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# EVOLUTION OF TELEVISION CYBERJOURNALISM: ARTIFICIAL INTELLIGENCE AVATARS AS 'NEWS ANCHORS' IN INTERNATIONAL MEDIA

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*Artificial intelligence*
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**ABSTRACT**

*The evolution of artificial intelligence has caused a disruption in people's lives, affecting their personal and professional experiences. In the field of journalism and the media, especially television, a turning point has been reached, so more in-depth analysis is needed to establish a diagnosis of the impact that AI systems are having on models that some see as the new news presenters in online news companies. This study focuses on analysing and reflecting on the role and impact that news presenters are having on television (even in non-media institutions but related to journalism and communication), based on generative artificial intelligence models in Ibero-American, European and Asian media.*

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## 1. Introduction

Cyber)journalism, as a professional, academic and scientific discipline exercised in news organizations and studied in communication faculties, is subject to the need for adaptive changes derived from the global process of digitalization (Klewes et al., 2017) that require comprehensive strategic planning with a systematic, epistemological and holistic vision (Sánchez-Gómez et al., 2018). Various researchers (Casero-Ripollés, 2018) also highlight that we are moving towards a more open and decentralized landscape in which a greater number of actors participate in the exchanges that contribute to defining the public sphere thanks to digital platforms. In this sense, it is evident how technical and technological needs are driven by the emergence of citizen participation, where 'consumers no longer want to be limited to receiving information about a new product or service but are looking for more interaction with the media. Consequently, 'everything has changed with the massive and free access to the internet where everyone can produce content' (Elías, 2018, p.2).

In the Age of Artificial Intelligence (AI), the digital transformation seems to be reinforced by the need to configure a solid digital culture in corporations at a time when the narration and transmission of news is constructed and modified by several actors and multiple issuers, through more than one channel and using different multimedia resources (Túñez López & Tejedor Calvo, 2019). Since the beginning of this decade, this transformation has been engulfed by the increasing use of AI tools, which brings with it models of journalistic content created with algorithms, where the ethics of the behaviour of AI 'machines' (Flores-Vivar & García-Peñalvo, 2023; UNESCO, 2021) acquires a leading role affecting our daily lives, which implies reflecting and asking ourselves (Coeckelbergh, 2021) What ethics does the decision of an AI 'machine' respond to? Can AI algorithms be held responsible for their actions and the consequences they entail? How does artificial intelligence learn and act? `

Several experts are quick to point out how this technology is increasingly present in the media (Parratt *et al*., 2024; Simón, 2024) and is beginning to form part of the journalistic ecosystem. So much so that some journalism researchers and academics (Carrasco, 2024; Diakopoulos *et al*., 2024; Philp, 2024) are exploring the use of extended language models (LLM) for content creation. These models could be exploited to order and transform textual input into different formats. For example, news headlines or scientific summaries (Nishal, 2024) based on the text of newspaper articles.

Other AI developments with an innovative approach in the media environment (Hoguet, 2019), but with some concern among practitioners, refer to the emerging world of AI-generated avatars in the form of news anchors for TV news or related programmes. Companies and platforms such as Synthesia, D-iD or Deepbrain, to name but a few, are consolidating these models, which are already seen as the tip of the iceberg of an information industry that will probably have a new explosion in a short time, as it did thirty years ago with the arrival of the Internet.

But there are still some risks to these developments. One of them is disinformation. There are several cases in which various avatar models in the form of news presenters generate disinformation. One such case was analyzed and published in the English version of the newspaper El País by reporter Florantonia Singer (2023), in which she reported how a blond man presents a news item for House of News, a supposed news programme in which an English-speaking presenter tries to demonstrate that Venezuela's economy is not 'really destroyed' as many claim. In another news segment, a black news anchor analyses the profits generated by the Caribbean Series, a professional baseball tournament held in Caracas.

The so-called journalists are Noah and Daren, two avatars created with artificial intelligence from Synthesia software's catalogue of over a hundred multiracial faces. According to Singer (2023, p. 19), the point is that Noah and Daren are just two examples of avatar models dressed as TV presenters who generate misinformation.

In this context, the media industry and experts are asking themselves: What is the next step (Caswell, 2023), what is the perception of journalists regarding the creation of robotic presenters (Tusa & Tejedor, 2019)? And in the background, will journalists be replaced by machines or artificial intelligence algorithms?

This paper attempts to establish a diagnosis of the potential of this phenomenon of AI and cyberjournalism on television.

