



**Domesticating artificial intelligence: journalistic paradigm
repair in the age of AI**

BA Thesis
F.L.M. van Bree
2061698
Online Culture: Art, Media & Society/Digital Media
Department of Culture Studies
School of Humanities and Digital Sciences
14/06/2024
Supervisor: dr. T. Van Hout
Second reader: dr. I.E.L. Maly

Table of contents

1. Introduction	3
2. Generative AI in journalism: a comprehensive overview	5
2.1 The rise of generative AI	5
2.2 Practical applications and future aspirations	6
2.3 Ambiguity, challenges, and concerns	7
3. Crises and corrections: journalism's default response to change	9
3.1 Journalism delegitimised	9
3.2 Boundary work and paradigm repair	9
3.3 The journalist's toolkit.....	10
4. Data and methods.....	12
4.1 Metajournalistic discourse and boundary work.....	12
4.2 Data collection.....	12
4.3 Data analysis	13
5. Findings	15
5.1 Generative AI as a colleague	15
5.1.1 Transparency 1.0.....	15
5.1.2 Human-in-the-loop	16
5.1.3 Journalist as a meta-gatekeeper	17
5.2 Generative AI as an assistant	18
5.2.1 Transparency 2.0.....	19
5.2.2 The indispensability of the human journalist	19
5.2.3 Human-machine-human.....	20
5.3 Generative AI as an outsider	21
5.3.1 Transparency 3.0.....	21
5.3.2 Serving the public	22
6. Discussion	24
6.1 The domestication of generative AI.....	24
6.2 Limitations and future research	26
7. Conclusion	27
References.....	28
Appendix A.....	37
Appendix B.....	38
Appendix C	40

1. Introduction

As is the case with most new technologies, there have been thousands of stories, fantasies, debates, and predictions circulating about artificial intelligence (AI). Utopian and dystopian, these reconfigurations of AI – an overarching term for a set of technological solutions and machine learning technologies – range from downplaying it as the latest hype from Silicon Valley to fearfully depicting it as the technology that will stand at the dawn of technological singularity. AI has got the world talking and it is starting to penetrate more aspects of daily and professional life simultaneously. The same rings true for media organisations and newsrooms. Fast-developing generative AI has the potential to overtake many parts of the journalistic work process, ranging from generating mere news angles to writing full-fledged texts. And as generative AI is permeating newsrooms around the world, journalists find themselves at a crossroads, navigating between technological innovation and journalistic tradition. OpenAI, an American enterprise that researches AI and launched well-known generative AI models such as ChatGPT, DALL-E and Sora, conducted research on the impact of large language model's (LLM's) on the labour market. In this research, journalists, news analysts and reporters alike showed up among the occupations with the highest exposure to generative AI. Exposure, in this case, refers to the time spent on typical tasks being reduced by at least 50% due to automation and AI technologies (Eloundou et al., 2023). Naturally, findings like these leave journalists with a great deal of uncertainty. How can we, as journalists, use generative AI so that we stay ahead of the developments and use the technology so that it benefits us, instead of the technology overpowering us and ultimately, taking in our jobs?

But questions emerge not only about the practical applications of generative AI in journalism. Both AI and algorithms are historically renowned for being biased and untrustworthy. Deepfakes, failed algorithms, so-called “hallucinations,” and unreliable texts generated by LLM's are only some of the examples of the untrustworthiness and inconsistencies of these technologies. On top of this, there is an increasing concern for the volume of misinformation spread by AI technologies and its ability to fuel bias and discrimination. This clashes with traditional journalistic values. As Deuze (2005) illustrates, journalists' occupational ideology is, among other, based on ideals of public service, objectivity, and validity. Journalists traditionally position themselves as fair, objective, and valid watchdogs of society (Deuze, 2005). Evidently, the increasing spread of fake news and misinformation through AI, as well as the inconsistency of generative AI technologies which are also gradually being used in journalism, interferes with this journalistic ideology. As generative AI is increasingly, albeit cautiously, used in producing journalistic work, it is also notorious for its biased and unreliable information. Obviously, this raises implications for the very identity of journalists as truthful guardians of democracy.

Traditional notions of journalism as a profession, as well as the established professional identity of journalists, are threatened with the advent of generative AI. Building on the idea that the application of generative AI in journalism remains highly contested and

ambiguous, further research on the impact of generative AI for journalistic practice and identity is valuable. This thesis intends to investigate how journalists respond to these disrupting changes in their profession through the lens of boundary work (Gieryn, 1983) and paradigm repair (Bennett et al., 1985). Ultimately, this thesis seeks to define how journalists negotiate and establish their role as a professional in a society which is faced with rapidly evolving generative AI by answering the questions; do journalists engage in boundary work and paradigm repair regarding the advent of generative AI and if so, in what ways?

After this introductory section, section 2 defines generative AI and its prominence, provides a comprehensive overview of the applications of generative AI in newsrooms and news organisations, and highlights which problems and concerns this raises for journalists. Section 3 elaborates on journalistic tactics of boundary work and paradigm repair, and subsequently shows how journalists have previously dealt with disrupting developments or technologies. In doing so, this section will also expand upon several characteristics of traditional journalistic identity. Section 4 will address the methodology of the research; it elaborates on metajournalistic discourse and explains how data was gathered and analysed. Following the methodology, section 5 presents the results of the research. Finally, section 6 and 7 provide a conclusion of the research, together with a discussion of the results and recommendations for further research.

2. Generative AI in journalism: a comprehensive overview

2.1 The rise of generative AI

As the umpteenth change to the journalistic profession, algorithms, AI, and machine learning (ML) technologies have penetrated newsrooms worldwide. Ranging from news recommender systems (Karimi, Jannach & Jugovac, 2018) to dynamic paywalls (Simon, 2024), different types of ML and AI are readily applied in newsrooms, and both journalism and journalists have so far adjusted to them accordingly (Simon, 2024). Digital journalism, including, but not limited to, digital-first newspapers (Ewing, 2024; Hendrickx & Picone, 2020), data journalism (Diakopoulos et al., 2024), algorithms (Dodds, 2021), citizen/social media journalism (Bruns, 2017) and even j-blogging (Singer, 2005), has come to substitute for a large part of journalism generally. Over the last decade, another technology has rapidly developed that is, once again, shaking up journalism: deep learning. As a subset of classic ML, these ML models have a large amount of layers – hence the adjective ‘deep’ – and allowed for the development of generative AI and LLM’s (Patzner, 2023b).

Generative AI, as the name suggests, can generate a wide range of original outputs with little to no human intervention. For example, the extremely popular ChatGPT can be used to generate text, headlines, or angles, whereas image-generators such as DALL-E and Midjourney use prompts to create original images and illustrations. The applications of generative AI seem broad, which unsurprisingly leads to the commonly expressed fear that, due to its seemingly independent “thinking capacities”, generative AI will eventually lead to technological singularity. However, generative AI technologies typically classify as “narrow” AI (Broussard, 2019; Simon, 2024; Jones et al., 2022; Stray, 2019). That is, these types of technologies are developed to serve a specific purpose and are focused on solving solely one task. In the case of popular LLM’s, such as ChatGPT, this task consists of answering questions, writing texts, and engaging in common conversations in natural language. Despite its ostensible narrow functionalities, though, generative AI and deep learning are among the first algorithmic technologies that can be categorised under the common denominator ‘artificial intelligence’ (Patzner, 2023a). Moreover, due to their broad applicability in generating different types of digital material, these models can certainly be applied in many aspects of both daily and professional life. And so is the case too for news organisations and newsrooms.

Recent developments in public generative AI models, think of ChatGPT, Sora, Midjourney and DALL-E, have accelerated massively. This has sparked frenzied discourse around the world about its real-world implementations, consequences, and possibilities. The rapid development of both LLM’s and generative AI requires news organisations to quickly churn out new AI strategies and initiatives to regulate the “AI tsunami” that seems to be upon them. Indeed, these technologies specifically can generate a wide range of journalistic productions; all the way from interview transcripts

to elaborate sports journalism reports. Hence, with the potential of these generative AI models to seamlessly undertake traditional journalistic tasks such as transcribing, writing, or crafting captivating headlines, the urgency to address, discuss, and regulate the implementation of generative AI in the newsroom has never been more critical. Accordingly, many researchers and journalists have investigated the current uses of generative AI in journalism, as well as the aspirations journalists have for this technology in the future.

2.2 Practical applications and future aspirations

In most of the work that has been done on generative AI in journalism, scholars and journalists seem to agree on the fact that AI is currently being implemented in newsrooms by means of improving efficiency and speed (Simon, 2024; Opdahl et al., 2023; Diakopoulos et al., 2024). Generative AI technologies are not yet trusted to generate journalistic work autonomously but are rather seen as helpful tools that can soon – or currently already – assist in or take over tedious and repetitive tasks, such as fact-checking, data exploration or transcribing (Simon, 2024; Opdahl et al., 2023). These journalistic tasks are, arguably, easily automated, and hence seem to be the main focus of many news organisations in developing generative AI nowadays. A report by Diakopoulos et al. (2023) illustrates that, besides performing repetitive tasks, another main usage of generative AI in newsrooms today is related to content production, specifically the production of text. This report presents a survey of 292 individuals in the news industry, of which 69.6% claims to have used AI for the generation of “(...) *news headlines, social media posts, newsletters, quizzes, text from data, taglines, and story drafts*” (Diakopoulos et al., 2024, p. 11). Other major categories resulting from this survey include the gathering and processing of information, as well as the production of multimedia – think of images, illustrations, and audio (Diakopoulos et al., 2024).

A study focused on a specific branch of journalism, investigative journalism, puts forward similar results. For investigative journalism too, the idea prevails that generative AI technologies could replace simple and tedious journalistic tasks with “*cheap computation*” (Stray, 2019, p. 1077). These types of technologies could eventually free up journalists’ time and make the process of journalistic work significantly more efficient. Moreover, for this type of journalism specifically, there are also aspirations for AI in speeding up the processing of large amounts of data or having the ability to detect new patterns in data entirely. These aspirations are most widely discussed in the data journalism community, and especially the latter would have a significant impact on investigative (data) journalism, as it may lay bare stories that would usually go unnoticed (Stray, 2019). The hopes of AI assisting in data journalism were also reflected in Diakopoulos’ report (2024, p. 14), as it showed that more than 15% of journalists who participated in the survey demonstrated “*considerable interest in using generative AI to support data analysis and research.*”

Upon looking at the field of study concerned with AI in journalism, it becomes clear that generative AI is mainly used and developed currently to assist in tedious tasks that otherwise require considerable time being spent on them, such as data processing and

transcribing. However, generative AI is also already used for creative purposes. By letting the AI generate news headlines, angles, text snippets, and even audiovisual products, journalists outsource a part of the tasks that normally require human creativity to a generative AI bot. Generative AI might already constitute for more than a mere efficiency-driver.

