Designing the future newsroom: Using human-centred design for audience-oriented innovation in four leading legacy newspapers. Implications for journalism.

Eirini Evangelia Psychari, BA, MSc

Thesis submitted for the award of PhD

School of Communications

Dublin City University

Supervisor:

Dr John O’Sullivan

January 2025

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of PhD is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed: Eirini Evangelia Psychari ID No.:17212239

Date: 16/01/25

FIGURES

TABLES

ABBREVIATIONS

DT: Design thinking

HCD: Human-centred design

UCD: User-centred design

SEO: Search engine optimisation

UI: User-interface

URL: Uniform resource locator

UX: User experience

ACKNOWLEDGEMENTS

Pursuing a PhD has been a transformative journey—one of introspection, intellectual discovery, self-doubt, but also determination and resilience. This long and gruelling process of productive and unproductive days and nights was characterised by individual, and for the most part, solitary work. I would not have reached the end of the road without the unwavering support and invaluable guidance of my supervisor, John O'Sullivan. John, a 'thank you' is not enough. Your constructive feedback pushed me to do better; the freedom you gave made me more creative; and your encouragement kept me motivated. I am grateful.

A special thanks goes out to my DCU colleagues and everyone else who has contributed in different capacities along the way. Kevin Doyle, for the advice on early PhD life and teaching. Colleen Murrell, for the input at the transfer stage. Anastasia Deligkiaouri, for lending an ear at your office in-between teaching sessions, and for sharing your famous recipe with kasseri-slash-cheddar (but no cheese!). Elena Lopez Cuenca, for the encouragement and positive outlook you provided during our chats. A thank you to SoC Chair of PhD Studies, Jim Rogers, and Alessio Cornia. Outside DCU, a special mention to Joe Breen for the help and that intellectually stimulating phone call. Also, to all those who offered feedback at the YECREA and NeFCA PhD workshop at Utrecht. Moreover, I want to express my deepest gratitude to my interviewees from *The New York Times*, *The Washington Post*, *The Guardian*, and *The Irish Times*. Your contribution is what made this research possible.

Last but not least, many thanks to my family. My parents, Maria and Vassilis, for the continuous love and support. My daughter, Karolina—I owe you an apology for having to deal with 'mummy writing her book' when your life had already turned upside down because of the pandemic. Navigating through this challenging time was not easy, but you did amazingly well. Finally, a thank you to my husband, Dimitris, for having my back and for not complaining too much when I brought my laptop to bed during those eureka moments.

This research is dedicated to the loving memory of my grandmother, Katina Koufaki (1926-2020), and my uncle, Stavros Psycharis (1945-2022).

Dunshaughlin, April 2024

FUNDING

This research has received funding from the School of Communications, Dublin City University, and The Irish Research Council (GOIPG/2020/428).


audience
research
news
design
journalism
organisation
data
product
stories
newsroom
readers
engagement
understand
user
qualitative
editors
thinking
business
content
editorial
teams
analytics
project
centred
projects
problem
needs
tools
digital
process
designers
change
information
users
media
engineers
write
value
page
culture
experience
newspaper
talking
create
metrics
skills
approach
innovation
strategy
trust

ABSTRACT

Designing the future newsroom: Using human-centred design for audience-oriented innovation in four leading legacy newspapers. Implications for journalism.

Eirini Evangelia Psychari

In recent years, design has become an increasingly important function in news organisations seeking to support their digital-first strategies and business models, gain a deeper understanding of what their audiences want, and what drives engagement and conversion. While the use of audience metrics is well-documented and studied in journalism research, news organisations' design efforts—not only in the context of the appearance and functionality of products but as a set of processes and mindset directed at fostering a culture of audience-centred innovation—remain relatively under-explored.

By operationalising Pierre Bourdieu's field theory, this research explores how *The New York Times*, *The Washington Post*, *The Guardian*, and *The Irish Times* have incorporated human-centred design in their products, services, and audience research and the implications for journalism. It also explores how this audience-oriented culture affects journalistic professional boundaries and how journalists perceive the changing structural dynamics in the newsroom.

Following a multiple case study design, with in-depth expert interviews as the primary data collection method, this research does not aim to extract broad inferences but to analyse the processes and effects of the same phenomenon across different newspapers and countries. Field theory allows for a study of journalism that focuses both on its broader institutional conditions and the importance of relationships between its agents and new entrants.

This research shows that while design practices facilitate the development of several cross-functional projects, ranging from UX and UI applications to audience research and innovation efforts related to audience engagement and trust, they are sometimes obstructed by outside pressures and organisational limitations and are met with resistance in the newsroom. At the same time, while journalists recognise the audience-centric culture, it is viewed as a challenge to long-standing norms and the prevailing journalistic doxa, confirming Bourdieu's view of journalism as a site of struggle and competing logics.

Chapter 1. Introduction

I will begin this thesis with a short anecdote from back when, as a young and enthusiastic journalist working for print, I was asked by my editor to cut my Sunday paper article by half to make space for a last-minute—and very unexpected—advertisement. The article was written, interviews were in place, all edited and proofread. It was a good story—or so I thought—so I felt compelled to express my frustration and utter disappointment at the request. In my mind, it was "just an ad." Although I cannot recall the exact words I muttered, I remember my editor taking his eyes off his computer screen and only half-jokingly saying: "Ok, but do you want us to get paid?" I chuckled because I was yet to see what was coming. The years that followed were bleak. Fewer and fewer ads, recession-fuelled layoffs, and a steep decline in readership led to an unprecedented precarity in the industry. Looking at how other legacy newspapers, and especially the global leaders, responded to the crisis, resulted in some experimentation with product bundles and other innovative features in our newspaper—and in me, eventually realising that journalism is a cause but one in need of revenue.

Investments, however financially painful, could only partially address the problem. Not only was the audience getting accustomed to the "culture of the free" (Goyanes, Demeter, and de Grado, 2022), but the increasingly polarised political landscape exacerbated its disenchantment with established media. Trust levels reached an all-time low, and while we had more tools than ever at our disposal to make sense of what motivated readers to "click" on a story, the insights could not be translated into actionable measures to reverse the downward trend. This unorthodox way to introduce my research is the motivation behind it. Experiencing first-hand the profound changes news organisations, and especially legacy newspapers, have undergone during the last two decades alongside a difficulty to transition and adjust to a digital-first environment, is what inspired this project. It is hoped that it will make a contribution both in scholarship and the news profession.

1.1 The research in context

Profound changes in the media ecosystem have transformed how journalism is both perceived and practised, how news is created and distributed and how decisions on business models are taken. Technology and the widespread adoption of social media have not only led to porous professional boundaries within a converged media environment but have also reshaped the relationship between journalism and its audiences (Gulyás, 2016). Such developments suggest that the challenges the profession faces cannot be reduced to technological change (Witschge, Anderson, and Domingo, 2016, p. 2). Instead, they must consider the broader cultural transformation journalism has experienced, as it went from ignoring audiences' preferences to paying close attention to how these receive, react, understand the journalistic output and what they want from their news (Costera Meijer, 2020). In this process, journalism's relationship with its audiences has become more intricate and perhaps more controversial. It depends on heterogeneous and often conflicting factors, ranging from deep-rooted perceptions about journalism's role in democratic societies to business considerations related and accentuated by the unprecedented information about audience behaviour and preferences. Issues, such as trust and objectivity, and normative considerations, arise as journalism's ability to appeal directly to its audiences and underwrite its independence from the government (Schultz, 1998, p. 3) is both enabled and blurred by the digital context. Moreover, different conceptions and theories about the role of journalism in society lead to different discourses about audiences and their relationship with the news. For example, McQuail (2010, p. 403) argues that since who constitutes the audience is contested, audience research can be varied and inconsistent. This ambiguity extends to newsrooms: even though news organisations have access to sophisticated audience metrics about audiences' preferences, these are not always representative of the public's behaviour they measure *how* people behave but not *why* (italics in the original) (Nelson, 2020, p.5).

Nevertheless, both journalism practitioners and scholars rarely doubt the importance of being attentive to audiences anymore (Swart et. al, 2022), especially as news organisations focus their efforts on transitioning from advertising-supported to audience-supported revenue models (Nelson, 2020, p.3). This "audience turn in journalism" (Costera Meijer, 2020; Swart et. al, 2022) has given rise to discussions about how news organisations can expand and engage their audiences, how to be of service to them, and innovate in that space. In response, they increasingly employ professionals whose role is to support the development of journalistic products and services revolving around audience needs and innovation and act as "bridges" between business, editorial and technology (Royal and Kiesow, 2021). Although the characteristics and responsibilities of these professionals vary, they most commonly work within multidisciplinary teams across a range of positions and functions that align audience needs with the news organisation's mission (ibid, 1561). These roles are sometimes occupied by designers (Royal and Kiesow, 2021), who bring design thinking into the newsroom (Cherubini, 2018). Traditionally, design in journalism has been associated with visual elements: graphics, typography, layout, colour, and visual storytelling. However, design as a human-centred approach to innovation, especially as opposed to technological innovation, is relatively under-studied. This research aims to fill this gap and further present a novel approach by studying the application of design in newsrooms under the lens of Bourdieu's field theory. A Bourdieusian framework has been selected as the most appropriate to offer a holistic view of the phenomenon under investigation, where the field of journalism becomes a site of struggles and competing logics, which can transform or maintain the established relation of forces (Bourdieu, 1990b, p.143).

1.2 Strands of design: An overview

The terms design thinking, human-centred and user-centred design are most commonly used interchangeably. For example, the design firm IDEO, which popularised DT in business, call their company "early leaders of human-centered design" and DT a "human-centered approach to innovation" (About IDEO: our story, who we are, how we work, n.d). Elsewhere, DT is being described as "the root of human-centered design", with the latter providing solutions for products, services, and processes that will be used and improve the lives of a specific group of people, community or demographic (McInnis, 2022). One example of the application of HCD in technology was Apple's participatory action research to modify the iPhone and improve the overall UX of the phone with distinct features (ibid). In this sense, whereas DT is a process used to provide innovative human-centred solutions for products and services, HCD is mostly concerned with the usability or UX of a given product or service. Rouse (1994, p. 216) defines HCD design as a framework or a process of "assuring that the concerns, values, and perceptions of all stakeholders in a design effort are considered and balanced". However, he argues, HCD is not only about creating systems that are usable but also useful. Friess (2010, p. 41) tracks down the early incarnations of modern HCD at IBM in the 1980s, that developed a process which emphasised four critical steps: 1. An early focus on the needs and the characteristics of the intended user population, 2. The users as part of the design team, 3. Empirical and experimental measurement, 4. An iterative process. She argues that HCD is essentially a more popular term for UCD, which was a philosophy envisioned by Norman and Draper in 1986 and emphasised the creation of useful and understandable products with the needs of the user in mind (ibid).

Other definitions of design would emerge depending on their emphasis. Participatory design, for example, is intended to meet users' needs by involving them in the design process and applying their knowledge and experiences to the creation of products and services (Participatory design, n.d). It finds its origins in the various social, political, and civil rights movements of Western societies, especially Scandinavia, in the 1960s and 1970s, that saw communities demanding increased participation in decision-making and collective action (Robertson and Simonsen, 2013). As participatory design is about end-user feedback and input, it naturally complements UX design to create user-friendly products and services (Participatory design, n.d). Also closely related is product design, which is concerned with the creation of successful products. In fact, UX and UI design commonly fit within product design, which blends user needs with business goals (Product design, n.d). Product designers take charge of all five steps of the DT process mentioned above, and also define product goals and create product roadmaps (ibid). Lastly, service design (thinking) aims to create systems and processes that will provide a holistic service to the user (Stickdorn, 2011). It is not concerned with a single product but with experiences, collaboration, and exchange of knowledge between many different practitioners, such as designers, engineers, ethnographers, managers and more. Service design depends both on statistical analysis, but also ethnographic research to understand the habits, culture, social context, and motivation of users and incorporate this knowledge into the design process (ibid, p.25).

1.3 Scope of the research

In recent years, news organisations increasingly turn to human-centred design to support their innovation efforts, engage with their audiences, and gain a deeper understanding of how these receive and interact with the journalistic output. While the use of audience metrics is well-documented in journalism research, news organisations' human-centred design efforts—not only in the context of looks and functionality of products, but as a set of processes and mindset directed at promoting an audience-centric culture—are relatively under-explored. This study examines how design practices complement audience-oriented innovation in legacy newspapers, and the implications for journalism. It also investigates the areas of cooperation and struggle that arise in this process and how journalists perceive these changes in their organisations. Therefore, it aims to answer the following research questions:

1. RQ1: How does design support audience-oriented innovation practices in legacy newspapers and what are the implications for journalism?

2. RQ2: What areas of collaboration and struggle arise between non-journalistic audience-oriented professionals and journalists?

3. RQ3: How do journalists perceive the audience-centric culture in their organisations?

The research follows a multiple case study design, utilising in-depth interviews as its primary data-collection method. In total, 26 interviews were conducted with designers and other audience-oriented practitioners, as well as editors and journalists, while some of the participants were high-ranking, C-suite executives. A small number of elite, agenda-setting newspapers, across the US, the UK, and Ireland, was chosen for this research: *The New York Times*, *The Washington Post*, *The Guardian*, and *The Irish Times*. The first three are global-reaching, market leaders, while *The Irish Times*, although a smaller newsroom, is one of the leading newspapers in Ireland. However, the aim of this research is not to provide generalisable conclusions or focus on a cross-organisational comparison per se, but to identify patterns and differences in the adoption of design practices across these legacy newspapers. Additionally, it should be noted that as this study focuses on news organisations that belong to the North Atlantic/Liberal media system (Hallin and Mancini, 2004), its findings may not be relevant or applicable to non-Western contexts. To conclude, this research seeks to investigate the implications of the aforementioned developments for journalism, utilising Pierre Bourdieu's field theory as its theoretical foundation. A Bourdieusian approach was chosen as it can offer a holistic framework to analyse the transformations in journalism, focusing on its wider institutional conditions and the importance of relationships between its different agents. This way it situates journalism within a multi-levelled environment of power relations, avoiding internalist tendencies that isolate it from its wider context (Lindell, 2015) and bridging the gap between micro and macro approaches in research.

1.4 Outline of chapters

Chapter 2 discusses practice theory and, more specifically, Bourdieu's field theory. Journalism is viewed as a practice guided by routine enactments, norms, and conventions, as well as reflexive interpretations of the profession in a bottom-up discourse among different agents in the journalistic field, such as journalists and new entrants, including designers and other audience-oriented practitioners. After presenting the main theoretical framework for this research, the chapter proceeds to investigate the exogenous forces that prompt changes in the journalistic field, which are identified as the economy, technology, and innovation.

Chapter 3 touches upon the endogenous forces of the journalistic field, journalistic doxa and habitus, and discusses how the audience provides news organisations with economic and symbolic capital, as it is both a source of revenue and legitimisation to the degree that journalism fulfils its societal mandate. Issues related to trust, objectivity, and journalism's competence in fulfilling its public role are also raised.

Chapter 4 presents an overview of design literature for context, and investigates design in journalism research and practice, as a human-centred approach to innovation, product development, and qualitative audience research.

Chapter 5 outlines the study's methodological approach, discussing its philosophical assumptions, the rationale behind the case selection, and the research design. Chapters 6-9 present the detailed findings of the case studies that include *The New York Times* (Chapter 6), *The Washington Post* (Chapter 7), *The Guardian* (Chapter 8), and *The Irish Times* (Chapter 9). Chapter 10 analyses the findings of the research, first through a cross-case analysis of its main four themes, and then by discussing the RQs. Lastly, Chapter 11 presents this study's key contributions to journalism and design scholarship, and discusses recommendations to practitioners and news organisations, as well as future research.

Chapter 2. Journalism between fields and audiences

The multidisciplinary nature of journalism is evident not only in practice but also in academic inquiry, with theorising coming from a variety of disciplines and traditions: it has been studied, among others, by "political science, cultural studies, history, language studies, philosophy, economics, management, business, science and technology studies, and communication" (Ahva and Steensen, 2019, p. 38), with sociological perspectives dominating the field (ibid, p. 43). This "heterogeneous, multidimensional, and full of competing ideas" (Löffelholz, 2008, p. 15) theoretical discourse has been enriched and is now dominated by a pragmatist-participatory approach, in which empirical data often precede theory in academic enquiry (Ahva and Steensen, 2019). Therefore, questions on the "profound transformations" (Wahl-Jorgensen and Hanitzsch, 2009, p. 9) that journalism and journalistic organisations undergo in tandem with political, economic, cultural, and technological changes should not focus exclusively on how journalism adapts its internal structures. Instead, Deuze (2008) argues that in an environment of what Bauman calls "liquid modernity", theories should sensitise the researcher to ask how a state of "permanent revolution wreaks havoc" (p. 856) on the foundations of the journalistic field itself.

The first section of this chapter (2.1) focuses on a brief historical uncoiling of the sociological theories in journalism research, an approach that Bourdieu considers essential to understand the development of a field (Shoemaker and Vos 2009). The next section (2.2) presents a general outline of *practice theory* as a starting point to later introduce *field theory* (section 2.3) and its application to journalism studies (section 2.3.1). Subsequently, sections (2.4 and 2.5) focus on the *heteronomous poles* of journalism, namely the economy and technology, prompting discussions of *boundary maintenance* and *de-differentiation tendencies* associated with changes in journalism's environment, as well as the adoption or rejection of innovation in newsrooms in relation to structural and individual factors.

2.1 The sociology of news-making

Although there is no agreed definition of what news is (Phillips, 2014, p. 5), journalism's multidisciplinary nature "covers and shapes all aspects of society, from politics to fashion, from business to everyday life", incorporating a legacy of "disciplinary tradition and styles" (Ahva and Steensen, 2019, p. 38). Shoemaker (2006, p. 105) sees news as a "primitive construct", one that does not require definition in everyday conversation, and Hartley (1996, p. 12) describes journalism as the "primary sense-making practice of modernity". While

Schudson (2003) believes that the characterisation of journalism as an agent of modernity is ambitious, he still sees the value in this claim: despite operating within a set of constraints, news, as a "manufactured good" and the result of various social, economic, and political institutions and practices, (p. 12) shapes the public's shared experiences and collective perception of reality (p. 13).

Similarly, Tuchman (2002, p. 90) states that "news is both a permanent social structure and a means of social reflexivity and contestation; a product as well as a productive process," while Zelizer (2004) highlights the historical continuity of news-making, arguing that journalism in different forms has been around "since people recognised a need to share information about themselves with others" (p.2). The view of journalism as a social construct with deep historical roots is mirrored in Pettegree's (2014) analysis of news as an invention: long before the appearance of print, people sought to be informed about unfolding events and opinions, a desire "as old as human society itself" (p. 2) which later led news to assume its influential role in popular politics and society. From the exclusive news market of the medieval world in the 15th century to the emergence of the periodical press in Europe and elsewhere, news, mainly in the form of newspapers, began to play an influential role in popular politics (Pettegree, 2014). Curran (2011) points to the multiple social and political roles historians have attributed to newspapers, including that of "agencies of social reform" (p. 140). In particular, he mentions the rise of the radical press during the Napoleonic Wars as a broker of "a novel sense of class identity" (p. 142), viewed as a threat by the monarchy for rejecting the traditional social order in favour of the "productive classes" (p. 141). This conflict between social classes was later articulated by Marxian thought, where the mass media were seen as "a class-defined institution" (Löffelholz, 2008, p. 17) that reaffirms the dominant social order (Stevenson, 2002). Breaking from economic determinism, Gramsci, viewed power as achieved through ideas as well as financial domination: a social grouping is considered hegemonic if it provides people with cultural leadership and controls the economic means of production (ibid). In this process, people "need to be continuously won over" (Phillips, 2014, p. 6), and the media become the battleground of contest (Curran, 2011, p. 194).

Later conceptions attributed to the media a more liberal dimension, depicting them as "open fora" (Curran, 2011, p. 194). Habermas (1991) described the public sphere as the ground for "critical public reflection" (p.29), before the press was degraded into a "mere trade" (p. 184). However, as Stevenson (2002) points out, Habermas' theory focused on the nation-state level and largely failed to consider both cultural fragmentation and spatial considerations. Nevertheless, Gramscian and Habermasian approaches and subsequent iterations, recognised the mass media and journalism as preeminent institutions of modern society and imply several larger forces at play raising questions of "power, control, structures, institutions, class and community" (Reese and Shoemaker, 2016, p. 396). These themes have saturated the "sociological turn in journalism research" observed in the 1970s and 1980s (Wahl-Jorgensen and Hanitzsch, 2009, p. 6) This era shifted away from a merely empirical approach in journalism research, which had focused on news selection, agenda-setting, media effects, audiences, and the routines of news making (Wahl-Jorgensen and Hanitzsch, 2009). While these early newsroom studies resulted in several ground-breaking, middle-range theories such as the gatekeeper model (White, 1950; for a revised model, see also Shoemaker 1991; and Shoemaker and Vos, 2009) and the agenda-setting theory (McCombs and Shaw, 1972), they did not take into account the "social and cultural background of journalists and journalistic organisations" and neglected "the societal dimension of journalism" (Ruhl, 2008, p. 29).

As the study of newsmaking focused on the social practice of journalism that viewed news as a socially constructed organisational product (Reese, 2016), the gradual shift of attention from individual journalists to organisational settings (Steensen and Ahva, 2015) went even further. A series of ethnographic studies mainly on US newsrooms, including Tuchman's (1978) seminal *Making News* and Gans' (1979) *Deciding What's News*, provided a more nuanced look into the organisational context of newsmaking, while ethnographic research later helped to explain the impact of technology on "a more digitally-oriented journalism practice" (Reese and Shoemaker, 2016, p. 401). As Ahva and Steensen (2019) point out, the institutional dimension of journalism became a central point of organisational theory and the hierarchy of influences (HoI) model. These approaches are used to understand the influences on how journalism is produced, ranging from macro-level social forces to micro-level factors. Therefore, they focus on the interplay between mental structures (e.g., norms), material structures (e.g., the economy), and agency in journalism research, but do not explain society as a whole (ibid). More specifically, while Shoemaker and Reese's (2014) model of influences on journalistic content production proposes five levels of analysis (social systems, social institutions, media organisations, routine practices and individuals), the authors suggest that the emphasis placed on each level depends on the research focus. However, as Löffelholz (2008) posits, even though these models reduce the complexity of journalism studies by categorising and organising empirical data, they do not offer a holistic theoretical model of journalism.

Conversely, attempts to portray journalism as a macro phenomenon that can be sufficiently explained by analysing the relationship between individuals and society can be traced back to German sociologist Max Weber (1864-1920), who emphasised the need to study journalism under the lens of theoretical pluralism and in a systematic and empirical methodological approach (Löffelholz, 2008). While Weber's suggestion for a "sociology of newspapership" was not realised until decades later in the US (ibid), as well as Germany (Weischenberg and Malik, 2008), his ideas around how the broader political and societal contexts influence media organisations (Matthews, 2017) have informed macro-theoretical perspectives that view journalism as a social system. As Ahva and Steensen (2019) argue, such macro-level approaches view journalism "as a kind of social system in which certain roles are performed, and practices are undertaken" (p. 43). Such a perspective draws heavily from Weber's *value spheres* and Emile Durkheim's *division of labour* in their portrayal of differentiation as the defining feature of modern society (Benson and Neveu, 2005; Benson, 2006; Borch, 2011), and is utilised to explain journalism functions, how it differs from other forms of communication, why it matters and the role it plays in the broader societal system (Löffelholz, 2008; Ahva and Steensen, 2019). While functional differentiation serves as an umbrella term for various sociological approaches, it has been criticised for placing too much emphasis on the system as a self-sufficient functioning whole (Couldry, 2004), thereby neglecting agency, which, in the context of journalism, refers to the significance of individual journalistic action in explaining newsmaking phenomena (Löffelholz, 2008). For this reason, although Niklas Luhmann's social systems theory (Luhmann, 2000) was initially considered as a possible theoretical framework for this research, it was abandoned due to its perceived limitations in explaining journalistic agency. Moreover, as McQuail (2010) suggests, media's functions in the form of media effects are largely subjective and are not always recognisable or easily measured.

Nevertheless, several aspects of functional differentiation will be further analysed below to contextualise changes in journalistic autonomy and shifts of boundaries between professional journalists and their audiences in the digital environment. While the logic of boundary maintenance is common in professions like journalism, which lacks formal training and status (Gieryn, 1983), and professional norms function as "definitional devices" (Singer, 2015, p.22), structural changes in the news ecosystem necessitate a new conceptualisation of how journalism is theorised (Hanitzsch, 2007; Löffelholz, 2008; Picard, 2014). In this context, scholars have called for an inclusive study of journalism that will pay more attention to emerging practices and new actors in the changing news environment (e.g. Heinonen and Luostarinen, 2008; Anderson, 2013; Witschge and Harbers, 2018). Practice theory can provide a framework to understand journalism as the result of a set of routine activities on the one hand and the discourse between different agents on the other (Swidler, 2001). By focusing on Pierre Bourdieu's field theory, a more specific practice-based analytical foundation is provided, which aims to bridge the gap between macro-level 'societal' models and micro-level 'organisational' approaches (Benson, 1999, p. 463). At this point, it is important to note that this research does not claim that field theory is the only conceptual framework capable of providing such a multi-level study of journalism. For instance, as discussed above, the HoI model also follows a levels-of-analysis approach (Reese and Shoemaker, 2016) on the various factors that influence journalistic production. However, in a constantly shifting media landscape, characterised by technological and economic disruptions and a networked public sphere (ibid), the HoI model has been criticised for providing a static model of analysis (Ferrucci and Kuhn, 2022) that places the journalist at the centre of its enquiry (Banjac, Miro, and Hanusch, 2024). Here, designers and other audience-oriented practitioners are viewed as new agents—or entrants—in journalism, whose presence is driven by external forces and actions are determined by power relations within the field. These new practices can be met with resistance but also have the power to potentially transform the field (Tandoc and Jenkins, 2017). Therefore, it was decided that this research would benefit from a practice-based approach to study the dynamics of professional practices among the various agents who operate within the journalistic field in the context of digitalisation, commercialisation, increasing audience awareness and participation. An overview of practice theory is presented in the following section, before moving on to discuss field theory and its relevance to this research.

2.2 Practice, institutions, and journalism

Ryfe (2018, p. 218) draws on Bourdieu, Giddens, and Latour to elaborate on a practice approach to social activity. While he acknowledges the diversity in how these authors developed their theories, Ryfe (ibid, p. 219) invokes them to summarise practice as a recognisable set of actions that extend over time and are logically linked by conventions, rules, and strategies. Similarly, Reckwitz (2002, p. 250) defines practice as a "routinized way in which bodies are moved, objects are handled, subjects are treated, things are described, and the world is understood". For Reckwitz, therefore, practice stands in the crossroads of minds, bodies, things, thoughts, interactions, processes, structure, and agency.

These descriptions of practice suggest that individual action only becomes meaningful through shared understandings. In this process, practice precedes action and therefore, it cannot be reduced to what individuals say or do (Ryfe, 2018). This conceptualisation resonates with Gherardi's (2009, p. 536)) view on practice as a "socially sustained action" that focuses not on what is done but on what enables collective action. Reckwitz (2002, p.256) differentiates between individual and social practice by referring to the homo economicus and the homo sociologicus. In the first case, society consists of individuals who "confront each other with their decisions", while in the second, society is the product of agents or actors who abide by or confront "a system of normative rules and expectations" (ibid). In this sense, social practice theories shift the level of analysis from the micro (individuals) and the macro (institutions, society), to how practices are constituted and sustained within a network of human and non-human actors, interactions, and meanings (Reckwitz, 2002).

Social practices are therefore bodily-mental routines that are enacted by agents or by what Ryfe (2018, p. 220) calls skilled social actors. Bourdieu (1998a, p. 25) describes these agents as having a "feel for the game": they are "active and knowing", and as Ryfe (2018, pp. 220-221) explains, they can "creatively and strategically" manipulate the conditions of practice. The notion of embodied performance, Ryfe (2018) suggests, is an attempt to transcend the subject/object dualism problem in social theory. He explains that practice theorists view social life as the result of individual action and organised rules, practices, and strategies. When applied in journalism, such an approach illustrates the arrangements under which journalistic practice operates daily: journalists make news judgements in "a bodily sense of newsworthiness" (Schultz, 2007, p. 193), which is both "self-evident and self-explaining" (ibid, p. 190). This is what Schultz (ibid) calls the "journalistic gut feeling": journalists act as knowledgeable agents but always within a highly structured social space. Similarly, Ahva (2017, p. 1529) suggests that practice theory seems an appropriate theoretical framework for journalism studies as journalism is characterised by "routine enactments". While the routinisation of journalistic practices in the form of professional norms and conventions, such as deadlines, editorial decisions, and the allocation of resources, can affect journalists' perceived autonomy (Sjøvaag, 2013), journalism cannot be reduced to automated processes. Rather, it goes through what Ahva (ibid) calls *interpretative reflexivity*: journalists do not simply act out practices but give meaning to their actions by interpreting and evaluating them. Reflexivity also allows for small deviations in practice, which can lead to structural changes (ibid). Furthermore, Ahva argues that such changes in journalism can involve digitalisation, the involvement of different actors, new user cultures and platforms of distribution as well as the diversification of places where journalism is produced. Therefore, she proposes the study of journalism as "a structure of public communication enacted through practices by various actors—journalists and citizens alike—and assembled into fact-based, verified and timely representations in sites that exceed the newsroom" (ibid, p. 1529).

Whether these changes in the form of innovation in newsrooms are strategic and purposeful or happen arbitrarily will be discussed below. However, at this point, it becomes apparent that practice theory allows for a conceptualisation of journalism as reiterated and reshaped through a complex system of interactions and discourses between different actors (Witschge and Harbers, 2018). Following on Schatzki (2001a), who refers to practice as "a set of doings and sayings organized by a pool of understandings" (p.58), Witschge and Harbers (2018) propose viewing journalism as a dynamic set of practices shaped by prior shared activities and understandings. Practice is not simply the routines or what people do, but a group of activities that structure and are structured by the discourse surrounding these activities (ibid). Therefore, practice theory encourages a holistic understanding of journalistic practice as an "ongoing process of bottom-up, collective negotiation of practitioners" (ibid, p. 111), which is not only provisional but also linked to the material and spatial conditions of producing the news. While, as Witschge and Harbers argue, such an approach does not mean that everything can potentially be journalism, it provides a shift away from normative expectations and functionalist definitions about the role that journalism should play in society and allows for a study of journalism outside newsroom centricity. Couldry (2004, p. 125), for example, advises against viewing the institutional media "as all there is" to avoid reducing the breadth of the analysis. Instead, he says, the starting point of analysis should be asking the simple question of "What is going on and where?" (ibid).

Journalism's enduring institutional nature, however, is not to be denied. As Ryfe (2016) argues, behaviour patterns are both durable and resistant to change, and journalism consists of longstanding rules that have not changed much in the digital age. While traditional journalistic institutions are not the exclusive site of news production (Witschge and Harbers, 2018), the majority of working journalists, Ryfe (2016) posits, still work for mainstream news organisations, while the internet seems to have increased the homogeneity of news making. He says that the crises journalism has faced have not altered its basic form, and changes in practice happen gradually. However, he recognises two important adaptations that can potentially lead to dramatic changes in journalism. First, news production has become more service-oriented and less product-oriented (ibid, p. 379). Journalists not only produce stories but also increasingly handle and distribute content produced by others. As a response to this development, news organisations hire fewer reporters and more programmers, designers and other experts to curate the distribution platforms. According to Ryfe, these new entrants in journalism adopt new patterns of behaviour, an aspect that is central to this research that explores how journalists, designers and other non-journalistic practitioners collaborate to incorporate audience-oriented practices in news organisations and how this affects journalism and structural dynamics. The second adaptation Ryfe (ibid) refers to is the newsroom's de-centralisation, with more distributed and collaborative forms of journalism.