## 2. Holistic approach to AI in cyberjournalism

Artificial intelligence is transforming knowledge spaces that are already part of the social fabric ofpeople's lives, affecting their personal and professional experiences (Benjamins and Salazar, 2020; Boden, 2022). In the field of journalism and communication, as disruptive technologies have become ubiquitous in the media ecosystem, newsrooms are increasingly adopting - and adapting to - various AI tools (Flores-Vivar, 2022), led by ChatGPT.

Studies of AI-related cyberjournalism are still somewhat scarce, focusing more on the IT side and less on the impacts of AI on society (Canavilhas, 2022). As background, we can state that research and explorations on the convergence of cyberjournalism and artificial intelligence have been going on for little more than a decade. Specifically, since 2014, with Quakebot, an algorithm programmed to write a text when an earthquake occurs, developed by Ken Schwencke, a journalist and programmer at the Los Angeles Times newspaper. The bot model was designed to write a note in the newspaper's CMS the moment it detected an earthquake measuring 3.9 or higher on the Richter scale, leaving the text ready for the reporter to review it and press the 'publish' button. In this way, the LA Times became the first newspaper to report an earthquake measuring 4.4 on the Richter scale, all thanks to a robot (Benjamins & Salazar, 2020). This led to the use of algorithms in the news creation process, i.e., in the words of Rissig Licha (2016), 'the birth of Algo-Journalism', continuing in the following years, expanding its fields and objects of research as they have been expanding faster and faster, especially since 2020.

This is the fundamental reason why the new ecosystem of news organizations, as it did three decades ago with the internet (2004), increasingly incorporates artificial intelligence in newsrooms. Hence, the aim of several research projects is to show how algorithms work as cultural machines that we need to learn and understand. Algorithms are part of our environment, and they are everywhere. They are the architects of extensive mathematical proofs. They dominate stock markets, music composition, car driving and news writing. Moreover, their powers of creative authorship are increasingly taking shape (Finn, 2017). But, alongside advances, uncertainties arise. For example, the 'filter bubbles' caused by recommendation algorithms is a phenomenon that in the news sphere is more dangerous and can lead to more polarized societies as happened in social media in the US elections and in the Brexit vote in 2016 (Salazar & Benjamins, 2022).

Cyberjournalism and cybermedia studies (Flores-Vivar, 2017; López García, 2010; Parra & Álvarez, 2004; Salaverría, 2005), are fields that are increasing demand of more research by scholars in a new era, shaken by the arrival and consolidation of artificial intelligence that strongly impacts, above all, the journalistic profession, and whose effects and consequences are yet to be determined. Although it is true that, 'whether we like it or not, the possibility of a future of AI systems is limited by what we currently know about the nature of intelligence' (Larson, 2022, p.7), especially because algorithms are omnipresent in all aspects of our daily lives (Gabelas-Barroso et al., 2023).

These computational algorithms are capable of streamlining tasks as diverse as the discovery, filtering, analysis, production, publication or distribution of content (Palomo et al., 2023) in news organizations. Therefore, in the field of digital journalism (cyberjournalism) and new media on the Internet (cybermedia), artificial intelligence algorithms are having a strong presence, observing an evolution ranging from studies on the change in the conception of information (Benjamins & Salazar, 2020; Boden, 2022; Callahan & Barker, 2019; Cukier et al., 2021; IRCAI, 2021; Levinson, 2012; Morán, 2023; Postman, 2018), the design and organization of content in the digital press (Gencarelli, 2014; Goldman, 2022; Hoguet, 2019; Tousignant, 2017) and studies on the ethics of artificial intelligence with application to the field of education and communication (Flores-Vivar & García-Peñalvo, 2023; Tuomi, 2019; UNESCO, 2019; UNESCO, 2021a, 2021b, 2021c).

In this context, AI and its impact on cyberjournalism hatches the foundations of the (journalistic) profession and the media and is 'heralded by experts as one of the current technologies that will drive more

efficient journalism in all departments of journalistic companies' (Gutiérrez-Caneda et al., 2023). In addition to these innovations, journalism has been shaken by internal and organizational factors that, in many cases, have called into question the legitimacy of the content. Misinformation, spread by fake news and post-truth, has brought disrepute to society. In some cases, this disrepute has been accompanied by the perception of citizens that journalism, the media and professionals, live in collusion with the powers of the day and no longer exercise the supervisory control with which they were configured over the years, motivated in some cases 'by the internal degradation and discouragement of the journalistic institution itself, unable to distance itself from all these forces' (Dader, 2014, p.2).

