		Negative Reaction		Support		Hate Speech	
	(N)	F (%)	(N)	F (%)	(N)	F (%)	(N)	F (%)
Artificial News Anchor Debuts In South Korea	5	29.41%	5	29.41%	6	35.29%	1	5.88%

A total of 17 user comments were received on the news video (Table 7) about the first AI news anchor to begin work in South Korea. It was observed that 35.29% of user comments supported the AI news anchor. However, it is noteworthy that user comments

expressing neutral opinions (29.41%) and negative reactions (29.41%) were equally distributed. In the following section of the study, content analysis is conducted to derive explanatory results from user comments, which are examined in detail.

Table 8. User Comments on the News Video Titled "Ai Sana & Shahrukh Khan Interaction Promo: Ai Anchor Sana Exclusive Conversation With Shah Rukh Khan"

VideoTitle	Neutral Opinion		Negative Reaction		Support		Hate Speech	
	(N)	F (%)	(N)	F (%)	(N)	F (%)	(N)	F (%)
Ai Sana & Shahrukh Khan Interaction Promo: Ai Anchor Sana Exclusive Conversation With Shah Rukh Khan	21	77.78%	3	11.11%	1	3.70%	2	7.41%

India Today, India's leading English-language news channel received a total of 27 user comments on the news video presented by Sana, the female AI news anchor (Table 8). It was observed that the vast majority of user comments, 77.78%, expressed neutral opinions. On the other hand, it is noteworthy that

although 3.70% of users supported the news video presented by Sana, approximately 18% expressed reactions and hate speech. Another noteworthy factor is that among the news videos analyzed in the study, the news video presented by Sana received the least support from users.

Table 9. Test Results for the Hypotheses

Hypothesis	Test	Test Statistic ($\chi^2/t/F/r$)	p-Value	Decision
H1	One-Sample Z-Test	Z = 2,90	0,0019	Confirmed
H2	One-Sample Z-Test	Z = 2,90	0,0019	Confirmed
H3	Chi-Square + Residual Analysis	$\chi^2 = 41,313$	<0,001	Confirmed
H4	Two-Proportion Z-Test + Fisher's Exact Test	Z = 1,44	0,075	Rejected

Upon examining the results of the statistical tests applied to the hypotheses analyzed in this study, it was found that the One-Proportion Z-Test was applied to hypotheses H1 and H2, yielding values of Z = 2.90 and p = 0.0019 (p < 0.01). The proportion of neutral comments among user reviews (36.36%) is statistically significantly higher than the proportion of negative comments (27.03%). Therefore, hypotheses H1 and H2 have been confirmed.

A Chi-Square Goodness-of-Fit Test and Residual Analysis were applied to Hypothesis H3. The Chi-Square (χ^2) value was determined to be $\chi^2 = 41.313$, and the p-value was <0.001. The results of the residual analysis revealed that the hate speech category was significantly lower (z = -4.16; p < 0.001) than the expected value (104.5) under the assumption of equal distribution. Thus, Hypothesis H3 has been confirmed.

The Two-Proportion Z-Test and Fisher's Exact Test were applied to Hypothesis H4. The Two-Proportion Z-Test yielded a Z-value of 1.44 and a p-value of 0.075. In Fisher's Exact Test, the p-value was determined to be 0.076. In this context, although the male

AI news anchor's negative reaction rate (33.33%) was higher than that of the female AI news anchor (25.94%) in terms of frequency, this difference did not reach statistical significance (p = 0.075 > 0.05). Based on these findings, it cannot be concluded that the female AI news anchor received significantly fewer negative reactions than the male AI news anchor. Therefore, H4 has been rejected.

6. Findings Related to the Content Analysis

Within the scope of the study, user comments posted on YouTube in response to news presentations delivered by AI news anchors from New China TV, CBS Boston, and India Today we're classified into four categories—neutral expression of opinion, negative reaction, support, and hate speech—and analyzed through content analysis.

Comments highlighted by users in the neutral opinion category regarding AI news anchors in the news video titled "World's First AI News Anchor Makes China Debut" (Table 5) are as follows:

- "More body language and facial expressions are needed."
- "Oh my God."