In this context, it is evident that while technological developments favour a more diversified physical space where journalism occurs between different agents, a practice approach does not suggest that journalism research should no longer pay attention to the traditional newsroom (Witschge and Harbers, 2018). Instead, as Witschge and Harbers (2018, p. 116) point out, practice theory can contribute to exploring how “different organisational formats help stabilize, form, or challenge journalistic practice”. Besides start-up organisations and working-from-home arrangements, such formats can also include flexible organisational structures that allow new journalistic “activities, rules, routines, emotions” to emerge (ibid).

Whereas a bottom-up practice approach allows one to study how the complex interactions between many agents constitute journalism, the routinisation and continuation of these practices and their similarities across organisations and different media systems also imply “a higher-order institutional level of analysis” (Lowrey, 2018, p. 127). However, these two approaches are not mutually exclusive, as practices do not happen in a vacuum. Lowrey (2018) argues that questions about whether journalism is a profession of practice, or an institution do not move journalism research forward. Instead, he says, it is important to identify the underlying mechanisms and conditions that make news production more or less routinised, instrumental, open to change, or entrepreneurial to understand the impact of such variations (p. 140). Bourdieu’s field theory is an approach that helps to study journalism as a collective space that mediates macro-level forces on journalists’ individual actions (Ryfe,

2006) while taking into account the wider conditions and the importance of relationships between its different agents.

2.3 Field theory

While Schatzki (2001b) argues that there is no single definition of what constitutes practice, he identifies Bourdieu as one of the primary practice theorists in social science. He refers to the *field of practices* (italics in original) as the "nexus of interconnected human practices" (p. 10 – 11), echoing Bourdieu's notion of the field as a space where agents operate on a "mezzo-level" (Benson, 2006, p. 199; Barnard, 2018, p. 34). For Bourdieu (1998b, p. viii), action is *dispositional* (italics in the original) and attributed to the "potentialities inscribed in the body of agents and in the structure of the situations where they act or, more precisely, in the relations between them". In this sense, Lowery, Sherrill, and Broussard (2019, p. 2133) explain fields "bridge the micro level of individual agency and the macro level of political and economic institutions". Bourdieu (2005) summarises the field as the space within which the position-takings of agents aim at either conserving or transforming the structural relations that constitute the field. In this regard, the field is a microcosm and at the same time a "social universe", one that has its own nomos, or governing logic, but is not entirely independent from the encompassing social universe (ibid, p. 33).

As Benson (2006, p. 188) notes, Bourdieu draws from Weber and Durkheim in portraying modernity as "a process of differentiation into semi-autonomous and increasingly specialized spheres of action". Such spheres include politics, the economy, cultural production, and religion (ibid). Their relative autonomy, Bourdieu (2005, p. 32) argues, is important to understand the practices generated in each one of them. Central to Bourdieu's conceptualisation of how fields structure practices is the notion of *habitus*. He describes habitus as "systems of durable, transposable dispositions" that are both "structured" as well as "structuring structures" (Bourdieu, 1977, p. 72). This scheme reveals a spatial and a temporal dimension of field theory that transcends the "false dilemma" (ibid) presented in the dichotomy between agency and structure. While the social fields are the objective structures which map the agents' position and the dynamics between them, habitus refers to the beliefs, behaviours, and internalised dispositions the agents acquire over time (Maares and Hanusch, 2020) as the result of a long-term process of socialisation through their families and education (Benson and Neveu, 2005).

The dual nature of habitus as "a set of subjective generative principles" produced by "objective structures" (Jenkins, 1982, p.272) has led to criticisms that Bourdieu's theoretical framework eventually gives in to structural determinism and thus fails to explain change (e.g. Jenkins, 1982; Alexander, 1995; Yang, 2014; Lunt, 2020) or that it follows a pattern of deterministic Marxism that reduces agency to calculations of materialistic interests (Alexander, 1995). However, as Benson and Neveu (2005) point out, the idea of experiences and practices as constantly being modified and modifying those that follow refutes claims of structural determinism levelled against field theory. Bourdieu himself (1993, p. 25) states:

> The degree to which the social world seems to us to be determined depends on the knowledge we have of it. On the other hand, the degree to which the world is really determined is not a question of opinion; as a sociologist it is not for me to be "for determinism" or "for freedom" but to discover necessity if it exists, in the places where it is.

It can be argued that the fluidity of habitus as being the product of internalised dispositions within a specific historical trajectory (ibid) is important for understanding the relation between structure and practical action in Bourdieu. As Bourdieu (Bourdieu and Wacquant, 1992, p.135) explains:

> It is only *in the relation to* certain structures that habitus produces given discourses or practices (…) We must think of it as a sort of spring that needs a trigger and, depending upon the stimuli and the structure of the field, the very same habitus will generate different, even opposite, outcomes.

Elsewhere, he provides an example of how action is not merely the product of structural determinants but also of calculations over contingent occurrences, such as other agents' actions and perceptions of actions. He explains how the members of the dominant class tend to choose products that will differentiate them from the "brutish necessity" inflicted upon the nondominant classes (Bourdieu, 1984, p.252). However, when the dominated classes appropriate and popularise the products meant to act as class markers, the dominant classes "engage in an endless pursuit of new properties through which to assert their rarity" (ibid, p. 249).

This "strategization" happens at different levels (Potter, 2000, p. 237). The first involves a conscious process where agents make rational calculations, whereas the second involves an unconscious tendency to preserve the operational logic of the field itself (ibid). This is another point for which field theory has been criticised. As Alexander (1995) argues, Bourdieu's theorisation fails to explain structural change, as field theory sees agents as reproducing the existing class relations. However, the perpetuation of social structure in field theory can be explained by looking at the concept of *capital*. Bourdieu argues that the social field has two main forms of capital: economic capital, which is the accumulation of monetary resources and anything that can be converted into money, and cultural capital, which refers to things such as education, general knowledge, credentials, verbal abilities, prestige, cultural preferences, and artistic sensibilities (Benson and Neveu, 2005; Benson, 2006; Usher, 2017). Although the specific form of capital that prevails in each field varies, Bourdieu accepts that economic capital is generally more powerful (Benson and Neveu, 2005, p. 4). Other forms of capital include symbolic capital, which refers to the status or recognition that agents receive, and social capital, which represents ties to other social actors (Barnard, 2018, p. 35). These forms of capital and their combination shape agency by enabling or constraining it, and social actors, in a constant struggle for capital and positioning, lean towards the positions that best mirror their habitus (Maares and Hanusch, 2020). Agents who are in a position to amass both economic and cultural capital and can more easily transform one form of capital into another are those who dominate the field – examples of such dominant agents in journalism, Benson and Neveu (2005, p. 4) argue, are *The New York Times* and *The Washington Post*.

As Maares and Hanusch (2020, p. 4) explain, the agents that occupy more powerful positions in the field are equipped with a different habitus than those in dominated positions and thus can define the field's nomos, which in turn distinguishes and legitimises the field. While those in powerful positions can legitimise their dominance in the field by the synergistic combination of economic and cultural capital, it can be argued that they have an interest "to defend the social conditions of production of things that are only accessible in certain conditions" (Bourdieu, 2005, p. 46). Although, as Bourdieu (1990a) argues, agents usually modify their individual positions in the field, rather than abolishing or transforming the principles of classification, substantial change can happen as the result of "'external' shock to the field" (Benson, 2006, p. 6) in the form of pressure from neighbouring fields (Benson and Neveu, 2005, p. 6). In the case of journalism, Benson and Neveu (ibid) point out, such shocks can include economic crises, dramatic changes in the legal and political environment, significant social and cultural movements, or specific media regulations. Bourdieu (1990a, 2000) also describes a situation of disconnection between the field and the habitus, which he calls *hysteresis* or the "Don Quixote effect" (2000, p. 160). According to Bourdieu, a change in the social position or conditions in times of crisis can leave an individual in a state of inertia and a sense of disorientation, acting according to dispositions that were acquired under different social conditions (Benson and Neveu, 2005, p. 10).

Bourdieu, however, does not deny agents the power to transform the field. In field theory, the influx of new entrants into a field can result in either the transformation or the conservation of the field (Benson, 1999; Benson and Neveu, 2005). In journalism, for example, increased competition over limited positions can make journalists cautious and conservative, leading to the reproduction of the field. At the same time, "changes in the class composition of new entrants" (Benson and Neveu, 2005, p.6) can change its dynamics. As Benson and Neveu (ibid) argue, field theory can be utilised to explore the characteristics of the new entrants in journalism, including their education, professional training, and their capacity to change the field through deviant trajectories.

This is of particular importance for this research that explores how such dynamic in legacy newspapers are affected by the introduction of the new entrants as a result of audience-oriented efforts in the newsroom. As this research follows a purely qualitative research design, it does not aim at extracting generalisable conclusions. However, as these legacy newspapers are the ones that dominate the field (Benson and Neveu, 2005, p.4) and therefore define its nomos, the tensions and struggles that can alter their internal dynamics or, conversely, lead to the institutionalisation of new practices and the preservation of the field's logic, can affect the whole field.

2.3.1 Bourdieu and the journalistic field

Although Bourdieu wrote little about journalism, he applied field theory to discuss the impact of television on French politics in the book *On Television* (1998b). In what has been widely received as a polemic rather than a generalisable analytical framework for journalism (Marlière, 1998; Benson and Neveu, 2005), Bourdieu (1998b) argues that

> The journalistic field produces and imposes on the public a very particular vision of the political field, a vision that is grounded in the very structure of the journalistic field and in journalists' specific interests produced in and by that field (p. 2)

On Television abounds in French examples of how television endangers different fields of cultural production, such as the arts, science, philosophy, and law, the political field and democracy (Marlière, 1998, pp. 220-221). However, Bourdieu's essay on journalism is a more holistic attempt to deal with journalism, the journalistic field, and its relation to the political and social science fields (Bourdieu, 2005). Later, media scholars (Benson, 1999;

Couldry, 2003; Benson and Neveu, 2005; Benson, 2006) clarified and expanded field theory to apply to different contexts in journalism, and its analytical tools have since been utilised widely in media, journalism, and audience research. Among others, Hellmuller, Vos, and Poepsel (2013) analysed the normative shift from objectivity to transparency in news production as an emerging form of cultural capital in journalism, while Vos, Eichholz, and Karaliova (2019) studied the relationship between journalists and audiences as a new entrant in the journalistic field. Tandoc (2015) examined how journalists used Web analytics in their newswork from a field theory perspective, and Usher (2017) studied news startups in the United States and Europe in the field of journalism.

For Bourdieu (1998b, p. 39), journalism constitutes a distinct field, a "microcosm with its own laws, defined by its own position in the world at large and by the attractions and repulsions to which it is subject from other such microcosms". In field theory, journalism is seen as part of the field of power, and therefore "it tends to engage with first and foremost those agents who possess high volume of capital" (Benson, 2006, p. 195). However, within the field of power, journalism is also situated in the field of cultural production, while all are part of the encompassing social space (Benson, 1999). The field of cultural production, Benson (ibid) explains, is divided between the field of restricted production (for example, small literary journals or avant-garde art and music), which is closer to the cultural pole, and large-scale production, which is intended for mass audiences and closer to the economic pole. Journalism is mostly situated in the field of mass-scale production and thus closer to the heteronomous pole of economic and political power (ibid, p. 466). As Neveu (2007) explains, the heteronomous pole is influenced by forces external to the field. In journalism, these forces manifest in maximising audience ratings or the commitment to a political party or ideology (ibid, p. 336). As Bourdieu (2005, p. 42) explains:

> Journalism is losing more and more of its autonomy through 'audience ratings', which bear particularly heavily on the most heteronomous sector of journalism – television – and on the most heteronomous sectors of the subfield of television, the weight of the economy within the field is constantly growing.

Therefore journalism, compared to other fields in the cultural production field, is characterised by a higher degree of heteronomy and is "a very weakly autonomous field" (Bourdieu, 2005, p. 33). Thus, to understand what is happening in journalism, the researcher should look beyond the surrounding world. Instead, journalism should be conceptualized as a microcosm to "understand the effects that the people engaged in this microcosm exert on one another" (ibid). While economic capital is the dominant capital in news production, journalistic capital refers to the “specific, cultural capital of the journalistic field” (Schultz, 2007, p. 194). As Vos, Eichholz, and Karaliova (2019) argue, part of this form of capital is how journalists perceive their roles, and it is a source of the journalistic field’s autonomy.

Journalistic roles are associated with normative considerations or what Bourdieu calls *doxa*: “A set of professional beliefs which tend to appear as evident, natural and self-explaining norms of journalistic practice” (Schultz, 2007, p. 194). Doxa is both a stabilising factor for the journalistic field as well as an area of contestation to the degree that journalism, and its perceived autonomy, is subject to several exogenous economic, political, and social forces (Vos, Eichholz and Karaliova, 2019). Doxa is usually common in agents who share what Bourdieu calls *illusio*, or as Benson and Neveu (2005, p. 3) explain, “the emotional and cognitive investment” that makes agents believe that the game is “worth playing”. As Vos, Eichholz, and Karaliova (2019, p. 1010) argue, while journalists have been socialised to accept the rules and routines deriving from their roles, journalistic capital is also subject to change. Field theorists have identified several ways that journalistic capital can be reshaped, but “nearly all these scenarios involve new entrants to the field” (ibid).

In addition to the autonomous and heteronomous poles in journalism, Benson (1999, p. 467) argues that journalism is structured around the division of “old” and “new”. When studying new entrants in the field, the researcher adds a dynamic dimension that shows the relationship between the “objective structures” and the “subjective perspectives” of agents (ibid). Therefore, in journalistic production, the question of “why” and “how” a story was written should consider “the convergence of ‘disposition’ (habitus) and ‘position’ (structural location within a field)” (ibid). The journalistic habitus is to understand and be able to master the rules of the journalistic game, or as discussed above, to “have a feel for the game” (Schultz, 2007). However, different positions and dispositions “point to different forms of mastering the game”, which can affect journalistic autonomy (ibid, pp. 193-194). Furthermore, Schultz (ibid, p. 194) points out that even within the journalistic field, there may be different forms of habitus: the “editorial habitus”, the “intern habitus”, the “foreign correspondent habitus”, the “investigative reporter habitus”, the “newspaper habitus”, the “television habitus”, and so on. This conceptualisation will be used to explore whether the habitus of new entrants—specifically designers and other audience-oriented practitioners—clashes with that of journalists in news organisations, impacting journalistic norms and structural dynamics. It will also examine how journalists accept the changes that these new agents introduce into the journalistic field.

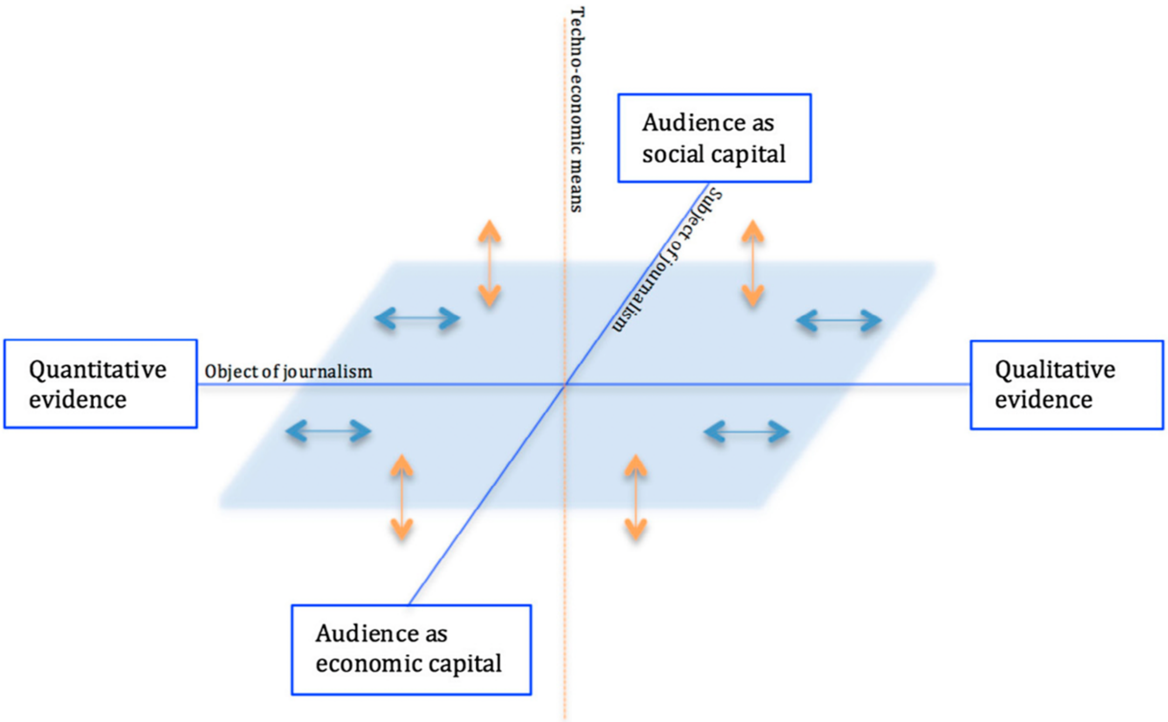
Wang's dimensional field theory and the study of journalism

As mentioned above, the journalistic field operates at the crossroads of several endogenous and exogenous forces that influence business decision-making, journalistic practice, and news production, as well as theoretical discourse. Studying the adoption of audience metrics in newsrooms, Wang (2018) proposes a dimensional field theory model based on three axes (see Figure 1): the techno-economic means, the subject of journalism, and the object of journalism. The techno-economic means, Wang (ibid, p. 486) argues, are affected by pressures from other fields, such as technology and economy, and trigger changes in business models and audience vision.

The subject of journalism refers to the people that journalism serves and therefore are "acted on": the audience, that oscillates between "audience as social capital" and "audience as economic capital" (ibid, pp. 480-482). The "audience as social capital" is related to journalism's doxa and public service role, with the discussion focusing on editorial autonomy and gatekeeping considerations. On the other hand, the "audience as economic capital" is associated with the commercial vision of journalism, and the adoption of technologies from nearby fields. The quantified audience metrics are a manifestation of the perception of the audience as a commodity (ibid). Both conceptualisations of the audience, which are driven by the journalistic doxa and habitus and by forces from outside the field, are further discussed in Chapters 3 and 4.

In relation to the object of journalism, Wang (2018, p. 483) utilises Anderson's approach to refer to the evidence that journalism employs to "define truth, reality, and knowledge". In this case, the object of journalism does not refer solely to the material objects used in newsrooms but rather to the epistemological dimension of the journalistic evidence, that is assembled and given meaning to by journalistic culture, practices, and norms (Anderson, 2015). Wang (2018, pp. 483-484) explains that the object of journalism refers to the materials journalists use to make a "journalistic point in news" and include qualitative and quantitative audience data and data-driven journalism. Both the subject and the object of journalism reflect dynamics in the journalistic habitus, doxa, and capital. However, all these influences are in a dialectic relation with each other within a "multi-dimension universe" (p. 485), and their adoption, rejection, or reappropriation is what shapes the field.

Figure 1: The dimensional journalistic field (Source: Wang, 2020)



Following Wang's model, the next sections will discuss the exogenous forces that prompt changes in the journalistic field. These have been identified as the economy, technology and innovation. The endogenous forces, such as the journalistic doxa and habitus, along with changes in journalists' perception and reception of the subject of journalism, the audience are discussed in Chapter 3. In Chapter 4, the focus shifts to the evidence, or the object of journalism: while the adoption of audience metrics in the newsroom is a manifestation of the aforementioned dynamics in the journalistic field, Wang argues that quantitative and qualitative audience data in journalism are not treated equally. An over-reliance on purely quantitative evidence holds the risk for the subject of journalism to become the object of journalism, on the basis that "if the number is good, the story is good" (Wang, 2018, p. 484). If this trend continues, Wang warns, journalism will lose sight of its subject and become "rootless" (ibid). The implementation of metrics in newsrooms is congruent with journalism's audience turn and shifts in the profession's norms and values. However, it is often associated with questions surrounding the value of metrics as an adequate reflection of audience's preferences (Tandoc and Thomas, 2015). Design is then introduced as an increasingly adopted approach by news organisations that seek to gain a more nuanced understanding of their audience's needs and shape their products accordingly.

2.4 The political economy of news business

Although the particularities of the newspapers studied in this research and their ownership forms will be discussed in the case studies presented in Chapters 6-9, as the historical legacies of each can determine the outcomes of the challenges they face today (Nielsen and Levy, 2010, p.13), a brief overview of the political economy of news business is attempted below drawing from Hallin and Mancini's (2004) typology of media systems. In their landmark study "*Comparing Media Systems*", Hallin and Mancini (ibid) identified three distinct types of western media models: the North Atlantic/Liberal, the Northern European/Democratic Corporatist, and the Mediterranean/Polarised Pluralist. The liberal model is generally characterised by a market-dominated journalistic culture, strong professionalisation and non-institutionalised regulation, a commercial press which is largely neutral and information-oriented, and medium-scale newspaper circulation; The Democratic Corporatist model is characterised by high newspaper circulation, strong professionalisation and institutionalised regulation, strong state intervention with protection for press freedom, and historically a strong party press; Lastly, in the Polarised Pluralist media system journalistic professionalisation is generally weaker, the press is politically oriented, and state intervention is high with periods of censorship, and instrumentalization (ibid, pp. 67-68). While the US, Britain, and Ireland, where the case studies of this research are situated, belong, along with Canada, to the liberal model, scholars observe a trend towards greater homogenisation between media systems. For example, Hallin and Mancini (ibid, p. 251) have argued that the Liberal Model gained predominance in North America, Europe, and other parts of the world, with news media leaning towards commercialisation and professionalisation and cutting their historical ties with political parties. In later work, Hallin and Mancini (2017), focused on the convergence of Western media systems, with discussions revolving around the role of digitalisation as a shaping force of the media field. While national differences and political parallelism were still relevant, Mancini (2020; 2024) explains that the rise of the internet and social media has led to the deinstitutionalisation in the field. In this process, the production and circulation of news depend less on established institutions and more on dispersed individuals with no specific education, routines, or affiliation with professional organisations. However, a process of reinstitutionalisation has also been observed, with new institutions, such as technology multinationals, taking the place of old ones (ibid).

Similarly, McChesney (2015, p. 78) argues that whereas media systems before the 1990s had national characteristics, the 21st century saw the dawn of a global commercial media market powered by the global capitalist economic system. On the same note, McQuail (2010, p.250) speaks of a “global media system”. Its basic characteristics include, among others, an increasing multinational media ownership, homogenisation of media systems and culture, similarity in news and entertainment products around the world, and audience access to globalised media (ibid, p. 254). Therefore, it can be argued that many of the challenges that journalism faces as an institution today are magnified under the lens of the network society (Castells, 2009; Van Dijk, 2012)—a world that Deuze (2008, p. 858) describes as being in a “permanent revolution” in which people are expected “to navigate complex and permanently unstable social and technological networks”.

Journalism, Deuze (2008) argues, fails to adjust to the increasingly individualised and globalised world, and continually reproduces its contours. Thus, questions about journalism’s “value and necessity” today (Broersma, 2007) are not new but connected to long-standing notions of citizenry, democracy, and capitalistic wealth concentration. As Schultz (1998, p. 95) has argued, the press is the only institution that provides checks and balances but is also dependent on financial and commercial success. This is what Nerone (2013, p. 448) calls a “tragic rather than romantic emplotment” when discussing the Habermasian account of the political origin of journalism and the birth of the public sphere in 18th-century Western Europe. The bourgeois public sphere, Habermas (1991) argues, allowed participants to discuss public issues and keep a check on the government and the state. The public sphere opened a space for journalism, and the newspapers, once aimed at the mercantile class, became political organs. However, the transformation of the press into a commercial business that came with the rise of corporate and new private economic interests “tragically squandered” the potential for strong democracy through public deliberation (Nerone, 2013, p. 448). Drawing on Walter Lippmann's ideas on the "manufacture of consent", used to describe the management of public opinion in the 1920s, Herman and Chomsky (1994) refer to the mass media as a "propaganda model". They argue that the mass media communicate “messages and symbols to the general populace”, including codes of behaviour entrenched in the institutional structures of society (ibid, p. 1). Imbalances in wealth and power, combined with mass media’s mutually beneficial relationship with powerful sources of information, affect both their interests and choices (ibid, p. 18).

Also following a Marxian perspective on mass media, Berry (2019) discusses how deregulation and increased penetration of market logic have produced a structural transformation in the industry that, during the financial crisis, resulted in news favouring neoliberal politics. He argues that the effects of such developments in the news industry were amplified by the internet, algorithms and data, a trend that threatens the production and the business model of news in two ways. First, news consumers turn from print to digital versions of newspapers, eroding the revenue base of news organisations. Second, technology giants, such as Google and Facebook, using their data sets and micro-targeting, take up the advertising slice that traditionally went to media organisations (ibid, p.75).

Likewise, McChesney (2015, p.2) describes how against the background of technological breakthroughs, hypercommercialism and profit-driven journalism, media ownership in the US and much of the Western world has become even more concentrated in the hands of very few media conglomerates. Media have thus transformed into a force that undermines democracy, rather than serving as a foundation for fostering an informed and engaged public (ibid). In such market-driven cultures, Hanitzsch (2007) argues, audiences are treated as consumers rather than citizens, and journalism prioritises consumerist values, providing audiences with what they want to know instead of what they need to be informed about. Issues pertaining to diminishing advertising and circulation revenues, new entrants, user-generated (UGC) content, and technological affordances are seen as eroding journalism's public service role (Boczkowski and Mitchelstein, 2017), and will be raised again in the following chapters. At this point, it becomes clear that journalism's heteronomous pole exposes the profession to strong economic, political, and technological influences. However, the discussion on the viability of news business should not disregard the nature of journalism, whose activities are simultaneously economic and political, heavily reliant on constantly evolving technologies (McQuail, 2010), but also guided by a profound sense of professionalism and public role awareness, as discussed in Chapter 3. Furthermore, as Benson, Neff, and Hessérus (2018) point out, research on media ownership tends to be dominated by critical views of media moguls or broad studies of media industry concentration and usually ignore questions of whether distinct forms of ownership, such as non-profit or public ownership, serve the normative ideals of journalism differently than commercial media. They argue that media ownership power may be analytically distinct, but it is often empirically intertwined and mention the example of legacy newspapers, for which public-service-oriented news and economic instrumentalism are not mutually exclusive.

2.4.1 Funding the news

Even before the financial crisis of 2007-2009, newspapers in the US had faced reduced advertising and circulation revenues caused by a long-term decline in readership, accelerated by the increasing prevalence of the internet and the rise of new technologies, leading to shifts in how people consumed the news (Wunsch-Vincent, 2010; Starr, 2011). Following a period of expansion in the 1980s and 1990s, the economic viability of print media became non-sustainable, reflecting the growing array of information options available to the audience (Brock, 2013, p.138). As Simons (2017, para. 8) puts it: "Technology has torn apart the two businesses – advertising and news – that used to be bound together by the physical artefact of the newspaper." Between 2003 and 2015, newspapers in the US saw a steep decline in advertising revenue, followed by significant cutbacks in newsroom employment (Anderson, 2019, p. 229). According to the Pew Research Center the downward trend continued through 2020, with the total estimated advertising revenue of $9.6 billion, down 25% from 2019.

Similarly, in the UK, the digital advertising share of Facebook and Google in 2018 amounted to more than 60% (Andrews, 2020, p. 61). According to The Cairncross Review (2019, p. 26) on the future of journalism, between 2008 and 2018, national newspapers in the UK experienced a sharp decline in circulation: *The Guardian* saw its weekday circulation fall by 60%, the *Financial Times* by 58%, and *The Times* by 30%. During the same period, the circulation of newspapers in Ireland halved, combined with a steep decrease in advertising revenues (Press Council of Ireland/Office of the Press Ombudsman, 2019, p. 4). In 2020 in Ireland, Google and Facebook controlled almost 45% of the total media market, accounting for 84.4% of all online advertising investment (Banks, n.d.).

The COVID-19 pandemic has made the financial struggles of news organisations even more pronounced and accelerated the pre-existing business trends in newspapers. According to the Pew Research Center, newspapers in the US saw their advertising revenues declining by 42% during the second quarter of 2020 compared to the same period in 2019 (Barthel, Matsa, Worden, 2020). During the same period, their circulation revenue decreased by a median of 8%. The financial downturn was also reflected in the wage and compensation expenses of some newspapers, that reported a double-digit percentage decline between 2019 and 2020 (ibid). By February 2021, "more than 60 local newsrooms across the country had closed" (Jenkins and Graves, 2021, p.112). In the UK, while the pandemic temporarily led to increased news consumption, digital subscriptions only concerned a few legacy brands that invested in their digital strategies (Newman, 2021, p. 62). Despite the government's interventions to help the press by funding a three-month public health campaign and abolishing VAT for digital publications, national and local newspapers' circulation decreased by an average of 10 per cent each. At the same time, more than 2,000 people working in the press have lost their jobs because of the pandemic and the deteriorating state of the UK's media ecosystem (Tobitt and Majid, 2021).

Ireland has followed suit, with *The Irish Times* reporting an increase of subscriptions in 2020 at three times the rate of 2019 and Independent.ie more than 30,000 subscriptions by the end of 2020 (Murrell, 2021, p.86). While there was a 4-percentage-point increase in the people willing to pay for news, reaching 16%, the news media industry was hit by further layoffs, closures, and redundancies (ibid). According to Core's report, Outlook '21 – Media Forecasts, advertising revenue across national newspapers in Ireland in 2020 decreased by 23.5 % to 65.7 million euros, combined with a decrease of 13.9% in digital revenues (Murphy, n.d.). Furthermore, according to a PwC report, while newspapers were on track for an increase of revenues from digital media by 2027, these were not expected to make up for losses from the decline of print media (Murrell, 2024, p. 88). In addition, the transition to a digital-only future resulted in more precarious working conditions for journalists, as shown by Mediahuis Ireland's announcement of a 10% reduction of its staff across its titles in 2024 (O'Donovan, 2024).

As news organisations look for ways to finance their business models while audiences' interest in news decreases, Picard (2010, p. 18) argues that journalists seem "genuinely shocked" by people's unwillingness to pay for news. However, research shows that the public is not only indifferent to the financial struggle of news organisations but also, in much of the world, it opposes state support to help them stay afloat (Fletcher and Nielsen, 2021). O'Sullivan and Fortunati (2021) argue that financial support and incentives for quality journalism may offer a solution for the degradation the profession has been experiencing due to neoliberal market pressures, technological disruptions, and hostile political forces. Renewed discussions surrounding the normative role of journalism in society and professional values and standards require the rethinking of its wider context, and the possibility of state supports in democratic countries has attracted interest, as shown by the Cairncross review in the UK and calls for journalism financial aid in Ireland (ibid, p. 150). While such intervention is more common and historically accepted in the Northern European/Democratic Corporatist Model and especially in the Scandinavian countries (Hallin and Mancini, 2004), Picard (2007, p. 242) points to a rather idealised perception of this model that is based on "rhetoric and good intentions than actually producing and operating a system of support that leads to the desired outcomes". He explains how despite government subsidies and fiscal advantages, newspapers in these countries continue to face financial difficulties and either close or become more commercial to appeal to broader audiences. Government subsidies are less welcome within the industry as newspapers increasingly shed their political identities, while the few politically focused newspapers "tend to have extremely small readership and poorer quality content" (ibid, p. 242).