Added to this is the fact that 'fake news is the result of the expansion of the Internet as a common place to share information of all kinds, without total and exhaustive control of what is shared' (Moreno Espinosa & Román San Miguel, 2021). Moreover, this disinformation affects not only journalism but any sector that disseminates or generates information content (Rubio-Moraga & Dader-García, 2019). Hence, the 'massive spread of false, manipulated or erroneous information, in the form of a disinformation pandemic, alerted the scientific community, concerned about the negative impacts that disinformation causes in society' (Quian et al., 2023, p.2).

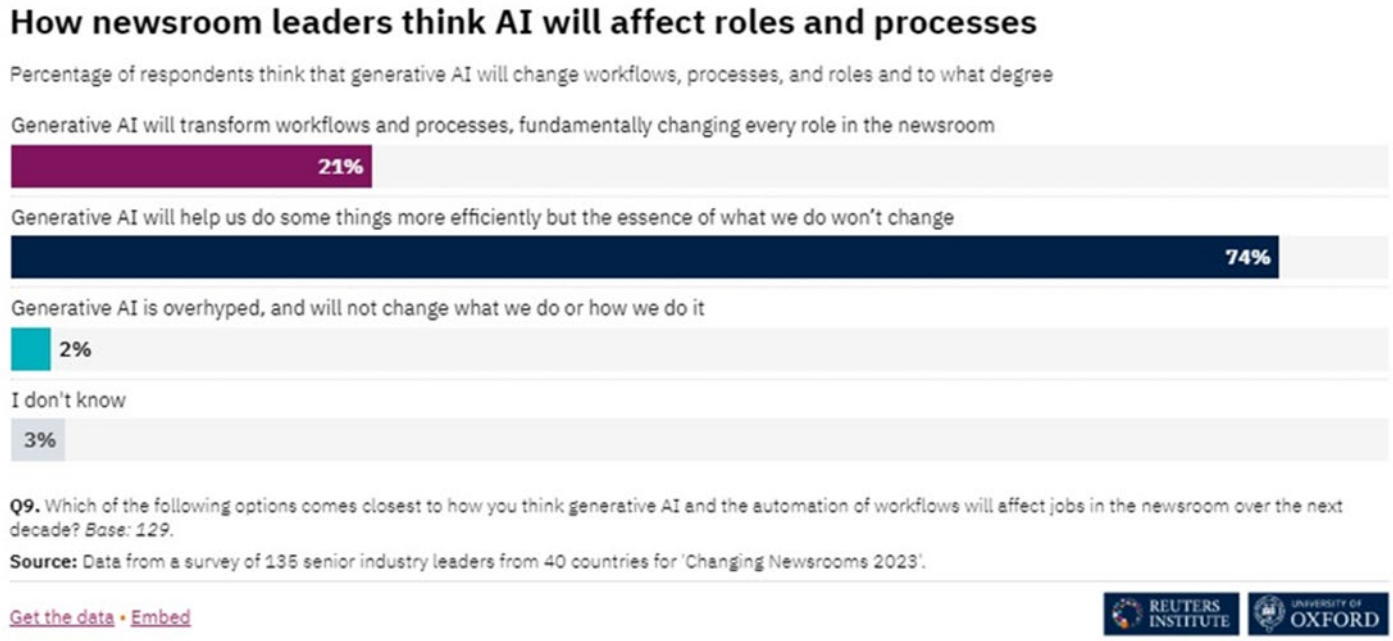
Thus, innovation in journalism takes on a transcendental status. After a peak of innovative activity in the mid-2010s, the idea of fundamentally reinventing how news could be produced and consumed had gradually become less fashionable, giving way to 'innovation exhaustion' without complexes (Caswell, 2023). But, the public launch of ChatGPT in late November 2022, demonstrated capabilities with such obvious and profound potential impact for journalism that AI-phagocytised innovation is now the urgent focus of teams in almost every newsroom, bringing with it a phase of uncertainty and expectation and questions such as 'Can machines and computers, with their enormous capacity to process lots of data at great speed, provide reliable information to journalists that will enable them to identify news events?' (Vila & Tejedor, 2021).

On the other hand, various reports such as the Digital News Report of the Reuters Institute and the University of Oxford, as well as the opinion of experts such as David Caswell (2023), Richard Fletcher and Federica Cherubini (2023), among others, and projects such as JournalismAI of the London School of Economics (LSE), analyze the trends and warn of the possible impacts and innovations that generative AI will have on media newsrooms.