The comments that stand out in the negative reaction category for the relevant video (Table 5) are as follows:

- "Now news anchors are out of work! I'm starting to wonder which jobs are safe from automation."
- "A scary slippery slope..."
- "A bit creepy lol."
- "A soulless broadcast..."
- "More work is needed to make the tone of voice more compelling. It's still boring."

The comments that stand out in the supportive category for the relevant video (Table 5) are as follows:

- "This AI answered the first question that came to my mind in its second sentence. Very interesting!"
- "Reading the news without bias, without love or hate in your heart, right? That's very much like God."
- "HA! Good for Xinhua; now they won't have to deal with human news anchors who occasionally have nervous breakdowns and can't tell lies. China isn't a completely dystopian society, folks."

The comments that stand out in the hate speech category of the relevant video (Table 5) are as follows:

- "There are even more reasons for you to cut your cables."
- "You can be sure that everyone (who is rational and lives in a free country) already despises this because it is an extremely inhumane situation."
- "I think this is complete nonsense; he is a real person, and the artificial intelligence part is just propaganda."

"World's First AI News Anchor Makes China Debut"

When analyzing user comments on the news video titled (Table 5), comments in the neutral opinion category express surprise and comment on the body and facial movements of AI anchors, while comments in the negative reaction category emphasize that AI anchors are scary and soulless and will cause employment problems for human news anchors. On the other hand, in the support category, it is emphasized that news presented by AI anchors will be unbiased, truthful, and impartial. On the other hand, in the hate speech category, it is noteworthy that news presented by AI anchors is seen as nonsense and perceived as inhumane.

Comments made by users in the neutral opinion category regarding AI news anchors in the news video titled "Xinhua Unveils World's First Female AI News Anchor" (Table 6) are as follows:

"Constructive criticism: When she opens her mouth,

her upper lip is not synchronized with the movement of her teeth. The nose could also move; we sometimes talk about the nostrils widening when breathing. She could move her head more freely from side to side, and her earrings could sway a little more naturally."

- "It's not perfect, especially in terms of mouth movements, but there is progress."
- "The use of such applications is only beneficial when there is a real need, such as during a pandemic, or when human resources are unavailable due to a disaster."
- The following are the comments that stand out in the negative reaction category of the relevant video (Table 6):
- "The facial muscles need to be more sensitive to resemble real people."
- "The male presenter was a good AI copy and one of the most realistic I've seen, but it looks and moves too much like a real person; all the arms move, the facial expressions are very realistic, so I don't believe it. If they could make such a good female presenter, wouldn't they have made the male presenter just as good? The Chinese government tends to exaggerate almost everything when it's not busy maliciously stealing and copying other countries' technologies."

The comments that stand out in the support category for the relevant video (Table 6) are as follows:

- "Wow, this is incredible. China is really far ahead in artificial intelligence. Congratulations."
- "The small details in the eyes and facial expressions are enough, that's it!"
- "I like this! No comments. No deviation from the topic. No slip of the tongue. No deviation from the party line. Better yet, it will have a perfect social score. And because it's artificial intelligence, it will evolve to be smarter than any human in that position. Compared to this, organic life forms will remain ignorant and incompetent."

The following are the comments that stand out in the hate speech category of the relevant video (Table 6):

- "This is very strange... it seems literally inhuman and like an attempt to further control the message."
- "Even thinking that AI clones are a good thing is madness!!"
- "This is scary."
- "Am I the only one freaked out by this development?"
- "Am I the only one freaked out by this development? This is really scary. Soon we'll see robots instead of people on TV, which is truly frightening. They mimic us, but they are not us."

- “Embarrassing”
- “At some point, you should never believe what you hear because it’s propaganda and doesn’t come from a real person or journalist.”

When user comments on the news video titled “Xinhua Unveils World’s First Female AI News Anchor” (Table 6) were analyzed, comments in the neutral opinion category stated that AI news anchors have made progress, although their mouth movements are not perfect. While in the reaction category, it is emphasized that mouth movements need to be more sensitive to resemble humans and that the similarity of male and female news anchors’ faces and mouth movements to humans is highlighted. In the support category, it is stated that AI news anchors are considered incredible and that their eye and facial expressions are sufficient. On the other hand, hate speech comments emphasize that AI news anchors are seen as frightening and embarrassing and that seeing robots instead of humans on television is disturbing.