Newspapers' diminishing support for subsidies in Scandinavian countries further indicates a move towards the homogenisation of media systems discussed above, characterised by a market-oriented press. In this news media environment, Simon and Graves (2019) observe a strategic split in the business models of news media, and especially newspapers: while some publishers, mostly in fragmented competitive markets, such as Britain, continue to offer their online news for free, newspapers have increasingly adopted some form of pay model, including these that combine mostly free news with some premium content, such as freemiums, or metered paywalls, that usually allow for a number of free articles before a paywall is shown. Their study across 200 news organisations in seven markets in Europe and the US found that 69% of newspapers operated with either freemiums or metered paywalls, while bulletproof paywalls were only implemented by a handful of up-market newspapers. On the other extreme, the majority of digital-born news outlets offered free access to their news (Cornia *et al.*, 2017; Simon and Graves, 2019). While Simon and Graves conclude that "paywalls are here to stay" (p.4), Holm (2016) warns that the hybrid of free and paid-for news has yet to meet expectations, perhaps as a result of newspapers' inability to adopt the strategic culture that accompanies this business model. While some news organisations have experimented with micropayments (Geidner and D'Arcy, 2015), crowdfunding (Carvajal, García-Avilés and González, 2012), and sharewalls through which the user permits the company to collect data when they agree to share the news (Bechmann, Bilgrav-Nielsen, and Koorsgard Jensen, 2016), the viability of these models is questioned. Cornia *et al.* (2017) identified some other sources of revenue that private news organisations, especially newspapers, have been exploring. These include new verticals, such as content offerings beyond the organisations' main brands, repackaged content products, sections targeted at specific audiences, native advertising, branded content activities, offline activities, such as events and merchandising, and business-to-business services (ibid, p. 8). None of these alternative revenue models can be a one-size-fits-all solution to the financial problems news organisations have been facing. As Cornia (2017) argues, news organisations often pursue multiple projects simultaneously, aiming at improving their finances and the quality of their journalism or fostering an innovation culture. How the news organisations explored in this research respond to such pressures is discussed in Chapters 6-9.

2.5 Technology and innovation in the newsroom

Within the context of news organisations, innovation can reflect the process of taking new approaches and practices while maintaining quality and high ethical standards (Pavlik, 2013, p.183), or the capacity to respond to new strategic contexts (Küng, 2017). However, in general, innovation refers to “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” and research often focuses on the characteristics and differences between its earlier and later adopters (Rogers, 2003, p. 26-27). Writing in 2004, Boczkowski characterised the pre-web innovation culture in American newspaper organisations as having “reactive, defensive, and pragmatic traits” (p. 51), a trend that later resulted in a reluctant and conservative adoption of new technologies. However, he argues that the cumulative change that took place in the same period should not be underestimated, as it produced very different infrastructures, patterns, and products than those in traditional print. He identified three structural factors whose different combinations in newsrooms led to different innovation outcomes: 1. The closeness between the print and online newsrooms; 2. Whether the audience was a consumer or a producer of information and technically savvy or unsavvy, and 3; Whether the online newsroom reproduced editorial gatekeeping practices or found alternatives to them. Almost a decade later, Siles and Boczkowski (2012, p. 1386) described these phenomena in newsrooms as a process involving a “series of dynamics, mechanisms, means, and changes”. Their focus was not on the result but rather on how newspapers evolved over time and reacted to these shifts. This persistent state of flux often results in the altering of norms and routines, but not the destruction of the established structures or the status quo. This process is what Robinson, Lewis, and Carlson (2019, p. 371) call *transformation*, and it is consistent with Bourdieu’s postulation that fields tend to preserve their operational logic. For example, Tandoc (2014) explains that journalists are often slow to adopt new technologies, such as web metrics and audience analytics, and when they do, they tend to normalise them and adapt them to their existing norms and routines. However, this is a process of constant negotiation, where the modification of routines to accommodate technological changes is also important (ibid).

Likewise, Paulussen (2016, p. 194) describes newsroom innovation as an organisational process characterised by diverse dynamics, mechanisms, and negotiations, and change as evolving through continuous strategic and cultural arrangements across various levels and between different stakeholders. Such social constructivist conceptualisation of innovation in newsrooms considers several different factors at play and is tied to the largest challenges media organisations face, especially in relation to their digital strategies (ibid). Paulussen (ibid, p.195) explains that much research on newsroom innovation has adopted a "social shaping of technology" (SST) perspective, that assumes a mutual shaping between technology and society, instead of a deterministic account of technological change. In this process, innovation is enabled and constrained by structural factors, professional habits and routines, role perceptions, agency, and material considerations. These observations are confirmed by further research pointing to a complex system of newsroom relations in a converged environment (Robinson, 2011), the adoption of new technologies (Tandoc, 2014), the interplay of editorial, business and technology in cross-media newswork (Lewis and Westlund, 2015), audience participation (Domingo *et al.*, 2008; Karlsson, 2010), and the transformation of traditional routines and roles as a result of social media (Tandoc and Vos, 2016). While Paulussen (2016, p. 196) argues that the effects of technological innovation in newsrooms should be examined within the professional and organisational context "in which journalists shape the way innovation is implemented (or not)", Witschge and Nygren (2009) have identified 10 areas of technologically induced changes in journalistic work, affecting daily work, routines and norms, presented in Table 1.

Table 1: Technologically induced changes in journalistic work (adapted from Witschge and Nygren, 2009)

Demands in daily work (overtime work)
More mobile work
Multi-skilling (to handle technology and switching between different formats)
New content management systems that give journalists access to more content
More creative opportunities for formats and design
Constant deadlines, where the journalistic process of newsgathering, evaluation and production are compacted
New media logic with more web-specific content
Interactivity and user-generated content
Technological adoption and development, with journalists doing the work previously done by technologists
Journalistic autonomy, with the wall of separation between journalists and the financial/marketing activities becoming less visible

Similarly, in his single case study of dagbladet.no, Steensen (2009, p. 831) observed that innovation relies on multiple factors that are not isolated "but highly intertwined in intricate chains of causes and effects". Taking into consideration the role of agency—a factor he notes as overlooked in prior research—he argues that innovation at dagbladet.no often stemmed from individual initiative or good relationships between organisational members, and that informal power structures could block it. This interplay between innovative individuals and structural factors results in the adoption of innovation, albeit in an unpredictable manner (Steensen, 2009).

While newsrooms often take a random or conservative approach to innovation, such processes are mostly associated with technological advances (Küng, 2015; Broersma and Singer, 2021) and are neither linear nor always successful as they require both knowledge coordination and cross-functional collaboration in news organisations (Westlund and Ekström, 2020). This can be achieved through organisational rules and directives that align divergent specialist knowledge and goals, routines, and group problem-solving (Grant cited in Westlund and Ekström, 2020). While legacy news organisations are characterised by embedded structures, practices and routines, news start-ups usually take a more agile approach to technological change and product development (Carlson and Usher, 2016). Such new entrants in the journalistic field do not aim to disrupt long-standing professional norms and ideals but occasionally infuse journalistic culture with new practices centred around technological innovation and change, experimentation, and better user experience (ibid, p. 576). Deuze (2007) argues that as news media have become more responsive and less prescriptive towards their audiences, business practices also become more focused on heterarchy rather than hierarchy. Similarly, Steensen (2009) points out that innovation processes are affected by the representation of the audience as active collaborators that can lead to a rather distributed model of gatekeeping in the newsroom. Other scholars suggest that newsroom research should shift its focus from rigid editorial activities and structures to the study of socio-technical objects, the process of group problem-solving and cross-functional collaboration, and the management of digital products in the newsroom (Lewis and Westlund, 2015; Royal, 2017; Westlund and Ekström, 2020). All these issues are central to the design approach and are further discussed in Chapter 4, which presents the application of design in newsrooms.

Furthermore, media innovation scholarship should also study the transfer of knowledge from the audience towards intra-organisational actors (Lewis and Westlund, 2015). This component is frequently overlooked by journalists and news organisations, who fail to see audiences as agents who provide news with meaning (Raetzsch, 2015, p. 68). As Raetzsch (2015) argues, journalism is a structure of public communication, and as such, it is enacted by journalists and audiences alike. Drew and Thomas (2018) point to the *Innovation* report released by *The New York Times* in 2014 (discussed in more detail in Chapter 6) to illustrate how innovative change in newsrooms can happen as a reaction to their inability to connect with their audiences. However, Raetzsch (2015, p.74) suggests innovation efforts should focus on audiences as more than a statistical product of data aggregation and should rather make them "feel embedded in the social fabric of society". This aspect of innovation in newsrooms is also addressed in Chapter 4, which discusses how design practices can be used to offer a more qualitative approach to audience research and engagement within news organisations.

2.5.1 Field theory and journalism as a de-differentiated phenomenon

While Bourdieu (2005, p. 39) argues that to exist in a field "is to differentiate oneself", several external factors, such as globalisation, technology, modernisation, and commercialisation (Hallin and Mancini, 2004; 2017; Cottle, 2009) mobilise forces of convergence within and between media systems. In this media environment, news organisations have been competing for audience's attention and advertising share, while legacy media increasingly invest in new business ventures as a response to the creation of more digital-born market entrants and the diffusion of UGC (Nielsen, 2019, p. 331). These developments have seen new entrants in the journalistic field claiming journalistic identity (Elridge, 2017), resulting in a shift of boundaries between professional journalists and their audiences (Carlson and Lewis, 2020) as well as a change in the modes of both news production and consumption (Mitchelstein and Boczkowski 2009; Loosen, 2015; Fortunati and O'Sullivan, 2021). Especially in newspapers, Fortunati and O'Sullivan (2021, p. 4) argue, the rise of new entrants has challenged the traditional norms resulting in an increased criticism of professional journalism, which is seen as lowering the standards of news writing. Indeed, while journalists often adhere to the traditional values of their profession, journalism is viewed as "losing its contours" (Loosen, 2015, pp. 68-69) due to "changing economic, technological and organizational circumstances" (Weischenberg and Malik, 2008, p. 166), *liminal* actors in a networked journalistic environment (Ananny and Crawford, 2015), cross-beat teamwork (Grubenmann, 2016; Drew and Thomas, 2018), and fluid institutional logics (Lischka, 2020). These changes have prompted discussions focusing on the de-industrialisation and de-ritualisation of journalism (Broersma and Peters, 2013), as well as the decline of public trust in journalism (Fletcher, 2020b), which is discussed in Chapter 3.

As Loosen (2015, p. 72) suggests, these changes can be pinpointed to different levels of analysis and include the de-bounding between journalism and market dictates (macro), between the editorial desk and marketing/business departments (meso), between the core journalistic activities and the non-journalistic ones (micro), as well as the journalistic coverage/output that cuts across the macro-micro divide. Taking the above into consideration, it becomes clear that neither boundary work nor the notion of de-boundedness is precise and limited to a single development or process. Carlson and Lewis (2020, p. 126) suggest that any boundary work in journalism "can be made more manageable" if it studies participants (the actors involved), practices (the means by which actors work) and propositions (the shared beliefs that support this work).

While research on boundary work is rich and includes questions on "what could or should be called journalism" (ibid, p. 128), professional norms (Singer, 2015) or even "legitimate forms of news" (Sjøvaag, 2015), Loosen (2015) points to the lack of a strong theoretical underpinning that could explain phenomena of de-boundedness in journalism from a holistic perspective. He uses Luhmann's social systems theory as a starting point to show how journalism follows a "roundabout pathway" (p. 73) from differentiation to de-differentiation, separated into four phases. The first phase focuses on differentiation or how journalism's function is demarcated against its environment. The second phase concerns how the social system of journalism, similar to Bourdieu's journalistic field, interacts with other social systems (ibid, p. 74). The third phase focuses on de-differentiation and is characterised by indications that journalism is unravelling at the periphery, revealing its dependence on other systems, such as the economy. The fourth phase concerns indications of journalism's stabilisation, or what Loosen describes as "unravelling around the edges" but "hardening (itself) up at the core" (ibid, p. 75). Such conceptualisation can have theoretical and empirical implications. On a theoretical level, the researcher can ask questions about changed structures and structural interdependencies, new forms of differentiation, and loss of function (similar to Bourdieu's loss of autonomy). On the empirical level, the researcher can compare the centre (news journalism) and periphery of journalism (for example, data journalism or collaborative journalism), study what the audience regards as journalism, the different actors that produce news or analyse to what extent these actors interact with their audiences (Loosen, 2015).

Wang (2020) applied a similar framework to study how the news industry oscillates between differentiation and de-differentiation in relation to the tech industry. She defines de-differentiation as a process in which social institutions are pulled closer to each other through convergence, and differentiation as a process in which industries set boundaries and demarcate themselves from other professions. Wang (ibid, p. 154) argues that the power relations at play in this process can benefit from a differentiation/de-differentiation framework that helps to explain how the journalistic field obeys its own nomos while at the same time negotiates its heteronomous and autonomous influences in a dialectical interaction that reveals the intricate power dynamics of the field.

The focus on power relations here is key. While differentiation theory is strongly associated with social systems theory, discussed above, Hallin and Mancini (2004) believe that it can also benefit from a field theory framework. Social systems theory, like Bourdieu's field theory, sees social institutions as specialised social systems with distinct functions in society. However, as Hallin (2005) and Hallin and Mancini (2004) argue, such an approach fails to consider the power dynamics between different agents, while it assumes an evolutionary, unilinear process towards greater differentiation. The disruption in journalism's traditional ties, they argue, does not necessarily equate to greater autonomy or diversity in the profession (Hallin and Mancini, 2004, p. 83). Instead, whereas today's media tend to differentiate themselves from organised political groups, they have moved closer to the field of economics that, as mentioned previously, has become the dominant pole of journalism (Hallin, 2005). Bourdieu sees change in journalism as involving a high degree of de-differentiation, as well as a process of struggle between agents that can result in greater or lesser autonomy in the field (ibid, p. 82). This conceptualisation will be used in this research which aims to explore how audience-oriented and design practices affect journalism and the relations between different practitioners in legacy newspapers.

2.6 Conclusion

This chapter focused on Bourdieu's field theory as the theoretical framework that will guide this research and the forces operating from outside the field, constituting the heteronomous pole of journalism: the economy, and technology and innovation. Journalism was described as a de-differentiated phenomenon, oscillating and constantly negotiating its contours against its environment, leading to greater or lesser autonomy of the field. At this point, it becomes apparent that field theory offers a multi-dimensional analytical model, where conscious and unconscious power relations are realised through past and present structures in a constant "competition for legitimate appropriation of what is at stake in the struggle in the field" (Bourdieu, 2005, p.44).

This research does not aim to measure the impact of the audience turn in journalism on journalistic output directly or, conversely, to assess the reception of newsrooms' audience-led strategies by the public and, therefore, their success or failure. Instead, it aims to explore how legacy newspapers incorporate design practices into their broader audience-oriented innovation strategies and how this process affects journalism and the relationships between different media practitioners, which can either point to a shakeup of the journalistic habitus or the preservation of the field's logic. To do so, it follows a multiple case-study design in which in-depth interviews with designers and other audience-oriented practitioners, as well as journalists, are the main data-collection method. Therefore, whereas audience's engagement, as discussed in the next chapters, is increasingly relevant in journalism practice, its impact on news organisations and the journalistic field will only be assessed indirectly. This methodology allows one to explore both the organisational characteristics of the specific newsrooms and their position in the journalistic field, the audience-led strategies employed, as well as the practices, tensions and areas of cooperation or contestation that emerge from the adoption of these practices.

By utilising field theory's analytical framework, it is possible to take into consideration "questions of economy, culture, power, politics" and bridge micro and macro levels of investigation without exclusively focusing on the individual or organisational perspective of news production (Willig, 2013, p. 375). As Willig (2013) notes, empirical investigations of journalistic capital are often statistical (p. 381). However, Benson (1999, p. 468) stresses the importance of qualitative research to examine the influx of new entrants, and the characteristics of those entering the field in relation to the field's internal logic. This research aims to shed light on some of these complexities, by examining how design and audience-oriented practices can lead to the transformation or preservation of the journalistic field, and how journalists perceive these changes. To conclude, while this chapter introduced the theoretical underpinning of this research and discussed the external forces shaping the field, the next chapter will focus on the journalistic doxa—the taken-for-granted norms that uphold journalism as a profession, define professional roles and journalists' perceptions of the audience.

Chapter 3. Normative considerations and the ‘subject of journalism’

Journalism is intertwined with its environment and, therefore, directly affected by “challenges of a political, technological, economic, cultural, and social nature" (Zelizer, 2007, §1) In this backdrop, studying how normative, value-laden theories apply in the context of an increasingly digitalised environment is imperative to interpret the public, individual, and institutional expectations of what journalism “ought or ought not to be doing” (McQuail, 2010, p.162). The first section (3.1) in this chapter examines journalism’s normative roots and sources that still shape and steer contemporary journalistic practice and discourse. A particular focus is placed on journalism’s moral obligation to safeguard democracy and protect the public interest, a role that creates a pertinent sense of what the profession ought to be doing, affecting both journalistic practice and the audience’s expectations from journalism. These taken-for-granted, established norms and values of journalism, or what Bourdieu calls doxa, shape journalistic roles, professional beliefs, and practices. However, they also raise questions about journalism’s objectivity and transparency and trigger what is seen as one of the biggest challenges the profession faces today, discussed in the next section (3.1.1): lack of trust. In the third section (3.2), the focus shifts to what Wang (2018) calls the “subject of journalism”: the audience, that oscillates between “audience as economic capital” and “audience as social capital”. Journalism has a sense of serving the audience, but it has not been traditionally close to it (ibid, p. 480), leading to discussions about its elitist tendencies and disassociation from the communities it is supposed to be serving (Section 3.2.1).

3.1 The sources of normativity

Journalism enjoys a rich history of professionalisation (Deuze and Witschge, 2018) and the normative assumptions of how it ought to behave towards society permeate its commercial activities and professional status. As McQuail (2010, p. 162) notes, the most profound sources of normative expectations in journalism derive from the historical framework that has shaped the role of the media as an institution. Notions such as neutrality and objectivity accompanied the transition from a reflective and instructive journalistic style to a commercialised and fact-centred press that developed in the US to reach a larger audience and, in the late 19th century, diffused into Europe from the UK (Broersma, 2020, p. 408). The extent to which professional practice feeds back into journalism theorising is described by a pragmatist/participatory approach, in which theory may not necessarily serve as the starting point of academic research (Ahva and Steensen, 2019, p.42). Barnhurst and Nerone (2009, p.17) identify two sources that inform journalistic discourse: an occupational one that built the identity of journalism as newswork developed and professionalised, and an intellectual interest in the evolution of the means of communication that traces its roots as far back as Plato's time. Similarly, McQuail (2010, p. 163) points to several other sources of normative expectations that go beyond professional practice: the social and political theory of the press, the public as citizens, the public as audience, the media market, the state and its agencies, and interested parties in the society affected by the media. Even though sociological perspectives dominate journalism scholarly literature, the disciplinary framework mostly associated with the normative obligations of the press stems from the political science tradition that links the field to the democratic function of society (Zelizer, 2004; Ahva and Steensen, 2019). For example, Schudson (2008, p. 12), describes journalism's democratic functions as an obligation to inform, investigate, analyse, show social empathy, provide a public forum for dialogue, and mobilise people. Similarly, Deuze (2005, p. 447) lists the profession's five ideal traits or values:

1) Public service: journalists provide a public service (as watchdogs or 'newshounds', active collectors and disseminators of information); 2) Objectivity: journalists are impartial, neutral, objective, fair and (thus) credible; 3) Autonomy: journalists must be autonomous, free and independent in their work; 4) Immediacy: journalists have a sense of immediacy, actuality and speed (inherent in the concept of 'news'); 5) Ethics: journalists have a sense of ethics, validity and legitimacy.

The notion of media's obligations to the society is also evident in McQuail's (2010, p. 184) social responsibility or public interest model, the second of his four categories of normative media theory. In this model, the media maintain high standards of self-regulation with government intervention when needed, while obligations to society go beyond the media's self-interest (ibid). In contrast, his liberal-pluralist or market model suggests that both regulatory and accountability issues are run by market logic and public interest "is what interests the public" (ibid). While models that take issues of ownership and public interest into consideration complement the normative social responsibility theories, questions arise about whether capitalism and wealth concentration are synonymous or can coexist with democracy (e.g. McChesney, 2015, Schutlz, 1998; Akhavan-Majid, and Wolf, 1991).

For example, Akhavan and Majid, and Wolf (1991) see the interaction between journalists and power elites as a two-way influence model, where the media are themselves a power elite that can control and be controlled by the government, something that does not allow them to be independent, to promote diversity and plurality, or function as an adversary of the government protecting the public interest. Likewise, Schultz (1998, pp. 12-13) believes that normativity's role in institutional journalism is flawed for reasons that include concentrated ownership that limits diversity, poor representation of minorities, and the disproportionate political power and influence of media owners. However, she distinguishes between commercial news media production and the role of individual journalists, who can be "resilient, determined, shrewd and civic-minded" (ibid, p. 12). This is what Barnhurst and Nerone (2008, p.21) call "a wall of separation between the counting room and the newsroom" and a central feature of journalism's professionalisation discourse in the 20th century. The complex set of news media activities is partially mirrored in this management/newsroom dichotomy, reflecting the tension between the heteronomous pole of journalism represented by the news organisations' business department and its autonomous pole, which orients the profession's internal logic. However, the degree to which normative ideals shape journalism as a profession is contested, perhaps revealing a gap between practice and theory. For example, while literature shows that doxa plays a big role in journalists' sense of identity (Siegelbaum and Thomas, 2016), these perceptions often drive the discourse on journalism's alleged failings and are particularly visible in how journalists perceive audiences and their relationship with them, discussed in the next sections.

3.1.1 Normative standards as a trust currency

The continuing presence of the "normative ideal of the informed citizen" (Fisher, 2016, p. 454), extends to issues related to the declining levels of trust in journalism as well as the profession's moral failures and institutional performance (Blöbaum, 2014). As Tsfati and Cohen (2005) point out, this situation is a self-inflicted wound: when news organisations promise their audiences that they will provide information that conforms to the normative standards of objectivity, fairness, accuracy and reliability, the audience builds its trust on the expectation that journalism will abide by this kind of idealised reporting. However, the public cannot be certain that journalists will act as watchdogs to protect the public interest, and when journalists do not live up to these expectations, trust suffers (ibid). Likewise, Tsfati and Cappella (2003, p. 506) discuss how audiences become sceptical of journalism when they believe that journalistic standards are sacrificed "for personal and commercial gains". The ideal of neutral and impersonal journalism that made objectivity the central norm of the journalistic paradigm (Vos and Moore, 2018) has been challenged from different perspectives. Sometimes, objectivity serves as a way to counter the "disappointment of the modern gaze" (Schudson cited in Anderson and Schudson, 2020, p. 141) or as a strategic ritual of formal attitudes aimed at shielding journalism from critics (Tuchman, 1972). However, Hallin and Mancini (2004, pp. 13-14) highlight objectivity's unrealistic nature, arguing that it cannot explain many functions of the press, not only in countries where the practice of journalism is rooted in partisan traditions, such as Spain and Italy, but also in the US where it is more prominent.

Furthermore, with the rise of political polarisation and populism in Western countries and beyond, adherence to normative ideals has become more complex, especially as populist leaders challenge mainstream media and portray them as biased and antagonistic (Panievsky, 2022). From the Nazi-revived term of "Lügenpresse" (the lying press) used by the German far-right to President Donald Trump who declared the media the "enemy of the people" (Enli and Rosenberg, 2018), the dynamics between politics, media, and public trust appear to depend on a number of varying factors. These can include the characteristics of the political system itself, populism's view of society, the media's own ambiguous role and understanding of populism, the public's populist attitudes (e.g. Krämer, 2018; Fawzi, 2019; Schulz, Wirth, and Müller, 2020), as well as the role of social media that amplify populist messages online and facilitate direct interaction between political actors and the audience (Crilley and Gillespie, 2019).

As this changing landscape influences media habits (Fletcher, 2019), re-evaluating normative ideals is often viewed as a means to address longstanding criticisms of journalism's deep-rooted norms, which exhibit "serious wear and tear" (Ward, 2011, p. 119), and as a way to rebuild trust in an online environment characterised by fragmented audiences with conflicting expectations. For example, scholars have shifted their attention from objectivity to transparency, which has been called the "cyber-newsroom Glasnost" (O'Sullivan, 2012), a "shift in the cultural capital of journalism" (Hellmueller and Poepsel, 2013) and the "'god' of institutional ethics" (Ward, 2013). For Eide (2014, p. 679), transparency can be a way to respond to "the increasing need for the justification and legitimation of journalism". In their study among media users in Germany, Uth, Badura, and Blöbaum (2021) found that news organisations can increase their trust relationship with their audiences by improving the transparency of their products and processes. In particular, they found that audiences appreciate content transparency strategies, such as fact-checking services and strategies that allow them to participate in editorial processes (ibid, pp.77-78).

Karlsson (2010) identifies two kinds of transparency: disclosure transparency, which refers to the openness of news producers regarding the process of news production, and participatory transparency, which aims to involve the audience in the news production process. The latter, along with the extent to which news organisations engage audiences as a strategy to address new challenges (Brants, 2013), and how design practices can promote transparency in journalism, will be discussed in Chapter 4. However, it is apparent that the normative notions comprising what Fenton (2010, p. 8) calls "the holy grail of professional journalism" can both build and erode trust.

3.2 Perception and reception of the audience in the journalistic field

The wake of the global financial crisis in 2008 found traditional news organisations, and especially newspapers, faced with diminishing economic and cultural capital and preoccupied with questions surrounding what Anderson (2019, pp. 228-229) calls the "participatory era" in his history of digital news, an era that signalled the opening of newsrooms to audience interaction and participation. With the expansion of the journalistic field, Tandoc (2015) argues, journalists faced an unprecedented level of interaction with what Rosen (2006) has called the "people formerly known as the audience". This development was initially accompanied by an optimistic notion of a bottom-up information utopia in journalism and other cultural products (Tandoc, 2015, p. 228). At the same time, what was perceived as "the liberatory power of the internet" was thought that would eliminate the anti-democratic tendencies of professional journalism (Anderson and Revers, 2018, p.28). However, the growing role of audiences in journalistic practices and routines has posed a challenge to long-established professional boundaries and journalistic identities, normative role conceptions, the relationship between journalists and the public, and the political economy of newsrooms (e.g., Jönsson and Örnebring, 2011; Waisbord, 2013; Elridge, 2017; Wall, 2017; Hanusch and Banjac, 2019; Carlson and Lewis, 2020)

Both employment and organisation in news-making have been structured around the newsroom, something that has served to stabilise the profession and shape the scholarly construction of journalism (Deuze and Witschge, 2018). Therefore, work routines and values, as observed in institutional arrangements, seem to offer the framework in which professionalisation is realised as a set of standards. In this context, journalists' self-perception of "newsworthiness" has helped to strengthen the conditions that granted journalism a unique place in the public sphere (Vos and Finneman, 2017). In an environment characterised by the fragmentation of online news publications and the interactivity of digital platforms, scholars have observed a shift in the sender-receiver process of the traditional Aristotelian one-way communication model (Hanusch and Banjac, 2019), while the perceived borders of the journalistic field have been infiltrated by what Elridge (2017, pp. 44-45) calls the 'interlopers' – or, simply put, the digitally-enabled "would-be journalists" transgressing journalistic boundaries and misappropriating professional identities (ibid). These new actors, Carlson and Lewis (2020, p. 123) point out, can range from "well-funded, digital-native start-ups to the lone individual able to blog or tweet or comment, with many gradations in-between". Ahva (2017, p. 142) distinguishes between typical audiences randomly engaging in journalism acts and the "in-betweeners", namely citizens who are not professional or salaried journalists but play a significant role in the journalistic process and can include activists, freelancers, academics, students, or artists. As metrics have taken a central role in newsrooms, Christin (2020, p. 76) outlines the emergence of a new category of actors, whom she calls the "algorithmic publics". She explains that she uses the term "publics" to illustrate their civic-minded role "as citizens endowed with political legitimacy" as opposed to the "haphazardly assembled spectators" that constitute "audiences" (ibid).

Borrowing futurologist Alvin Toffler's term "prosumers", Picone (2007) explains how news users have moved up in the value chain by becoming both consumers and producers, actively involved in the design and production of customer-oriented goods that they eventually want to buy. Elsewhere, he argues that audience studies should ask whether the term audience is still adequate to describe the multiple ways in which people are involved with today's media environment (Picone, 2016). Instead, he argues that "news users" can be used as an umbrella term to include people who "actively select, give meaning and produce news media" (ibid, p. 130). Similarly, Bruns (2008) refers to the "produsage": the collaborative and peer-based content production where participants are producers as well as users ("produsers").

The distinctions mentioned above could be useful for the value-based marketing activities of news organisations, however, the extent to which audiences are actively involved in the news product or challenge the journalistic field is contested. For example, while Jenkins (2006, p. 259) sees the convergence culture as an opportunity "for grassroots communities to speak back to the mass media", other scholars (Goode 2009; Bird, 2011; Elvestad and Phillips, 2018) suggest that it is still journalists, as well as the market, that control the agenda in this process. Jönsson and Örnebring's (2011) study on online broadsheet and tabloid newspapers in Britain and Sweden further indicates that while the internet offers greater opportunities for citizen participation, this interaction does not equate either control or production and citizens' contributions are usually limited to cultural or personal content. As Hermida (2011, p. 27) points out, journalists and news organisations have been reluctant to allow readers to set the news agenda and "open up the news-making process to input from outside the newsroom".

In his typology of online journalism in 2003, Deuze (p. 220) warned that when mainstream news sites embrace connectivity, they should consider how this affects several parameters, including their monopoly on content, their understanding of audiences and their role in the community, as these developments undermined "the 'we write, you read' dogma of modern journalism". Later, McQuail (2013) foresaw a paradigm shift in mass communication and the concept of audience. Although McQuail (ibid) suggests that a new paradigm should take into consideration the circular and connected nature of communication instead of focusing on a linear, sender-receiver delivery model, he still thinks that many issues remain in the sphere of the journalistic doxa. At the same time, he suggests that changes should not be seen by the light of technological determinism but through that of previous theorising.

> It does not make much sense to speak either of the empowerment of the audience or of its demise when we cannot identify the audience in question. The audience was never as open to control and manipulation as the original paradigm mistakenly presumed. But the old way of perceiving an audience has not gone away because it suits the purposes of many participants in the larger system in which modern media re-embedded. (McQuail, 2013. p. 19).

Studying innovation in online newspapers, Boczkowski (2004, p. 76) reached a similar conclusion: to the degree that newsrooms are a socio-material space, technology informs journalists' understanding of their audiences and therefore, organisations' online presence. However, technology is also used to reproduce traditional print practices and thus the field's logic (ibid). These findings can be linked to Elvestad and Phillips' (2018, p. 36) view that it is not the tool of technology that makes a journalist, but the process of journalism itself. Indeed, O'Sullivan and Heinonen (2008) found that while interaction with the audience across 11 European countries and 40 news outlets is largely seen as beneficial by journalists (online and print), the majority (51%) does not consider DIY journalism (such as citizen journalism or blogging) as real journalism. Professional journalists' scepticism towards UGC was observed right after news organisations opened their doors to content produced outside their own settings (Singer, 2015, p. 25-27). While UGC has been met with resistance, with journalists citing ethical and legal implications of its use and invoking normative identity and boundary markers to protect their profession and differentiate themselves from amateurs, there has also been a gradual shift in their response: journalists seem to accept the reality of UGC, and instead of sealing “their ethical borders, practitioners are looking for ways to bring UGC within their own ethical sphere” (Singer, 2015, p. 27).

Further indicating a trend towards professionalisation and perhaps conformity to the journalistic doxa, a study on citizen journalism websites in the US revealed that many of them, especially among the for-profit ones, include former or current professional journalists as contributors (Lindner, Connell, and Meyer, 2015). Similarly, in her research on venture-backed news start-ups in the US and Europe, Usher (2017) found that while these new entrants have their distinct technological and cultural innovations, they largely abide by the fundamental journalistic doxa. At this point, it becomes apparent that how journalists adapt to the profession’s ongoing transformations and their responses to how audiences are perceived when included in journalistic work point to a “prevailing principle of continuity in journalism” (O’Sullivan and Heinonen, p. 368). Under this lens, newswork and journalistic performance become an instrument of professional demarcation (Coddington, 2014), largely aimed at controlling the crossing of the profession’s boundaries by new entrants (Singer, 2015, p. 27). As Barnard (2018) notes, the debate over who controls journalism’s gates, or as he puts it, “the practices and processes through which information becomes news”, becomes important because, in the end, it revolves around the symbolic power of journalism: who shapes “the norms, values, and ideologies” and therefore, “legitimate journalistic action” (p. 44).