In this regard, in line with the general approach of JournalismAI's Changing Newsrooms report (Beckett & Yaseen, 2023), concerns about the impact that generative AI will have on roles and responsibilities in newsrooms led Federica Cherubini and Ramaa Sharma (2023) to conduct a global study on the impact of AI in newsrooms (Figure 1). To do so, they asked more than 1,500 respondents how they think generative AI and workflow automation will affect newsroom jobs over the next decade.

As seen in Figure 1, the response was that 74% said 'Generative AI will help us do some things more efficiently, but the essence of what we do in journalism will not change', while 21% thought 'Generative AI will transform workflows and processes, fundamentally changing all roles in the newsroom'. Only 2% thought that generative AI will not change journalistic work, reflecting the extent to which many media managers believe AI will have an impact on their industry.

**Figure 1**. How newsroom leaders think AI will affect functions and processes




Source: Changing Newsrooms 2023. DNR.

## *2.1. Hypotheses on generative AI models as TV presenters*

The convergence of artificial intelligence with cyberjournalism and cybermedia, especially television, marks a turning point that requires further analysis to establish a more accurate diagnosis of the impact that AI systems are having on models that some see as the new news anchors in television media. In this vein, a few experts argue that AI has impacted on several areas of journalism and television broadcasting. It has been used to create audiovisual content, although the quality is often questionable, as seen in AI-generated commercials. However, over time, this type of technology may become an indispensable tool and become an important complement to journalistic practice (Caswell, 2023).

As a starting hypothesis, AI news anchors are the tip of the iceberg of more radical changes that will take place in television media in the short term. A second hypothesis is whether a radical change in the conception of journalism is developing from the use of various artificial intelligence systems: what are these changes, what is the validity of journalism and its truthful and real service to citizens, and what is its relationship to the media and to journalism professionals?

A third hypothesis leads to the synergies established between the two platforms, Internet and mobile telephony (Aguado & Martínez, 2008), where artificial intelligence systems have made their home (Luo *et al*., 2021). Does this mean that each platform can now be used indistinctly and according to the situations of each user, or does it already represent a clearly differentiated change between fixed and mobile communications mediated by AI systems? Technologically and communicatively, this is the way forward, but what about the business models that, although there are some companies that make a profit, nevertheless, overall, AI systems hardly bring economic profitability? What new forms of advertising linked to journalism with artificial intelligence are being tried out? What content attracts or rejects this advertising? What are the most advanced experiences both for economic profitability and for social, cultural and service profitability that AI systems can bring about? And finally, what training does artificial intelligence require for effective professional journalistic uses? And what is the role of universities in the new scheme of journalism training with artificial intelligence?

## 3. Objectives and Methodology

Against this background, this study has three objectives. The first aims to analyse, reflect on and discuss the role and impact of 'news presenters' based on generative AI avatar models, mainly in media located in Asian countries (China, India and Kuwait), Latin American countries (Honduras, Mexico, Peru and Venezuela) and European countries (Russia). A second objective is to analyze the quality of the avatars and the synchronisation or dissonance of the voice with facial gestures. A third objective seeks to elaborate an action plan or guide of standards, reflections and protocols for the coexistence between AI and professionals in news organizations.

Prior to the analysis of AI avatars, qualitative-quantitative research of experimental design is proposed. Data collection involved the analysis of data from AI apps. Descriptive models were used to summarize the characteristics of the data collected from the tools in a matrix file and their validity was verified by a group of experts, in accordance with the research design. The tools studied include the following phases: 1) collection of information from AI apps; 2) archiving of the material; 3) dissemination on the various digital platforms used; and 4) value proposition and possible uses. The method used for data collection was also based on direct observation of the websites hosting the AI tools.

### *3.1. Methodological justification*

To achieve the objectives outlined, a study methodology is proposed that is based, firstly, on the systematic review of existing literature on artificial intelligence systems, trends and developments in AI in newsrooms and other areas of news organizations. This technique has been chosen since literature research is the stage of scientific research where one explores what has been written in the scientific community on a given topic or problem (Hart, 1999). In this case, what is there to consult about AI systems and how to do it?