Comments from users in the neutral opinion category regarding AI news anchors in the news video titled “Artificial News Anchor Debuts In South Korea” (Table 7) are as follows:

- “Even though I don’t understand English, the channel, which has always been innovative, has become a leading channel in the 21st century. MBM, have you become a leading channel in the 21st century? Thank you, inspector.”
- “Virtual entity. Not a robot.”

The following are the comments that stand out in the negative reaction category of the relevant video (Table 7);

- “Yes, if we don’t think for ourselves and just follow our masters’ scripts and instructions, we are no different from artificial intelligence. When we think for ourselves, we truly become human. We don’t bow down.”
- “Robots are really taking over.”

The comments that stand out in the supportive category for the relevant video (Table 7) are as follows:

- “This thing is incredibly realistic, why aren’t they more impressed??”
- “Nice video and good news.”
- “Good news”

The following are the prominent comments in the hate speech category for the related video (Table 7):

- “The beginning of the end”

When analyzing user comments on the news video titled “Artificial News Anchor Debuts In South Korea” (Table 7), it is noteworthy that comments in the neutral opinion category emphasize the virtual nature of the anchor, while comments in the reaction category emphasize the freedom of thought characteristic of humans and express concern about

robots taking control. In the support category, it is emphasized that AI news anchors are incredibly realistic and that the news presented is of good quality. Furthermore, there is only one hate speech comment related to the news video in question, and it is noteworthy that this comment perceives the news presentation by AI news anchors as the beginning of the end.

Comments from users in the neutral opinion category regarding AI news anchors in the news video titled “Ai Sana & Shahrukh Khan Interaction Promo: Ai Anchor Sana Exclusive Conversation With Shah Rukh Khan” (Table 8) are as follows:

- “It looks like Alexa.”
- “Is this a robot, news anchor?”

The following comments stand out in the negative reaction category for the relevant video (Table 8):

- “Couldn’t you find a live girl to be the anchor?”
- “I think news should only be delivered by humans, not artificial intelligence.”
- “Indian news channels don’t take anything seriously; they’re making fun of artificial intelligence.”

The comments that stand out in the support category for the relevant video (Table 8) are as follows:

- “She’s the best artificial intelligence anchor so far.”

The following are the comments that stand out in the hate speech category of the related video (Table 8):

- “What a stupid joke made in the name of artificial intelligence.”
- “The embarrassing moments button is here.”

“Ai Sana & Shahrukh Khan Interaction Promo: Ai Anchor Sana Exclusive Conversation With Shah Rukh Khan” When analyzing user comments on the news video titled (Table 8), comments in the neutral opinion category emphasize the similarity of AI news anchors to Alexa, while comments in the reaction category emphasize the necessity of human news anchors presenting the news. It is noteworthy that Indian news channels’ use of AI anchors to present the news is perceived as a lack of seriousness. In the support category, India Today highlights that its AI news anchor, Sana, is the best AI presenter. On the other hand, in the category of hate speech, it is noteworthy that the AI news anchor is seen as an embarrassing joke.

7. Conclusion

Traditional journalism is going through a transformation process with the introduction of digitalization and artificial intelligence technologies. This transformation is reshaping the public’s perceptions of the media. Although the use of artificial intelligence as

an actor in news delivery provides media companies with advantages such as speed and low cost, it also raises many questions on the part of the audience regarding credibility and trust.

Therefore, it is important to understand how artificial intelligence news anchors, who are becoming increasingly visible in the new media ecosystem, are perceived by target audiences in order to anticipate the future and limitations of this technology in journalism. With their high level of interaction, social media platforms provide the ideal research ground for expressing attitudes and expectations towards technological innovations without censorship. In this study, viewers' perceptions of AI news anchors were examined through user comments on news presentations on the digital video platform YouTube.

Within the scope of this research, the study analyzes a total of four videos from New China TV, CBS Boston, and India Today using both quantitative and qualitative research methods. There are a total of 447 user comments on news presentations made by artificial intelligence news anchors on the YouTube platform within the scope of the study. Comments consisting of meaningless words and emoji expressions and users' irrelevant conversations among themselves were excluded from the evaluation, so a total of 418 user comments were analyzed using the SPSS package program within the scope of the study.