Whether distinguishing between “good” and “bad” journalists (Singer, 2015, p.21), journalists and “bloggers, commenters, Facebook posters and tweeters” (Robinson, 2015, p. 155), journalists and activists such as Julian Assange of Wikileaks (Elridge, 2017), or even between journalists and non-governmental organisations (Powers, 2015), it is obvious that the journalistic field meets new entrants with resistance. Elridge (2017, p. 51) argues that these interlopers are viewed as “lesser-than” and labelled as “journalistic” rather than real journalism. He points out that journalism’s reflexes as an “immovable construct” (p.50) can be described by what Bourdieu calls an inherent conservatism to the field’s dominant vision. However, as audiences become more interactive and consultative (McQuail, 2010, p. 446), the participatory culture permeates the business models of both legacy news organisations (Anderson and Revers, 2018) and those of smaller newsrooms where “pro-am” content replaces professional labour due to limited financial resources (Nah *et al.*, 2015). At the same time, individual journalists, as well as news organisations, are called to find ways to manage their presence on social media, which, Carlson and Lewis (2020, p.128) argue, are "complex spaces where old boundaries cannot be so clearly recognized or even theorized".

Against this backdrop, Bourdieu's distinction between journalists and audiences may seem outdated (Vos, Eichholz, and Karaliova, 2019). However, questions on journalistic boundaries continue to saturate the profession, revolving around the "material struggles concerning the allocation of resources" and the "symbolic contests for control and legitimacy" and the (Carlson and Lewis, 2020, p. 123), or to put it on Bourdieu's terms, the symbolic and the economic capital. The audience accommodates journalism with both forms of capital (Tandoc, 2015). On the one hand, the audience is traditionally viewed as a market or the recipient of a product (ibid, p. 785). On the other hand, the audience is also a source of legitimisation for journalism: news organisations that fulfil their responsibilities to the public increase their reputation (ibid). In this process, journalists' perception and reception of the audience may be an almost knee-jerk reaction to preserve and abide by the journalistic doxa. However, how journalists view the audience is also affected by influences from outside the field, discussed in the previous chapter, and their habitus: their seniority, their status as digital or traditional journalists, their educational background, their considerations of financial and professional stability, all affect how they view and respond to the audience (Wang, 2018). How news organisations include audiences through design practices and how these developments expose journalism to new external influences, creating demand for types of skills and professionals that are not traditionally part of journalism, is discussed in Chapter 4.

3.2.1 The 'news gap' and journalism's elitism

The way journalists perceive their audiences can lead to different communication outcomes and news content: if journalists view their audiences as irrational, they may believe they are not interested in public affairs news but in click-bait, sensationalist, low-quality content (Coddington, Lewis, and Belair-Gagnon, 2021). Sometimes this discordance is expressed through what Boczkowski and Mitchelstein (2013, 2017) call the "news gap"— the difference between the news audiences and journalists are interested in. However, although journalists have a significantly higher interest in public affairs news compared to the audience, this gap is dynamic and reduces during heightened political activity, suggesting that the agenda-setting power of journalism is circumstantial (ibid). Nevertheless, market competition, the greater ability of audiences to reject news they are not interested in, and the rising challenges to journalistic roles stemming from the increased awareness of audiences' news consumption, can amplify its effects and undermine journalism's public service role as a privileged space for public deliberation (ibid). While news organisations can respond to these challenges by introducing more flexibility in their news production practices and news selection (ibid, pp. 149-150), being attentive to audiences' needs is still met with resistance among journalists (Costera Meijer, 2020, p. 2338). This situation often stops news organisations from asking "*what journalism is for*" (italics in the original), causing them to ignore alternative news sources, inadequately address class and race issues, lack newsroom diversity, and perpetuate elitist tendencies that fuel public resentment (Zelizer, 2018, pp. 149-152). Similarly, as Ferucci, Nelson, and Davis (2020, p. 1588) point out, audiences feel alienated and distrustful of news that fails to accurately reflect their lives and consider their perspectives by excluding them from its production. Journalism often overlooks marginalised communities, with journalists viewed as part of an elite serving other elites (ibid, pp. 1596-1598). Usher (2021) similarly highlights elitism as one of the most critical challenges facing journalism today. In her book "News for the Rich, White and Blue", she argues that quality journalism in the United States serves those whose cultural and economic capitals allow them to pay for such "economic luxury" (ibid, p. 52) and at the same time trust and appreciate its value. In this "preach to the converted" process, news organisations and especially newspapers, fail to reach and empower marginalised communities, and therefore serve only an "elite democracy" (ibid, p.240). The Media Pluralism Monitor for 2021 paints a similar picture for Europe. Minorities, local communities, people with disabilities, and even women, have insufficient access to media, with most of the countries studied displaying medium or high risk in all relevant indicators (Bleyer-Simon et al, 2022).

While concerns about journalism's disconnection from the communities it is intended to serve (Deuze, 2008; Fink, 2019) are linked to the issue of public trust, discussed above, they also raise questions about how journalistic organisations can better engage the audience and how this would influence journalistic practices, values, and the overall quality of the media (Hermida and Thurman, 2008; Domingo et al., 2008; Heinonen, 2011; Costera Meijer, 2013; Hujanen, 2016). Nevertheless, as Costera Meijer (2020) points out, metajournalistic discourse now focuses on the concept of innovation rather than that of quality journalism, and news organisations recognise the need to be of service to the audience. This process involves a better understanding of how audiences experience journalism; when they feel informed, and when they will pay for a journalistic service with either money or attention (ibid, p. 2338). While data analytics help journalists and news organisations to know more about their audiences (Fink, 2019), Boczkowski and Mitchelstein (2017, p.176) argue that algorithms and the increased information about audience's preferences threaten "journalism's jurisdictional space". Questions about how journalism can interact with and make sense of their audiences are addressed in the following chapter.

3.3 Conclusion

This chapter highlighted the normative role orientations that saturate journalism as a profession and practice. Journalism's normative roles are legitimised discursively through interaction with neighbouring fields, especially politics. This is where most of the elements related to the journalistic doxa lie: journalists have a normative obligation to safeguard democracy, and to act as watchdogs and gatekeepers of information. It comes as no surprise then, that most considerations about what journalism should be doing are closely related to political participation and citizenship. These normative roles act as a stabilising factor in the field as they help to demarcate the profession against pressures from neighbouring fields and new entrants. However, they are also challenged as journalism is increasingly seen as inadequate to protect the public, provide surveillance, and hold power to account. Journalism is seen as an elitist profession, favouring those in power. Therefore, questions regarding the autonomy of the field contradict its sense of impartiality and objectivity. The question of whether a more deliberative and pluralistic model of journalism can replace or complement the elitist one should ask what the shared expectations from journalism are. Therefore, how journalists perceive the increasing role of the audience is key. As Wang (2018, p. 481) argues, journalism has gone from ignoring the audience to being addicted to the audience. However, who this audience is and what it wants from journalism is contested. The next chapter examines how news organisations employ design methodologies to know more about their audiences and gather insights beyond algorithms and audience metrics, develop new products and services, promote cross-functional collaboration, and inform decision-making. It also discusses the tensions that arise between editorial needs and business interests in this process, and the ensuing challenges to traditional structures and journalistic roles.

Chapter 4. Design in journalism: towards an audience-centred newsroom?

Chapter 2 introduced Bourdieu's field theory as the theoretical framework of this research and discussed the "technoeconomic means" of journalism (Wang, 2018), which reflect the external dynamics and exogenous forces that influence the field. This is the heteronomous pole of journalism and is influenced by changes in the fields of economy, technology and innovation. Chapter 3 moved on to discuss the sources of the autonomous pole of journalism as a manifestation of the journalistic doxa and habitus and are tied to normative considerations. Central to this discussion is how journalism is perceived by its subject, the audience, and vice versa. This chapter shifts the focus to the "object of journalism", which Wang (ibid, p.483) identifies as the evidence journalism uses to make "journalistic point in news" and can be either quantitative or qualitative.

The first section (4.1) presents the increasing role of audience metrics: while journalists and news organisations have unprecedented access to a vast wealth of information about their audiences, an overdependence on metrics, can both widen this gap and present a danger for democracy as clicking behaviour is not always representative of the audience's preferences or needs (Kormelink and Costera Meijer, 2018). The next sections discuss design as a complementary method of enriching news organisations with deeper knowledge about their audiences. While much research has been conducted on the adoption of algorithms and audience metrics from news organisations, the role of design in newsrooms is relatively under-explored in scholarship. Sections 4.2 and 4.2.1 summarise design theories and the utilisation of design, and more specifically DT, in business. Then Section 4.3 moves on to discuss the role of design in journalism research and practice.

4.1 Are audience metrics enough?

As Bruns (2016) points out the computational turn in journalism is associated with the emergence of big data analytics as a tool for quantification, audience research and engagement. On the side of journalistic production, he explains, simple volumetric analysis of news outputs, such as social media feeds, web scraping and article databases, allow news organisations to track the key trends in publication activity. More detailed data processing, such as computational textual analysis, can reveal how these key themes change over time, or identify key individuals or organisations in public debate. On the side of journalistic reception, news organisations can track site access and activity data, as well as social media engagement, that provides them with real-time insights on user attention, the performance of their content, and the overall the positioning of the news brand (ibid). Such detailed and large datasets are valuable to news organisations that seek to understand what audiences' behaviour online and what they ask from the journalistic output. By utilising technological tools that allow them to see the audience's news preferences through clicks, likes and shares, journalists today know more about their audiences than ever before (Fink, 2019, p. 41). However, as Tandoc and Thomas (2014) argue, while the value of such analytics is straight-forward for the field of online marketing, where they were first utilised to track metrics that lead to conversion, their application in journalism is contentious and the degree to which these metrics constitute a meaningful representation of journalistic audiences is questioned. For example, Petre (2021) argues that performance metrics do not make journalism more accountable to the public but are rather used as a new form of managerial surveillance, that intensifies journalistic work, and creates competitive dynamics between colleagues. Even though journalists often choose to engage with analytics, Petre also points to journalists' long-held disinterest in audience feedback as a way to protect their professional status and journalistic autonomy.

Nevertheless, the quantification of audience behaviour has provided news organisations with large amounts of data that need to be processed and translated (Ferrer-Conill and Tandoc, 2018). As a result, some newsrooms create audience-oriented roles, focused on the handling of these data. As Ferrer-Conill and Tandoc (2018, p. 441) point out, "These emerging roles facilitate the incorporation of the measurable audience in newsroom operations as they give meaning to data that can be used to make editorial decisions." However, they argue, these professionals do not communicate with audiences directly and their roles are constrained by the tools they rely on, such as like, shares, number of comments and other audience metrics (ibid, p. 448). In addition, as Cherubini and Nielsen (2016) explain, some news organisations develop distinct forms of analytics, tailored to their editorial needs and priorities, in a bid to inform their day-today decisions and longer-term strategies. While such best-practice editorial analytics are most commonly developed by market leaders, they are still an inadequate measure of audience preferences, and need to be complemented by qualitative data and editorial expertise (ibid). Likewise, Bruns (2016, p. 12) explains that the use of analytics in journalism should move beyond "number-crunching" measures of performance to include, qualitative, in-depth exploration that will examine the impact of journalistic and audience practices on stories, news organisations, the public debate, and the whole society. As discussed in Chapter 2, newsrooms are slow adopters of new technologies, and audience metrics are typically used to enhance traditional gatekeeping functions (Tandoc, 2014). Brian Hamman, Senior Vice President of Product Engineering at the New York Times, puts this natural tension between audience metrics and journalistic values into perspective: he explains that the newspaper's mission is not entirely algorithmic but rather editorially driven (DaCosta, 2018b). He argues that with hundreds of articles being published daily "if we just let an algorithm take over, it's entirely possible that for some people the entire home page could just be arts and sports. But that's not a reflection of the world. That is part of our mission: to be a reflection of what is important" (ibid, par. 4). Elsewhere, he says that the newspaper's aim is to create a news experience that actively involves product developers, designers, engineers and journalists (DaCosta, 2018a).

Similarly, Kormelink and Meijer (2018) argue that clicks are a flawed instrument of measuring people's online news consumption, because an absence of clicking does not necessarily equate to people's lack of interest in the news. Clicks, they write, "capture a limited range of users' interests or preferences" (ibid, p. 681) and they should be critically assessed rather than being taken at face value. Therefore, audience engagement, should not only be measured by clicks but also other methods, such as ethnography. They conclude: "By giving people what they supposedly 'want' – as captured in clicks – news organizations could end up harming not only democracy but also themselves, as adhering to clicks might lead to the trivialization of news and thus to a decreasing interest of users." (ibid, p. 681). These observations are also echoed by Nelson (2021, p. 66), who argues that whereas audience metrics, such as clicks and pageviews, may indicate that readers have interacted with the journalistic output, they are not suggestive of audience engagement. Instead, he distinguishes between "reception-oriented" and "production-oriented" audience engagement and explains that the first form is market-driven and translated into quantifiable measures that can be used to address financial problems, whereas the second form focuses on the efforts to bring the audience "into the news production process" (pp. 32-33). Production-oriented engagement involves questions surrounding collaboration with the public, diversification in the voices included in the news, and empowerment of the audience, which in turn is the best way to restore trust in the news (ibid).

Whereas the quantifiable turn in audience preferences has been linked to an open-source culture that can potentially make journalism more democratised and more responsive to the public (Coddington, 2015), Fink (2019) argues that superficial metrics do not help journalists make sense of who they write for, and this can lead to a disconnection from the real needs of the audience. This situation can exaggerate the lack of trust in journalists, often perceived as powerful people who push agendas against the public interest (ibid). In the same vein, Wang (2018) has emphasised the risks from journalism's overreliance on audience metrics. In her multidimensional field theory model, introduced in Chapter 2, she argues that the changing vision of the subject of journalism, the audience, is affected by changes in the object of journalism, which is the evidence journalism uses to make sense of the world. Wang explains that quantitative evidence, including metrics, has been given more attention in journalism than qualitative evidence that traditionally included audience letters, and online comments or chats. She points to journalists' reluctance to engage with such qualitative evidence and warns that if overreliance on quantitative evidence continues the subject of journalism, which is the audience, will turn into the object of journalism. Without a subject to serve, journalism will lose its purpose and perhaps audience will increasingly be viewed solely as economic capital. The adoption of audience metrics in newsrooms prompts changes to journalism-audience relationship that Wang situates between the journalistic doxa and habitus. Field theory's analytical power lies in the fact that it allows the researcher to study such tensions as the result of the "social, economic, and cultural power struggles" (Anderson, 2012, p. 9) that occur inside the field. For example, advances in algorithmic journalism should be examined in parallel to the dynamics inside the journalistic field that shape the practices of newswork and the development of journalistic products. Likewise, developments in nearby fields, such as computer science, should also be taken into consideration (ibid). Such a multi-level perspective is also mirrored in design methods, which are introduced below as a more nuanced approach for audience-centred product and service development in news organisations.

4.2 Design in theory: an overview

During the past decades, the discipline of design has risen in prominence both conceptually and in practice. However, what a design approach entails and how it is applied in industry is vague, resulting from the obscure nature of the discipline itself (Buchanan, 1992; Kimbell, 2011). Alexander (1964, p.15) has famously argued that "the ultimate object of design is form", a view that perhaps still resonates with the most widely accepted interpretations of what designers do. Nevertheless, he recognised that whereas the form is the solution to a given design problem, it is the context that defines the problem itself (ibid), pointing at the complex interrelationship between design and its environment. Similarly, Simon (1996), in his seminal book "The Sciences of the Artificial", originally published in 1968, has described design as the process that gives artefacts their desired properties, by adapting their inner environment to the outer one (p. 113), where the outer environment acts as a mould (p. 5). He distinguished between the natural and the artificial world, arguing that the world we live today is mostly man-made “as almost every element of our environment shows traces of human artifice (ibid, p. 2). He advocated for a “science of design”, which is concerned with “how things ought to be” in contrast to the natural sciences that are concerned “with how things are” and highlighted the key role of design in many different disciplines, such as engineering, architecture, business, law, education, and medicine (ibid, p. 115). As Kimbell (2011) observes, while Alexander was mostly concerned with materiality, Simon’s view on the multidisciplinary nature of design ascribed a rather abstract quality to what designers do. This aspect of design was also reflected in the work of Archer (1984) in the 1960s, who distinguished between the form-giving function of design and that of *design thinking*:

> (…) There has been a worldwide shift in emphasis from the sculptural to the technological. Ways have had to be found to incorporate knowledge of ergonomics, cybernetics, marketing, and management science into design thinking. As with most technology, there has been a trend towards the adoption of a systems approach as distinct from an artifact approach. (p.57)

Archer also highlighted the complex nature of design problems, a notion that later came to prominence under the term “wicked problems” that was popularised by Rittel and Webber (1973) in their influential paper "Dilemmas in a General Theory of Planning". Rittel and Webber (ibid, p. 155), described "wicked problems" as complex issues for which "there are no 'solutions' in the sense of definite and objective answers," as opposed to "tame problems" that science has developed to deal with. They argued that social problems cannot be solved on a scientific basis because they are “malignant”, “vicious”, “tricky” and “aggressive”, as opposed to tame problems that are “definable, separable, and may have solutions that are findable” (ibid, p.60). Societal problems are wicked problems: they are "are ill-defined and they rely upon elusive political judgment for resolution” and they cannot be solved, only "re-solved, over and over again" (ibid). As Camillus (2008, p. 1) explains, wicked problems are different from difficult problems because traditional processes cannot resolve them, they have innumerable causes, are tough to describe, and they do not have a right or wrong answer.

Drawing on the work of Rittel and Webber, Buchanan (1992, p.16), in his paper “Wicked problems in design thinking”, argues that every problem in design (or DT) is wicked because the nature of design itself is elusive and “can be applied to any area of human experience”. He describes design as a liberal art, breaking away from Simon’s scientific view that characterised the first wave of DT theory. He argues that design has no specific subject matter, and it is "what a designer conceives to be" (ibid, p. 16). According to Buchanan, DT is an integrative discipline, which draws together different professionals. These professionals do not share a common understanding, definition or method of DT; instead, they are drawn together by the "modality of impossibility" (ibid, p. 20) inherent to the discipline. He writes:

> (…) The impossibility of rigid boundaries between industrial design, engineering, and marketing. It points toward the impossibility of relying on any one of the sciences (natural, social, or humanistic) for adequate solutions to what are the inherently wicked problems of design thinking. Finally, it points toward something that is often forgotten, that what many people call "impossible" may actually only be a limitation of imagination that can be overcome by better design thinking. This is not thinking directed toward a technological "quick fix" in hardware but toward new integrations of signs, things, actions, and environments that address the concrete needs and values of human beings in diverse circumstances. (pp. 20-21)

Buchanan (ibid, pp. 9-10) further expanded the scope of the DT discourse and provided a framework of the four broad areas that it is applied by both professional and non-professional designers. These areas are: 1. Symbolic and visual communication, including typography, graphic production, and the print industry; 2. Material objects in the form of everyday products, 3. Activities and organised services, for which design provides an organic flow to make them more "intelligent, meaningful, and satisfying"; 4. The design of complex systems or environments for living, working, playing, and learning, including urban planning and architecture. While Buchanan (ibid, p.10) points to the way signs, actions, and thoughts interconnect, interpenetrate and merge into DT to create innovative outcomes, Cross (1997, p. 311) talks of "the creative leaps" of design that result to significant innovations. The role of creative design in addressing complex problems, Cross (1997, p. 317) explains, is that it builds the bridge "across the chasm between problem and solution". Elsewhere, Cross (2001) emphasises the tacit knowledge designers use to approach problems. Following Schön's (1983) constructivist paradigm of design, he refers to the intuitive processes design practitioners follow. Similar to the "journalistic gut feeling" presented in Chapter 2, Cross (2001, p. 55) discusses the "designerly ways of knowing, thinking, and acting", further breaking away from Simon's positivist view of design.

Theoretical discourse on design has guided the application of DT in business, and product and service development during the past decades. However, Cross (1992, p. 9) emphasised the lack of a "simplifying paradigm" of DT, noting that attempts that view it simply as a problem-solving, information-processing, decision-making, or pattern recognition approach, fail to fully capture its complexity. While the body of scholarly research around the theory of design is rich, the practice of design as an organisational resource remains vague. Simon, Gupta, and Buchanan (2011) note that design firms applying DT innovation strategies rely on models of radical collaboration by cross-disciplinary teams, knowledge sharing, finding inspiration from a wide range of sources, and exploring options and ideas early to foster continual and rapid innovation. While DT has infiltrated areas such as business and organisational management and policy making, it has been characterised, among other things, a "management buzzword sold as the next strategic tool" (Mootee, 2013, p. 32), a "public relations term" (Norman, 2010), a "failed experiment" (Nussbaum, 2011), a way to de-politicise management (Kimbell, 2011; Tonkinwise, 2011), questioning its purpose, usefulness, or innovative approach. Kimbell (2011), however, argues that to address ambiguity on the role of the practice of DT, it first needs to be rethought theoretically, drawing from other disciplines, such as sociology, anthropology, history, and technology studies.

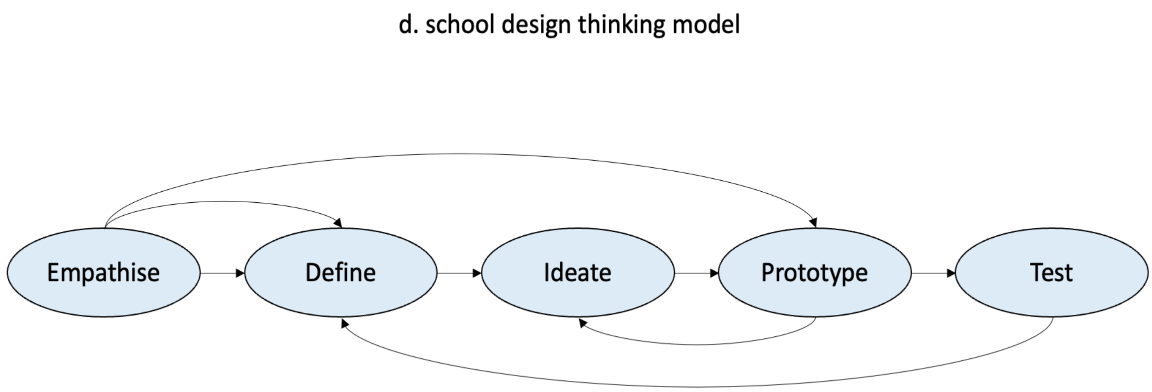
Elsewhere, Kimbell (2012, p.141) invokes practice theory, and especially Reckwitz's (2002) definition of practice as discussed in Chapter 2, to reconceive design activity as "a set of contingent, embodied routines that reconfigure the sociomaterial world, and which are institutionalized in different ways". This view on design, she argues, de-centres the designer as the main actor in design activity, which is seen as the result of practices between different human and non-human actors, such as managers, employees, customers, end-users, and other stakeholders, as well as "sketches, chairs, websites, consultancies, and post-it notes" (ibid). Kimbell's practice-based approach to design is in line with journalism's theorising under a practice lens, presented in Chapter 2. As Hoolohan and Browne (2020) argue, such a conceptualisation of DT provides an explanatory theory that enables design practices to reflexively reconfigure routines and everyday activity and translate them into actionable and robust policy and management actions. How DT and its various iterations are applied in contemporary practice is discussed below.

4.2.1 Design thinking in practice

Although DT as an organisational resource has no universally accepted definition, it is generally described as a human-centred, collaborative, cross-disciplinary, possibility-driven, iterative approach to problem-solving and innovation (Brown, 2009; Brown and Wyatt, 2010; Kimbell, 2011; Kimbell, 2012; Lietdka, King, and Bennett, 2013; Rodgers, 2013; Lietdka, Salzman, and Azer, 2017). The term DT for business and organisational needs is mostly associated with the work of the American design company IDEO (Johansson and Woodilla, 2009; Chaplin, 2016). However, the design process has been adapted by several other companies, organisations, and institutes, including Stanford d. school and the Hasso Plattner Institute School for Design Thinking, the Interaction Design Foundation, as well as the Design Council in London. As Dam and Siang (2019, par. 5) of the Interaction Design Foundation write, “There are many variants of the Design Thinking process in use today, and they have from three to seven phases, stages, or modes. However, all variants of Design Thinking are very similar.”

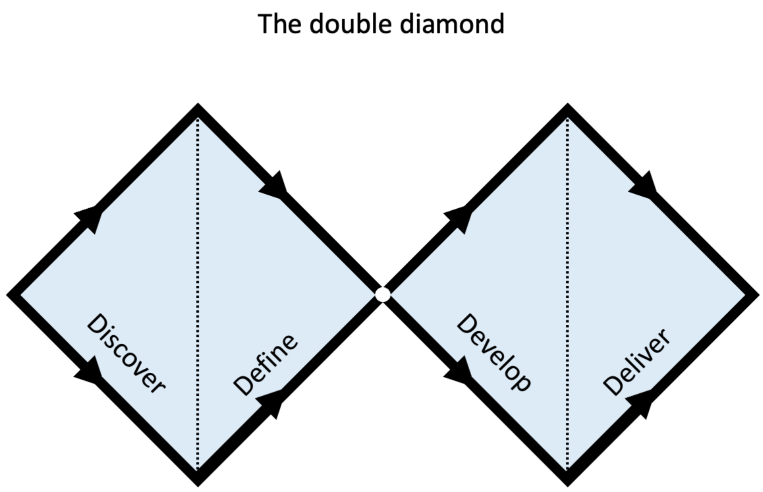
DT, as popularised by IDEO and Stanford d. school, consists of five iterative steps (illustrated in Figure 2): 1. Listening and empathising with an organisation’s users, 2. Identifying and defining people’s problems and needs, 3. Challenging assumptions and ideating possible solutions, a step that requires cross-disciplinary teams, 4. Prototyping through low-resolution solutions that are both quick and low-cost, and 5. Testing includes gathering feedback on how people receive a product or service before it is made public (Brown, 2009; Chaplin, 2016; Dam and Siang, 2019; Hasso Plattner Institute of Design at Stanford, n.d.).

Figure 2: Visual representation of the design thinking process (Source: adapted from Stanford D. School)



Another popular visual representation of the design process is the Double Diamond created by the Design Council in London (Figure 3). It consists of four steps: 1. Discover, 2. Define, 3. Develop, 4. Deliver (The double diamond: A universally accepted depiction of the design process, n.d). The first diamond is about understanding and defining the problem by speaking and spending time with the people who are affected by the problem, while the second is about providing different answers to the problem, co-designing with a range of different people, and testing out solutions at a small scale before rejecting the ones that will not work and expanding on the ones that will (ibid).

Figure 3: Visual representation of the design process according to the Design Council in London (Source: Adapted from The double diamond: A universally accepted depiction of the design process, n.d)



The design processes presented above require tools such as ethnographic research for deep insights, stakeholder/user interviews, the creation of journey mapping and personas of users to understand their needs, problem framing and cross-disciplinary brainstorming, and visualisations in the form of sketches, storyboards, and role-play (Brown, 2009; Hoolohan and Browne, 2020). DT has grown in importance in management discourse, as well as the public sector, including urban planning, healthcare, education, transportation, and global development (Brenner, Uebernickel, and Abrell, 2016; Design thinking. A guide for prototyping and testing solutions for the sustainable development goals, 2017; Lietdka, Salzman, and Azer, 2017). Much of criticism levelled against DT, which is often described as a mindset (Brenner, Uebernickel, and Abrell, 2016) or even a philosophy (Norman and Verganti, 2014), derives from the ambiguity surrounding its methods, its uniqueness, effectiveness, lack of measurement, and scepticism around who should be considered a design thinker.

However, as Brown (2009) points out, the transition from *design doing* to *design thinking* occurred alongside an economic shift favouring knowledge creation, processes, services, interactions, collaborations, diverse entertainment forms, and modes of communication over solely producing artefacts and physical objects: "The evolution from design to design thinking is the story of the evolution from the creation of products to the analysis of the relationship between people and products, and from there to the relationship between people and people" (ibid, p. 47).

In this regard, a human-centred approach to innovation is what sets DT apart from technocratic innovation, based on purely quantitative data, which can easily measure things that are already there (Brown, 2009). DT is described as based on empathy, observation, deep listening, exploration, and co-creation (Brown, 2009; Liedtka, Salzman, and Azer, 2017), qualities that put the user at the centre of any design project, whether designing for business outcomes or social innovation. For example, Lietdka, Salzman, and Azer (2017) posit that innovation is undergoing a fundamental shift from being narrowly focused on technology and experts to being more intuitive, inclusive, and democratised. They believe that DT can encourage co-creation and infuse businesses and organisations with a new stakeholder-centred mindset and behaviour, in which design is the product of diverse teams using participatory methods. The increasingly complex fields that DT finds application, is also mirrored in its various iterations and sub-sets, as those discussed in Chapter 1, such as HCD, UCD, service design, participatory design, product design, and the more technologically focused UX and UI design.

4.3 Design in journalism research and practice

Aitamurto, Borges-Ray, and Diakopoulos (2023, p. 399) argue that journalism's growing interest in design came as a "parallel development" to the digitalisation of the profession. They explain that, traditionally, design ventures in journalism were mostly associated with the visual presentation of news; however, later, they came to include both journalistic artefacts and sociotechnical understandings of journalism (ibid. p. 400). These considerations, they posit, run through all manifestations of journalism, ranging from practices and norms to audience consumption. For that reason, it is important to understand how design helps to shape different relationships in the journalistic field, on the one hand, and how these relationships constrain relevant to journalism design, on the other (ibid).

Commenting on algorithmic and automated news production, Diakopoulos (2019) stresses the paramount importance of a design orientation in journalism to support journalistic goals and mirror specific journalistic values. Such values, he explains, can be lost with automated systems where control is limited and "usually mediated through metadata" (ibid, p. 3). He argues that journalism studies should explore how journalism and news automation can benefit from "design guidelines" based on HCD, that will align journalistic technology and simplistic audience data, with organisational goals and values (ibid, p. 4). Heather Chaplin, a journalist and founding director of "Journalism + Design" programme at the New School in New York City, was among the first scholars to study the application of DT in American news organisations with her research "Guide to Journalism and Design". In her case studies of four American news organisations (BuzzFeed, *The New York Times*, NPR, AL.com), she investigates the role of design in newsroom innovation and the creation of journalistic products and services. Other studies explore design-led storytelling formats for journalism (Doherty, 2016), design implications in the development of computational news discovery tools (Diakopoulos, 2020), and designer methods in media innovation labs (Mills and Wagemans, 2021).

More recent studies published in a special issue of *Digital Journalism* journal called *Design+Journalism*, shed more light on the various applications of design in journalism research and practice. More specifically, McKernan *et al.* (2023) explore how a HCD framework can help designers and developers create useful tools for journalists who cover political ads in digital platforms by understanding their needs, goals, values, and the context of their work. Also from a sociotechnical perspective, Gutierrez Lopez *et al.* (2023) argue that the deployment of AI tools in newsrooms can benefit from the integration of design principles to support editorial requirements by considering journalistic practices, values, routines, and socio-cultural experiences. They explain that design strategies can be applied in newsrooms in three ways: 1. To prioritise editorial voices by creating new roles for data curation and editing; 2. To embed technology into journalistic workflows by shaping data interventions; and 3. To cross disciplinary boundaries and bring about slow and, perhaps, long-term socio-cultural change (ibid, p. 468).

Moreover, Dimitrakopoulou and Lewis (2023) used DT as a generative method to create a toolkit—called the Generative Dialogue Framework (GDF)— to promote greater empathy, deep listening, and co-creative mutual understanding between journalists and their audiences. They write that this toolkit can benefit both curricula and practice by facilitating tools, methods, and mindsets to re-imagine engaged journalism through a human-centred approach. From an audience perspective, Løvlie, Waagstein and Hyldgård (2023) used

Research through Design[1] method to design the process for the creation of a tool to help readers understand and assess the trustworthiness of science journalism articles. Their tool highlight the areas that help readers recognise the value of scientific articles, but also the challenges that facilitate an in-depth understanding. Doherty, Johnston and Matthews (2023) propose a design-led view of journalistic materiality through which technologies and journalistic values are shaped through doing, thinking, and imagining to create innovative processes and journalistic outputs. In this sense, journalism is viewed as a process of designing things that respond to public concerns. In a more traditional application of design in journalism, Billard and Moran (2023), explore how visual design can help build trust in news media, while Mari (2023) explores how web design has changed the way news organisations engage with audiences through the years.