Secondly, we rely on the method of observation (Gaitán Moya & Piñuel Raigada, 1998) and analysis of television media websites that have incorporated news anchor models (avatars) created using artificial intelligence tools. To carry out the observation and analysis, whose period of study runs from 30 November 2022 to 1 December 2023, the AI virtual presenter models were previously located according to the following criteria:

a) Avatars created from launch of Chat GPT (December 2022 to December 2023).
b) Formulation of search equations, considering the various operators, value ranges, limiters and truncations. Specifically, the Boolean Search Equation or Intersection Logic and Logical Sum (AND, OR) using the following conjunction: (presenters OR avatars) AND (artificial intelligence OR virtual).
c) For the data analysis of AI tools, a quantitative approach was proposed (Igartua, 2012) including the analysis of 80 AI applications. These applications were categorized according to the specific use of the tools (textual, images, videos, maps, audio, translation).

Thirdly, given that the project has levels of experimentation provided by information technologies and social participation on a phenomenon (in this case, AI) that affects not only the journalistic profession but also society, an action-research design is proposed. Bearing in mind that action research creates a form of enquiry and simultaneously addresses knowledge and social change in a way that brings together theory and practice (Burns, 2007), students of the Master's Degree in Professional Multimedia Journalism at the Complutense University of Madrid were involved in the design of the study.

### *3.2. Study design for research and action*

The proposed study has a methodological approach that begins, firstly, with the participation of the students of the subject Journalistic Innovation of the Master's Degree in Professional Multimedia

Journalism. The working dynamic consisted of students forming working groups (participatory research) to analyze, test and perform tests on various AI tools (thematic concern), which have been selected (quantitative approach) by the group of researchers at the Internet MediaLab (at the time, a center for innovation, artificial intelligence and interactive media studies).

The students are provided with a matrix sheet (Figure 2), highlighting, fundamentally, the environment of the tools, launch date, examples found and their socialization, matrix (developer) of the tool, founder, media in which it is being used, value proposition, business proposal or venture that could be made with AI tools. The forty (40) students of the master's degree have collected data, analyzed and tested a total of eighty (80) tools. Previously, the students formed ten working groups (4 students per group). Each group was assigned eight (8) tools.

**Table 1**. Factsheet for the analysis of artificial intelligence tools for journalism and communication

| TECHNICAL DATA SHEET | |
|---|---|
| **TOOL** | **CHARACTERISTICS** |
| Name | |
| Description | |
| Feature | |
| Creator (Company, developer or platform) | Year of creation or release |
| Application environment (what it is used for) | |
| Example (ascertained) | |
| Access cost per License | Free / with registration / Premium |
| Advantages | |
| Disadvantages | |
| Potentiality (value proposition, potential entrepreneurship, applicability, etc.) | |

Source: 2024. Matrix developed by the students of the master's degree in professional multimedia journalism. UCM.

The second part, which corresponds to the analysis of avatars as an object of study, is carried out by the project's researchers, who also seek to relate whether the tools tested by the students have been used - or can be used - in the creation of avatars that give shape to models of news presenters. In this phase, a critical and reflexive analysis is carried out, covering the level of realism, synchronicity between voice and gestural movements, dissonance, cadence of the voice (robotised), definition of the image, etc. of each AI avatar used by the media as news presenters. Finally, an ethical-philosophical approach is proposed to be reached in the last phase of the project. This phase will also offer some recommendations (guidance and guidelines) on journalistic training in artificial intelligence (professional training innovation) for a new society where citizens are facing a different definition of journalism and consolidating new experiences as something especially new, already known as the 'new media' (Levinson, 2012) in the Age of Artificial Intelligence.

## 4. Results

More and more countries in Asia are introducing news anchors produced with artificial intelligence. The region is witnessing the rise of AI news bots that have begun reading news bulletins in countries, often to help meet diverse cultural and linguistic needs.

### *4.1. First explorations of AI use in Asian, Latin American and European countries*

In 2018, China took a move that was the first one in the world: introducing an artificial intelligence (AI) news anchor. The move was unlike any other and, according to China's state news agency Xinhua, the virtual newsreader was meant to 'work' around the clock on its website and social media channels, 'reducing news production costs'. But, machine-generated journalism is still nascent for the industry, so after the launch of ChatGPT, it is not surprising that China is at the forefront of the evolution, unveiling its second prototype, Ren Xiaorong, on 22 March 2023. India followed suit in April 2023, launching its first AI-powered presenter under the name Sana. Joining the trend, several other channels nationwide also introduced their AI-powered 'news anchors'. In the first fortnight of July 2023 alone, two AI news anchors made their debut in India. First `Lisa', appeared on Odisha's private news channel, presenting bulletins in English and Odia, a language that is spoken by 31 million people. A second channel, Power TV (India), made a similar innovative move. The channel introduced its own artificial intelligence presenter called Soundarya.