Concrete examples of AI being implemented in newsrooms also show that generative AI technologies go beyond being solely assistants and efficiency-drivers. In the Netherlands specifically, multiple projects have been set up to seek out the potentials of generative AI in producing news and journalistic productions. For example, the digital agency Media52 has been experimenting with an AI-colleague called Liao on their independent journalistic platform Innovation Origins (Innovation Origins, 2023), as well as a fully AI-powered news website, '*De Geïllustreerde Kunstmatige Intelligentie*'. This website publishes news using OpenAI's ChatGPT and DALL-E (figure 1), without intervention of any editor or journalist (Kivits, 2024). In a similar vein, the publishing company Mediahuis Nederland has launched the experimental *Resport*, a website that uses the GPT-4 algorithm in combination with sports journalism to generate AI-driven sports reports (Verhagen, 2023).



Figure 1: Homepage of '*De Geïllustreerde Kunstmatige Intelligentie*'

2.3 Ambiguity, challenges, and concerns

Overall, there is considerable curiosity in the news industry for the potentials of generative AI, which is also demonstrated through the multiple initiatives that have been set up exploring AI's capabilities in independently and creatively producing news. However, one cannot help but notice that there is still lots of ambiguity surrounding the application of AI in newsrooms. Products, platforms, and initiatives that are currently

being developed in news organisations ultimately remain experiments, and a lot of the discourse stays centred on fears, hopes, and aspirations projected onto the future. This ambiguity should not come as a surprise, as some considerable academic concern has already demonstrated the prevailing unintelligibility of generative AI for journalists (Jones et al., 2022; Deuze & Beckett, 2022).

According to several scholars, generative AI literacy for journalists is of crucial importance because it enables them to “*apply AI responsibly, creatively and efficiently*” (Deuze & Beckett, 2022, p. 1913). Furthermore, understanding machine learning systems allows journalists to use these systems in “*ways that do not compromise journalistic norms and values*” (Jones et al., 2022, p. 1733). Unfortunately, though, the “black box” nature of generative AI causes a limited awareness and understanding of the technology. Not only is the implementation of generative AI technologies an ambiguous undertaking, even the very core of journalism, journalists themselves, are struggling with comprehending the technology in the first place. In their study on how journalists make sense of AI and algorithms, Jones et al. (2022) demonstrate that there is a pervasive limited awareness of generative AI technologies among journalists. They highlight how journalists nowadays mostly resort to “*guesswork and imagination when discussing AI and algorithms*” (Jones et al, 2022, p. 1750). And this ‘guesswork and imagination’ is also reflected in the opinions and questions about generative AI that are expressed by journalists, as these not only diverge from one another quite drastically, but also strongly express a certain moral panic.

Questions and concerns about generative AI among journalists and researchers mostly discuss the preservation of quality in journalistic work (Ananny, 2024; Opdahl et al., 2023), though there are some different views on how generative AI might influence this exactly. Whereas optimists believe that AI could expand journalistic production (Carlson, 2015a) and free up journalists’ time, allowing them to focus on those parts of the journalistic process that require human work (Opdahl et al., 2023), pessimists fear that generative AI and the implementation of these technologies in newsrooms will lead to an erosion of the quality of (traditional) journalism. It has long been established that journalists’ occupational ideology strongly rests on values such as objectivity, validity, and public service (Deuze, 2005). However, emergent generative AI technologies are commonly feared to threaten these values, as generative AI allows for the generation of fake news, is a black box regarding the sources it draws from, and often makes mistakes or ‘hallucinations’, eroding the accuracy and validity of news. Generative AI is seen among journalists as a threat to their traditional values, norms, and standards, and discourse regarding the topic is regularly underlined by moral panic. Considering that AI is regarded to disrupt journalistic tradition and identity, dealing with such a change would require both journalists and traditional notions of journalism to change drastically. But generative AI is not the first technology or development that has caused a considerable change to traditional notions of journalism and journalists’ identity.

3. Crises and corrections: journalism's default response to change

3.1 Journalism delegitimised

Over the course of history, traditional journalism has undergone some profound changes, but has also had to deal with significant amounts of criticism and mistakes undermining its legitimacy. Previously, threats to journalism's legitimacy and accountability arose predominantly from bad journalism, anomalies, scandals, or mistakes (Bennett et al., 1985; Thomas & Finneman, 2014). These internal issues typically involved individual journalists or news organisations failing to adhere to established ethical standards and norms, which ultimately resulted in public distrust. In recent years, journalism's legitimacy has been stained by several external technologies and services that have disrupted traditional journalism practices in myriad ways.

The proliferation of the internet and digital platforms has revolutionised the way news is produced, distributed, and consumed. Plenty scholarly attention has been paid to the changes journalism has undergone and how journalism has responded to these changes, some examples including the normalisation of so-called 'j-bloggers' (Singer, 2005) and 'j-tweeters' (Lasorsa, Lewis & Holton, 2012), or how web analytics (Tandoc Jr, 2014) and internet news distribution (Singer, 1997) have changed processes of gatekeeping. The culmination of both the decentralisation of public communication and the growing distrust and antagonism towards journalism through the internet has led to a delegitimation of journalism (Tong, 2018). But in all these instances where news or journalism were challenged, journalists have habitually responded with a strong discursive strategy in hopes of reaffirming and relegitimising their profession's solidity.

3.2 Boundary work and paradigm repair

Attempts at demarcating a profession are known as boundary work rhetoric, in which participants from a certain knowledge field establish, support, or uphold certain boundaries that mark off a profession to expand authority and protect autonomy (Gieryn, 1983; Van Hout & Burger, 2017). For journalism specifically, boundary work rhetoric is often constituted by reaffirming classic norms and values that define traditional journalistic practice. As Tong (2018, p. 257) illustrates: "*The relegitimation of journalism reiterates and reinforces the historically shaped essence of journalism that reflects a continuity of, rather than changes in, legacy journalism*". Therefore, boundary work in journalism is commonly referred to as 'paradigm repair' (Bennett et al., 1985). Building on Kuhn's (1962) notion of the paradigm, defined here as "*a set of broadly shared assumptions about how to gather and interpret information relevant to a particular sphere of activity*" (Bennett et al., 1985, p. 54), paradigms operate as a set of ideas that establish the standards, practices, and ethical guidelines that journalists follow to ensure their work is credible, accurate, and trustworthy. Paradigms provide a framework that helps journalists determine what constitutes news, how to report it, and how to interpret and present information to the public. Therefore, paradigms support the

integrity and reliability of journalism by defining professional norms and values that guide journalistic behaviour and decision-making.

Journalism's paradigm rests on values and norms such as objectivity, validity, autonomy, objectivity, legitimacy, transparency, and immediacy (Deuze 2005; Allen, 2008). These values are foundational to the profession, as they establish the criteria for what is considered good journalism. Through these carefully chosen values, this paradigm not only demarcates the profession, but also helps journalists claim legitimacy to societal importance (Allan, 2008; Krzyżanowski, 2014). But besides a strongly established paradigm, journalists also rely on a certain journalistic stance (Van Hout et al., 2012) and professional roles (Mellado, 2015) which define the normative boundaries of their profession – but in which established norms and values are also reflected. Most commonly, journalists assume the role of the gatekeeper (Janowitz, 1985; Shoemaker et al., 2009). The gatekeeper role, sometimes also referred to as 'watchdog' (Mellado, 2015), involves actively selecting, writing, shaping, and disseminating information so that it can become news. This process defines which pieces of information are rendered important and is often underlined with notions of objectivity and public service (Deuze, 2005) – thereby illustrating how the different paradigmatic values and norms are also emphasised through established professional roles.

Considering all the frameworks that are set in place, journalism is a profession that is strongly demarcated by acceptable ways of handling and practising. And whenever its authority or legitimacy is either challenged or threatened, journalists (meta)discursively resort to these existing paradigms and roles to reestablish their profession's legitimacy. Journalists engage in boundary work and paradigm repair to defend their professional norms by emphasising their adherence to their core values and their role in upholding democratic principles. In doing so, journalists seek to reinforce the public's trust in their work as well as reassert the importance of journalism in society, which, unsurprisingly, is precisely what is needed when journalism is faced with new technologies that threaten the continuation of its traditional existence.

3.3 The journalist's toolkit

As outlined above, journalism has faced several challenges over the past years. Scholars have regularly investigated how journalists have responded to these changes through the lenses of boundary work and paradigm repair. Processes of paradigm repair have appeared in different ways. For example, journalists have attempted to normalise a new technology by moulding it to fit with established ways of practice while simultaneously using these new technologies to also enhance existing norms and practices. This method of normalising was seen when journalists adopted blogs and Twitter/X (microblogging) as standard units of practice (Singer, 2005; Lasorsa et al., 2012). But also with other technological changes, such as the move towards a digital-first newsroom (Hendrickx & Picone, 2020), automated journalism (Carlson, 2015a), an increased use in web analytics for gatekeeping processes (Tandoc Jr, 2014), and internet news distribution (Ruggiero, 2004), journalists are using paradigm repair as a tool to

guard themselves against the disruptive changes these technologies are posing to their profession.

In a more rigorous fashion, journalists have also actively used methods of second-order paradigm repair (Carlson, 2012; McCaffrey, 2016). This is a more elaborate style of paradigm repair work that responds to more fundamental, far-reaching threats to the paradigm. In cases where second-order paradigm repair is employed, journalists “*work out their response to change through metajournalistic discourse as they seek to reconsolidate a collective identity built around shared visions of their work*” (Carlson, 2012, p. 280). In other words, second-order paradigm repair involves more fundamental and comprehensive renovations or recontextualizations of the journalistic paradigm. Instead of first-order paradigm repair, which might involve quick fixes like setting guidelines for online reporting, or emphasising adherence to paradigmatic norms and values, this type of paradigm repair is about transforming the profession to fit new realities. Within journalism, both methods of paradigm repair strongly rely on the traditional notion of the journalistic paradigm as outlined above.