The body of research presented above deals with different aspects and applications of design in journalism, and no single definition is used. Chaplin (2016) advises against using the term DT in journalism because, she argues, it cannot capture all that design has to offer to journalism. Furthermore, she points to the negative connotations the term has attracted over the years while being applied in business and management. Despite what she calls "outright hostility" against the term, Chaplin (ibid) argues that design, as a human-centred, agile learning process, can be utilised in news organisations to increase audience engagement. Utilising a system thinking approach, Chaplin (ibid) argues that every story and every news organisation should be viewed in relation to the larger ecosystem in which they operate and the audience they want to serve, as nothing is created or consumed in isolation. Such a conceptualisation can also benefit from a Bourdieusian analytical framework, in which journalism is viewed as a field with penetrable boundaries, heavily influenced by changes in neighbouring fields. Design-led, audience-centred innovation in news products and processes in news organisations can, in theory, affect how people perceive, accept, communicate and interact with journalism, but it is also connected to several other aspects of design application in newsrooms today. These are presented in the next sections.

[1] Research through Design is an approach that applies DT principles to research, mainly in the area of human-computer interaction, as a method of scientific inquiry (Zimmerman, Stolterman, and Forlizzi, 2010).

4.3.1 Audience research and engagement

Robinson (2019) writes that digital media give journalists the opportunity to gather new sources of knowledge for their audiences, divided into two categories*: learning from people* and *learning from data* (italics in the original). While the latter includes the use of analytics and metrics for audience insights, the former includes the new methods journalists use to listen to and communicate directly with their audiences. Besides readers' comments and social media, these methods comprise person-to-person contact between journalists and the audience in formalised events, focus groups, and other forms of UX qualitative research. One such example, Robinson writes, was the Huffington Post's 2018 "Listening to America" bus tour, where journalists heard about story ideas directly from the audience and got to meet unfamiliar readers. Another example is ProPublica's lightweight and inexpensive user testing editors have used to interact with their readers through social media, emails, or even in meetings at the newsroom and ask them to test products, stories or apps (Sleight, 2014; Hazard Owen, 2015; Robinson, 2019). As David Sleight (2014) the Design Director of the non-profit ProPublica, argues, design is what brought together the two "very healthy" departments of investigative journalism and data journalism. As he explains:

> The purpose of that is figuring out new ways to convey news coverage to the audience that both tap into — I don't want to say a sense of empathy, but how to create some sort of sense of connection to the coverage. We've got these investigative stories, but how do we actually relate this to the average reader or average user? And that's where design has a lot of space to work on an existing product.

Chaplin (2016) writes that DT stands in opposition to technology-driven design, as it is based on the idea of serving human needs rather than facilitating innovation for the sake of technological advantages. Designers, she explains, do not have the answers to the problem *a priori*. Indeed, as Brown (2009, p.16) posits, designers have no "one best way" to approach a problem. Instead, they bring people in to create customer journeys and maps, personas, scenarios and expectations (Gibbons, 2018). These will provide them with important qualitative indicators of their customers, including mindsets and emotions (ibid). When design-led methods are applied in journalism, Chaplin (2016) argues, they can fill in the gaps of quantitative evidence, and audience engagement can move beyond marketing activities and become an editorial mission.

Confirming the importance of qualitative audience research in newsrooms, Li (2013) wrote about the case study of Voice of San Diego, whose senior editor used DT to cover the 2012 city council elections. Instead of writing more stories on the candidates' agendas, the website sent reporters to each district of the city for one week to learn about what the residents thought affected their lives. The reporters learnt that some areas lacked basic infrastructure, such as sewers, or that some communities found pedestrian safety an important issue. When the stories went online, Li said that the website got positive feedback both from residents and the journalistic community. Another example of the application of DT in the newsroom comes from Philly.com, which experimented with user-centred story meetings for audience insights (Ulken, 2018). They invited people to talk with journalists about their lives, their communities, and their information needs, and through a DT process defined the problems, gathered ideas and voted on possible solutions. As Ulken (2018) explained, this process helped the organisation to give a face to the audience, instead of being viewed monolithically.

4.3.2 Newsroom convergence and cross-functional teamwork

As discussed previously, design focuses on cross-disciplinary teams from different backgrounds for idea generation. This perspective is not strange to journalism research; however, it is often discussed in the context of newsroom convergence. Jenkins (2006, p. 2) defines convergence "as the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want". He views convergence as a combination of technological, cultural, economic, and social circumstances as opposed to solely being driven by advances in technology. In this process, Jenkins (2006) highlights the role of audiences as active participants and not as passive spectators (see Chapter 3) and the importance of collective intelligence to generate shared knowledge. Although he acknowledges that convergence is both a top-down corporate-driven and a bottom-up consumer-driven process (ibid, p. 18), he argues that as consumers learn how to use new media technologies, they become more empowered.

However, in journalism, Jenkins' ideas are contested. Although, as discussed above, technology potentially gives audiences agency, digitalisation and technological changes in newsrooms are usually introduced as a response to their financial hurdles. Deuze (2008, p. 258) highlights that the discussion on convergence usually oscillates between the flexible, innovative, creative work and product development, and the exploitation of media workers and consumers that these fluid conditions and logics often cause. In addition, Larrondo *et al.* (2016) point to several reasons why convergence in newsrooms fails: the fear of deteriorating working conditions, internal competition between different departments and journalistic habitas, styles, or routines. Indeed, as news organisations heavily rely on cross-functional collaboration between different practitioners, from inside and outside the journalistic field, such as journalists, editors, technologists, and businesspeople (Lewis and Westlund, 2015), tensions can arise.

Often the implementation of innovations that require a culture of cross-functional collaboration in newsrooms is hindered by the resistance of journalists, as well as other practical reasons, such as the physical structure between departments and organisational hierarchies (Paulussen, Geens, and Vandenbrande, 2011). User-friendly editorial systems, training, and communication, as well as open-plan spaces, can help reduce but not completely overcome resistance (Larrondo *et al*., 2016, p. 279). However, Singer (2008) points to the difficulties encountered by journalists who are called to create cross-platform content and deal with many different activities and fluid workplace structures. Nevertheless, research indicates that journalists have varying levels of ease with technology, while the introduction of AI in newsrooms has generated scepticism among them. (Gutierrez Lopez *et al*., 2023). In addition, technology advancements create tension between the “new blood” of journalists and more senior ones, as the cost of training is significantly higher for experienced workers, and established news workers are usually more resistant to change (Saltzis and Dickinson, 2008). This situation can lead employers to see younger journalists as "change agents" who typically recognise the value of innovative practices for driving change and engaging audiences (Broersma and Singer, 2021). Although younger journalists usually adhere to doxic journalistic values rather than perceive themselves as “disruptive innovators” (ibid, p. 833), the ongoing digitalisation of the journalistic field results in organisational restructurings and in an influx of agents with new, engagement-oriented skills (Lindblom, Lindell, and Gidlund, 2022).

Such changes can challenge traditional newsroom structures and journalistic roles. Rosen (2012) uses the concept of wicked problems to advocate for a non-traditional, agile, beat-free newsroom. He explains that this type of newsroom would operate under a “wicked problems beat”, consisting of a network of people better equipped to handle inherently complex global phenomena. This beat would be agile and human-centred, attentive to the audience, and capable of quickly prototyping solutions to specific problems (ibid). However, cross-beat teamwork structured around the need to respond to complex, globalised problems is confronted by challenges that arise from existing newsroom structures, especially in legacy media. Studying the phenomenon in a large Swiss newsroom, Grubenmann (2016, p. 458) argues that cross-beat teamwork can be organised in the form of a matrix or cross-functional organisation, which combines the traditional hierarchy of beats with a project mindset. Among the advantages of matrix organisations are the linking of existing expertise in newsrooms, increased communication frequency, and flexible use of resources. The disadvantages, however, include team conflicts, role ambiguity, and the tendency of department editors to invest only in projects with measurable outcomes, especially click rates. Such changing work structures can, therefore, be seen as eroding the wall between the editorial and business sides and threatening journalistic autonomy (Broersma and Singer, 2021).

These kinds of tensions link back to the discussion on the role of journalism in democracy and its twin imperative of "performing a public function and achieving commercial success" (Jönsson and Örnebring, 2011, p. 128). This is what Brants (2013) calls civic and strategic responsiveness in newsrooms. He explains that the first form of newsroom responsiveness addresses audiences as citizens, and news media try to bridge the gap with the public by developing ways of listening and connecting to the public (ibid, p. 23). The strategic responsiveness is commercially and market-driven, and the goal is to persuade audiences and bind them to a product (ibid, p. 24). However, Chaplin (2016) argues that this dual purpose does not necessarily mean conflicting interests. She writes:

> The question, of course, is can you turn a wall into a picket fence without sacrificing, consciously or unconsciously, editorial staff's capacity to remain uninfluenced by business interests. This is not to imply that reporters shouldn't care if their news organizations survive—presumably, they do—but rather that they should not be making decisions about what to cover, or not cover, based on what advertisers want.

As discussed above, the shift towards closer alignment between editorial and business functions is triggered by developments external to the journalistic field, and challenges traditional norms regarding journalistic autonomy. However, as Cornia, Sehl, and Nielsen (2020, p. 187) argue, it can also insulate newsrooms from outside pressures and interests by securing the economic sustainability of news organisations. Indeed, as Suárez (2020, p.16) explains, news organisations with successful subscription models have found ways to break down silos and create cross-functional teams, where marketing, technology, and editorial work in tandem to meet the audience's needs. Cross-disciplinary teamwork in news organisations is also facilitated by the so-called bridge roles. Even though these are not a new phenomenon in newsrooms, Granger (2023) explains that it has been the last five years that they have become increasingly common in some news organisations. Such roles work at the intersection of different disciplines, bridging the gap between journalists and other professionals, and they often act "as representatives of product in the newsroom or editorial within product" (Cherubini, 2018). Cherubini (ibid) argues that bridge roles bring project management and DT principles into the newsroom, and infuse them with new skills, as well as the potential of cultural change.

4.3.3 Product development, technology, and innovation

Gilbert (n.d) writes on NiemanLab's Predictions for Journalism 2021, that news publishers should start realising that design applies to a range of editorial and commercial activities, from new modes of storytelling to different ways of paying for news. Newsrooms, he argues, must be open to audience engagement and move away from narratives that treat readers as a homogenous, singular body. He explains that through a design approach in the news and revenue strategies that will cater to different paying abilities, news organisations can learn from audiences rather than dictate to audiences and perhaps improve trust in news. The importance of audience-focused and civic-minded innovation in journalism is also highlighted by the Reuters' Institute Journalism Innovation Project (Posetti, Shabbi, Simon, 2018). They argue that innovations that forge deeper relationships with audiences can help mitigate the consequences of the "relentless pursuit" of technology-led innovation, such as viral misinformation and online harassment (ibid). Similarly, studying the intersection of AI technologies in journalism, Gutierrez-Lopez *et al.* (2019) found that teams consisting of designers, AI experts and journalists democratise access to trustworthy information and perhaps promote algorithmic transparency on AI systems.

News organisations have been incorporating diverse methods of reaching out to their audiences and meeting their needs. *The Guardian* has used DT to reaffirm the newspaper's values as a progressive global brand (Design Council, 2018), with changes ranging from the navigation of the website to different payment methods, including financial commitment and contributions (Breuer and Herman, 2018). While *The Guardian* will be discussed in detail in the respective case study chapter, Mills and Wagemans' (2021) research sheds light on how user-centred innovation approaches can catalyse changes in news products and processes. Drawing on 45 interviews with people working in media labs around the world, they explain how these utilise a complex range of actors, ties, and relationships to respond to technological change and innovate (ibid, p.1481). In the case of in-house labs in news organisations and news agencies, they found that "technologists, interaction designers and media expertise combine to create ‘innovative’ products, services or processes for media consumers, their clients (…) or other parts of the organisation ranging from marketing departments to the newsroom” (ibid, p. 1472). Such innovations include VR/AR experiences, AI applications, and app and experience development. To do so they often use DT and other related approaches for agile product development (ibid, p. 1483).

Although product development and product thinking in a news organisation setting have gained traction over the last years, Becca Aaronson of the News Product Alliance (Gallo, 2020) argues that their application differs from other industries as they need to also incorporate journalism ethics and editorial mission in their strategy. Royal *et al.* (2020) differentiate between “journalism in product” and “journalism as product”. The former includes the various platforms through which journalism is disseminated, while the latter prompts news organisations to identify their users, understand their needs, and the best way to address them. While many news organisations embrace an “audience-needs” personalisation model for innovation to combat declining revenues and news avoidance (Newman, 2023), this process is not without contestation.

For example, studies on the effects of news personalisation have warned of the creation of “filter bubbles” and “echo chambers” online, where algorithms control the information people are exposed to, and users are seen as passive receivers rather than as active actors (Monzer *et al.*, 2020). This is described as an environment of increased polarisation (Möller, 2021; Ross Arguedas *et al.*, 2022) which denies citizens the exposure to necessary information to make informed decisions (Beam, 2014). In particular, Elvestad and Phillips (2018) argue that the view of a bottom-up journalistic culture built around individuals as opposed to elite news production, enabled by the democratised forces of the internet, is a myth. They point to the lack of regulation and the oligopoly conditions that characterise companies that control information online, and result to a “bubble culture” driven by algorithms (p. 29). However, other studies have found that politically partisan online news echo chambers are relatively small, even in extremely polarised countries such as the US (Ross Arguedas *et al.*, 2022), or that people who use search engines to get their news often have more diverse news diets than those who mainly rely on self-selection (Fletcher, 2020a).

Furthermore, Costera Meijer (2013) argues that quality journalism and audience centricity are not mutually exclusive. While audience-centred news, especially if it is determined by audience metrics as discussed above, may often be viewed as succumbing to market dictates and losing editorial autonomy, journalists can both enlighten and increase their audiences by having a “better understanding of what people experience as quality” (Costera Meijer, 2013, p. 4). In order to provide what she calls “quality journalism” and at the same time pay attention to their audience’s needs, news organisations should stop focusing on news exposure and make sense of what people value in journalism and what constitutes a quality news experience (Costera Meijer, 2013). In a secondary analysis of previous audience studies, followed up by smaller studies and discussions with experts in newsroom innovation, she found that the public’s experience of quality information consists of the following three attributes:

> 1 Participation: News users value journalism more when it makes better use of their individual and collective wisdom. 2 Representation: News users value journalism more when it takes their concerns and views into account. 3 Presentation: Valuable journalism distinguishes itself by a captivating presentation, a gratifying narrative and layered information. (p. 4)

This holistic approach to journalism, she explains, requires becoming more receptive towards audience’s “knowledge, needs, concerns, questions and sensitivities” (ibid, p.14). It becomes apparent that such an audience-oriented conceptualisation of journalism can benefit from the design methods and applications discussed above. As Hargadon (2003, p. 6) argues, breakthrough innovations happen within networks that link “people, ideas, and objects together in ways that form effective and lasting communities and technologies”. He explains that design companies, such as IDEO, act as “technology brokers” (p. 135) which bring together structure, practice, and culture to foster innovative processes and products—a view, that chimes with the discussion about newsroom innovation as the result of structural factors, professional cultures, shared practices, and technological affordances, presented in Chapter 2. Such an approach to innovation, however, holds the risk of an almost theological conception of DT’s ability to bring about change and transformation (Seitz, 2020). However, by utilising practice theory, the researcher can move beyond practitioners’ sometimes dogmatic self-descriptions and interpretations of their work and study the “embodied and materially mediated activities and processes” that constitute the practice (ibid, p. 11). In that sense, the application of design in journalism can be viewed as part of a complex system of interactions and relations between different agents within temporal structures and material conditions that enable or restrict their activities.

4.4 Conclusion

As raised in Chapter 2, journalism is realised within the objective structures of the journalistic field and the dynamics between the internalised dispositions of its agents, or what Bourdieu (1977) calls habitus. Change within the field can happen because of an external shock from neighbouring fields, such as the economy and politics, or the influx of new entrants (Benson, 1999; Benson and Neveu, 2005) that have the power to reshape the journalistic capital and therefore, affect the field's autonomy. Journalism's position as standing at the intersection of market and technological forces, and its perceived democratic role in society, is mirrored in how journalists and news organisations view their audiences.

As discussed in Chapter 3, the audience provides news organisations with economic and symbolic capital, as it is both a market and a source of legitimisation. However, news organisations' business models collapse, and journalism's ability to implement its historical civic function is challenged as technological disruptions and opportunities alter practices and habits in news production, consumption, and distribution, while trust in the news falters. While audience metrics and algorithms offer journalists unparalleled access to information about audience's preferences and behaviour, quantitative journalistic evidence is not always representative of the public's needs. This chapter discussed the role design can play as an audience-oriented innovation approach in journalism. It identified three ways news organisations utilise design capabilities: for audience research and engagement, cross-functional collaboration, and product development and innovation. The next chapter presents the methodology used for this research.

Chapter 5. Methodology

This chapter discusses the methodology of the thesis. The first section (5.1) deals with the philosophical assumptions that guide the research strategy, and in particular, the critical realist approach that aims to uncover the underlying causal mechanisms and structures that influence social phenomena. Then (Section 5.2), the rationale of the case selection is presented. The last section (5.3) moves on to discuss the research design of this thesis, which adopts a multiple-case study approach with semi-structured in-depth expert interviews as the primary data collection method to gain a deep understanding of the phenomenon under investigation. In total, 26 interviews were conducted with three different sets of professionals from four leading legacy newspapers across three countries. The results were supported by publicly available information on the selected news organisations. To manage and analyse the data collected from interviews using thematic analysis, the research employed NVivo, a Computer-Assisted Qualitative Data Analysis Software (CADQAS) tool for qualitative coding.

5.1 Philosophical assumptions

Social phenomena are contingent and complex in nature and cannot be viewed under the lens of a single objective truth to be observed or empirically known (Denzin and Lincoln, 2003). Qualitative researchers are faced with a multitude of methodological approaches, strategies, and interpretive practices (ibid), and they are called to locate themselves and their research within a methodological and theoretical *bricolage*. Therefore, the choice of practice should be "pragmatic, strategic, and self-reflective" (Nelson, Treichler, and Grossberg, 1992, p. 2).

This research follows a multiple case study design, with semi-structured, in-depth interviews as the primary method for collecting data. A purely qualitative approach was considered the most advantageous for this study as it allows for an in-depth exploration and analysis of practices, processes, relationships, and interpretations, in line with Bourdieu's relational ontology, which affirms the primacy of relations and connections in the fields of practices (Wacquant, 1992, p. 15). As Mohr (2013) observes, in Bourdieu's relational ontology, the meaningfulness of the objects under investigation is not determined by their characteristics or attributes but in reference to their wider context, such as the "practices, or activities within which they are embedded". This view does not favour a realist/positivist paradigm lens, in which the social world can be reduced to a single tangible reality that can be measured and known irrespective of humans' knowledge of it. Similarly, design research calls for a methodological approach that steers away from a positivist analysis to avoid stripping the practice of its intuitive, iterative nature and designers of their tacit, embodied knowledge.

However, this research does not follow a constructivist paradigm either, for it does not view reality as a purely subjective experience where nothing exists independent of human knowledge (Denzin and Lincoln, 2005). A constructivist approach assumes a relativist ontology, in which multiple mental constructions exist, and a subjectivist epistemology, in which meaning is co-created by the inquirer and the inquired (Guba, 1990; Denzin and Lincoln, 2005). For constructivism, reality only exists in human minds and can only be accessed by subjective interaction (Guba, 1990, p. 26). Although constructionist, context-specific paradigms have been utilised broadly in journalism research and have produced many diverse studies, they have also been criticised for their inadequacy in explaining anything that goes beyond personal interpretations of the world, especially in an age of digital journalism and innovation (Ward, 2018). Ward (ibid) proposes a holistic epistemology in journalism research that will incorporate insights from both realist and constructivist paradigms to reflect the profession's complex role in society.

Critical realism

Although this research does not reject the analytical value of constructivism, it aims to avoid certain dichotomies and static interpretations often associated with it. For that reason, critical realism has been identified as an approach that can provide a holistic framework to guide the methodology of this research, as it combines realist ontology with relativist epistemology and judgmental rationality (Archer *et al.*, 1998, p. xi). Therefore, critical realism favours an analysis that combines both socially constructed and naturally occurring truths, because it accepts the divergence on how different people come to understand different things and, at the same time, the existence of knowledge irrespective of human activity (Bhaskar, 2008, p.11). As Ekström and Westlund (2019) explain: "Knowledge is a social product, dependent on (but not determined by) norms, shared understandings and social organization of the activities in which knowledge is produced. And the knowledge is about a world not produced in these activities."

Critical realism is mostly associated with the work of Roy Bhaskar, who, originally writing in the 1970s, has described it as "transcendental realism" (Bhaskar, 2008, p. 16). Bhaskar (ibid, p. 158) explains that knowledge is articulated in two dimensions, the transitive, and the intransitive. The transitive dimension is the result of human praxis and refers to the socially produced experiences and construction of events. The intransitive dimension refers to the structures or mechanisms that exist independently of humans (Bhaskar, 2008). As Stutchbury (2022, p. 114) puts it, critical realism looks "for explanations (causal mechanisms) through a focus on what people can achieve (agency) in the social context in which they are operating (structures)". Bhaskar (2008, p. 2) views reality as a series of three distinct but interrelated layers, which he calls "domains": the domain of the real, the actual, and the empirical. If these domains were visualised as an iceberg, the domain of the real would be the lowest stratum or the underlying causal mechanisms within objects or structures that cause events to occur. The middle stratum, or the domain of the actual, would be the events that occur whether they are observable or not, and the higher stratum, the empirical domain, would be the experienced and observed events that are understood through human interaction (Fletcher, 2017). Each of these domains is semi-autonomous and has different properties but is also closely related to the others.

As Wright (2011, p. 163) explains, under a critical realism conceptualisation, journalism researchers have the flexibility to study complex interactions between what is "empirically experienced or perceived; events which really happen; and more deeply rooted social, political or economic causes". Critical realism is also suited to journalism research because it allows for reflexivity in studying human agency and structure (Wright, 2011). Journalism practitioners make choices based on personal, social, and practical issues that arise from the real domain but are not entirely shaped by them (ibid). At this point, it becomes apparent that critical theory is also highly compatible with Bourdieu's ontology, which also merges components of social constructionism and realism (Ignatow and Robinson, 2017). Bourdieu rejects the dichotomy between positivist and interpretive methodologies, while his constructivist structuralism attempts to bridge subjectivism and objectivism through the logic of practice (Ritzer and Stepinsky, 2017). Furthermore, Bourdieu criticises the "theoretical theory", which is "independent of objects of empirical investigation" (Swartz, 1997, p. 5).

Schematically, and at the risk of oversimplification, critical realism domains can be translated into three levels of analysis reflecting Bourdieu's three main "thinking tools" that constitute practice: field, habitus, and capital (Maton, 2012, p. 51). These levels are as follows: 1. the field (the domain of the real), which is the macro level and the site of the journalistic game. Shifts at the field level, such as pressures from heteronomous forces cause changes to the other levels. 2. The habitus (the domain of the actual), which is the meso level and bridges agency and structure. This level reflects the internalised dispositions of agents, or the practical mastering of the game, and it is where empirical relations meet the invisible mechanisms of the lowest stratum. In a news organisation, this level mirrors negotiations and tensions between journalists and other practitioners who compete for power and influence. 3. The capital (the domain of the empirical), which is the micro level. This level encompasses the various forms of capital held, distributed, and transformed by agents. As discussed in Chapter 2, journalistic capital defines how journalists perceive their roles and acts as a form of currency, limiting or enabling journalistic autonomy. Instead of focusing on a single concept, this multi-level conceptualisation of field theory is utilised to guide the discussion of this research in Chapter 10. Like in critical realism, these different levels of analysis are inter- and co-dependent and can help to provide a holistic understanding of the phenomenon under investigation. While the main unit of investigation is organisations, the discussion diffuses to all levels of analysis, as described above.

Critical realism is also compatible with design research to the degree that it helps the researcher identify and make sense of complex (or wicked, as discussed in Chapter 4) problems that cannot be studied using a positivist framework but also considers the role of objective structures. Both critical realism and design research favour a theory-laden, but not theory-determined approach, as knowledge is situated in the continuum of the transitive and the intransitive dimension. Design as a cross-disciplinary, collaborative, and intuitive practice is sensitive to its social and cultural context and interactions but also the underlying structures, such as economic and technological phenomena. As design is directed at meeting a particular need through action-oriented intervention, a pragmatic approach would also be suited to studying its practice and application. However, a purely pragmatic philosophical framework would contradict some of the normative ideals of journalism regarding its role in democracy, as it evaluates knowledge according to its usefulness (Wright, 2011, p. 161), and therefore a critical realist approach was preferred for this research.

Lastly, although critical realism is often associated with mixed-methods research, it does not favour a specific research method. Sayer (2000, p.19) argues that in contrast to positivism and interpretivism, critical realism is “compatible with a wide range of research methods, but it implies that the particular choices should depend on the nature of the object and what one wants to learn about it”. Data can be obtained from two types of research methods; extensive, such as statistical data, large-scale surveys, or questionnaires, and intensive, such as in-depth interviews, ethnography, or focus groups (Fletcher, 2017). The rationale and the preferred methods for this research are discussed below.

5.2 Rationale of case selection

The legacy newspapers selected for this research are *The New York Times* and *The Washington Post* in the US, *The Guardian* in the UK, and *The Irish Times* in Ireland. Yin (2018) argues that when conducting case studies, it is important to set the boundaries of the research. At this point, the rationale behind case selection should be explained. After the topic of the research was defined, the case selection considered three different levels of analysis in the following order: 1. Organisations 2. Countries/Media system 3. Individuals. First, the sorting began by identifying news organisations that are known, through publicly available sources, such as articles, the publications' websites, and LinkedIn, to have adopted HCD or DT to inform their audience-centred practices. As Stake (2005) points out, the case selection for a case study should not be random; instead, cases should be chosen purposefully because they present an interesting case in terms of information, theory, or uniqueness for the subject explored. Case selection was further limited to what Fletcher and Park (2017) describe as traditional print news providers that now maintain online platforms, rather than what Nicholls *et al.* (2018) call digital-born providers, that often favour innovative practices and flexible structures. Traditional news organisations are the ones whose business models have faced the biggest disruption in the news industry, while at the same time, as Fletcher and Nielsen (2017, p.1175) explain, continue to "account for the majority of journalistic employment and investment in news production in most high-income countries". Furthermore, the decision to explore legacy, traditional newspapers with global reach, and not smaller and/or regional newsrooms, is based on the rationale that these newspapers dominate and define the nomos of the journalistic field and, therefore, any developments and changes in them can reflect the whole field. Their leading position is further amplified by the homogenisation of the media systems due to market forces and digitalisation, an issue also raised in Chapter 2. Even though *The Irish Times* is a legacy newspaper in Ireland and holds the competitive advantage of language, it is a smaller news organisation with limited global reach compared to the other three case studies. However, as previously discussed, the purpose of this research is not to draw generalisable conclusions or compare cases per se. As Stake (2006) notes, a multicase study is not a design for strict comparison between cases. Instead, cases are selected to provide a better understanding around a set of problems. Therefore, instead of focusing on a strict comparison between cases, this research aims to explore the same phenomenon in different settings and identify patterns and differences in the adoption of design practices in these news organisations, considering their position in the journalistic field and the characteristics of their respective markets.

The second step of the case selection was to narrow down the potential case studies to countries that belong to the North Atlantic/Liberal media system, discussed in Chapter 2: the US, Britain, Ireland, and Canada (Hallin and Mancini, 2004). This was decided in order to limit the case selection in English-speaking countries to avoid any language barriers obstructing the process of the in-depth interviews and the collection of supporting evidence (articles, videos, documents, etc) for the case studies. Canada was excluded to further reduce complexity by limiting the choices to countries whose national publications are exclusively in English. Greece, the home country of the researcher, was initially also considered; however, no news organisations applying DT or HCD could be readily identified. This step limited the case selection in the US, the UK, and Ireland and the newspapers mentioned above. The last step of the case selection process was to identify individuals who were working or have worked in the selected news organisations in relevant positions. These were identified through their LinkedIn profiles or their newspaper's websites and through "purposeful" or "snowball" sampling (Patton, 2002). The preferred methods for this research are further discussed below.

5.3 Research design

To answer the research questions presented above, this research takes an exploratory multiple case study approach with in-depth interviews as the main data-collection method. Creswell and Creswell (2018, p.61-62) identify five types of design approaches in qualitative research: 1. Narrative research, in which the researcher studies the lives of individuals and asks them to provide stories about their experiences, 2. Phenomenological research, in which the researcher describes the lived experiences of individuals about a phenomenon, 3. Grounded theory, in which the researcher aims to produce a theory of a process, action or interaction grounded in the views of participants, 4. Ethnography, in which the researcher identifies patterns of behaviour, language, and action of a cultural group in a natural setting, and 5. Case studies, in which the researcher provides an in-depth analysis of a case, such as a programme, an event, an activity, a process, or one or more individuals.

Case studies are the preferred method of investigation when the researcher seeks to understand a phenomenon holistically within a bounded system (Creswell, 2007, p. 73). Yin (2018, p. 2) suggests that case studies should be used when: 1. The main research questions ask “how” or “why”, 2. When the researcher has little or no control over behavioural events and, 3. When the focus of the study is a contemporary phenomenon. As Yin explains, even though single-case studies can offer invaluable insights, they are often used to study extreme or unusual cases. Yin (ibid, p.54) also considers single and multiple case studies as variations of the same methodological framework. However, he points out that some disciplines regard them as two distinct methodologies. Multiple cases are often considered more compelling and allow for stronger conclusions, although they require considerably more extensive resources and time (ibid). As mentioned above, multiple case studies should not follow a sampling logic, but a replication logic. This means that each case is selected to either predict similar results (literal replication) or demonstrate differences for predictable reasons (theoretical replication) (ibid, p. 55). All four news organisations in this research are theoretical units which were selected to illustrate and provide a greater understanding of the same phenomenon, and similar procedures were followed for each of them. As Creswell (2007, p. 76) points out, in multiple case studies, researchers do not usually choose more than four or five cases. When they do select a large number of cases, there is an interest in generalisation, an approach that holds little meaning for qualitative researchers (ibid). Single or multiple case studies can also be holistic or embedded (Yin, 2018). In holistic case studies, there is only one unit of analysis, while in embedded case studies, the unit of analysis breaks down into several subunits. For the needs of this project, different sets of professionals in each newspaper were interviewed, but they were not treated as distinct cases within the case. Such an approach would require larger data sets, perhaps of quantitative nature (ibid).

Yin (2018, p 8) also differentiates between three types of case study approaches: exploratory, descriptive, and explanatory case studies. Although this research follows an exploratory case study design, Yin notes that boundaries within these different types of case studies are flexible, and they usually overlap. He says that exploratory case studies have perhaps the most notorious reputation because the research follows intuitive paths instead of a pre-determined plan (Yin, 2012, pp. 29-30). They are often used as a separate task, for example, as the pilot phase of the actual case (ibid). Streb (2010, p. 372) notes that exploratory case studies are used when there are no preliminary propositions and hypotheses and that identifying these is often the “actual purpose of the study”. Exploratory case studies are often criticised for their flexibility and adaptability. However, Streb (2010) argues that this view ignores the usefulness of exploratory research in studying social phenomena in depth. Furthermore, Stake (1995) writes that research cannot be planned entirely from the beginning, suggesting an iterative process of investigation. Although grounded theory was also considered for this research, mainly because of its iterative nature, it was rejected as this approach avoids active engagement with a specific theory during the analytical process (Fletcher, 2017, p.186). This research is guided by Bourdieu's field theory and also draws from design theoretical traditions. The option of a newsroom ethnography was also dismissed; even if organisational barriers could be overcome for all four newspapers, such an approach would require spending long periods in the field, something that was not possible due to the personal commitments of the researcher, geographical and budget constraints, and the COVID-19 pandemic. When interviews were being conducted, most participants were working either remotely or under a hybrid work model.