Besides India, in April 2023, a Middle Eastern media company (Kuwait) also took the opportunity to launch its first virtual news anchor. The AI 'anchor' named 'Fedha' appeared on Kuwait News' Twitter account and generated a flurry of reactions on social media. While some praised the 'virtual anchor' as an innovation, others expressed concern about the ethics of using AI in newsrooms.

In Latin America, television news anchors in the form of artificial intelligence avatars are also emerging in the television media. One of the first to be introduced goes by the name of Nat, from Grupo Formula, a news organization in Mexico. This was followed a few weeks later by Illiariy, created and developed by the Image and Communication Office of the Faculty of Arts and Human Sciences of the National University of San Marcos. This avatar, together with Clara, presented in October 2023 and developed by the University of Guadalajara in Mexico, are projects that emanate from the academic world. Another AI as a news anchor is Sira, presented in April 2023 by the Venezuelan television network Venezolana Televisión and announced as the assistant to Venezuelan president Nicolás Maduro's television programme Con Maduro+. The Honduran newspaper Proceso Digital also launched Maya, the Latin American country's first female news anchor, in May of that year.

In Europe, despite greater technological resources, the use of artificial intelligence avatars as news anchors is residual in the period studied. The Russian 'virtual presenter' Snezhana Tumanova, launched in March 2023 by Svoye TV, stands out.

### *4.2. Analysis of AI avatars as news presenters*

The results of the analysis highlight the incipient advance of these artificial models of news anchors that are beginning to 'activate' in television newsrooms and highlight a paradigm shift in the way the media transmit news. Early results show that AI avatars have marked characteristics in narrative and visual aspects that differ from human presenters. Increasingly, however, it is found that there is an immediate correlation between the narration and the avatars' lip movements. It is striking that, of the ten models analyzed, all are avatars of women, young, idealized in their physiques. Physiognomic features of great beauty and most of them with ethnic features typical of the society they represent (with the exception of Kuwait, which presents a blonde woman).

**Table 2**. It lists the various 'news presenters' discussed above, highlighting a summary of critical analysis of each AI avatar, the release date (presentation) and features of each.

| Name/Date | Media/Organization | Country/ Region | Analisis / URL |
|---|---|---|---|
| **1. Ren Xiaorong** Date of presentation : **22.03.2023** | *People's Daily News Media* | *China (Asia)* | **URL**: https://www.whatsonweibo.com/meet-ren-xiaorong-peoples-daily-ai-virtual-news-anchor/ |
| | | | **Analysis:** Can broadcast 24 hours a day, 365 days a year. Communicates directly with the audience, discusses current issues and answers personalised questions. Interaction is still limited. Predetermined topics: environmental protection, epidemic prevention, housing, politics and employment. |
| **2. Snezhana Tumanova** Date of presentation : **24.03.2023** | *(Svoye TV)* | *Russia (Europe)* | **URL**: https://www.youtube.com/watch?v=gWiIaQ-bDRU |
| | | | **Analysis:** Weather presenter developed with AI and premiered in the 'Future Forecast' programme. The channel revealed that the programme operates using neural networks. One is responsible for the virtual presenter, another for preparing the text and a third for generating graphical content. The programme will be broadcast five times a day and will provide viewers with regular weather updates. In the launch video, the avatar's voice tracks are visibly out of sync with the animation, and the figures appear awkwardly cropped against a flat background. |
| **3. Nat** Date of presentation : **25.03.2023** | *(Grupo Formula)* | *Mexico (America)* | **URL**: https://www.youtube.com/watch?v=FB7hWbQpDNU |
| | | | **Analysis**: Nat is the first AI-generated TV presenter in Latin America. Its development took about a month and a half. The AI needs the knowledge and judgement of journalists to accurately develop its dialogue and selection of information. She will share space with other human commentators. |
| **4. Illariy** Date of presentation : **29.03.2023** | *(FLCH-UNMSM)* | *Peru (America)* | **URL**: https://www.youtube.com/watch?v=IJZNq_fR6Pc |
| | | | **Analysis**: Its name means 'dawn' in the native language (of the ancient Incas) most widely spoken in Peru. It narrates the news events at the Universidad Nacional Mayor de San Marcos. Carlos E. Fernández, teacher and architect of the Illariy AI project, says that various AI programmes were used: Dall-e (to generate a JPG image. For example: a woman in a blue suit with Andean features, a news reporter or narrator). Then the DI-D program was used (to convert text to video) and served to animate Illariy's face and thus pronounce or generate the vocalisation according to what the text indicates as a command. In parallel, work was done on the newsreel scenario, using the same AI technique. Two models were made vertically and horizontally (designed for the social networks: YouTube, Facebook, TikTok and Instagram). In addition, design programmes such as Adobe Photoshop and Illustrator were used. Two other programmes were also used: Palette.ia (to give colour to the image when they are in black and white) and Sound Draw (to generate music). Illariy is a member of the Communications and Institutional Image team of the Faculty of Arts and Humanities. |
| **5. Fedha** Date of presentation : | *(Kuwait News)* | *Kuwait (Asía)* | **URL**: https://www.youtube.com/watch?app=desktop&v=n36C-jUJoi8 |
| | | | **Analysis:** In the future, Fedha could adopt a Kuwaiti accent and present news bulletins on the site's Twitter account, which has 1.2 |