Following an eventful history charged with disruptive technologies and its subsequent routines of repair work, journalism is now facing yet another fundamental disruption, generative AI. But now, due to the nature and capacities of this technology specifically, journalism is challenged in new ways; instead of a technology being capable of automating only parts of the journalistic process, generative AI has the potential to substitute journalists entirely. Therefore, the threat of generative AI may seem more fundamental than any of its predecessors. It is not “just” traditional norms and values that could be altered, affected, or eliminated, it could potentially be the entire profession. Despite its looming presence, consensus about the applications and effects that generative AI will have in and on journalism has not yet been reached, either by scholars or journalists themselves, which makes research into how journalists respond to this disruptive technology even more valuable. Hence, this thesis adopts the lenses of boundary work and paradigm repair to look at journalists’ responses to generative AI.

By examining if and how journalists engage in boundary work and paradigm repair in response to generative AI, this thesis aims to provide a comprehensive understanding of the strategies and discourses that are emerging around generative AI within the profession. Three research questions anchor the thesis: how do journalists perceive the role of generative AI in their work? What normative or ethical considerations are being made? And how are traditional journalistic values being upheld or recontextualised considering generative AI technologies? In doing so, this thesis explores the theories of boundary work and paradigm repair further, but also sheds light on which attitudes journalists hold towards generative AI.

4. Data and methods

4.1 Metajournalistic discourse and boundary work

According to Carlson (2016b), ways of doing journalism are inseparably connected to ways of understanding journalism's meaning and its larger sociocultural significance. He defines metajournalistic discourse as “*discourse that connects the creation and circulation of journalism's sociocultural meanings to the social practices surrounding news production and consumption.*” (Carlson, 2016b, p. 350). Metajournalistic discourse acts as the site where journalists establish definitions and professional boundaries, as well as negotiate what makes up for journalism's legitimacy. In other words, metajournalistic discourse is discourse that both constitutes for and delineates journalistic practice. Since metajournalistic discourse inherently signals attitudes and beliefs about the meanings, goals, and boundaries of journalism, this type of discourse illuminates how journalists communicate, protect, and repair their traditional paradigm, as well as engage in professional jurisdiction (Abbott, 1988). Furthermore, Van Hout & de Smedt (2016, p. 224) argue that “*professional vision emerges intertextually in journalism practice.*” Journalists' self-acclaimed identities are implicitly communicated and performed through their work. Thus, an analysis of journalistic texts could show how journalistic identity is negotiated and established, and how boundaries are policed.

Given that journalists' role performance, how they perceive their professional roles and how they demarcate journalism as a profession is intertwined in the texts they produce, I collected metajournalistic discourse in the form of articles from Dutch newspapers and broadcasters, as well as official policy documents on the application of AI in the newsroom from several major Dutch media outlets. Due to the reasons outlined above, metajournalistic discourse allows for a closer examination of how AI is covered in the news and, especially, which judgements and normative assumptions journalists hold towards the new technology that is disrupting traditional notions of their profession. Metajournalistic discourse can reveal how journalists regard generative AI technologies to threaten traditional notions of their profession, and how they use the classic strategies of boundary work and paradigm repair to shield themselves for these disruptive forces.

4.2 Data collection

To build a corpus of relevant metajournalistic discourse about generative AI, data was extracted primarily from the LexisNexis database, which covers a wide variety of international newspapers and magazines. For the Netherlands in particular, the LexisNexis database holds an exclusive license to all content published by DPG Media and Mediahuis, two media institutions that, taken together, are responsible for more than 95% of Dutch newspapers. Besides the LexisNexis database, data was gathered from, inter alia, Villamedia. Villamedia is an editorially independent online platform for and about Dutch journalism, and is part of the Dutch association of Journalists, also known as the *Nederlandse Vereniging van Journalisten* (NVJ). To sift through the Villamedia and LexisNexis archives, a keyword search was performed using the

keywords: “robotjournalistiek”, “kunstmatige intelligentie”, “journalistiek”, “artificial intelligence”, “artificial intelligence journalistiek”, and “kunstmatige intelligentie journalistiek”. Considering the topic of this thesis, the keywords were carefully chosen to ensure that the resulting articles cover *both* AI and journalism, instead of solely AI – which, unsurprisingly, is an extremely popular topic in the news nowadays. The English translation “artificial intelligence” was included to make sure I would not miss articles that did not use the Dutch term. I searched for articles published between September 2020 and March 2024. This period was chosen because 2020 can be seen as one of the first years in which generative AI gained considerable attention in journalism, taking an opinion piece written entirely by generative AI which was published in The Guardian on the 8th of September 2020 as a general incentive (The Guardian, 2020). Furthermore, to be included in the analysis, the metajournalistic discourse had to meet the following conditions:

- 1) It must discuss the application of generative AI in journalism, and/or the future of journalism regarding the application of AI technologies
- 2) It must focus on the use and effects of generative AI by and on journalists

This approach led to a total of N=53 articles published between September 2020 and March 2024 to be concluded in the analysis. [Table 1](#) shows a full overview of the data corpus and where data has been collected.

4.3 Data analysis

To analyse the data, a multi-method approach consisting thematic analysis (TA) and discourse analysis (DA) was adopted. These qualitative methods were employed sequentially; TA was used first as a preparatory stage for further DA. Thematic analysis, as defined by Braun & Clarke (2012, p. 57), “*is a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set.*” By iteratively reading, analysing, and interpreting text, TA allows for the identification of reoccurring themes in larger sets of data. As is the case with this thesis, the conduct of TA usually starts with the coding of the (metajournalistic) data. Through a general familiarisation with the data set, eight initial codes were identified for this thesis ([Table 2](#)). Each code was allocated to several quotes. These quotes were decontextualised from the more elaborate journalistic articles to create manageable units of analysis. Quotes were selected when they contained one or more of the following characteristics:

- 1) Statement or opinion which defines how generative AI is or should be used by newsrooms.
 - a. Example: “*Resport supplier ANP itself, for example, says it sees AI above all as a tool, ‘that editors can use as inspiration when creating headlines, backgrounds, story ideas or sources to approach.’*” [Code: Allocating AI to ‘unimportant’ tasks] (Verhagen, 2023).
- 2) Statement or opinion about how a journalist should handle generative AI, and/or what their relationship should look like.

- a. Example: *“I think you have to see AI as an extension of yourself,” says Brugman. ‘At certain points in the journalistic process, you can save time with those tools. Just like we use Google as a search engine and no longer look everything up in encyclopaedias.’* [Code: Allocating AI to ‘unimportant’ tasks] (de Vries, 2023).
- 3) Statement that explicitly mentions or references paradigmatic journalistic values or professional roles.
 - a. Example: *“Naturally, when using AI tools, journalists must always remain critical and informed, and ensure that their work meets the highest standards of accuracy, objectivity and ethics.”* [Code: the meta-gatekeeper role of the journalist] (Brouwers, 2023).

Following this initial coding, I revisited these eight codes and searched for overarching themes within them, using Braun and Clarke's explanation of this second step in TA's process. According to them, generating themes from initial codes *“involves reviewing the coded data to identify areas of similarity and overlap between codes”* (Braun & Clarke, 2012, p. 63). Eventually, this process led to development of three positions towards generative AI, combining all the eight initial codes, which were then further analysed using DA.

DA is a qualitative research method that approaches discourse as social practices that constitute social identities, norms, and perceptions (Alejandro & Zhao, 2023). In a similar vein, Van Hout & de Smedt (2016) define DA as a useful method to examine what people accomplish with communication, and how social action, beliefs, viewpoints, social identities, and ideologies are expressed through text and language. In their work on discourse analysis and journalistic role performance, they argue that DA can shed light on *“how professional roles are performed in interaction between journalists and in the texts they produce”* (van Hout & de Smedt 2016, p. 221). DA was chosen as a method in this research to shed light on the implicit dimensions of the themes identified with TA, especially regarding the negotiation, demarcation, and performance of traditional journalistic identity, by iteratively and closely reading the quotes from the corpus. The combination of these two research methods allows for a systematic, clear, and rigorous process with TA, while also allowing for a more in-depth analysis into meaning-making and identity construction through DA (Alejandro & Zhao, 2023). The next chapter will elaborate on the three positions identified in the process of analysis, namely: 1) generative AI as a colleague, 2) generative AI as an assistant, and 3) generative AI as an outsider. To illustrate these three positions, several quotes which were selected during TA have been incorporated in the next chapter. For the sake of consistency, these quotes have been translated from Dutch to English using the AI-powered translator DeepL Translate. The original quotes in Dutch can be found in the [appendix](#).

5. Findings

The sections below elaborate on the different positions which were employed by journalists in response to generative AI. While analysing the metajournalistic discourse, it became clear that journalistic responses to generative AI come in three flavours: 1) seeing AI as a colleague, 2) using AI as an assistant, and 3) seeing AI as an outsider. These three positions differ from each other mainly in the degree with which they integrate generative AI in their work process. Ranging from a wholly-adaptive way of handling the technology to a rather radical refusal, these positions show different hierarchical positionings towards generative AI on the workflow. As will be shown, all three positions outlined below rest on customary tactics of boundary work and paradigm repair to repel threats to journalism's legitimacy and counter the possible redundancy of journalists.

5.1 Generative AI as a colleague

Within the first position journalists take towards the use of generative AI in newsrooms, journalists regard AI as a colleague. This position implies equal footing and mutual trust between the journalist and the generative AI. Generative AI is allowed and used to generate full-fledged journalistic productions autonomously and is sometimes even introduced as a reporter or editor in its own right – as is the case with Liao, the AI-driven editor from Innovation Origins (Innovation Origins, 2023). Therefore, generative AI takes on its own, prominent place in the newsroom, together with the responsibility to generate satisfactory journalistic productions. But to reach these satisfactory standards, journalists express the need to control and redirect the work generative AI performs, as well as be transparent about when generative AI is used exactly. These needs are underlined with several paradigmatic norms, values, and professional roles, which will be elaborated on in the following sections.

5.1.1 Transparency 1.0

Transparency is highly-valued within journalism, as it functions both as a system of accountability and as a means to increase legitimacy among citizens (Allen, 2008). Accordingly, transparency is a value that is often mentioned in journalistic debates. This has also become apparent in metajournalistic discourse about generative AI, though transparency regarding generative AI is approached in three different ways. These three ways will be elaborated on throughout the findings section.