Going back to discussing the preferred method, Maxwell (2012, p.76) argues that qualitative research is inductive in its approach to research design, which can change according to new information and circumstances. This research, however, does not follow an inductive or a deductive, but an abductive form of inference. Inductive inference is informed by the constructivist/interpretivist paradigm and aims to generate a theory from facts discovered in the case. On the contrary, a deductive approach, which is associated with the positivist paradigm, aims at testing a theory or hypothesis and validating or falsifying it (Braun and Clarke, 2006). However, critical realism most commonly uses abduction and retroduction (Meyer and Lunnay, 2013; Fletcher, 2017), an approach that is viewed as the middle ground between induction and deduction (Veen, 2021). As Mukumbang, Kabongo, and Eastwood (2021, para. 6) argue, "Abductive reasoning typically begins with an incomplete set of observations and proceeds to obtaining the likeliest possible explanation for the set." Veen (2021) explains that abduction breaks away from induction and deduction, as it generates a probable conclusion. While deduction infers or predicts a result, and induction makes a case of a more general rule, abduction accepts that there are always other possible explanations. In that sense, it can be argued that abduction is a logical and pragmatic form of inference, a reasoning that is also central to design practice (Kolko, 2010).

Retroduction is described as a form of abductive inference. Meyer and Lunnay (2013, para. 2.1) posit that whereas abduction involves analysing data that may not match the initial theoretical framework, retroduction is a conceptualisation method that allows the researcher to locate the circumstances without which something cannot exist; used in conjunction, they can provide a useful framework for research. Stutchbury (2022, p. 115) argues that while abduction is a process of theoretical re-description, retroduction is about focusing on causal mechanisms. Retroduction is utilised in research to study the underlying structures and social realities that have or have not been triggered in each situation and their effects (ibid), so it produces a stratified analysis in line with critical realism domains of analysis. As Mukumbang, Kabongo, and Eastwood (2021) argue, retroduction "requires moving from an observation of concrete phenomena to reconstruct the basic conditions for these phenomena" (para. 12) and, therefore, identifies the "structures, context, and mechanisms that explain the observation" (para. 16). This approach can guide the systematic combining of a multiple case study design by helping the researcher go back and forth between data and theory and identify underlying influences that affect the initial observable behaviours.

While a multiple-case study is the most suitable method for this research, it is not without limitations. Case studies are criticised for being vague or not a rigorous scientific method, because generalisation is not possible (Yin, 2018). However, Yin (2009) argues that case studies usually rely on analytical rather than statistical generalisation. This means that the researcher compares the results of a case study to existing theory, rather than drawing inferences from data to a population. To increase the quality and scientific rigour of case studies, Yin (2018) suggests that evidence should come from different sources. These sources can include documents, archival records, interviews, direct observations, participant-observation, and physical artefacts (Yin, 2018, p. 110). This research uses in-depth interviews as the main data collection method, which are informed by publicly available documentation and archival records about the cases explored, such as news articles, videos, administrative documents, formal studies, and organisational records. Although the supporting sources were not systematically analysed alongside the interviews, they provided a rich wealth of evidence to inform the case studies.

In terms of research validity, Denzin (2009) discusses four types of triangulation: 1. Data triangulation, which includes the collection of data from multiple sources across people, time, or space 2. Investigator triangulation, when more than one researchers are involved in investigating a phenomenon 3. Theoretical triangulation, with the researcher applying different theories, and, lastly, 4. Methodological triangulation, in which the researcher adopts multiple data-collection methods (for example, interviews, observations, surveys, or focus groups). The most pertinent form of triangulation for this research is data triangulation. Natow (2020, p. 161) explains that in order to achieve data triangulation in interviews, the researcher can gather data from different periods, locations, or people with diverse viewpoints or degrees of power. The data collected for this research included interviews with three sets of different practitioners (journalists, designers, and technologists/audience-oriented professionals) in four different organisations (*The New York Times*, *The Washington Post*, *The Guardian*, and *The Irish Times*). Lastly, research validity in multiple case studies is enhanced by performing within and cross-case analyses to find themes and relationships between the data (Eisenhardt, 1989). According to Yin (2009) pattern-matching techniques enhance the rigour of the study, although the process varies and depends on the nature of the research. For example, Eisenhardt (1989) describes an iterative process in which data are compared to existing theory to develop new insights. She argues that within-case analysis typically is more descriptive and involves case study write-ups for each site, whether cross-case analysis looks for similarities and differences across cases. (ibid, p. 540). In this research, data collected from interviews and publicly available sources are presented in the case study chapters (Chapters 6, 7, 8, and 9). While these chapters are mostly descriptive, the cross-case analysis and discussion in Chapter 10 are more interpretative, focusing on the patterns and differences across cases in relation to literature and attempting theoretical generalisation. The following section discusses the preferred data collection method for this research.

5.3.1 In-depth interviews

Yin (2018, p. 118) argues that interviews are one of the most important sources of case study evidence. The research design favoured semi-structured interviews to allow for an in-depth exploration of the phenomenon under investigation. In semi-structured interviews, the researcher has prepared a list of questions in advance of the interview but tries to replicate the causal quality of the unstructured interviews, in which they have little control over the respondent's answers (Berger, 2014). As Rutledge and Hogg (2020) note, an in-depth interviewing approach requires spending a significant amount of time with each participant and usually includes open-ended questions. The main purposes of qualitative interviews are to obtain unique information or interpretation held by the interviewees, to find out about a phenomenon that researchers cannot observe themselves, and to collect numerical aggregation of information by many participants (Stake, 2010, p. 95). The first two aims of qualitative interviews require a conversational style and probing questions for clarification and refinement (ibid). Therefore, the purpose is not to get simple yes or no answers but descriptions, explanations, and linkages (Stake, 1995, p. 65) and produce what Kvale and Brinkmann (2009) call "interview knowledge". In-depth interviews should be flexible and free-flowing (Morris, 2015), but should also include some pre-determined themes to be covered (Kvale, 2007).

Compared to other methods of empirical evidence, such as surveys or questionnaires, interviews can elicit much deeper responses and insights. Interviews allow the researcher to avoid the pitfalls of surveys, such as avoiding responses to certain types of questions or not being able to do follow-up questions in case of vague or contradictory responses (Mosley, p.6). In-depth interviews also allow the researcher to understand context and motivations, talk about what they think is important, and obtain non-verbal information by observing body language and intonation (Morris, 2015). Bogner, Littig, and Menz (2018) refer to three different forms of knowledge that can be extracted from interviews, and in particular, interviews with experts, whom they define as people who hold specialised knowledge related to a clearly defined set of issues. This study utilises interviews with three different sets of professionals with specialised and specific roles and thus they can be defined as experts, while as discussed below some of them hold senior and C-suite level roles within their organisations.

The first form of knowledge is *technical knowledge*, which comprises facts and information related to rules, application routines, and competencies specific to a field. This kind of knowledge is specialised, systematic and more reliable than everyday knowledge. The second form of knowledge when conducting expert interviews is *process knowledge* and refers to the knowledge acquired by practical experience through action in which the interviewee is directly involved or closely related to. The third form of knowledge is *interpretative knowledge* which entails subjective points of views and interpretations, as well as normative dispositions. However, as Bogner, Littig, and Menz (ibid) point out, it is impossible to differentiate between the three kinds of knowledge based on their characteristics. Rather, the differentiation is a construction of the researcher who interprets this knowledge, and the result of the research design. For example, when expert interviews are used as the main or one of the main data collection methods, they can be either *systematising* and/or *theory-generating*. Systematising interviews aim to access exclusive knowledge, both technical and process knowledge, possessed by the expert. Even though their interpretative nature is recognised, their main focus is the systematic and complete information on objective issues concerning the research question. In this case, the experts are not the object of the investigation, but the informants who provide information about the object of investigation (ibid). On the other hand, theory-generating expert interviews, Bogner, Littig and Menz (ibid) argue, aim to explore and reconstruct the subjective dimension of knowledge. In these interviews, the actions, views, and decision-making sayings of experts are the starting point for inductive theory formulation. This research follows both approaches to interviewing, attempting to understand objective issues as well as underlying mechanisms, reflecting the critical realist framework.

In-depth interviews also have several disadvantages and limitations. First of all, interviewees may present inaccurate information, lie or present a partial, favourable truth, try to promote themselves or their organisation, modify their answers depending on the interviewer, and present an official account of events or official guidelines (Alvesson, 2003). These can be especially true when conducting expert interviews, in which the interviewees represent their organisations. To avoid such pitfalls, the research should adopt a reflexive pragmatist approach and consider interviews as complex social phenomena that need to be theoretically analysed to understand the logic behind the various interview statements (ibid, p. 31). Furthermore, as Bogner, Littig, and Menz (2018) argue, even though expert interviews are considered a standard qualitative research method and can constitute a more concentrated method of producing data compared to other methods, such as observation, there is often a power imbalance between the interviewees, who are aware of their expertise and social position, and the interviewer who may be inexperienced or viewed as such. This situation can result in the interviewee displaying paternalistic behaviour or dictating the content of the interview to the researcher. To mitigate such problems during interviews with experts, the researcher should deliberately demonstrate their own expertise or use this asymmetrical interaction to their own advantage. For example, as Bogner, Littig and Menz (ibid) explain, when the interviewer is seen as inferior or the questions are considered naïve, the interview can produce results that might not otherwise be revealed as the researcher is seen as trustworthy. Other common problems that the researcher faces when interviews is the main data collection method concern their reliability and validity (Kvale, 2009). These issues can be alleviated by the researcher's ability to continuously check, question, and theorise the findings of the interviews. Lastly, in-depth interviews cannot be generalised, they are time-consuming and, if transcribed by a third party, costly (Morris, 2009). Nevertheless, as Berger (2000, p. 125) points out, even though interviews are a high-risk method, they are also a unique tool when researchers seek to get insights of considerable importance.

5.3.1.1 Participants and thematic analysis

Twenty-six individuals from four newspapers (*The New York Times*, *The Washington Post*, *The Guardian*, and *The Irish Times*) were interviewed for the needs of this research. Due to the small pool of organisations and practitioners this research drew from, a random or probability sample was not possible. Instead, as mentioned above, a "purposeful" or "snowball" sampling was used (Patton, 2002). Most potential participants were contacted based on their role descriptions and experience on LinkedIn or the websites of their organisations, while others after being recommended from their colleagues. To answer the first and second research questions, (*"How do design practices support audience-oriented innovation in legacy newspapers, and what are the implications for journalism?"* and, *"What areas of cooperation and struggle arise between non-journalistic audience-oriented professionals and journalists?*), two groups of practitioners were contacted: 1. Product designers/UX designers/managers, 2. Technologists/engineers/audience analytics professionals and audience researchers. Then to address the third research question (*"How do journalists perceive the audience-centric culture in their organisations?"*) journalists, reporters and editors were also contacted. The interviewees also included high-ranking professionals, such as director/president-level and other C-suite executives. The exact job titles of the participants, as well as age, sex/gender, locations (where they are based), Pulitzer Prizes and other awards, are not mentioned to minimise the risk of them being identified. Interviewees with very specific or more senior roles were made aware that they could be identifiable from their responses only. A decision was made to include the name of one of the participants, Aron Pilhofer, based on his stated willingness to be identified for the needs of the research, as well as his seniority and the specialised nature of his role within both *The New York* Times and *The Guardian*. The projects he led and the roles he held during the transition of these newspapers into the digital age would not have been properly explained without including his name. This decision was guided by ethical considerations and the interviewee's explicit consent.

The breakdown of the participants and interview details are presented in Table 2. For coding purposes the interviewees were grouped into three broad categories: 1. Designer/Product Designer/UX/UI, 2. Technologist/Audience analytics/Audience editor/Audience Researcher, and 3. Journalist/Reporter/Editor. For clarification, the second category did not involve any journalistic roles but professionals who developed tools, handled audience-related data and provided insights to support journalistic work and inform editorial decisions, or acted as intermediaries between the newsroom and other teams, such as product.

Table 2: Participants' list

	Interviewees				Interviews	
Organisation	**Code name**	**Professional code group**	**Years of experience**	**C-suite/ Senior Executive**	**Date**	**Duration of transcribed interview**
The New York Times (case 1)	NYTA1	Technologist/Audience analyst/Audience editor/Audience Researcher	>15	Yes	11/05/2022	24 min
	NYTA2	Technologist/Audience analyst/Audience editor/Audience Researcher	11 to 15	No	23/03/2023	41 min
	NYTA3	Technologist/Audience analyst/Audience editor/Audience Researcher	>15	Yes	12/01/2023	25 min
	NYTA4	Technologist/Audience analyst/Audience editor/Audience Researcher	1 to 5	No	01/12/2022	23 min
	NYTD1	Designer/Product Designer/UX/UI	>15	No	13/05/2022	27 min
	NYTD2	Designer/Product Designer/UX/UI	11 to 15	No	26/08/2022	39 min
	NYTJ1	Journalist/Reporter/Editor	>15	No	03/02/2023	25 min
	NYTJ2	Journalist/Reporter/Editor	>15	No	13/03/2023	15 min
	NYTJ3	Journalist/Reporter/Editor	>15	No	15/03/2023	32 min
	Aron Pilhofer	Journalist/Reporter/Editor (Former associate managing editor for digital strategy)	>15	Yes	27/01/2023	58 min
The Washington Post (case 2)	WPA1	Technologist/Audience analyst/Audience editor/Audience Researcher	6 to 10	Yes	09/03/2023	28 min
	WPD1	Designer/Product Designer/UX/UI	11 to 15	No	07/12/2022	45 min
	WPD2	Designer/Product Designer/UX/UI	11 to 15	No	14/12/2022	19 min
	WPJ1	Journalist/Reporter/Editor	1 to 5	No	08/05/2023	28 min
The Guardian (case 3)	GuardianA1	Technologist/Audience analyst/Audience editor/Audience Researcher	11 to 15	No	02/12/2022	25 min
	GuardianD1	Designer/Product Designer/UX/UI	6 to 10	No	27/06/2022	22 min
	GuardianD2	Designer/Product Designer/UX/UI	>15	No	22/05/2023	32 min
	GuardianD3	Designer/Product Designer/UX/UI	>15	No	21/07/2022	33 min
	GuardianD4	Designer/Product Designer/UX/UI	>15	Yes	08/06/2022	32 min
	GuardianJ1	Journalist/Reporter/Editor	6 to 10	No	27/02/2023	30 min
	GuardianJ2	Journalist/Reporter/Editor	>15	No	31/01/2023	43 min
	GuardianJ3	Journalist/Reporter/Editor	1 to 5	No	27/02/2023	25 min
The Irish Times (case 4)	ITA1	Technologist/Audience analyst/Audience editor/Audience Researcher	11 to 15	No	21/07/2022	31 min
	ITD1	Designer/Product Designer/UX/UI	6 to 10	No	08/11/2022	23 min
	ITJ1	Journalist/Reporter/Editor	>15	No	24/10/2022	40 min
	ITJ2	Journalist/Reporter/Editor	>15	Yes	22/09/2022	39 min

A different set of questions was prepared for each professional group, with some themes being consistent across all interviews (see Appendix A for a rough guide of the questions). The interviews were conducted via Google Meet and Zoom between May 2022 and May 2023 and were scheduled depending on the availability of the participants. A guide with the topics to be discussed was emailed to some of the participants prior to the interview. Video calls were used for all interviews except for one for which the interviewee chose audio-only.

The interviews were recorded digitally (audio only) after asking for the interviewees' permission. The participants were asked to notify the researcher if they wanted to make a comment off the record. The interviews produced around 17 hours of audio, out of which about 13 hours were transcribed using a professional transcription service. The remaining hours were considered not important for the study's purposes and were not transcribed for budget reasons. For example, they included discussions about the project or casual conversations before and after the interview.

The interviews were smooth and in a friendly tone, and the participants were highly competent in advancing the understanding of the subject. Some interviewees, especially designers, were enthusiastic to participate and know more about the project and its results. Around 500 professionals were contacted from all four newspapers. Journalists from all four news organisations were generally the least eager group to participate, which suggests that they were unfamiliar and/or unsympathetic to the subject. Some journalists cited time constraints, while others mentioned restrictions from management, which is in line with previous research on the challenges of recruiting journalists as participants (e.g. Blanchett *et al.*, 2023). Some of the responses received from journalists via email were "This is above my pay grade", "I am not familiar with the subject", "I am very busy", "My job is in the field", "I do not do surveys (sic)", and "I only speak to researchers I personally know".

While the steps for recruiting participants were consistent across all four case studies, some newspapers were less responsive than others. In the case of *The Irish Times,* the help of a mediator (Andoh-Arthur, 2019) was eventually sought. Nevertheless, interest in participating was still low from all three groups of participants. Most importantly, it was not possible to access individuals identified as potential key participants for this research, who would have expanded the understanding of how design is applied in *The Irish Times*. However, it must be noted that *The Irish Times* is a much smaller organisation compared to the other case studies, in which alternative key participants could be identified and eventually recruited. Furthermore, the professionals who participated demonstrated an exceptional level of expertise—with some of them holding very senior and senior positions in their organisations either in the past or at the time of the interviews—and their contributions provided valuable insights that significantly enriched the discussion. Despite an initial positive response from professionals in *The Washington Post*, it proved difficult to access more interviewees, especially journalists. This was perhaps connected to the reorganisation and downsizing that resulted in a string of layoffs in late 2022 and early 2023.

However, the non-journalistic interviewees from *The Washington Post* were all identified as key participants possessing the expertise for a detailed understanding of the phenomenon under investigation. In addition, the journalist was also knowledgeable and helpful and provided insights that contributed to the research.

One interviewee got in touch and asked to participate after they had decided to leave their organisation, while some interviews were rescheduled multiple times because of participants' commitments. Overall, six people (three from *The New York Times* and three from *The Irish Times*) who had initially agreed to participate later opted out or did not respond when asked to arrange a date for the interview. A "low risk" ethics clearance was taken from the Research Ethics Committee in Dublin City University (Appendix B), as participants would be interviewed in their professional capacity only and no information on their personal beliefs or attitudes would be required. All participants were sent the Plain Language Statement and the Informed Consent form (Appendix C). Overall, while the typical challenges of conducting interviews, as discussed in the previous section, were carefully considered by the researcher, no significant obstacles arose during the process. While the researcher's professional experience in journalism might have helped mitigate potential power imbalances, a few participants, particularly those from the second and third professional categories, initially displayed some confusion regarding the scope of the research. This issue was resolved by offering a more detailed explanation of the project's objectives. In a few instances, some interviewees, particularly those in senior positions, adopted a more scripted, formal approach, indicating they were representing their organisation's official narrative. However, in none of these interviews did this formality persist throughout the entire process, as the researcher encouraged more personal accounts beyond the official stance, facilitating an exchange that provided both technical and interpretative insights. Video calling (for all except one interview, as explained above) was not found to affect the power dynamic, the length of the interview, or the quality of the data collected. It enabled interviews that would otherwise have been impossible due to the limitations discussed previously. There were no major technical issues or interruptions during the interviews, and the high quality of the video calls allowed for an observation of the interviewees' non-verbal cues and facial expressions. These observations echo findings from other studies, which report no significant differences between online and in-person interviews when the topics which are discussed are not personal or sensitive (Lindsay, 2022).

Then the interview transcripts were reviewed and checked for accuracy against the recordings to address any possible inaccuracies related to outsourcing transcription to an external service provider. This process allowed for deeper engagement with the data and helped to identify and correct errors in transcripts. After an initial manual coding, data were imported into NVivo to perform thematic analysis. NVivo allows for the efficient organisation of qualitative data, facilitating the identification and analysis of patterns and themes, adding rigour and transparency to the process (Sotiriadou, Brouwers, and Le, 2014). However, it provides the researcher with a tool to support data analysis, rather than guiding the process, which remains mostly subjective (ibid).

Thematic analysis

Thematic analysis is a method to analyse qualitative interviews, and it finds application across a range of theoretical frameworks and research paradigms due to its reflexive and theoretically flexible nature (Clarke and Brown, 2017). It has been described as "an umbrella term" to include different approaches at identifying patterns across qualitative data sets (Braun *et al.*, 2019, p. 844), and as "a process to be used for encoding qualitative information" (Boyatzis, 1998, p. 4). Although thematic analysis is flexible and broad in its scope, Clarke and Braun (2017, p. 297) explain that its aim is not to summarise the data but "to identify, and interpret, key, but not necessarily all, features of the data, guided by the research question". It can be used to analyse small data sets with one or two participants to more extensive interview studies of 60 people (ibid, p. 298). Codes in thematic analysis represent the researcher's interpretation of meanings, while coding often involves a structured codebook (Byrne, 2022). Braun and Clarke (2006, p. 79) explain that thematic analysis is used to identify, analyse, and report themes within data. Such themes arise in two main ways: 1. In an inductive or "bottom-up" way or 2. In a deductive or theoretical, "top-down" manner (ibid, p.83). The inductive approach is interpretive and subjective, while the themes develop from and are strongly linked to the data, and not the research questions or the study's theoretical underpinning. In contrast, the deductive manner requires a theory-driven coding approach and focuses on a detailed analysis of specific aspects of the data (ibid, pp. 83-84). Furthermore, Braun and Clarke (ibid, p.81) argue that thematic analysis can be conducted within an essentialist/realist, a constructionist, or a contextualist paradigm. The essentialist/realist paradigm reports on experiences, meanings, and the realities of participants, whereas the constructionist paradigm examines how these experiences and meanings are the effects of societal discourses (ibid). The contextualist paradigm, which is the most pertinent for this research as it sits closer to critical realism, is used to investigate how individuals make meaning of their experiences, while it recognises the influence of broader social contexts and constraints (ibid). Drawing on Braun and Clarke's (2006) conceptualisation of thematic analysis, Quinn and Prendergast (2023, pp. 127-128) describe the five key steps of the method. First, researchers should familiarise themselves with the data, noting emerging patterns and ideas related to the RQs. The next step involves the generation of some initial, either explicit or implied, codes, in order to categorise and organise the data. Then, researchers, guided by the RQs, search for patterns in codes, which are then grouped into distinct and conceptually coherent themes. Subsequently, these themes are reviewed, refined, and clarified before the final phase, which is the writing up.

With these steps as a guide, this research started with an initial manual coding for data cleaning. This step facilitated further familiarisation with the interviews and included an initial analysis and interpretation of the data, along with observational notes taken during data collection. It informed subsequent coding in NVivo, which followed a non-linear, iterative process using a contextualist/abductive approach. While the manual coding discussed above involved an inductive engagement with the data, the first phase of coding in NVivo entailed the generation of an initial deductive codebook to reflect existing theory and prior research. This step resulted in the creation of six codes (design in audience research, design in organisational culture, design technical applications, approach to audience-centred innovation, cross-disciplinary collaboration, and resistance to audience-centred culture), which were broadly guided by the research questions and were mainly descriptive (Byrne, 2022). In particular, the first four codes addressed RQ1 (*How does design support audience-oriented innovation practices in legacy newsrooms and what are the implications for journalism?*), and the last two codes RQ2 and RQ3 (*What areas of collaboration and struggle arise between non-journalistic audience-oriented professionals and journalists?* and *How do journalists perceive the audience-centric culture in their organisations?*).

The second phase of coding in NVivo involved the generation of new, more interpretive, codes (ibid), created inductively from the data. This step created codes that reflected both structural influences and material constraints (for example, codes describing the application of design in news organisations or the creation of audience-oriented products), as well as interpretations and perceptions of these changes by participants (for example, codes dealing with norms, attitudes, relationships, and journalistic autonomy). Some interview excerpts were then reassigned to new or existing codes. The next step involved grouping and re-grouping of codes that were unified into four themes which reflected the theoretical considerations of this research. These themes are: 1. Design applications, 2. Cross-functional collaboration, 3. Approach to audience-oriented innovation, and 4. Implications from audience-centric culture for journalists.

These themes provided the framework that guided the presentation of results in the case studies which follow in the next chapters, and the cross-case analysis in Chapter 10. The process for the thematic analysis followed the contextualist paradigm by taking into consideration both the broader context of limitations and changes posed by causal mechanisms and the "reality", as well as how participants made meaning of their experiences (Braun and Clarke, 2006, p.81). In line with abductive inference, coding was guided but not determined by theory and took a flexible and iterative approach moving back and forth between the data and the study's theoretical framework and existing research. The RQs themselves mirrored this process, as they aimed to find the best possible explanation of observable (design's role in audience-oriented innovation) and less readily observable (power relations and perceptions) phenomena and processes, using pre-existing theory as a guide. The data structure of codes, themes and theoretical dimensions are presented in Figure 4. Each case study was analysed separately, followed by a cross-case analysis (see a query example in NVivo in Figure 5). The findings are discussed in the following chapters.

Figure 4: Coding process

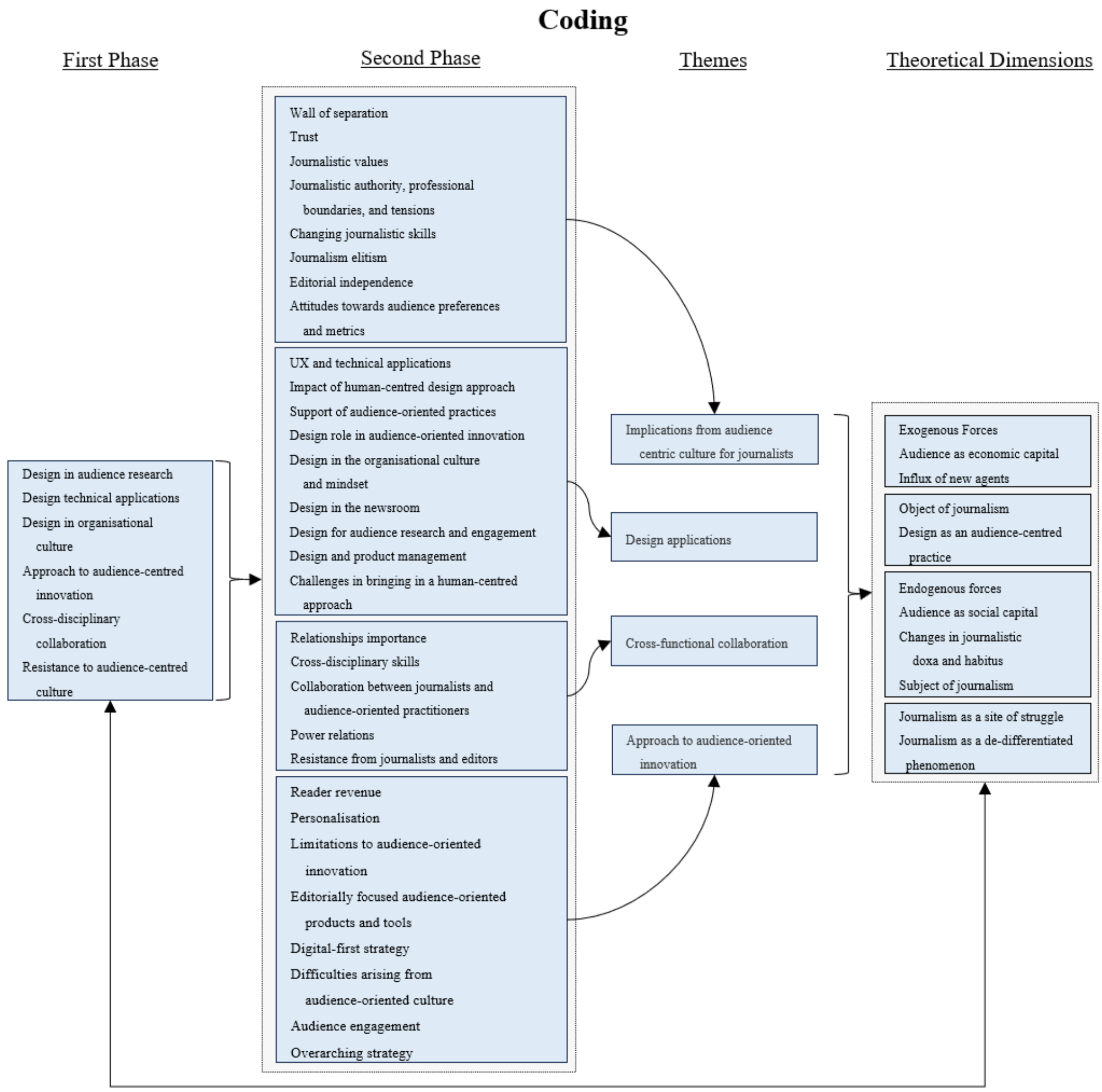
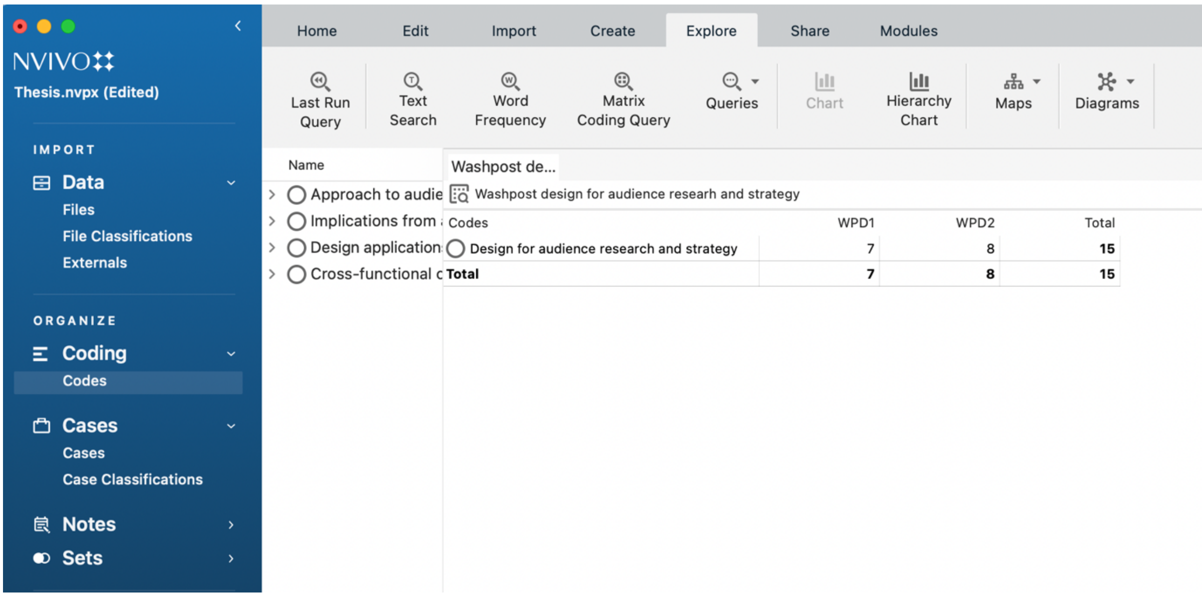


Figure 5: An example of a query result in NVivo used for data analysis



5.4 Conclusion

A multiple case study design with in-depth semi-structured interviews as the primary data collection method was selected as the appropriate methodology for this purely qualitative research. While, as explained above, this methodological approach presents with several limitations, it is believed that the information-rich insights from the case studies will offer a detailed understanding of the complex dynamics surrounding the application of design practices for audience-oriented innovation in four legacy newspapers and the implications for journalism. The in-depth interviews with key participants within these news organisations, including designers, technologists and other audience-oriented professionals, as well as journalists, shed light on the processes, perspectives, and experiences associated with the audience turn in journalism, in which design and DT play a significant role. This exploration moves on to discuss how these audience-oriented changes affect journalism, while revealing the areas of collaboration and struggle that emerge throughout this process.