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|---|---|---|---|
| **10.04.2023** | | | million followers, The presenter's blonde hair and light eyes reflect the diverse population of Kuwaitis. 'Fedha represents everyone. In the launch video, it is noticeable that the avatar's voice tracks are out of sync with the animation. The rapid rise of AI globally has increased the potential for spreading disinformation and threatening jobs and artistic integrity. Kuwait ranked 158th out of 180 countries and territories in the Reporters Without Borders Press Freedom Index 2022. |
| **6. Sira** Date of presentation : **28.04.2023** | *(Venezolana de Televisión - VTV)* | *Venezuela (America)* | **URL**: https://www.youtube.com/watch?v=uqK8bHFYQ1E<br>**Analysis:** Venezuelan President Nicolás Maduro has launched a new TV show called Con Maduro+, where he provides information about his administration with an AI-created 'assistant' and co-host. The AI Sira is stylised as an attractive Afro-descendant woman, with abundant curly hair and a slow, clear voice. For network officials, ChatGPT has popularised the use of AI so it could attract the attention of Venezuelans. But many have fuelled debate about the dangers of this technology and its possible uses to manipulate information. |
| **7. Maya** Date of presentation : **25.05.2023** | *(Proceso Digital)* | *Honduras (America)* | **URL**: https://www.youtube.com/watch?v=q7acqU-Xyfk<br>**Analysis:** Maya is a revolution in Honduran journalism. Its name, inspired by Mayan culture, makes it a symbol of diversity and representativeness in the media. As opposed to replacing human labour, Maya will complement journalistic tasks with mid-morning and mid-afternoon newscasts. Supported by AI and other technologies, Maya will be able to access and analyse large amounts of information. |
| **8. Lisa** Date of presentation : **16.07.2023** | *(Odisha TV)* | *India (Asia)* | **URL**: https://www.youtube.com/watch?v=k5NcpmQOu1g<br>**Critical Analysis:** Lisa is an AI system that uses natural language generation and processing algorithms to produce news articles, reports or summaries without human intervention. It will present news in both Odia and English for OTV Network's digital and TV platforms. It can analyse large datasets, extract relevant information and generate coherent narratives in a similar way to how human journalists create news. |
| **9. SANA** Date of presentation : **10.10.2023** | *(India Today Group)* | *India (Asia)* | **URL**: https://www.youtube.com/watch?v=1mHFRCO81Pw<br>**Analysis:** Kalli Purie, CEO, India Today Group, at the closing of the India Today Conclave 2023 in Mumbai, presented a wide range of AI news anchors in the various co-official languages (22), besides English and Hindi, including Sana. The AI news anchors cater to diverse linguistic communities across the country. They understand local preferences in terms of content preference, dialect, culture and language. This creates a personal connection with the audience. Sana, has delivered 200 hours of programming, transcending various genres, languages and platforms. |
| **10. C.L.A.R.A.** Date of presentation : **19.10. 2023** | *(University of Guadalajara)* | *Mexico (America)* | **URL**: https://www.youtube.com/watch?v=FQVjfcyLqnI<br>**Analysis:** C.L.A.R.A. refers to a guide for the use of AI in the classroom. It was created by specialists from the Virtual University system of the University of Guadalajara. It presents a series of recommendations and tools for teachers to take advantage of these technologies to prepare classes, design didactic resources and plan |

| | |
|---|---|
| | AI-based learning activities. Carlos Iván Moreno, a teacher and one of the creators of C.L.A.R.A., explains that the guide on the use of AI includes topics such as the biases that can occur, the nature of intellectual property, the misuse of this technology, ethical considerations and the dependence of students on these developments. |