First, when journalists let generative AI create journalistic productions autonomously, they often stress the importance of explicitly mentioning when and where generative AI is used. To increase AI-transparency further, newsrooms publish their AI guidelines and let readers review the data which has been used to generate texts or multimedia productions. For example, the Mediahuis AI guidelines have a specific section titled “Transparency above all”, which states that journalists from Mediahuis should: “1) *always state when AI is used to create or modify content*, 2) *publish AI guidelines and be*

transparent about how we use AI, and 3) encourage readers to give feedback and let them review their data” (Mediahuis, 2023).

Traditionally, transparency in journalism entails making public the private factors which substitute for the creation of news (Allen, 2008). In this way, transparency increases the credibility of journalism, as it allows readers to view the process in which news has been created. Considering this rather traditional definition of journalistic transparency, journalists who use AI as a colleague still adhere to this traditional value despite their rather forward-thinking employment of generative AI in the journalistic process. Whereas using generative AI could stain the credibility and legitimacy of journalistic productions due to its notorious characteristics, informing readers on when the technology is used allows journalists to reassert the credibility of their work. Reliability and transparency go hand in hand:

“Resport was born out of curiosity about how AI can be optimally used within journalism, the publisher claims. But even though it is an experimental website, a spokesperson for the publishing house does stress that reliability and transparency are not compromised.” (Verhagen, 2023)

Transparency about using generative AI is used in the traditional sense of reestablishing trust with the reader, and journalists rely on this paradigmatic norm to save face during or after the use of generative AI.

5.1.2 Human-in-the-loop

However, being transparent is not the only tactic which journalists employ to try and reassert the quality and credibility of their AI-generated work among their audience. An important theme in metajournalistic discourse about generative AI is the concept of the ‘human-in-the-loop’, which rests on the premises of a journalist being involved in any stage of the work process which uses generative AI to create journalistic productions. At which point a human should be involved in the process is rather undefined, though most journalists express their necessity in the final stages of production when generative AI is used. Generative AI is allowed to autonomously create journalistic productions, but a human journalist checks these productions before publishing to make sure they live up to journalistic standards.

An article published by Dutch quality newspaper NRC in January 2024 sketches how the human-in-the-loop process works. In this article, the CEO of Channel 1 – a fully AI-powered news channel from the United States – explains their process in which generative AI is almost fully responsible for the creation and distribution of the news. He states that, though no journalists work at Channel 1, a human still checks each AI-generated news item to ensure that there are no mistakes made, and that journalistic standards are met:

“AI still makes many mistakes - called 'hallucinations' - and the question is whether even relatively simple news reporting is therefore so easy to automate.

To overcome those errors, Channel 1 says, every news report is still checked by a human” (Bronzwaer, 2024).

The need to check AI-generated productions is also expressed in the AI guidelines published by Mediahuis, as these state that AI-generated content cannot be published without a person checking either the process or content. Furthermore, the Mediahuis guidelines state that the *“editor-in-chief ensures AI technologies comply with journalistic codes and standards”* (Mediahuis, 2023). A journalist performs final checks so that they can ensure the quality of an AI-generated production but can also make sure that the production lives up to adequate levels of accuracy, immediacy, credibility, and validity. ‘Human-in-the-loop’ summarises how journalists enforce their paradigmatic norms and values through editorial quality control on AI-generated productions.

5.1.3 Journalist as a meta-gatekeeper

There are several media institutions, newsrooms and journalists who adopt a forward-thinking and open approach towards generative AI, as far as that they explore AI’s capabilities in autonomously producing news. In extreme cases, news organisations even design fully-AI generated news platforms, news channels and/or journalists. Some examples of this are the previously mentioned AI-editor Liao, the Channel 1 news channel, but also the AI-driven sports journalism website Resport. Interestingly, journalists still stay somewhat involved in this AI-generated process. And while being involved, journalists keep stressing the importance of several journalistic values when using generative AI:

“The Algemeen Nederlands Persbureau (ANP) does experiment with generative AI, says Freek Staps. ‘But only within journalistic principles,’ stresses the editor-in-chief. A protocol was drawn up early this year in cooperation with the editors, the editorial board and the chiefs. “We call it our “guardrails”. The most important thing for the ANP is that the reporting is always factual, accurate and absolutely reliable. And if possible also a bit fast.” (Schipper, 2023).

“Naturally, when using AI tools, journalists should always remain critical and informed and ensure that their work meets the highest standards of accuracy, objectivity and ethics” (Brouwers, 2023).

Both quotes originated from a journalistic platform or journalist that regards generative AI as a colleague, meaning that these journalists use generative AI to autonomously produce news. In these quotes it also becomes apparent that journalists try to upkeep paradigmatic norms and values through controlling, redirecting, and being transparent about AI-generated content.

As mentioned, journalists traditionally assume the role of ‘the gatekeeper’ to establish ideals of objectivity and public service (Mellado, 2015; Deuze, 2005; Janowitz, 1985; Shoemaker et al., 2009). Since journalists adhere considerable value to the controlling and checking of AI-generated texts, there is a recontextualization of what this

gatekeeper role entails when journalists use generative AI. In this case, journalists' traditional gatekeeper role is recontextualised into a 'meta-gatekeeper' role.

The role of the meta-gatekeeper is mostly concerned with checking the legitimacy and trustworthiness of AI-generated news content. As generative AI's journalistic productions could be in stark contrast with journalism's paradigmatic values such as objectivity, trustworthiness, and accuracy, journalists who use generative AI dedicate most of their time towards controlling, checking, and guarding AI-generated news to ensure that it lives up to journalistic standards. The journalist assumes a 'parenting' role towards AI-generated news content. Instead of selecting, curating, and disseminating news themselves, journalists let the AI undertake these processes. The journalist merely functions to make sure that, what the AI generates, is of importance, reliable, and has a certain journalistic quality. The newly acclaimed meta-gatekeeper role of the journalist ensures that journalistic values which are usually enforced through the gatekeeper role, such as objectivity and reliability, persist, while moulding this traditional role to fit with the adaptation of generative AI in newsrooms.

“And every possible AI expression should explicitly consider that credibility, trust and quality are our greatest assets and should never be shamed.” (Oostra, 2023)

Through the definition of the meta-gatekeeper role, journalists try to normalise generative AI by recontextualising traditional professional roles in such ways so that it fits with new realities. Thereby, journalists engage in second-order paradigm repair (Carlson, 2012; McCaffrey, 2016). When using generative AI as a colleague, the traditional human gatekeeper role becomes increasingly irrelevant, as the AI is now responsible for most of the tasks that traditionally were involved in the gatekeeping role – that is, actively selecting, writing, shaping, and disseminating information so that it can become news. But by fashioning the traditional gatekeeper role into a meta-gatekeeper role, journalists ensure that this professional role does not disappear now that the fabric of news production has changed. Assuming a meta-gatekeeper role allows journalists to fit their profession into this new reality, in which generative AI has become an important and almost independent player in news organisations.

In short, when journalists use generative AI to generate journalistic productions, they legitimate this decision through second-order paradigm repair tactics which emphasise their adherence to traditional norms and values. Generative AI is used, but to ensure quality, credibility, and trustworthiness, journalists control, check, and redirect AI-generated content where necessary to reaffirm that journalistic standards are met, and make sure that readers are informed on how and where the technology was used.

5.2 Generative AI as an assistant

The second position which journalists take regarding generative AI is more moderate and nuanced than the first, as in this category journalists do allow for the use of generative AI for parts of the journalistic process, but do not rely on the technology to create journalistic productions fully. Rather, within this position, generative AI is regarded as an assistant to the human journalist. And in this case, both the choice to use generative AI

as an assistant, as well as the control which is performed on AI-generated content, is affirmed by professional norms and values.

5.2.1 Transparency 2.0

Like with the previous position, journalists also stress the importance of transparency when generative AI is used only partly in the journalistic process. For example, the digital news website NU.nl states in their guidelines that:

“Should the journalist have used artificial intelligence in the creation of the text, for example in generating a summary, NU.nl makes that clear to the reader.”
(Moerman, 2023).

The importance of transparency is motivated through the same principles as when journalists use generative AI to autonomously create news. Once again, journalists use the traditional notion of journalistic transparency to ensure credibility of their work, despite it being partially generated by AI. The focus on transparency also emphasises that journalists strongly adhere to their core values, which paradigmatically serves to protect journalism’s image. The paradigm repair that occurs through relying on transparency does not differ much from the previous position, though substantial categorical difference occurs in the way with which journalists legitimise their use and/or abstinence of generative AI.

5.2.2 The indispensability of the human journalist

In line with academic research on the implementation of generative AI in newsrooms, journalists who regard AI as an assistant in their work process see opportunities in generative AI by means of improving efficiency. News organisations and journalists often express how generative AI is well-suited to perform several tedious tasks, so that journalists have more time to do “the important stuff”. For instance, the NRC illustrates how their journalists use generative AI to write interview transcripts:

“NRC also uses artificial intelligence in its editorial offices. “For example, since this year our journalists have been using a transcription tool to work out their recordings based on Whisper, Open AI’s speech recognition technology,” says deputy editor Melle Garschagen. “This is an application of artificial intelligence that saves our journalists a lot of time and allows them to better focus on where their added value lies: talking to people, digging into topics, figuring things out.””
(Maessen, 2023).

Intertwined in this discourse are notions about what constitutes for important tasks in journalism. These parts often concern tasks that cannot (yet) be performed by an AI, such as adding empathy to a story, “digging deep” when it comes to investigative journalism, or talking to people:

“We want journalists to do what they are good at: making stories, talking to people. Not typing out interviews. As journalists, we are human beings, not robots. Journalists should go out and report on what is going on in society, they

should not waste energy typing out interviews. Everyone should do what she or he is good at: journalists at recording stories, the robot at fleshing them out." (de Quay, 2023).

A large part of journalists who use generative AI as an assistant stress that a generative AI can best be used for repetitive and relatively low value tasks. Meanwhile, the human journalist is positioned as indispensable, since they are equipped with the right knowledge and tools to accurately discover, arrange, and report the news. Through these discourses, journalists reassert their sense of ethics, immediacy, and newsworthiness (Deuze, 2005). Unsurprisingly, these senses all constitute for invaluable norms and values within journalism's paradigm. Journalists engage in paradigm repair to argue for the use of generative AI as an assistant by stressing that generative AI can be useful when it leaves them with more time to do what *they* are good at: finding, curating, and presenting the news with a high sense of journalistic norms and standards.