The results from the case studies are presented in Chapters 6-9. *The New York Times* (Chapter 6), *The Washington Post* (Chapter 7), and *The Guardian* (Chapter 8) case studies offer a broader spectrum of insights, benefitting from a higher number and/or mix of participants, and other available data. *The Irish Times* case study (Chapter 9) while insightful, presents a more focused examination. As explained above, the disparity in participants is attributed to various factors, including the size of the organisation, and the willingness of professionals to participate. All case studies address each of the main themes discussed above. However, their presentation does not follow a uniform structure due to variations in data and participants' availability. The following cross-case analysis in Chapter 10, synthesises the insights from the case studies, discussing the similarities and differences across the four news organisations.

Chapter 6. The New York Times

The New York Times case study begins with a brief overview of the organisation's path to digital transformation from the mid-2000s until today (Section 6.1). Then it moves on to present the findings from the interviews with designers (Section 6.2), drawing on: Theme 1. Design applications, Theme 2. Cross-functional collaboration and Theme 3. Approach to audience-oriented innovation. The next section shifts the focus to other audience-oriented practitioners (Section 6.3), discussing findings from Theme 2. Cross-functional collaboration and Theme 3. Approach to audience-oriented innovation. The last section (6.4) focuses on Theme 4. Implications from audience-centric culture for journalists, discussing journalists' perceptions and attitudes on audience centricity, and how this culture impacts their work and skills.

6.1 The path to 'The Gray Lady's' digital transformation

Aron Pilhofer, worked at *The New York Times* for almost a decade before he left for *The Guardian* in 2014. When he moved from the newsroom to the business side, with his latest role being Associate Managing Editor for Digital Strategy, the newspaper industry in the US had already been facing years of declining circulation and ad revenues (Plambeck, 2010). The "Gray Lady" was no exception. At the start of our interview, Pilhofer explained how, in 2007, he launched a "product and technology team" embedded in the newsroom, called "Interactive News"—which, in his LinkedIn profile (Pilhofer, n.d), describes as "the first of its kind at a major US news organization". The team, Pilhofer said in our interview, comprised designers, technologists and developers, and its main task was to build and launch "editorially focused digital products"—an initiative that was perhaps indicative of the newspaper's willingness to make strides out of its print-centric tradition.

A few years later, *The New York Times* released its landmark Innovation Report, leaked to the media after Jill Abramson's removal as executive editor of the organisation (Benton, 2014). The 96-page report was a blend of organisational self-reflection and a forward-looking roadmap to transform the newsroom into "a truly digital-first organization" (Innovation, 2014, p. 6). To achieve this goal, the report proclaimed, audience development should have been made "a core and urgent part" of the organisation's mission (ibid). At the same time, newsroom collaboration with "business-side units" focused specifically on reader experience, such as "Design, Technology, Consumer Insight Group, R&D and Product", was deemed an essential part of the organisation's digital strategy (ibid). The NYT Now app, the report continued, demonstrated "the benefits of collaboration across these departments" (ibid). Having introduced an online pay model in 2011 (Peters, 2011), the newspaper launched NTY Now in 2014 to reach a younger, mobile-savvy, audience with a curated list of stories at a lower price than the full digital subscription — only to be scrapped two years later (Ember, 2016). Design played a central role in the development of the app. "Design thinking was absolutely the methodology we used. It was an amazing design process and it worked great until we were about to launch," said Pilhofer, who led the editorial side of the app for a period of time. "Then, that sleek speedboat that was NYT Now suddenly came back into the bigger harbour that was in *The New York Times* and basically it just got crushed," he added.

Putting the audience at the centre of an organisation's activities is not always easy for such a big—with a back then, according to Pilhofer, conservative approach to innovation—newspaper. NYT Now was a success with users and dropped the average age of the newspaper's audience by 20+ years—it failed to hit business goals (Assir, n.d.). Nevertheless, the app was an example of a "low-risk experimentation" project that paved the way for other, successful, products (ibid). NYT Cooking is one of them. "It took them seven years to make that work" explained Pilhofer, adding that because of the NYT Now experience, Cooking was initially launched as a free product. Today, *The New York Times* runs a multi-revenue stream business model, offering subscriptions to include their "non-core news" products: Cooking, Games, Wirecutter, and the newly acquired The Athletic. Any of these products can be accessed either individually or by subscribing to the "All Access" bundle.

With nearly ten million subscribers (Robertson, 2023), out of which almost 9.2 million are digital-only, now *The New York Times* aspires to become "the essential subscription for every curious English-speaking person seeking to understand and engage with the world" (Our Strategy, 2022). Key to this aim is to design a seamless experience between *The New York Times* app and their "family of products" to allow their readers and subscribers "move fluidly across them" and create "lifelong relationships" with an engaged audience who finds the *Times* "too valuable to give up" (ibid). As shown in the following sections, agile product experimentation, cross-disciplinary collaboration, and an audience-centric culture are central to *The New York Times*' road to digital transformation, where sometimes a do-or-die feeling is present as forces external to the field imply an ongoing structural transformation. On the other hand, the importance of the audience as a form of social capital is also apparent;

trust and transparency are actively cultivated from both the business side and journalists, for whom traditional journalistic standards and news work remain a source of professional demarcation and legitimisation.

6.2 Design applications at the Times

This section relates to the application of design in audience-centred innovation at *The New York Times*. As explained on The New York Times Company website, the Product and Design team is responsible for "imagining, building and maintaining the core set of experiences" through which audiences "discover and consume" the organisation's journalism across all platforms (Product and Design, n.d.). Wording in this description is key; no matter a reader's journey, journalism should be their destination. An equal emphasis on the organisation's editorial mission was present throughout the interviews with designers, however, the infusion of new practices to the newsroom could also be observed. The different applications of design at *The New York Times* and how it supports audience-oriented innovation are discussed in the following sections.

6.2.1 Audience research and reader experience

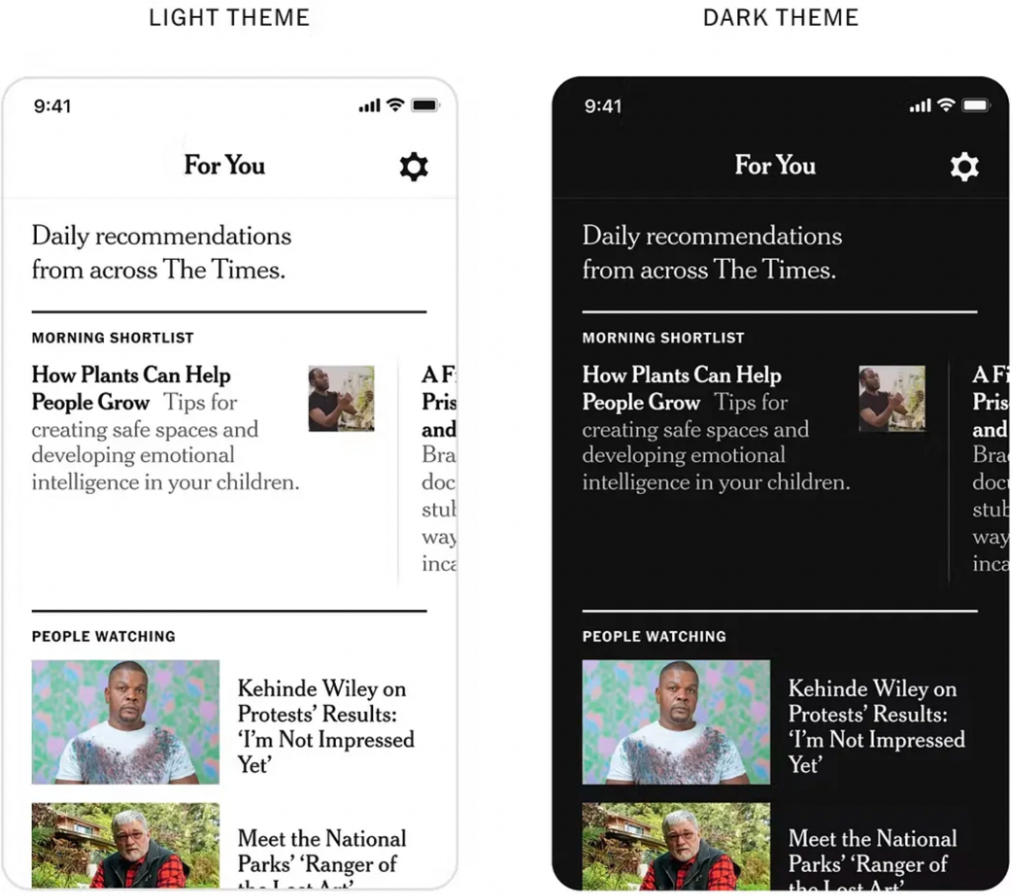
NYTD1 said their work was in "subscriber journey experience", which included research and discovery projects for the homepage programming, personalisation, and navigation through the *Times*' product. However, they said that their role sometimes involved working with five or six different teams concurrently. "I'm really like a systems and journey person," NYTD1 explained. "I lean on our research and work with the researchers to make sure that we are doing the broader generative studies. Then putting on a lot of provocations out there that we can really hone in on what it is we need to do for our readers" they added. Commenting on how different readers reach the *Times*, NYTD1 said:

> There are different ways people are coming in whether there is a breaking storyline and people know the *Times*, so it is their go-to place to find it (…) Or have people coming in via social and search, when somebody has a really specific thing they want to understand, more of this broader discovery. They come in without the context of the *Times* as much. Then we also have different people who are more at ease with reading in their email or visiting the homepage as a habit. Different people have different journeys into the product with different intent.

Audience research takes up a considerable part of the design process at the *Times*. NYTD1 explained how they worked alongside a team of audience researchers. The researchers "identify what the real questions are, pull in the right people to answer those questions, conduct research studies, from surveys to more generative things like co-creation" they said. Their findings, translated into artefacts and reports, "trickle down" to a lot of the work that designers do. Quantitative and qualitative data on audience behaviour have distinct characteristics. From a quantitative point of view, NYTD1 noted, "people will signal their interest at different parts of the experience, whether that is signing up for a newsletter, push notifications, or a specific interest in science, which can show we can send them the things that are relevant to them." Quantitative data, for example, can show if readers engage or do not engage with the *Times*, if they "stick around" and for how long. Qualitative research, on the other hand, explores the "why" behind a reader's journey and what "prompts people to pay" for the *Times*, said NYTD1. In the same vein, NYTD2 explained that "The numbers only tell a part of the story. They don't really identify behaviour. The numbers don't really identify motivation. We just know somebody's doing this and that a lot of people are doing it. Why?" The process designers follow to transform audience insights into actionable design is iterative and intuitive, according to their accounts: "These things evolve by themselves (…) It's stuff we do, but then we start to refine it more based on the different research studies that we are doing," NYTD1 said.

In general, designers described their work as creating products and experiences that respond to the needs of diverse audiences. "I think from a product design point of view, it's helpful to understand that not everybody is on a super-fast iPhone 13 with a high-data plan. There are people with disabilities and people who prefer dark mode," NYTD2 said. The dark mode for Android and iOS (Figure 7), which started as an internal beta and was launched a few months after the interview took place, was identified through audience research as an important feature "for both subscribers and non-subscribers" (Archer *et al.,* 2023). The process was described as the result of close collaboration between the newsroom, engineers, designers, product managers, marketing, and others (ibid).

Figure 6: Dark mode (Source: Archer et al.)



In terms of how reader experience can help the *Times* diversify their audiences, both NYTD1 and NYTD2 focused on the improvement of accessibility and inclusivity. This included researching different formats through which users read the newspaper online, which in turn, informed journalistic decisions.

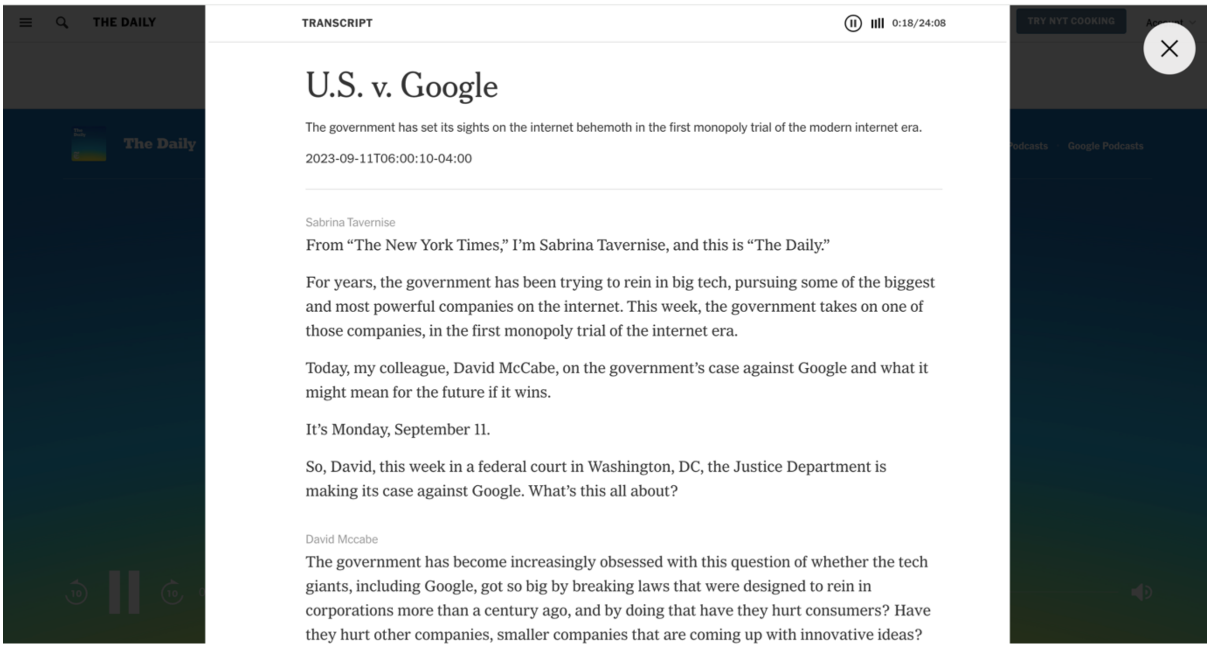
> I think it's a cyclic thing. It's the way that we design the experience can in a way inform the journalism and back and forth (…) to understand that we are not expecting people to come in and have the same behaviour that these news junkies that just read and know everything. (NYTD1)

As NYTD1 said, by understanding the different types of readers, designers did not only make information more accessible, but also helped the readers build their own knowledge in a subject. "Where we have visual information, data, all of these things provide different ways into a story," NYTD1 explained. Another initiative to enhance accessibility was the introduction of transcripts for podcasts (see Figures 8 and 9). The problem the design team was trying to solve was simple: podcasts were not accessible to many of the *Times'* readers (Shalom, 2019). Their implementation, however, was described as far from straightforward.

Initial designs, which included text as an overlay to the audio, were too tied to the speed of the speakers. This would create problems for people who process audible words faster than printed words (ibid). The design team decided to create a page with its own URL for transcripts that opened on top of the podcast and not on a separate page. An extra benefit of this design was that the transcript could be shared by itself and showed up on search results (ibid).

Figure 7: The Daily podcast with the embedded transcript feature (Source: Tavernise et al., 2023)

Figure 8: ibid



Such features were described as the result of extensive design experimentation and consultation with the audience. NYTD2 said they worked in a team called Storytelling, alongside other designers, product managers, engineers, the QA team, quantitative analysts who run A/B tests[2] and qualitative researchers. NYTD2 was mostly involved in reader experience and UI design. They described how they performed design sprints based around a hypothesis about comprehension and discoverability to test how users see and understand new features. Experimentation and early failure are part of the design process.

> We have these really long pages and they are comprised of little updates or snippets and people often in research have said "Oh, this is great, but I always need a way to get back to the top" (…) We put a back-to-top button on the page and thought this is user-requested. It's an easy win. I think we found that no one clicks on it. (…) I think there's a lot of that. Also, to be honest we didn't do a lot of research on this button — we just did it. (NYTD2)

NYTD2 said that their work involved designing the experience on the story page, which is the page that powers all the stories:

> Ninety percent of the stories are published in this tool. The thing about that page is that it is owned by everybody and it is owned by nobody. What happens is that you have a lot of product teams on that, and these teams are incentivised to boost engagement numbers. What could happen very quickly is that the page could be balkanised where every part of it is optimised for that one engagement metric.

Managing such "a complex problem" in "a complex organisation" required a holistic approach, which involved the creation of a design system that would "provide others with a toolbox to make good decisions," NYTD2 explained. This holistic perspective meant that designers were being proactive around full experiences, rather than performing tests to boost engagement on one thing:

> A successful test does not mean a successful experiment. We can make our share tools 100 pixels tall, and I am sure our share would go through the roof, but does that make a good experience if the first thing you see is massive share tools?

However, the applications of design at the *Times* move beyond creating a smooth reader experience and encouraging engagement through personalisation. Designers are often called to deal with both short-term issues and long-term strategy. According to NYTD2, these ranged from quick fixes in the editorial workflow to long-term projects, such as how to "get

---

[2] A/B testing is a user experience research methodology, in which two versions of something, for example a webpage, are compared to determine which one performs better (Gallo, 2017).

ahead of some of the strategy decisions that news and our product managers are thinking about". How design supports editorial work and audience-centred strategy at the *Times* is presented in the following sections.

6.2.2 Collaboration with the editorial staff and competing logics

The discussions with designers did not reveal any immediate tensions in the newsroom between them and editorial staff, while the adherence to journalistic values was highlighted throughout the interviews. One of the interviewees requested to keep the part where some tensions were suggested off the record. As discussed in Chapter 5 this is an expected risk of in-depth expert interviews, especially when interviewees represent their organisations. However, in some parts of the interviews the existence of competing professional logics was implied, as well as attempts to inoculate the newsroom with new practices and an audience-centric culture.

Interviews revealed that collaboration between designers and editorial staff at the *Times*, happens at different levels, on the basis of specific projects, and depended on the composition of the many different teams. When the designers talked about a typical design process for editorial purposes, they stressed the significance of immediacy and designing at the pace of the news cycle.

> I'm usually on a project where we have a newsroom partner. I work a lot in design sprints, bringing in research, and doing more further outthinking. I'll have newsroom people in those sprints to be contributing, refining ideas, working with us. Then I have other partners where we'll talk through and experience and think about how to craft the voice of this thing. Then you have different pockets of the *Times*, such as Live [the live updates] (…) They are so intertwined, and it's so fast paced. It's like you have to design the product on the go. (NYTD1)

> We have learnt that we can learn a lot by reacting to the news and taking opportunities in real news situations to test new ideas, test the hypotheses and react (..) When we are doing something like live coverage, it's really fast paced. Dropping somebody into a really fast-paced stream of updates, we have to figure out what context do they need to understand the updates they are seeing? What is the UX of the return? If they are on a really fast-moving live blog, for example, and they leave and they come back, what do they need to see? What don't they need to see? How do we balance a really visual report and text that somebody may need to help them understand what they are seeing? (NYTD2)

NTYD2 mentioned a project for which they collaborated with editors with an aim to offer readers deeper context for important stories. During the discovery phase, the *Times* found out that readers who were coming in from search or social "did not have a lot of context for framing, not in the sense of a journalistic framing, but like a rubric to understand what a story is about" NYTD2 said. They described how, alongside editors and masthead editors[3], they "built this top semantic navigation across Storylines, and we created these context modules that helped readers get a bigger picture, a zoomed-out view of this story just to help them understand the story they're on" (see Figure 10).

Figure 9: An example of how The New York Times helps readers find more context for a story on the website (Source: Haberman and Swan, 2023)

Interestingly, NYTD2 was able to detail the type of stories that usually required more context:

[3] The editors that appear in the Masthead of *The New York Times.*

> I think a great example is the Hong Kong protests in 2019 (…) unless you were following really closely, that's a really hard topic to get if you just be dropped into. There were protests against Starbucks and LeBron James, and there were even protests against face masks. I think if you were dropped in, you'd be like, "Why do they care about face masks? What's wrong with the NBA?" What readers would need to know is that "Hey, there's a big extradition bill happening in Beijing that could impact Hong Kong's lives." (NYTD2)

Nevertheless, both designers stressed that they did not have editorial judgement and did not challenge journalistic authority. "We don't have that ability and we shouldn't have that ability," NYTD2 said. Likewise, NYTD1 maintained that editorial judgement is "king at the *Times*, and it is important that it is". Instead of being prescriptive or meddling with editorial work, NYTD2 said that designers created tools under the guidance of editors and the leadership to help "the newsroom craft those things themselves. The tools really help guide the newsroom and how they create things." And they added:

> A/B tests have been phenomenal to help the newsroom make decisions. Is this worth our time to do? That's often the big discussion. This requires somebody to maintain this piece of content, is it worth it? Certainly, an A/B test will help make that decision, also qualitative user research, which is more informative for design.

While this account of the role of design in the newsroom implied a direct influence on editorial decision-making, NYTD1 also pointed to another way of how their work affects newswork. As they explained, the role of the designer is to bring the voice of the reader to the forefront, "to advocate for the reader" and their needs. This knowledge can influence how information is structured and presented, with either making the content more accessible or guiding the readers through a topic through different ways. By introducing research on different reader types and their interests, designers make information easier to access and comprehend, but also aim to promote the right diversity of subjects and issues:

> I have worked there for so long that I know what are the qualities in the stories that we have that people want to be more prominent (…) When we have things like newsletters and bursts, which are these things are on screen where if you are building guidelines and understanding how you build the structure of these things and how we speak to the readers, then you can start to shape those experiences. I worked on a newsletter way back called Debatable. Going from this structure of having different opinion pieces that people read to breaking down an issue into a scaffolder to be able to say, okay, what does this mean? Who's got opinions on this? What are the facts? What are the things that other people are saying? (NYTD1)

This process, of course, requires close collaboration with editors. Working between the newsroom and product, NYTD2 said they could not distinguish between the two. Collaboration between designers and editors seems to be the norm at the *Times* and NYTD2 said that they usually did not notice any tensions arising from these interactions. However, they mentioned that this interaction most commonly happened in a higher managerial level, where the role of design as an organisational resource was already understood and valued:

> We are not always in the trenches with the day-to-day. We are usually working with senior people that are on-board with the strategy and understand what we're trying to do. Oftentimes it's not like we said we need to do this. It's like a handshake between a lot of people to say we have to solve this problem. Everybody's already on-board.

NYTD2 pointed to two factors that can perhaps help to minimise frictions between the editorial staff and non-journalistic practitioners in news organisations. First, NYTD2 said, the product teams, designers and technologists working in journalism, should realise the difference between a native digital product and journalism. They argued that news organisations have been misguided in feeling that because they are digital, they need to act like a digital product:

> It's like saying, well, you know what? The newspaper, it shows up on newsprint at my door, and guess what else shows up at newspaper in my door, a phone book. It's on newsprint, shows up in my door. They're the same, but they're not the same. I just think we're equating just because it's on your phone, we're the same as Instagram and we're not. There's no way.

Similarly, technologists coming from Google or Facebook to the *Times* often get frustrated, when they realise that the product is journalism. "There is a digital product, but what people are coming for is journalism", they explained. The second factor, NYTD2 added, is promoting constant interaction, and removing physical barriers between different teams and the newsroom. "We are collaborating. In the past, I think what's happened is that product teams have been in another building or another room, they handed over a template to the newsroom and say, fill in the fields. That's not the right way to work," they concluded.

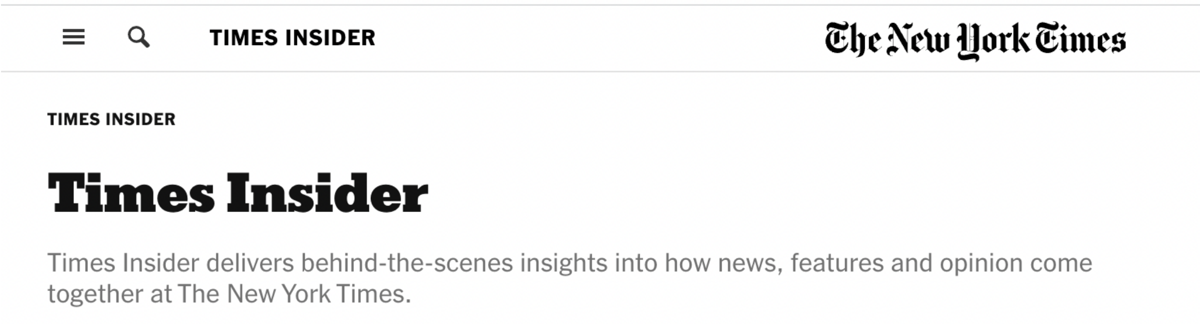
6.2.3 Design for trust and transparency

Designers argue that they want to build products that are worth paying for. However, as it is also evident in the sections above, they are also involved in projects closely related to journalism's values and most pressing problems:

> We have people dedicated to trust … the kind of feedback people need to know how this story came to be? How was it put together? How was it fact-checked? All of those things. How do you, through the communication of the story, be able to signal those things? (NYTD1)

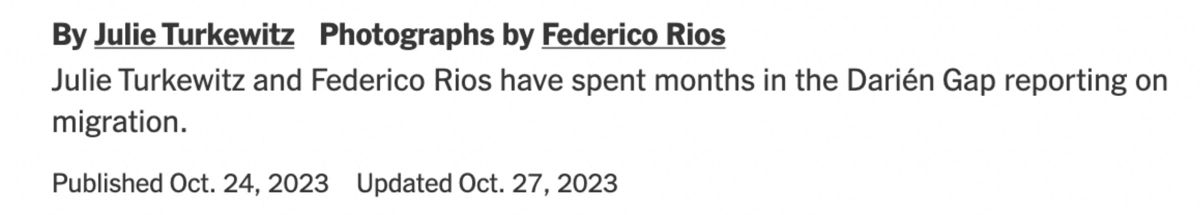
Cultivating trust and transparency takes up a considerable portion of the *Times'* audience strategy. In 2018, its then newly appointed publisher, A. G. Sulzberger, reiterated the organisation's commitment to producing trusted and transparent journalism amidst a deepening crisis of disinformation and attacks against the press by the Trump administration and technology platforms (The New York Times, 2018). 'Times Insider' (see Figure 11) is an example of a trust project which offers the audience a behind-the-scenes insight of how the 1,700-strong newsroom produce their journalism and thus increase transparency (DiTrollio, 2022).

Figure 10: Times Insider (Source: The New York Times, n.d.)



The road to the creation of its various features is described as a close collaboration between a team of editors and designers, though brainstorming, experimentation, and user feedback (ibid). One such feature was the new byline and dateline format (see Figure 12). As Director of Product Design for Trust, Dalit Shalom (2023), explained in a LinkedIn post, this new format, contained increased information such as a reporter's location, expertise on a specific matter, or the process of pulling a story together.

Figure 11: An example of an enhanced byline (Source: Turkewitz and Rios, 2023)



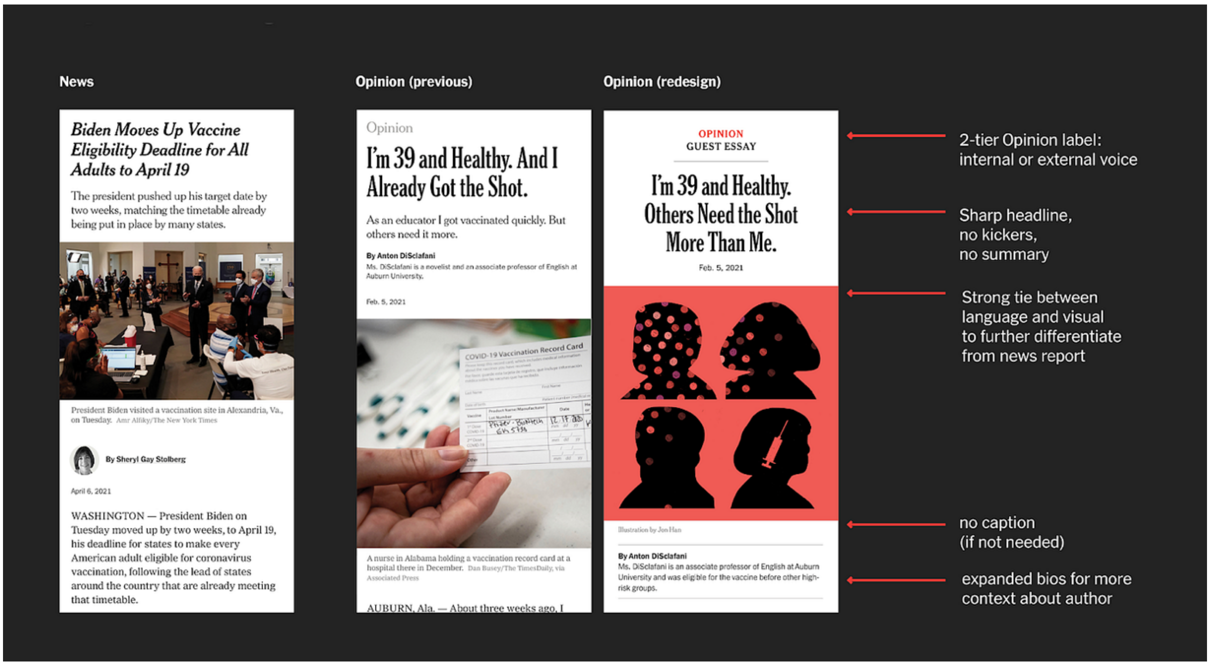
The *Times* had been experimenting with the enhanced bylines format for over a year before their launch in May 2023 (Tameez, 2023). Audience research showed that readers were confused as to whether traditional datelines signified the location of the news as opposed to the location of the reporters (Lacey and Ericson cited in Tameez, 2023). As editor of the Trust and Credibility team Edmund Lee pointed out, the new datelines have allowed reporters to present themselves in a more colloquial and conversational way, which is thought to enhance trust “as that’s the language people communicate in” (Brownstein, 2023).

Elsewhere, Shalom (2022) talked about the ‘Behind the Journalism’ initiative (see Figure 13), which was essentially described as a repository to help readers understand how the *Times* created its processes, policies, standards and reporting. She mentioned that by designing this feature, their intention was to illuminate aspects of journalism that can sometimes feel very “cryptic” to readers, such as the use of anonymous sources from reporters (ibid).

Figure 12: Behind the Journalism of The New York Times (Source: The New York Times, 2022a)

Another project that was developed by editors, strategists, and designers with trust and transparency in mind, was the redesign of the Opinion section. Research found that the *Times’* readers could not easily tell the difference between opinion pieces and news stories (Shalom, 2021). Designers held sessions with different readers, including subscribers and non-subscribers, and found that many of them valued diverse viewpoints, but they also asked for more transparency regarding Op-Eds. For example, they wanted to be made clear whether an opinion came from the *Times* staff or someone from outside the organisation. After several iterations, designers came up with a two-tiered labelling system that enabled readers distinguish between opinion pieces from the *Times* and ‘Guest Essays’ from external contributors. As shown in Figure 14 below, other visual changes in design included labelling the section in red so it would be more easily distinguishable, expanded author bios, and sharp headlines with no kickers (additional headlines) or summary.

Figure 13: The redesign of the Opinion section (Source: Shalom, 2021)



Such changes are important, because as NYTD1 noted, the brand of *The New York Times* alone and its expertise, can only carry it so far. Part of the newspaper's trust mission is to explain to the audience when and why information is to be trusted. However, this process also requires reaching reader demographics where disinformation abounds. This can be a challenge for designers, as the *Times*, despite counting well over 100 million registered users (Flynn, 2021), has "over-indexed on people who are going to read an article, or people who are going to read in-depth about something", NYTD1 added. These audiences are generally more affluent, more liberal, and more educated, or what Usher describes as the "rich, white, and blue" (see discussion in Chapter 3). NYTD1 said that "the priority should be reaching more people in easier ways" and pointed to forces external to the journalistic field which make this task even more pressing:

> We are competing with Twitter and Facebook in one side and then Netflix and Spotify on the other side (…) I just think our job is really important now, but it's like how do we reach more people that aren't seeing the facts? Thinking about ways beyond just our internal products is like, where are those other places that we can really show up and meet people where the disinformation is?

However, as it is made evident in the interviews with other practitioners and journalists, which are presented later in this chapter, the diversification and expansion of audiences is neither a straight-forward process nor an end to itself.