Source: 2024. Own elaboration based on the Search Equation: (presenters OR avatars) AND (artificial OR virtual intelligence)

## 5. Discussion and conclusions

The results show that, with the rise of generative AI, the use of technology has become part of the media industry's toolbox. With AI becoming a necessity in the development of internet journalism, experts say newsrooms around the world are beginning to grapple with how to incorporate the technology into their workflows and workplaces. The arrival of Chat GPT in newsrooms marks a turning point in the conception of global news, cyberjournalism and cybermedia. Hence, many industries are using Artificial Intelligence to increase productivity. News organizations are no exception. Companies are creating digital figures such as those mentioned above to combine the computational capabilities of AI with human creativity. These tools facilitate tasks and offer possibilities for personalized reader engagement, rigorous fact-checking and interactive content creation.

In line with the Simon Report (2024), artificial intelligence is notably applied to an increasing range of tasks in news production and distribution. Contrary to some claims, many of the most beneficial applications of AI in the news are relatively mundane and AI has often not proven to be a miracle solution in many cases. The potential of AI to increase efficiency in news organizations is a central motivating factor for its adoption, so its nascent use as storytellers and news anchors (such as those analyzed) are a progressive demonstration of these innovations in the media. Other examples of AI use demonstrate improvements in efficiency and productivity, including dynamic paywalls, automated transcription and data analysis tools in news production.

For now, ChatGPT is not as unpredictable as a human (Goldman, 2022). It depends on the user's prompt to execute a 'coherent' response. Therefore, some researchers determine ways to identify synthetic texts from artificial intelligence (Moran, 2023). For Open AI, AI-based language models are tools that optimize human work, rather than being a complete substitute for it. However, this does not mean that there will be no future implications. Developments such as Nat, Maya, Fedha or Sira bring to the table an interesting discussion in shaping the future news market.

On the other hand, according to the studies and reports cited (Reuters Institute, 2023), reporters and journalists are likely to see a reduction in their work teams, more activities to perform and salaries that may (perhaps) suffer a deterioration as a result of the consolidation of systems based on generative AI. In the face of such uncertainty, although systems such as GPT-4 have the potential to significantly reduce the time taken to perform a task, OpenAI has asserted that they are far from replacing workers (including media professionals) entirely. However, some authors (De Lara-González *et al*., 2022; Simon, 2024) disagree with contrary approaches as there are more and more areas where AI is being implemented, with various examples in production, distribution and marketing.

Ethics in the use of AI avatars is another major challenge facing the ecosystem of news organizations that had already been using AI tools in content creation (articles) and are now adding the use of AI avatars in newsrooms. Debates around ethics are heightened by the advance of AI in general artificial intelligence, which contributes to the generation of questions that experts such as Mariano Sigman and Santiago Bilinkis (2023) ask: 'What will happen if artificial intelligence finds what we are weakest in?' In this section, questions increasingly arise about the level of accuracy and reliability delivered by these AI systems or whether they have biases in their training and, therefore, in providing information. These are all questions that haunt the minds of citizens and are the subject of academic and professional debates.

Disinformation, 'fake news' or unverified information has been a constant problem in recent years. If projects such as the virtual presenters described above, which, according to their own words, will learn (through deep learning) and constantly improve in order to offer more and better information, the underlying question is: how can the enormous amount of data be verified and how will it be assimilated by the public, especially if the avatar has been generated by state media or those linked to the powers that be, as in the case of Sira (Venezuela) or Ren Xiaorong (China)?

Regarding training in the knowledge and use of AI, according to the Reuters Institute report (2023), there is a lack of training on current artificial intelligence issues among media professionals. However, this study highlights the fact of involving students (from the Master's Degree in Professional Multimedia Journalism) in work of a similar nature (research+action), as their participation in data collection and testing of AI applications (tools) has been a key element. Their participation in the work also involved developing another innovative learning method in their training: learning by doing.

Finally, this study is only an advance diagnosis of the development of AI in newsrooms in the form of 'virtual news anchors'. This means that it is not a finished investigation, but, on the contrary, it is intended to mark the beginning of more in-depth and comprehensive research.

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