5.2.3 Human-machine-human

The moderate approach of journalists who regard 'AI as an assistant' also becomes apparent through the journalist's role in the work process. Previously, it was established that journalists rely on the principle of the 'human-in-the-loop' to enforce paradigmatic norms and values despite the use of generative AI. Similar discourses occur when generative AI is used for only parts of news generation, though this relationship might better be described as the 'human-machine-human' relationship.

Like the 'human-in-the-loop', the idea of 'human-machine-human' states that a human should be involved in any part of the work process when using generative AI. However, instead of merely performing final checks, this relationship requires the human to be more involved; the journalist should be responsible for the beginning and final stages of production but is allowed to use generative AI to accelerate or ameliorate parts of the middle stages in news production. For example:

"Every report starts with a human; the journalist comes up with a journalistic question. Fine if after that AI is then deployed to support. But it also always ends with the human again; we never publish without human control. So, we don't see AI as a replacement for journalists, but as a supporter of journalistic tasks or as an assistant." (Schipper, 2023).

Once again, final control is used to enforce and check the presence of paradigmatic journalistic standards in partially AI-generated work. What makes 'AI as an assistant' categorically different from 'AI as colleague' lies in the motivation for *not* using AI to generate news independently. In this category, journalists acknowledge that AI can and should be used to perform several tasks, but also stress that an AI would never be able to perform just as well on important tasks as a journalist would, or even state that journalists possess over important capabilities which the generative AI lacks:

"Joris Gerritsen promises that robot journalism will not replace his editors. He will continue to need them to do what technology cannot: "Going to a fire or interviewing the mayor."" (van den Bos, 2023)

The journalist renders their skills and expertise as indispensable, based on paradigmatic beliefs about what counts for good journalism. By relying on the human journalist's capability to critically, ethically, and comprehensively analyse and report the news to the public, as well as emphasising that the human journalist will have more time on their hands to do so adequately when generative AI is used for tasks that do not require journalistic expertise, journalists reaffirm their expertise and legitimate their decision to use generative AI as an assistant. In short, when journalists use generative AI to mainly assist in tedious or repetitive tasks, paradigm repair occurs through the emphasis on journalists' capacity to deliver substantial work which complies with journalism's core values, as well as with the enforcement of several paradigmatic values through transparency and editorial control.

5.3 Generative AI as an outsider

The final position which journalists take towards generative AI is one of the most radical, as in this position journalists refuse to use generative AI in their work process. The motivation to do so is often underlined with moral panic and motivated from a strict adherence to the journalistic paradigm. Since within this category journalists regard generative AI to be in complete opposition with norms and values that are important in the 'journalism community', generative AI can be described as an outsider to this community. Generative AI is seen as an actor that cannot be trusted to act according to the rules of the group (Becker, 1963). Once again, motivations on why the generative AI should be seen as an outsider are based on paradigmatic norms and values, which will be elaborated on below.

5.3.1 Transparency 3.0

In the third position too, transparency proves to be an important topic in metajournalistic discourse. Whereas the first two positions adopted similar tactics regarding transparency about generative AI usage, journalists who see AI as an outsider use the notion of transparency quite differently.

First, it is important to establish how journalists who adhere to this position envision generative AI. Within this position, generative AI is often framed as risk or danger. Arguments rest on the importance of trustworthiness and reliability, and how these values cannot be ensured when using generative AI. Discourse stresses that traditional values cannot coexist with generative AI, which postulates traditional journalism as direct opposite of generative AI:

"The popularity of AI chatbots is of great concern to publishers. "Because reliability is the most precious asset news media have." (...) At home and abroad, publishers fear that chatbots could jeopardise both the reliability and the revenue model of journalism." (Eijssvoegel, 2023).

As journalists within this position regard generative AI to be in direct contrast with their traditional norms and values, they also do not see any possibility for generative AI producing texts or other productions that are able to live up to the standard of journalistic transparency. Such a view is expressed in the AI guidelines published by Dutch quality newspaper de Volkskrant:

“De Volkskrant also wants to be completely transparent about how information was gathered and the sources behind it. Journalistic work generated by AI systems does not offer this transparency.” (Volkskrant, 2023)

De Volkskrant emphasises their adherence to core values through not using technologies when they are regarded as a threat to these values. Through paradigm repair, de Volkskrant justifies their refusal to use generative AI technologies. Discursively speaking, transparency once again functions as a method to increase trust and gain credibility over the area of work.

5.3.2 Serving the public

Differently from previous positions, journalists commonly call on their paradigmatic value of ‘public service’ to motivate their reluctant attitude towards generative AI. Resting on the narrative of journalism’s function as a ‘fourth estate’, is metajournalistic discourse about how journalists are perfectly equipped to understand and explain enigmatic technologies such as generative AI. Despite it being proven that journalists overall possess limited awareness of generative AI and automation technologies (Jones et al., 2022), the idea that journalists should be the one responsible for explaining how these technologies work is regularly expressed. For instance:

“Results from AI systems are just often impossible to explain, even by the programmers who coded them themselves. For AI researchers, the inability to discern what machines are doing when they process data or teach themselves new skills has become a central concern. In our country, the use of ethnic profiling in algorithms as in the Surcharge affair is a case in point. This is where journalistic guidelines and codes come into play. Before there are actually explainable AI systems, the challenge is to explain and hold accountable the work of algorithmic systems.” (Wernaart et al., 2023).

Furthermore, journalists rely on their analytic and critical thinking skills to bring order into the chaos which is caused by emerging generative AI:

“The future scenarios being sketched right now are very black and white. Some are predicting the total AI apocalypse, while others are predicting a lazy world where we never have to work again. There is a lot of space between those scenarios.’ Goutier sees a role for journalists in critically monitoring those AI developments so that they can be adjusted.” (Buijs, 2023).

The journalist positions themselves as the right person to reflect and report on AI critically, which would allow for a more careful examination of the developments in field of

generative AI, as well as a more considered approach to future visions of technology and AI.

With suggesting the idea that journalism as a profession is needed to sketch critical and accurate representations and visions of AI, journalists press home their professional skills and expertise – arranging information, critical thinking, and accurate reporting and dissemination – while simultaneously establishing their indispensability. Allocating journalists to the task of clarifying generative AI not only lets journalists reestablish themselves as skilled professionals, but also renders their profession necessary in times dominated by AI technologies and automation.

Within this discourse it is also presupposed that society needs journalists to both receive accurate information about unintelligible AI technologies and relieve some of its corresponding ambiguity. These assumptions are what constitutes for the ideal of ‘public service’ which journalists fulfil through not using, but rather explaining, generative AI. Other journalists also see opportunities in this, as journalism would then constitute for the small amount of media that is still credible and dependable, despite the omnipresence of questionable AI-generated content:

“There is an opportunity here for news media, says Nicholas Diakopoulos. ‘If people end up at these kinds of content farms via search engines, they might next time go directly to their newspaper’s site, which does provide good information.’”
(Beukers, 2023).

Hence, through discourses of ‘public service’, journalists establish their own indispensability, reaffirm their expertise and democratic duty, and legitimate their decision to not use generative AI. Journalists who regard generative AI as an outsider posit the technology as a direct opposite to the paradigmatic norms and values of journalist. Therefore, these journalists engage in a rather conservative way of paradigm repair, in which the cultural authority and boundaries of the profession are maintained as much as possible through continuously stressing what constitutes for this paradigm, as well as strictly enforcing it through managerial decisions of not using generative AI.

6. Discussion

6.1 The domestication of generative AI

Based on the analysis of metajournalistic discourse, it has become clear that Dutch journalists engage in boundary work and paradigm repair regarding the advent of generative AI in three distinct ways. The approaches adopted differ mainly in their hierarchical positioning towards generative AI on the workforce, which ranges from equality, to subservience, and ultimately, subordination.

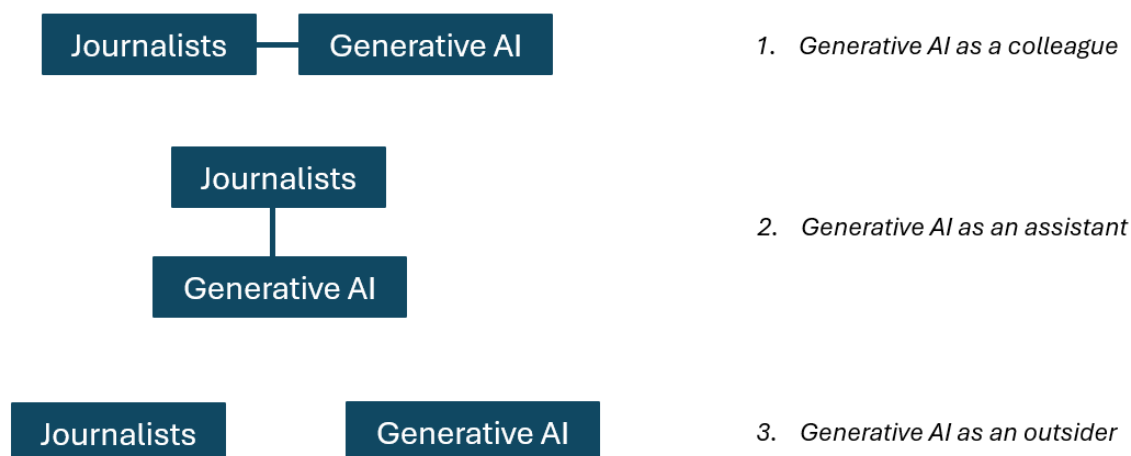


Figure 2: Schematic representation of the hierarchical positionings towards generative AI

First, journalists already see and use generative AI as a colleague, showing an equalitarian relationship with generative AI. These journalists use generative AI to autonomously create news while they stress the need to maintain editorial control to ensure that the AI-generated content meets professional standards. This need for editorial control allows journalists to enforce paradigmatic norms on AI-generated content, positing themselves as meta-gatekeepers. This dynamic results in second-order paradigm repair, where generative AI becomes normalised and traditional professional roles are recontextualised.

Second, Dutch journalists use generative AI as a subservient assistant, meaning that generative AI serves to assist in tedious or repetitive tasks such as transcribing or data analysis. In this case, journalists perform the same editorial control as with the former position. The reason to use generative AI solely as an assistant is motivated through the reaffirmation of journalists' expertise and skills, which ultimately also allows these journalists to establish their indispensability. Paradigm repair occurs both through the reaffirmation of journalists' capacity to adhere to paradigmatic norms, values, and standards, as well as through editorial control.