The user comments on the news presentations made by the AI news anchors in the four videos analyzed within the scope of the study were categorized into four groups: neutral opinions, negative reactions, support, and hate speech, and content analysis was performed. Of the total user comments received on the four videos analyzed in the study regarding the news presentations made by AI news anchors, 36.36% were neutral opinions, 27.03% were negative reactions, 21.77% were supportive, and 14.83% were hate speech.

The findings obtained from the statistical tests (One-Proportion Z-Test, Chi-Square Goodness-of-Fit Test, Residual Analysis, and Fisher's Exact Test) conducted on the four main hypotheses proposed in this study indicate that users have a cautious perception regarding the use of artificial intelligence in news presentation. It was determined that the proportion of neutral opinions in user comments regarding the use of AI anchors in journalism processes (H1) or news presentation (H2) was statistically significantly higher than the proportion of negative reactions ($Z = 2.90$; $p = 0.0019 < 0.01$), and both hypotheses were confirmed. In this context, it appears that the vast majority of users have not yet formed a definitive judgment regarding AI technology in news production and news presentation processes, but are attempting to make sense of and observe the process. Furthermore, an analysis of the study's

qualitative data reveals that neutral comments largely consist of constructive criticism focused on the technical shortcomings in AI anchors' body language, facial expressions, lip-syncing, and gestures, as well as their development processes.

Hypothesis H3—that the proportion of hate speech in user comments regarding AI anchors' news presentations would be the lowest compared to other categories—has been confirmed. The Chi-Square Goodness-of-Fit Test yielded $\chi^2 = 41.313$, with a p-value of <0.001 , and the results of the Residual Analysis ($z = -4.16$; $p < 0.001$) indicated that the hate speech category was significantly lower than the expected value under the assumption of equal distribution. In this case, Hypothesis H3 has been confirmed. This confirms that, rather than radical hostility toward AI news anchors, users' comments are primarily characterized by more cautious and concern-based criticism.

Hypothesis H4 posits that user comments directed at female AI news anchors contain fewer negative reactions compared to those directed at male AI news anchors. The two-proportion Z-test yielded a Z-value of 1.44 and a p-value of 0.075. In Fisher's Exact Test, the p-value was determined to be 0.076. Based on these findings, it is evident that female AI news anchors do not receive significantly fewer negative reactions than male AI news anchors. Therefore, H4 has been rejected.

When examined holistically, the findings of this study reveal that, based on user comments regarding news presentations by AI news anchors, negative reactions and hate speech account for 41.86 percent. This data confirms that AI news anchor technology faces significant resistance and negative perceptions from users rather than direct support (21.77%). In this context, it is evident that user comments regarding news presentations by AI news anchors today reflect a negative perception rather than support for this technological advancement.

The data obtained indicates that viewers are not only neutral in their acceptance of AI news anchors, but they also develop psychological resistance and discomfort towards the design of these digital characters and the process of automation. The human element inherent in journalism, the process of conveying emotion, has not yet been fully addressed. Indeed, rather than evaluating AI news delivery as a perfect technological transmission, audiences intensely question the authenticity of the figure presenting the news.

In addition to the theoretical and empirical contributions of this study, and based on its limitations, future research could include social media platforms such as TikTok, Instagram Reels, or X (Twitter), where AI-generated content is heavily consumed, in the analysis, given their distinct algorithms and user demographics. Furthermore, this study employed

a criterion-based sampling limited to Turkish and English keywords. It is believed that future research expanding linguistic diversity to include media systems in the Far East, Europe, and the Middle East, where AI journalism is heavily produced, would significantly enrich the literature.

This high level of negative perception and rejection behavior among viewers can be easily explained by the “Uncanny Valley” theory. According to the Uncanny Valley hypothesis, the more a non-human entity resembles a human in physical appearance or behavior, the more it creates a sense of eeriness and repulsion in viewers, which increases significantly beyond a certain threshold. Despite being so close to human nature, AI news anchors are creating discomfort rather than building trust in the viewer. To conclude, for AI-powered journalism to gain greater acceptance in the social context in the future, the goal should not be limited to technical visual perfection. Elements that break the uncanny valley effect and convey authenticity and emotional consistency should also be incorporated into the news presentation process.

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