Third, a conservative group of journalists does not allow for the use of generative AI at all, viewing generative AI as an outsider or subordinate to journalism. Their reluctance is motivated by strict adherence to paradigmatic norms and values. In addition, journalists

within this position stress their responsibility for clarifying generative AI technologies by underscoring their expertise and relying on their paradigmatic ideal of public service. These decisions allows journalists within this position to establish indispensability, legitimacy, and credibility. Thereby, journalists who hold this attitude towards generative AI engage in more traditional forms of paradigm repair where one strictly adheres to cultural and professional boundaries.

Though boundary work and paradigm repair play out differently across these positions, all the abovementioned attitudes demonstrate similar efforts to re-legitimise and secure the role of the journalist now that generative AI has infiltrated newsrooms. Journalists refashion traditional professional roles to avoid their redundancy and/or establish their indispensability by emphasising their capacity to meet paradigmatic norms, values, and standards in journalistic work. Furthermore, paradigm repair is also apparent in journalists' emphasis on transparency regarding the use (or non-use) of generative AI. Overall, journalists metadiscursively resort to paradigmatic notions of what counts for good journalism to assure credibility, reliability, and quality, while adjusting these notions where needed to make them fit with the new reality where generative AI is increasingly important in news production.

In a way, Dutch journalists are domesticating generative AI. Journalists are moulding, training, or even taming generative AI to excel at (or detain from) tasks associated with journalism. This domestication occurs in varying degrees of openness towards the adaptation of generative AI, in which each of the abovementioned positions ensures the technology behaves according to position-specific rules and criteria. The paradigmatic normalisation of generative AI technologies involves taming the disruptive technology so it complements rather than interferes with journalists' roles or ideologies. In conservative cases, generative AI is tamed in such ways that it has no chance of either complementing or interfering with the profession at all.

This thesis has shown how traditional tactics of boundary work, paradigm repair, and normalising are still undefeated when a new practice or technology is threatening the traditional journalistic paradigm. However, as generative AI poses a perhaps more fundamental challenge to journalists and the profession – considering that generative AI has the potential to overtake journalists entirely – the types of paradigm repair and boundary work that occur in generative AI may also be more fundamental and drastic. This fundamentality manifests itself in a radical refusal to not use the technology, but also, and most importantly, in second-order paradigm repair through the recontextualization of professional roles in the case of the meta-gatekeeper.

The results of this thesis show how journalists still habitually use paradigm repair tactics, but also demonstrates how these tactics can be employed in different ways and to varying degrees. Thereby, the analysis of metajournalistic discourse performed in this thesis provides depth and nuance to the established theories of boundary work and paradigm repair. In addition, a closer look at metajournalistic discourse concerning the implementation of generative AI in newsrooms can help shed some of the prevailing ambiguity surrounding the uses, benefits, and dangers of generative AI for journalism.

The analysis of metajournalistic discourse allows for a bottom-up analysis of the future of generative AI in newsrooms – how journalists envision that generative AI is or should be used will most likely also be the way in which it ultimately will be used.

6.2 Limitations and future research

Whereas this thesis provides valuable insights into paradigm repair and boundary work, as well as the current uses and imaginaries of generative AI in newsrooms, it does not come without limitations. The corpus, while extensive, was generalised across different types of news organizations. Traditional newspapers, digital-first outlets, broadcast media, and policy documents were all tarred with the same brush. Furthermore, this thesis also did not make a distinction between different types of journalism – such as investigative journalism, editorial decision-making, or standard reporting. Thus, the data corpus of this thesis was generalised across both disciplines and types of news organisations.

Considering that different types of journalisms and news organisations can have different beliefs, goals, and norms, a distinction between these different instances could give more detailed or nuanced insights into tactics of paradigm repair. Therefore, my recommendation for further research would be a comparative analysis across disciplines or organisations to see how individual branches of the industry may or may not differ from each other in their methods of boundary work and paradigm repair. Other additional research could illuminate how these different tactics of paradigm repair unfold in practice, and how the use of generative AI with its corresponding paradigm repair tactics affects the legitimacy and credibility of the news.

7. Conclusion

In recent years, generative AI technologies have infiltrated daily and professional lives, which has led to a drastic reshaping of various fields, including journalism. As these technologies have the capacity to generate texts and multimedia productions, they have introduced significant changes in journalistic practices and raised various questions about the future of the profession. The possibility of generative AI technologies replacing the human journalist, combined with the fundamental contrast between generative AI's characteristics and traditional, highly-valued norms within journalism, poses a threat to the legitimacy and sustainability of the profession. Journalism has faced existential challenges before, especially since the rise of digital media and internet technologies. Throughout history, journalists have responded to these threats and changes by metadiscursively re-legitimising their profession through boundary work and paradigm repair tactics. This thesis intended to investigate whether journalists nowadays also engage in these routines, and in which ways they do so.

Through a thematic and discursive analysis of metajournalistic discourse, this thesis has shown that journalists are responding to the advent of generative AI by domesticating these technologies to varying degrees. These degrees of domestication reflect different hierarchical positionings towards generative AI in the newsroom. At one end of the spectrum, journalists engage in second-order paradigm repair by refashioning the traditional gatekeeper role into the 'meta-gatekeeper', which ultimately demonstrates an equalitarian relationship with generative AI. Other journalists who take a more moderate stance regard the AI as a subservient assistant and enforce paradigmatic norms and values through editorial control and the establishment of the human journalist's indispensability. At the other end of the spectrum, journalists completely refuse to use generative AI, hierarchically regarding it as a subordinate outsider, motivated by a strict adherence to paradigmatic norms and values.

Dutch journalists, regardless of their attitude towards generative AI, are effectively taming these technologies to align with their position-specific rules, values, and norms. Whether through supervision, integration, or outright rejection, journalists are actively engaging in boundary work and paradigm repair to navigate the challenges posed by generative AI. Ultimately, these domesticating practices allow journalists to establish their expertise, evade redundancy, and re-legitimise the profession in the face of technological advancement, whether their news is AI-generated or not.

References

- Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. The University of Chicago Press.
- Alejandro, A., & Zhao, L. (2023). Multi-Method Qualitative Text and Discourse Analysis: A Methodological Framework. *Qualitative Inquiry*, 0(0).
<https://doi.org/10.1177/10778004231184421>
- Allen, D. S. (2008). The trouble with transparency: The challenge of doing journalism ethics in a surveillance society. *Journalism studies*, 9(3), 323-340.
<https://doi.org/10.1080/14616700801997224>
- Ananny, M. (2024). Making Generative Artificial Intelligence a Public Problem. Seeing Publics and Sociotechnical Problem-Making in Three Scenes of AI Failure. *Javnost - The Public*, 31(1), 89–105.
<https://doi.org/10.1080/13183222.2024.2319000>
- Becker, H. S. (1963). *Outsiders: Studies in the sociology of deviance*. Free Press Glencoe.
- Bennett, W. L., Gressett, L. A., & Haltom, W. (1985). Repairing the news: A case study of the news paradigm. *Journal of Communication*, 35(2), 50-68. <https://doi.org/10.1111/j.1460-2466.1985.tb02233.x>
- Beukers, G. (2023, May 10). AI in de journalistiek: de strijd om de waarheid verhevig. *De Volkskrant*. <https://www.volkskrant.nl/kijkverder/v/2023/ai-in-de-journalistiek-de-strijd-om-de-waarheid-verhevig~v717025/>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in*

psychology, Vol. 2. *Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>

Bronzwaer, S. (2024, January 10). Bij Channel 1 presenteert de avatar straks jouw op maat gemaakte journaal. *NRC Handelsblad*.

<https://www.nrc.nl/nieuws/2024/01/10/de-avatar-presenteert-het-nieuws-a4186604>

Broussard, M. (2019). *Artificial unintelligence: How Computers Misunderstand the World*. MIT Press.

Brouwers, B. (2023, April 30). Waarom journalisten die – met de beste bedoelingen – het gebruik van AI afwijzen het toch mis hebben. *Innovation Origins*.

<https://innovationorigins.com/nl/waarom-journalisten-die-met-de-beste-bedoelingen-het-gebruik-van-ai-afwijzen-het-toch-mis-hebben/>

Bruns, A. (2017). *Gatewatching and News Curation: Journalism, Social Media, and the Public Sphere*. Peter Lang.

Buijs, M. (2023, July 25). Me & AI: Nele Goutier vindt het belangrijk dat journalisten de ontwikkelingen volgen en snappen. *Villamedia*.

<https://www.villamedia.nl/artikel/me-ai-nele-goutier-vindt-het-belangrijk-dat-journalisten-de-ontwikkelingen-volgen-en-snappen>

Carlson, M. (2012). ‘Where once stood titans’: Second-order paradigm repair and the vanishing US newspaper. *Journalism*, 13(3), 267-283.

<https://doi.org/10.1177/1464884911421574>

- Carlson, M. (2015a). The Robotic Reporter: Automated journalism and the redefinition of labor, compositional forms, and journalistic authority. *Digital Journalism*, 3(3), 416–431. <https://doi.org/10.1080/21670811.2014.976412>
- Carlson, M. (2015b). Metajournalistic Discourse and the Meanings of Journalism: definitional control, boundary work, and legitimation. *Communication Theory*, 26(4), 349–368. <https://doi.org/10.1111/comt.12088>
- de Quay, R. (2023, February 21). ‘We willen het werk van journalisten beter én makkelijker maken’, zegt de CEO van Good Tape. *Villamedia*.
<https://www.villamedia.nl/artikel/goodtape-interview-ceo-transcriptie-tav-klitgaard>
- De Volkskrant. (2023). AI, kunstmatige intelligentie. *De Volkskrant: protocol*.
<https://www.volkskrant.nl/kijkverder/2023/vk-protocol~v701017/#ai-kunstmatige-intelligentie>
- Deuze, M. (2005). What is journalism? Professional identity and ideology of journalists reconsidered. *Journalism*, 6(4), 442–464.
<https://doi.org/10.1177/1464884905056815>
- Deuze, M., & Beckett, C. (2022). Imagination, Algorithms and News: Developing AI literacy for Journalism. *Digital Journalism*, 10(10), 1913–1918.
<https://doi.org/10.1080/21670811.2022.2119152>
- Diakopoulos, N., Cools, H., Li, C., Heilberger, N., Kung, E. & Rinehart, A. (2024). *Generative AI in Journalism: The Evolution of Newswork and Ethics in a Generative Information Ecosystem*. The Associated Press. DOI: 10.13140/RG.2.2.31540.05765

Dodds Rojas, T. (2021). Algorithmic-based technologies' impact on journalistic identity.

Leiden Anthropology Blog.

<https://www.leidenanthropologyblog.nl/articles/algorithmic-based-technologies-impact-on-journalistic-identities>

Eijsvoogel, J. (2023, March 24). Nieuwsmedia waarschuwen: ChatGPT kan verdienmodel journalistiek ondermijnen. *NRC Handelsblad.*

<https://www.nrc.nl/nieuws/2023/03/24/nieuwsmedia-waarschuwen-chatgpt-kan-verdienmodel-journalistiek-ondermijnen-a4160372>

Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2023). Gpts are gpts: An early look at the labor market impact potential of large language models. *arXiv.*

<https://doi.org/10.48550/arXiv.2303.10130>

Ewing, R. (2024). Stealing the newspaper: How the web changed everything for news.

In *Milestones in Digital Journalism* (pp. 11-29). Routledge.

Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science:

Strains and interests in professional ideologies of scientists. *American sociological review*, 48(6): 781-795.

Hendrickx, J., & Picone, I. (2020). Innovation Beyond the Buzzwords: The Rocky Road

Towards a Digital First-based Newsroom. *Journalism Studies*, 21(14), 2025-2041. <https://doi.org/10.1080/1461670x.2020.1809494>

Innovation Origins. (2023, January 30). Laio introduceert Laio: 'Ik ben de AI-Powered

News Editor voor Innovation Origins'. *Innovation Origins.*

<https://innovationorigins.com/nl/laio/laio-introduceert-laio-ik-ben-de-ai-powered-news-editor-voor-innovation-origins/>

- Janowitz, M. (1975). Professional Models in Journalism: The Gatekeeper and the Advocate. *Journalism Quarterly*, 52(4), 618-626. <https://doi.org/10.1177/107769907505200402>
- Jones, B., Jones, R., & Luger, E. (2022). AI ‘Everywhere and Nowhere’: Addressing the AI Intelligibility Problem in Public Service Journalism. *Digital Journalism*, 10(10), 1731–1755. <https://doi.org/10.1080/21670811.2022.2145328>
- Karimi, M., Jannach, D., & Jugovac, M. (2018). News recommender systems – Survey and roads ahead. *Information Processing & Management*, 54(6), 1203–1227. <https://doi.org/10.1016/j.ipm.2018.04.008>
- Kivits, N. (2024, January 13). De Geïllustreerde Kunstmatige Intelligentie brengt nieuws, maar doet dat zonder redactie. *Villamedia*. <https://www.villamedia.nl/artikel/nieuwssite-dgki-brengt-nieuws-maar-doet-dat-zonder-redactie>
- Krzyżanowski, M. (2014). Values, imaginaries and templates of journalistic practice: a Critical Discourse Analysis. *Social Semiotics*, 24(3), 345–365. <https://doi.org/10.1080/10350330.2014.930607>
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. University of Chicago Press: Chicago.
- Lasorsa, D. L., Lewis, S. C., & Holton, A. E. (2012). NORMALIZING TWITTER: Journalism practice in an emerging communication space. *Journalism Studies*, 13(1), 19–36. <https://doi.org/10.1080/1461670X.2011.571825>
- Maessen, L. (2023, September 4). Wat zijn de risico’s van AI? En wat kun je ermee? NRC praat je bij over kunstmatige intelligentie. *NRC Handelsblad*.

<https://www.nrc.nl/index/slim-leven/wat-is-kunstmatige-intelligentie-en-wat-kun-je-ermee-a4171668>

McCaffrey, R. (2016). Journalists Taking the Offensive: Paradigm Repair and the Daily Ethics Scandal. *Southwestern Mass Communication Journal*, 31(2).

<https://doi.org/10.58997/smc.v31i2.20>

Mediahuis. (2023). Mediahuis AI guidelines.

<https://www.independent.ie/editorial/editorial/aiframeworkguide140623.pdf>

Mellado, C. (2015). Professional Roles in News Content: Six dimensions of journalistic role performance. *Journalism Studies*, 16(4), 596–614.

<https://doi.org/10.1080/1461670X.2014.922276>

Moerman, T. (2023, August 24). Zo gaat NU.nl om met kunstmatige intelligentie. *NU.nl*.

<https://www.nu.nl/over-nu/6277878/zo-gaat-nunl-om-met-kunstmatige-intelligentie.html?referrer=https%3A%2F%2Fwww.google.com%2F>

Opdahl, A. L., Tessem, B., Dang-Nguyen, D., Motta, E., Setty, V., Throndsen, E., Tverberg, A., & Trattner, C. (2023). Trustworthy journalism through AI. *Data & Knowledge Engineering*, 146, 102182. <https://doi.org/10.1016/j.datak.2023.102182>

Patzer, A. (2023a, October 5). Not all algorithms are AI (Part 1): How the revolution started. *Forbes*.

<https://www.forbes.com/sites/forbestechcouncil/2023/08/30/not-all-algorithms-are-ai-part-1-how-the-revolution-started/?sh=192548f70241>

Patzer, A. (2023b, October 6). Not all algorithms are AI (Part 2): The rise of Real AI.

Forbes. <https://www.forbes.com/sites/forbestechcouncil/2023/10/04/not-all-algorithms-are-ai-part-2-the-rise-of-real-ai/?sh=506f27369c02>

- Ruggiero, T. E. (2004). Paradigm Repair and Changing Journalistic Perceptions of the Internet as an Objective News Source. *Convergence*, 10(4), 92-106.
<https://doi.org/10.1177/135485650401000408>
- Schipper, N. (2023, August 19). Robotjournalistiek: hoe kranten experimenteren met ChatGPT. *Trouw*. <https://www.trouw.nl/cultuur-media/robotjournalistiek-hoe-kranten-experimenteren-met-chatgpt~bb3474c1/?referrer=https://www.google.com/>
- Shoemaker, P. J., Vos, T. P., & Reese, S. D. (2009). Journalists as gatekeepers. In *The handbook of journalism studies* (pp. 93-107). Routledge.
- Simon, F. M. (2024). Artificial Intelligence in the News: How AI Retools, Rationalizes, and Reshapes Journalism and the Public Arena. *University of Columbia*.
<https://doi.org/10.7916/ncm5-3v06>
- Singer, J. B. (1997). Still Guarding the Gate?: The Newspaper Journalist's Role in an On-line World. *Convergence*, 3(1), 72-89.
<https://doi.org/10.1177/135485659700300106>
- Singer, J. B. (2005). The political j-blogger: 'Normalizing' a new media form to fit old norms and practices. *Journalism*, 6(2), 173-198.
<https://doi.org/10.1177/1464884905051009>
- Stray, J. (2019). Making Artificial Intelligence Work for Investigative Journalism. *Digital Journalism*, 7(8), 1076-1097. <https://doi.org/10.1080/21670811.2019.1630289>
- Tandoc, E. C. (2014). Journalism is twerking? How web analytics is changing the process of gatekeeping. *New Media & Society*, 16(4), 559-575.
<https://doi.org/10.1177/1461444814530541>

The Guardian & GPT-3. (2020, September 8). A robot wrote this entire article. Are you scared yet, human? *The Guardian*.

<https://www.theguardian.com/commentisfree/2020/sep/08/robot-wrote-this-article-gpt-3>

Thomas, R. J., & Finneman, T. (2014). Who watches the watchdogs? British newspaper metadiscourse on the Leveson Inquiry. *Journalism Studies*, 15(2), 172–186.

<https://doi.org/10.1080/1461670X.2013.806068>

Tong, J. (2018). Journalistic Legitimacy Revisited: Collapse or revival in the digital age? *Digital Journalism*, 6(2), 256–273.

<https://doi.org/10.1080/21670811.2017.1360785>

van den Bos, M. (2023, November 30). De robotjournalist moet geen bullshitgenerator worden. *NRC Handelsblad*. [https://www.nrc.nl/nieuws/2023/11/29/de-](https://www.nrc.nl/nieuws/2023/11/29/de-robotjournalist-moet-geen-bullshitgenerator-worden-a4182726)

[robotjournalist-moet-geen-bullshitgenerator-worden-a4182726](https://www.nrc.nl/nieuws/2023/11/29/de-robotjournalist-moet-geen-bullshitgenerator-worden-a4182726)

Van Hout, T., & Burger, P. (2017). Mediatization and the language of journalism. In O. García, N. Flores, & M. Spotti (Eds.), *Oxford Handbook of Language and Society* (pp. 489-504). Oxford: Oxford University Press.

Van Hout, T., & De Smedt, E. (2016). News discourse analysis and role performance. In C. Mellado, L. Hellmueller, & W. Donsbach (Eds.), *Journalistic Role Performance. Concepts, Models, and Measures* (pp. 221-234). London: Routledge.

<https://doi.org/10.4324/9781315768854>

Van Hout, T., Pounds, G., & Vertommen, B. (2012). Analyzing the view from here, there and nowhere: Discursive approaches to journalistic stance. *Discourse, Context & Media*, 1(2-3), 55-56. <https://doi.org/10.1016/J.DCM.2012.10.003>

Verhagen, L. (2023, August 15). Mediahuis lanceert sportsite waarbij AI de koppen en berichten voor sociale media verzint, en dat is pas het begin. *De Volkskrant*.

<https://www.volkskrant.nl/nieuws-achtergrond/mediahuis-lanceert-sportsite-waarbij-ai-de-koppen-en-berichten-voor-sociale-media-verzint-en-dat-is-pas-het-begin~be9f6e29/>

Wernaart, B., Arets, D., de Cooker, J. (2023, April 19). AI hoort in de journalistieke

beroepscode. *NRC Handelsblad*. <https://www.nrc.nl/nieuws/2023/04/19/ai-hoort-in-de-journalistieke-beroepscode-a4162537>

Appendix A

Table 1. List of publications and the number of articles analysed

Source	Type	Retrieved from	# of articles
Villamedia	Digital first journal	Villamedia.nl	23
Volkskrant	Quality newspaper	LexisNexis	3
Innovation Origins	Digital native	Google	2
De Limburger	Regional newspaper	LexisNexis	1
VPRO	Broadcaster	Google	2
Journalistiek-en-AI	Digital native	Google	1
Het Parool	Quality/Regional newspaper	LexisNexis	1
Trouw	Quality newspaper	LexisNexis	1
NRC	Quality newspaper	LexisNexis	8
Telegraaf	Traditional newspaper	LexisNexis	4
Financieel Dagblad	Traditional newspaper	LexisNexis	1
De Gelderlander	Regional newspaper	LexisNexis	1
NU.nl	Digital native	LexisNexis	1
Leeuwarder Courant	Regional newspaper	LexisNexis	1
ANP	Policy document	Google	1
Volkskrant	Policy document	Google	1
Mediahuis	Policy document	Google	1

Appendix B

Table 2. Eight codes with illustrative data extracts

Code	Meaning	Quote
Human-in-the-loop	Stresses the importance of human involvement in a production process that uses AI to ensure quality of information.	Sleutelwoord is mens-machine-mens. Denken en beslissen begint én eindigt bij de mens. Waar AI wordt ingezet, moet de mens altijd de laatste controle doen. (Leeuwarder Courant, 2023)
The meta-gatekeeper role of the journalist	Journalists explain that it is their duty to ensure that journalistic work which is (partially) generated by AI is fact-checked and trustworthy.	Vanzelfsprekend moeten journalisten bij het gebruik van AI-tools altijd kritisch en geïnformeerd blijven en ervoor zorgen dat hun werk voldoet aan de hoogste normen van nauwkeurigheid, objectiviteit en ethiek. (Brouwers, 2023) Op dit moment worden alle belangrijke artikelen nog geschreven door mensen. En dat zal ook nog lang zo blijven. Journalistiek is meer dan het maken van zinnen en schrijven van woorden. Een journalist onderzoekt, kijkt, praat met bronnen en zoekt betrouwbare getuigen. Zaken die, juist nu, belangrijker zijn dan ooit. (Gerritsen, 2023)
Journalists' indispensability	Conveys the idea that AI cannot replace the journalist since it does not possess over the qualities, standards and norms that makes up for a good journalist.	De populariteit van AI-chatbots baart uitgevers grote zorgen. „Want betrouwbaarheid van de nieuwsvoorziening is het kostbaarste bezit dat media hebben.“ (...) In binnen- en buitenland vrezen uitgevers dat de chatbots zowel de betrouwbaarheid als het verdienmodel van de journalistiek in gevaar kunnen brengen. (Eijsvoogel, 2023)
AI as the end of journalism (as we know it)	Discusses the loss of journalistic values and jobs in journalism as AI and automation penetrates the industry.	

Responsibility for clarifying AI	Journalists stress their belief that they are well-equipped to explain AI to the public and are therefore responsible to do so.	De maatschappij heeft meer dan ooit grote behoefte aan mensen die in staat zijn orde aan te brengen in de gigantische chaos waarin we ons bevinden - journalisten dus (Brouwers, 2023).
The importance of transparency	Highlights the importance of being transparent when AI is used in the journalistic process to generate news, headlines, images, or other audiovisual material.	Transparency above all. Always state when AI is used to create or modify content. Publish AI guidelines and be transparent about how we use AI. Encourage readers to give feedback and let them review their data. (Mediahuis, 2023)
Opportunities and hopes for journalism	Expresses different possibilities for journalism regarding AI - both for incorporating AI in the work process and adhering to traditional journalistic work.	Hier ligt een kans voor nieuwsmedia, zegt Nicholas Diakopoulos. 'Als mensen via zoekmachines bij dit soort content farms terechtkomen, gaan ze de volgende keer misschien direct naar de site van hun krant, die wel goede informatie levert.' (Beukers, 2023)
Allocating AI to 'unimportant' tasks	Expresses the sentiment that AI can be used to perform tedious and repetitive tasks, which leaves journalists with more time to perform 'important' work.	Het werk wordt ingewikkelder - en interessanter, denkt hij. 'Journalisten kunnen zich meer met onderzoekswerk bezighouden, met het brengen van onthullingen. Dat kan AI niet.' Journalisten kunnen hun vrijgekomen tijd ook gebruiken om mensen te spreken. 'Daartoe is AI ook niet in staat.' (Beukers, 2023)

Appendix C

Original quotes which were used for illustrative purposes in the analysis:

“Transparency above all. Always state when AI is used to create or modify content. Publish AI guidelines and be transparent about how we use AI. Encourage readers to give feedback and let them review their data” (Mediahuis, 2023).

“Resport is ontstaan uit nieuwsgierigheid naar hoe AI optimaal kan worden ingezet binnen de journalistiek, stelt de uitgever. Maar ook al is het een experimentele website, een woordvoerder van het uitgeefhuis benadrukt wel dat betrouwbaarheid en transparantie niet in het gedrang komen” (Verhagen, 2023).

“AI maakt nog veel fouten - 'hallucinaties' genoemd - en de vraag is of zelfs relatief eenvoudige berichtgeving daarom wel zo makkelijk te automatiseren is. Om die fouten te ondervangen, zegt Channel 1, wordt elk nieuwsbericht nog door een mens nagekeken. De vraag is in hoeverre die strategie houdbaar is als elke kijker een gepersonaliseerde nieuwsuitzending voorgeschoteld krijgt” (Bronzwaer, 2024).

“Human in the loop. Don’t publish AI-made content without a person checking the content or process. The editor-in-chief ensures AI technologies comply with journalistic codes and standards. Designate a key contact for AI-related questions and monitoring in the newsroom” (Mediahuis, 2023).

“Bij het Algemeen Nederlands Persbureau (ANP) wordt wel geëxperimenteerd met generatieve AI, zegt Freek Staps. “Maar alleen binnen de journalistieke uitgangspunten”, benadrukt de hoofdredacteur. Begin dit jaar is een protocol opgesteld in samenwerking met de redactie, de redactieraad en de chefs. “We noemen het onze ‘vangrails’. Het belangrijkste voor het ANP is altijd dat de berichtgeving feitelijk, accuraat en absoluut betrouwbaar is. En als het even kan ook nog een beetje snel.”” (Schipper, 2023)

“Vanzelfsprekend moeten journalisten bij het gebruik van AI-tools altijd kritisch en geïnformeerd blijven en ervoor zorgen dat hun werk voldoet aan de hoogste normen van nauwkeurigheid, objectiviteit en ethiek” (Brouwers, 2023).

“En bij elke mogelijke AI-uiting moet expliciet overwogen worden dat geloofwaardigheid, vertrouwen en kwaliteit ons grootste goed zijn en nimmer beschaamd mogen worden.” (Oostra, 2023)

“Mocht de journalist bij het tot stand komen van de tekst van kunstmatige intelligentie hebben gebruikgemaakt, bijvoorbeeld bij het genereren van een samenvatting, dan maakt NU.nl dat duidelijk aan de lezer” (Moerman, 2023).

“NRC maakt op de redactie ook gebruik van kunstmatige intelligentie. „Zo gebruiken onze journalisten sinds dit jaar een transcriptietool om hun opnames uit te werken gebaseerd op Whisper, de spraakherkenningstechnologie van Open AI”, zegt adjunct-hoofdredacteur Melle Garschagen. „Dit is een toepassing van kunstmatige intelligentie die onze journalisten veel tijd scheelt en waardoor ze zich beter kunnen richten op waar

hun meerwaarde ligt: mensen spreken, onderwerpen uitdiepen, zaken uitzoeken.”” (Maessen, 2023).

““We willen dat journalisten doen waar ze goed in zijn: verhalen maken, mensen spreken. Niet interviews uittypen. We zijn als journalisten mensen, geen robots. Journalisten moeten op pad en verslag doen van wat er leeft in de samenleving, ze moeten geen energie verspillen aan het uitwerken van interviews. Iedereen moet doen waar zij of hij goed in is: journalisten in het optekenen van verhalen, de robot aan het uitwerken daarvan.”” (de Quay, 2023)

“Elk bericht begint met een mens; de journalist bedenkt een journalistieke vraag. Prima als daarna dan AI wordt ingezet om te ondersteunen. Maar het eindigt ook altijd weer met de mens, we publiceren nooit zonder menselijke controle. We zien AI dus niet als een vervanger van journalisten, maar als ondersteuner van journalistieke taken of als assistent.” (Schipper, 2023).

“Joris Gerritsen belooft dat robotjournalistiek zijn redacteurs niet gaat vervangen. Die blijft hij nodig hebben om te doen wat technologie niet kan: „Naar een brand, of de burgemeester interviewen.”” (van den Bos, 2023).

“De populariteit van AI-chatbots baart uitgevers grote zorgen. „Want betrouwbaarheid van de nieuwsvoorziening is het kostbaarste bezit dat media hebben.” (...) In binnen- en buitenland vrezen uitgevers dat de chatbots zowel de betrouwbaarheid als het verdienmodel van de journalistiek in gevaar kunnen brengen.” (Eijsvoogel, 2023).

“De Volkskrant wil bovendien volstrekt transparant zijn over hoe informatie is vergaard en welke bronnen daaraan ten grondslag liggen. Journalistiek werk dat gegenereerd is door AI-systemen, biedt deze transparantie niet.” (Volkskrant, 2023).

“Resultaten van AI-systemen zijn alleen vaak niet uit te leggen, ook niet door de programmeurs die ze zelf hebben gecodeerd. Voor AI-onderzoekers is het onvermogen om te onderscheiden wat machines doen als ze data verwerken of zichzelf nieuwe vaardigheden aanleren een centraal punt van zorg geworden. In ons land is de inzet van etnische profilering in algoritmes zoals in de Toeslagenaffaire daar een voorbeeld van. Hier komen de journalistieke richtlijnen en codes om de hoek kijken. Voordat er daadwerkelijk verklaarbare AI systemen zijn, is het een uitdaging om het werk van algoritmische systemen te verklaren en verantwoordelijk te houden.” (Wernaart et al., 2023).

““De toekomstscenario’s die nu geschetst worden zijn heel zwart-wit. De een voorspelt de totale AI-apocalyps, de ander een luilekkerland waarin we nooit meer hoeven te werken. Tussen die scenario’s zit veel ruimte.’ Goutier ziet voor journalisten een rol weggelegd in het kritisch volgen van die AI-ontwikkelingen, zodat ze bijgestuurd kunnen worden.” (Buijs, 2023).

“Hier ligt een kans voor nieuwsmedia, zegt Nicholas Diakopoulos. 'Als mensen via zoekmachines bij dit soort content farms terechtkomen, gaan ze de volgende keer

misschien direct naar de site van hun krant, die wel goede informatie levert.” (Beukers, 2023).