6.2.4 The value of design in the organisational culture

This section presents designers' views about where they thought design stands in the *Times'* organisational culture. Some of their interpretations were related to how designers measure and demonstrate the impact of their work. Others were tied to the importance of audience research and focusing on user needs, as well as the facilitation of cross-functional collaboration between teams. Interestingly, the designers also highlighted the similarities of design practice to that of journalism, which perhaps explains why they were both able to bring up and discuss issues pertaining to journalistic values with ease, even though they did not have a journalistic background.

NYTD1 said that balancing editorial judgement and user needs was gradually becoming more pronounced at the *Times*. They consistently commented on the importance of audience research. "Research insights are the best grounding that we can have for informing our products (…) whereas before a lot was based on our own assumptions and biases", NYTD1 said. Also, they explained that audience research could help them determine whether the audience was engaging with the *Times*, or if "we over-engineer to the clicks, which is predominantly what we've done before". They also commented on the different functions of design at the *Times.* These included the business side, focused on growth and conversion, as opposed to the side which was more geared towards the news. Also, there spoke of brand design, and "the team that are doing the interactive pieces. They are working really fast to meet the news moments versus product design where we are more about building the product experience out. I think it's more and more coming together," NYTD1 said.

NYTD1 noted that designers aimed to facilitate the needs of both the readers and the newsroom and determine if people "value us in the long-term to fulfil a role for them". In this sense, design development involved and affected a large network of stakeholders internally and externally, an account which is consistent with literature on the subject (see Chapter 4). Furthermore, dealing with such ambiguous and complex problems made measuring design's impact in an organisation setting a tricky task:

> There are bigger studies that help us evaluate people's affinity with the brand. Real impact from design is not as easy to quantify, I think right now, but that's the shift that we want to make. If we are here to help people feel empowered or knowledgeable, how do we ensure that this is part of the matrix that we are doing? That's a thing for us to really understand. (NYTD1)

Both designers stressed that the power of design lie in its cross-disciplinary nature. In addition, NYTD2 also commented on how design, and in particular visualisations, facilitated discussion and collaboration between different teams at the *Times* by managing complexity to communicate knowledge:

> Visual design helps everybody, including users. I have been in rooms where there's four or five people talking (…) about some abstract concept that probably everyone is envisioning differently. I think that another role of design is being able to ground a discussion and not necessarily lead but help to facilitate collaboration.

Furthermore, NYTD2 said that the *Times* has a strong design culture, linking it back to design's traditional applications in newspapers, such as graphic design, typography, and photography, which are ingrained in the organisation's culture. "Aesthetics are important (…) All these visual things that were really important to the *Times* and are important because the media now is very visual," they commented. At different times of the interview, NYTD2 would point out the at the similarities between editorial work and UX design, mostly in synthesising information to create knowledge and meaning. For instance, they mentioned that understanding and comprehension are both a UX and an editorial problem.

> What goes into crafting a really good news story, is trying to understand how much background somebody needs. How much context? It is almost UX from a language point of view. We are using language to help people do this, not necessarily buttons or navigation. It is like what is the information hierarchy on a certain page and what can we do to help people comprehend and understand? (NYTD2)

Later, they would add that, in a sense, design is also an editorial practice, because "you are really making editorial decisions when you are putting stuff on a page". The similarities between journalism and the design methodology were also highlighted by Pilhofer. However, he noted that these are mostly superficial. He said that by applying DT over the years, he has heard a lot of people comparing the two practices, especially during the phase that involves user interviews. Nevertheless, he said that journalism and design require different skills and different mindsets. He mentioned that journalists first construct a narrative and then test it into the world, "so to greater or lesser degree, when you're doing a story, you've got the product pretty well conceived". However, he noticed that the perceived similarities between journalism and design can help to overcome resistance in the newsroom:

> One of the advantages of design thinking when trying to convince journalists that it's a good thing is that it bears some resemblance to what they do for a living. Therefore, they can understand it. Then you don't get into all of these, what feels to them an oppressive, almost government-like process (…) of development and project management. It's so antithetical to what a journalist does. Whereas design thinking

> feels (…) more agile, I guess, to the journalist. I think the advantage to it is that if you've really embraced it on the digital side, journalists, newsroom will understand what you're trying to do.

Indeed, from these accounts, it becomes apparent that even though an ethnographic approach to design practices at the *Times* was not possible, designers were able to situate design at the *Times* both discursively and as a set of practices. The former include descriptions of what designers are trained and asked to do: for example, creating products that answer to users' needs. The latter involves accounts of the similarities between design and journalistic doxas and how design practice co-evolves alongside the journalistic one, as a result of temporal and spatial processes and structures, relationships, embodied knowledge and routines. Neither designer presented design as the primary bearer of audience innovation at the *Times*. Instead, they described how their work facilitated collaboration to solve problems that were not restricted to commercial purposes, which brought them closer to the journalistic doxa and view of the audience as social capital. On the other hand, prioritising audience's needs and responding to them as part of a broader audience strategy and business model, may challenge journalistic authority and professional boundaries. This aspect of the audience-oriented culture at the *Times* was more discernible in the interviews with practitioners in audience-oriented and technology roles presented below.

6.3 Between data, audience, and the news

This section focuses on interviews with non-journalistic professionals at the *Times*, such as engineers, audience editors and analysts, who collaborate with designers and the product function. Their responsibilities were described as spanning across different parts of the organisation, while some said they had to wear many hats in their job. As mentioned in Chapter 5, the interviewees' exact job titles and backgrounds are not mentioned to avoid identification. The discussions focused on how these digital and audience-oriented roles affect journalistic practices and workflows at the *Times*, and the areas of cooperation and struggle that arise in the process. Here, the view of the audience as economic capital is more present, while tensions with the editorial staff are apparent, yet still not very pronounced.

6.3.1 Shaping editorial decisions for audience-oriented innovation

All participants commented on how their role required them to engage internally with various teams, most notably product design, audience research, editorial, and the newsroom. They described a news production environment that was infused with cross-disciplinary skills and ways of thinking. They also noted that their job makes journalism more "audience-friendly" by either closely following metrics and promoting engagement, or by creating tools and leveraging data to facilitate new forms of storytelling. For example, they said that engineers were generally responsible for building the user-facing templates and experiences, and also creating the tools that journalists use, such as storytelling tools. Furthermore, they described how audience editors had the "broad mandate" of leveraging data to assist editorial decision-making. Others talked of their responsibilities as traversing boundaries, and even involving journalistic work, suggesting the emergence of fluid and not always explicit data-driven journalistic roles. Like designers, they said that they were not involved in editorial decisions directly, but mostly through the shaping of editorial products and services. A technologist (NYTA1) mentioned the example of Live, the tool that the *Times* does its live coverage. Its development, they explained, was a "direct conversation" between product managers, engineers from the 400-people strong engineering team, newsroom editors and designers. They said that by deciding on the shape of that tool, how it should work and display things, and on its functionality, technologists shaped the structure of journalism, but did not have a say on the content of the live updates. However, NYTA1 remarked, that sometimes technologists' work got "very close" to making editorial decisions "and there are probably some areas, where they basically, do".

This is especially true for technologists like NYTA2, whose role was embedded in the newsroom, but they reported under the business structure. In fact, they said that their job title was more of an informal depiction of their responsibilities, and they could, in a sense, be described as editors. NYTA2 described their role as a "full matrix of roles and responsibilities". On the one hand, they said they created custom software for the newsroom, such as the live blogging, or responded to technical queries. On the other hand, they handled data analysis and data sources for important coverage events, such as the US elections, the Olympic Games, or more recently, the pandemic. NYTA2 described their team, called Interactive News Technology, as "small and lean", with allocation on data analysis partly depending on their expertise on "certain types of data forms", such as election campaign finance or non-profit tax filings. This aspect of their work, which involved doing data journalism, required routine interaction with reporters and the graphics desk. NYTA2 also mentioned that among their responsibilities was to train journalists on how to utilise data, so they could visually enhance their reporting and provide the audience with new forms of storytelling. This, according to NYTA1, is at the heart of audience-centred innovation efforts at the *Times.* As they explained:

> We define innovation more in terms of new storytelling formats, so new ways to tell individual stories. I think there's two ways we go about things. One is individual stories and how we tell individual stories (…) It could be a combination of video and audio and text and images. (…) Then, there's more of the products and how do we pull together products which is more about collections of journalism and navigating through our journalism. At the *Times* when we talk about innovation, it tends to be more at the story level and how we tell stories (…) to better serve our readers and serve reader needs.

NYTA1 added that the *Times* has been "very user-focused". However, they continued, the newspaper did not aim at personalising the entire experience and making it completely based on engagement or clicks. Instead, it wanted to balance its editorial mission with personalisation "as a way to help people get to the journalism more effectively and efficiently, and to be exposed to the breadth of the *Times*". Similarly, an audience editor (NYTA3) explained that the *Times* tries to steer away from going along "with just numbers". They mentioned the example of news avoidance to point out that the numbers do not always reflect how audiences consume and interact with news. NYTA3 said:

> It's probably a professed news avoidance, but when you look at the behaviour, it doesn't always bear out (…) There's a certain allowance, I guess you could say. They don't want to read the news, but when it comes up and we say it's important, they tend to read it anyway. It's a balance. It's a mixture, I think. I would not want us to always just cater to what the audience wants, because then that would completely alter the mix of what we present. When you spend time on a certain story and you look back on it and you see the importance that it's played in setting policy or affecting people's lives, you could say, "Well, people didn't want to read that at the beginning, but by the end of this process they did." There's a certain amount of leeway you have to give the editorial mission, the journalistic mission, to do the work that it's supposed to do.

However, a lot of editorial decisions are still based on datafied audience preferences. NYTA3 mentioned that audience metrics can guide decisions in new forms of journalism, which "you wouldn't see in the print days, but in the digital times, it makes a lot of sense". In addition, NYTA4 said that the audience team often pitched ideas to editors for explanatory and service journalism stories. They explained that the team was responsible for following and analysing different audience metrics and trends to help the desk optimise and promote stories, and also strategise on individual projects, such as international strategy, or audience rollout plans. While editorially important stories and big investigations did not depend on audience preferences, NYTA4 explained that there was a middle ground where the audience team worked to make every story friendlier to audiences. This process affected editorial workflows:

> Working with the SEO team on SEO headlines and URLs, it's a huge part of the workflow. Even on the homepage programming, they have tools that shows them how things are performing based on how people are clicking on the homepage, and they'll move things around depending on how things are clicking. (NYTA4)

The following sections discuss the opportunities and limitations in bringing an audience-oriented culture at the *Times*, and tensions that arise during this process with the editorial staff.

6.3.2 Opportunities and limitations in audience-oriented culture

The *Times* is transparent over what it owns and where its money comes from. Operating under a stock market traded ownership form with family control of voting shares (Benson, Neff, and Hessérus, 2018), The New York Times Company, besides the newspaper, website and app, also owns the recommendation service Wirecutter, the sports news site The Athletic, The New York Times Cooking, and The New York Times Games, all of which are separate businesses (The New York Times, 2022b). The company makes most of its money from subscriptions to these services and from advertising revenue (ibid). While the exact breakdown of subscriptions is not available, it is believed that each of these products, except for the Wirecutter, counts more than one million of standalone subscribers (Maher, 2023). The *Times'* business model revolves around using this "constellation of products that surround the news" (Knight cited in Maher, 2023) as a funnel for bringing in more subscribers. "When we say subscribers, we now count subscribers to any of the products," NYTA1 explained. "Ideally, we want people to subscribe to multiple products or the full bundle is what we are really hoping to achieve," they added. As NYTA1 also noted, the *Times* seeks to reach out to different demographics. Part of this strategy was the $550 million deal for the acquisition of The Athletic in 202 (Hirsch, Draper, and Rosman, 2022), with its largely younger audience base.

When it comes to news subscribers, NYTA3 explained that the *Times* wants "to somehow bring into the fold" people who could read them "but they don't" and those "who are readers, who are customers, but they're not reading as much as they could." For example, as NYTA2 explained:

> [The *Times*] is trying to find what those levers are (…) putting something in front of people who are coming from the background of low news readership, high cultural consumption. How to put the right things in their way or get the right things near them enough to be curious about the rest of the journalistic operation.

This goal included the expansion of the *Times'* international audiences, as almost 20% of its digital-only subscribers with access to the news product come from outside the US (The New York Times Company 2022 Annual Report). As NYTA4 noted, the *Times* recently introduced a new DEI (diversity, equity, and inclusion) goal that prioritised a metric for new readers. This metric, which uses cookies "to see if somebody's ever come to the *Times* before (…) has been mandated as a goal for the newsroom to increase new readers across the newsroom because we take that as a metric of diversity", NYTA4 said. And added: "The big caveat is if somebody clears the cookies."

Of course, the *Times*, as well as its main competitors that include *The Washington Post*, *The Guardian* and other legacy news organisations with international reach (The New York Times Company 2022 Annual Report), are in a better position to respond to pressures external to the journalistic field. This is because they possess both the economic and social capital to invest in audiences strategies, and also benefit from algorithms in tech platforms that favour well-known sources (Nelson, 2021, p. 132). However, how audience metrics are pursued, what they reveal and, most importantly, how they are translated into actionable insights, especially around engagement with the news, was described as being a work in progress. For example, NYTA2 explained that there were daily "casual conversations" around the organisation's struggle to reach new audiences and find out "what interests them and what doesn't". This was especially true for people outside the *Times*' "highly literate, and very loyal readership", and especially for "conservative-leaning rural communities" at the US who view the *Times* as "too biased to be reliable". NYTA2 said that journalists often report on places where they "struggle to find readership", as trust in the news and news literacy in these communities are low. Some of these audiences may read the *Times* during heightened political activity, such as elections. However, as NYTA2 explained, they will not show up during the regular news cycle "because they do not want to be seen doing so." Another challenge the *Times* faces and is also related to exogenous forces, is how to reach and follow the trends of younger audiences in tech platforms. "TikTok one year, Instagram, chasing those can be exhausting and expensive and really annoying," NYTA2 pointed out. When it comes to "college-educated" audiences who use these platforms, things are pretty straight-forward. However, for audiences from lower educational backgrounds, "it's really difficult to break through" and make them read the news, NYTA2 said:

> Because you don't want to say, "Random Zoomer, you should stop reading your news on TikTok and read it over here at a high-end subscription" for obviously the tone and volume of news would be alienating if you're not from a family or a history

> of people who are aware of what the news is up to. It's pointing a fire hose to their face and being like, "You should love this", and understandably, sometimes they're just like, "No, I don't."

Figuring out what matters to news consumers sometimes involves the use of vague and not always widely agreed-upon audience metrics (Nelson, 2021, p. 107). To be able to do that, NYTA4 collaborated with different teams, including the newsroom, engineers, product designers, as well as the Trust team, mentioned in the previous sections. However, NYTA4 remarked that the *Times* is still learning how to interpret cues on audiences engagement or what this engagement was really about. "I do not even think that what we do every day is necessarily best practice," they said and added: "Compared to marketing analytics, which have been around forever, click-through rate and forget what the other ones are (…) newsroom audience analytics are basically brand new in the scheme of things." In this process, it is not clear what metrics are meaningful to interpret audience habits. "We talk about what are the best metrics, and we change," NYTA4 said. Organisational limitations pertaining to the allocation of resources and the traditional "wall of separation" are also present. NYTA3 mentioned that finding the "right data points" was crucial, however, priorities between teams often diverged. They spoke of a specific cohort of readers that would come back "to the homepage several times a day, multiple times a week" but there was not a lot of information to understand their habits:

> Is there a day of the week that they tend to come in more frequently? Or what are the topic areas that they read consistently? Just getting an idea of that profile of that reader has been something I've been asking for three years. It's just you have to keep pushing, keep pressing for what you think are priorities, but they might not match up with product, or engineer, or data analyst priorities.

Similarly, NYTA4 said that choosing on which readers to focus has implications on both journalists' coverage of news and audience growth potential. They noted that for certain parts of the organisation engagement means for subscribers "to sit around and not leave". However, they added that the newsroom has different priorities and wants to offer high quality journalism. "There are just lots of different end goals that are in tension with each other, and you have to figure out what the best metrics are to satisfy all them," NYTA4 concluded.

6.3.2.1 Resistance from the journalistic side

As mentioned above, all non-journalistic interviewees worked within cross-functional teams, and also collaborated with the newsroom and/or editors either for specific projects or on a daily basis. NYTA2 highlighted that the *Times* has actively invested in breaking old habits and promoting collaboration between teams, an intention that was perhaps first made clear with the publication of the Innovation report in 2014. However, back then, cross-disciplinary teamwork was not a given. Pilhofer described how at its beginning, the Interactive News team faced difficulties in both working with journalists and trying to get into the mainstream of the organisation's operations. One obstacle was resistance from journalists, who viewed with suspicion initiatives coming from the business side. "Journalists are very xenophobic (…) It's very much an us/them. You are either a journalist or you are not a journalist," he said. What helped was the fact that Pilhofer himself was coming from the newsroom, and he already had "an established network and trust". The second and biggest, according to Pilhofer, obstacle was the size of the *Times* that made it difficult to find out what projects were running in each desk and focus of the right things. He mentioned that at the beginning, the Interactive News team would collaborate with anyone who agreed to work with them. They ended up doing a lot of work with the sports desk, which Pilhofer thought was more open to experimentation and innovation and more willing to commit resources. "Whereas other desks, it took more wrangling and effort," he said. The same obstacles are less pronounced yet still present to this day, with technologists pointing to several reasons why tensions or resistance from editors and journalists may emerge. These include perceived threats to journalistic professional boundaries, the allocation of resources between editorially worthy stories and audience preferences, and journalists having to constantly learn new technologies.

NYTA2 said that the *Times* has "largely moved past" these kinds of tensions. As they said, most journalists who reached out to them for the needs of a story or data training, did so because they "have seen other people do it and have seen the value in these collaborations". However, there was the exception of "very few people who've been ordered by their bosses to contact us and they're doing it reluctantly". Nevertheless, this predominantly smooth interaction was described as requiring as lot of effort from their part.

> We have to keep this high-level literacy about what the newsroom is currently paying attention to, editorial standards for decision-making, what each desk is currently up to for the speed and rigour at which they're reporting things. It's a weird job to need to try to read everything that we publish, just so the next day if a certain reporter comes to us, we have an idea of the workload that they've been under and the Storylines they've been talking about and what their desk has been working on. [For example] what their desk has been intentionally trying to experiment with and play with for audience understanding or analytics or big data. (NYTA2)

Furthermore, NYTA2 described how their team needed to exercise caution in their dealings with journalists, so they did not threaten their professional authority:

> As long as we frame it that way, as like, "Hey, we're going to work with this with you, but at the end, you're going to have these skills we're going to try to make sure that you're ready to use next time. When you need it next time, we'll still be here to help." They're usually so relieved to advance their skills and their knowledge quickly in that regard that they'll get over resistance about whose territory is what kind of work.

NYTA4 described a similar strategic approach when they pitched stories based on audience trends to the editorial staff. They said the team put a lot of effort into preparing the material that went to editors, so it was presented as merely suggestions and not as interfering with journalistic autonomy:

> I think we are very strategic. We spend several hours in the morning writing that note that I mentioned that gets sent, crafting it, and the language is really important, so framing things the right way as to not come across as blaming desks for doing things wrong or missing things, everything we say is a suggestion, and more and more they're taking us up on those, but we're not the ones at the top.

Like Pilhofer, NYTA4 said that such boundary negotiations are based a lot on trust and building networks. They mentioned that they had to figure out which editors were "more amicable" to audience suggestions and explain by presenting data to them why an audience-derived story was important:

> Practice (…) It's not even just that these explainers are a good audience service, but that they've got a lot of page views, which a lot of the time is something that editors and reporters care about, so showing them the importance of that. I think just building trust and showing them that we're on the same team, we're trying to make the journalism better and more widely read. Things like that.

NYTA3 characterised such interactions with news editors as a "gap in knowledge". They explained that sometimes there was a hesitancy to spend resources on stories which did not seem to derive from a strong cohort of the *Times'* readers, or those that were not deemed as editorially important:

> You get that tension pretty frequently when it comes to audience data insights, I think (…) not so much tension, but maybe just a gap in knowledge in terms of what we're presenting on the page product-wise, as potentially being important versus what you can derive from audience data insights. The stories you'll see at the bottom of the page in terms of, "Hey, you've read this story, here's some other ones to read." Some things are algorithmically derived. There's some things that editors choose. Maybe some mismatch in what you're seeing there. It never points of contention or attention. It's more like just needing to fill in more information across teams. Or informing this

> particular group of editors that, "Hey, these readers are really interested in this story." They just might not know.

Difficulties also arise from the introduction of new technologies into the newsroom that are sometimes experienced as a "never-ending learning curve" for journalists. "That is constantly changing, and people get exhausted trying to keep up with the latest [technology]," NYTA2 said. To overcome resistance, technologists said they often needed to explain how their input enhanced and not inhibited the quality of journalistic work:

> I think the increase of technology in daily roles, most are happy around stuff where a collaboration is going to let them maintain the rigour of what they want to do. That we're going to bring an appropriate amount of data analysis and seriousness to the same questions that they're going to bring to the reporting side of it. As long as that bar remains similarly high, they're very happy to do that. It's something that we constantly need to reassert that we're maintaining these standards and it's as rigorous as you could want for a partnership for going through this stuff. (NYTA2)

From these accounts, it becomes apparent that technological advances in the newsroom affect both journalistic skills and practices. Although NYTA3 did not view these changes as a threat but rather as a diversification of journalistic authority, they did mention that during the last four years, there has been a growing demand for hybrid roles at the *Times*:

> I think what I've seen here at the *Times* in particular is there's a certain pathway for journalists who are well versed in presenting information graphically. Or journalists who are data journalists. People who have the journalism foundation but they add other skills to that. There's a place for them in a place like this that you probably wouldn't have seen 10, 15 years ago. On the flip side of that, I think that there is a specialist opportunity for engineers or product folks who focus on news and journalism.

Likewise, NYTA4, mentioned that "everybody's a little bit more data and metric savvy." However, they added that most digital requirements affect editors more so than journalists. They said that part of their job was to educate the editorial staff and build tools that were made widely available to the newsroom. Nevertheless, frictions did come up, as despite collaborative and training efforts, technology was outside people's "day-to-day comfort level". "We can explain over and over and over again, but it doesn't mean the literacy is sticking around." Lastly, the size of the *Times* was again brought up as sometimes complicating collaboration:

> The *Times* is really decentralized, so it's not easy (…) information often lives in people rather than in systems or documentation where you can find it, so it's often, ask this person to ask this person for this, or do you know who would know this type of thing? (NYTA4)

While this section presented how audience-oriented practitioners experienced tensions that often arose during their collaboration with journalists and editors, the next section discusses journalists' views on audience preferences and the audience-oriented culture in their organisation.

6.4 Journalists' perceptions of audience-centric culture

This section presents the findings from interviews with journalists at *The New York Times*. Details about the journalists' background, location, and beats are not disclosed. At the end of the interview, one of the journalists said that "they don't care that much about anonymity". However, an effort was made not to reveal specific mentions of stories that could lead to the identification of any of the journalists.

6.4.1 Views on audience analytics and engagement

Journalists recognised that the digitalisation of journalism has increased audience awareness in their organisation and that the relationship with their readers has become more direct. However, they were ambivalent about being responsive to audience preferences or the degree to which this process should involve them. In general, they presented audience engagement efforts as being driven by economic pressures and structured primarily around subscriptions. NYTJ1 said that there is now much more awareness about how the audience interacts with the journalistic output: for example, "how the audience is using the app, in particular. What they like and don't like and how you can design things accordingly." Furthermore, they highlighted that in some ways, the *Times* has become a bit more "steered towards a certain subscriber base for a longer period of time", partly resembling organisations that offer high premiums for subscriptions to niche audiences.

Similarly, NYTJ3 commented:

> *The New York Times* has been successful as a subscription business, so those people are engaged in paying money. We have a lot of readers who look for individual stories. They find it through Google search, or Facebook, or whatever, so that's a different [story]. The way the audience people look at this is a funnel. The funnel's big and then it narrows down to people who are, actually, going to pay for it. They try to construct it so that there are many ways into *The New York Times* stories.

Although a revenue business model that is built on subscriptions requires an understanding of what drives audience loyalty, all three journalists agreed that they did not pay a lot of attention to audience analytics. Instead, journalists mentioned that following audience metrics closely was mostly a concern of their editors or the business side. "I don't [follow audience metrics], because for me, I don't want things distorted. I think if something is really interesting to me and my editors, that's sufficient. Or, if we think that's really important, that's sufficient" NYTJ2 noted. Later in the interview, NYTJ2 said that they tried to stay away from discussions regarding audience analytics. "My editor is one of the people who actually is supposed to keep track of audience engagement (…) I don't do that. I just do my thing and let them worry about it." Likewise, NYTJ1 explained that they only pursued stories which they though were of interest and importance. "They are of interest to me, and I think they are important. I'm trying to serve the reader, but I'm trusting my own taste in doing so", they pointed out. To the same extent, NYTJ3 noted:

> In America, we have a shining example of the peril of following the audience, and that's what Fox News is going through now (…) All they were doing was following their audience, give them what they want, and they want lies. That's one approach. There's nothing that, looking at audience numbers and stuff, that should change your standards.

In addition, NYTJ1 commented that the audience metrics that were being shared with journalists were not intuitive enough. NYTJ1 explained that they did check how many times their stories were read — "by read, it's clicked", they noted. However, they added that they did not pay a lot of attention audience metrics because they thought that not a lot of information was being shared with journalists:

> I know *The New York Times* has a lot more data than they're sharing with journalists. There's a lot of discussion around certain metrics, like time spent on articles, how many people are reading to the end of stories. Things like that. I think those are important in things at an organisational level that we need to be thinking about. We don't need to be writing as long as we do often. Maybe there are other story formats that we can go into that would sort of fit within people's attention spans. There are things along that level that I know, and they talk about openly. They just don't share about what these metrics generally show and where they're leading people's decision-making.

NYTJ3 corroborated other interviewees views on the editorial mission of the *Times*. They said that audience metrics are just signals and that their coverage of important events were guided but not ruled by them:

> Our international coverage does not pay for itself. There's no traffic that would justify the amount of money we spend to cover Ukraine, all the people on the ground, all the backup. It's millions, and millions, and millions of dollars (…) We're not putting a finger to the wind and deciding what we're going to cover based on audience numbers.

On the other hand, other forms of journalism, such as service journalism[4], are most commonly shaped by audience preferences, NYTJ3 added. All three journalists argued that weighing too much on what the audience wants can have a negative impact on journalistic standards. NYTJ3 said that although there was no expectation from them to follow analytics, sometimes editors would come to them and suggest stories based on audience trends. "I'm 'Hey, look, I'm not involved in these conversations'," NYTJ3 said. NYTJ1 stressed that following audience metrics puts an emphasis on speed over quality and accuracy, and that "can lower the bar" on the kind of stories journalists cover:

> It intensifies the competitive pressure (…) In the past couple of weeks, there was a number of stories about some animals getting kidnapped at the Dallas Zoo. Cute story. I clicked on it, but probably not something that a *New York Times* editor would otherwise maybe 15 years ago would have said, "Yes, do we have this?"

NYTJ2 was more vocal when asked how following audience trends could affect their journalism. "If I spend my life thinking what readers want, I'm going to end up writing trivial stories, very stupid stories," they said. And added:

> In a way, it kind of reminds me, when I was in school, they would say, "Oh, you have to teach kids what they really want to know, give them a book they really want to read," but you say, "Well, not necessarily. Maybe what you'd want to do is give them something they don't know about." One thing I like about reading the *Times* is that I learn about things I never would have or even thought to ask about.

Although journalists said that audience preferences did not affect their reporting, there mentioned that some audience engagement indicators were more important than others. NYTJ, for example, said that they were interested in knowing the time readers spend on an article. "I want to know if readers are only getting through the first paragraph of my story," they commented. Similarly, NYTJ2 expressed their frustration over readers' short attention spans:

> One of the things that's annoying is you see how long people spend on a story. Now I start to see things like where it'll say like three-minute read, four-minute read, sort of warning people, "You can read this whole story in just a few minutes." It's annoying when people, they spend like 30 seconds. (…) [They] just read the first paragraph, read the headline. People work very long and hard on stories, and it's annoying when people don't spend any time reading them, which is not in our

[4] Journalism that provides audiences with solutions, information, and help on problems of everyday life (Eide and Knight, 1999). In *The New York Times*, the Wirecutter, is an example of service journalism.

> control. It's our job to try and make it so compelling that once you start you can't stop. That's the whole goal.

Besides audience metrics, journalists pointed to three main ways through which they could learn about audience preferences and behaviour: reader callouts[5], emails, comments on social media, or in stories which are moderated. As opposed to audience metrics, NYTJ1 said that callouts usually present a great opportunity for audience engagement. They said that they are "a simple but meaningful and potentially important way" of involving audiences in the journalistic process. "If you're at the early stages of a story about cost-of-living crisis and you want to understand how it's affecting real people, you can put a callout. I am a fan of that (…) I think that's something that's really valuable," they added.

6.4.2 Journalism elitism and public trust

The caveat in engaging audiences partly lies in the fact that, as discussed in the previous sections, the *Times'* readers come from a specific socioeconomic cohort, an issue that is common for all four legacy newspapers studied in this research. This can exacerbate the already low levels of public trust in journalism, as mainstream news organisations are considered biased and journalists as powerful people who serve the establishment (see Chapters 3 and 4). In 2017, the *Times* introduced the 'Times in Person' initiative which saw reporters returning to places they had previously written about to engage with local audiences, improve their regional in-depth reporting and avoid the pitfalls of parachute journalism (Hazard Owen, 2018; Usher, 2021). 'Times in Person' was tied to the 'Reader Center' project (Hazard Owen, 2018), which was introduced the same year as a collaboration between the newsroom, Product and Design, engineers and others, to experiment with ways to deepen the *Times'* ties with their audiences (Introducing the Reader Center, 2017). Yet, as Usher (2021, pp. 97- 98) observes, even though being in a place makes a difference in covering a topic, journalists sometimes depict people outside urban America from an elitist and corrective point of view, and their reporting often backfires.

The journalists interviewed for this study were in line with other professionals presented in previous sections in mentioning that engaging audiences outside their wealthy and liberal readership has been a problem for the *Times*. NYTJ1 recognised that "a big failing of

[5] For example, reader surveys or questionnaires with open and closed-ended questions or social media calls for readers to share their stories.

journalism (…) has been engaging with the community and the public at large to win trust”. However, when talking about the *Times* and other news organisations’ subscription business models, NYTJ1 said that journalism often involves an audience for which it assumes “a certain level of expertise and knowledge”. Even in callouts, they said, “it’s self-selecting because it’s the people who are reading *The New York Times*.” Similarly, both NYTJ2 and NYTJ3 said that even though the *Times* invests in covering problems affecting marginalised or underrepresented communities, these communities are rarely its readers.

> We can be very involved with our audience, but they’re not the marginalised communities. They don’t read *The New York Times*. When I write my stories, I always send a copy to everybody that I talk to. I am often talking to people from marginalised communities. They’re not subscribers. They always say, “Oh, can I read this? I’m not a subscriber.” I say, “Yes, I’m sharing it with you. There’s a sharing link. You don’t have to be a subscriber.” They’ve never read the *Times*, that I know of. They’re not our audience. (NYTJ2)

NYTJ3 pointed out to different levels of difficulty when approaching people who did not constitute the *Times’* readers:

> Underrepresented communities should be what we’re covering. We do that a lot (…) Some of that is easier than others. It’s a lot easier for *The New York Times* to do an inner-city story about black poverty than it is to go talk to QAnon advocate, a believer in West Virginia. We’ve done both, but there’s a lot more blowback to talk to what would be Trump supporters and stuff. When we do those stories as to why they have or had the views they do. We do those as well and take some stick for it, but it’s part of the franchise.

NYTJ3 said that broadening the reach of the *Times’* reporting and adhering to journalism’s normative ideals, such as objectivity, can improve audience trust. However, they noted that “there are huge numbers of people that are not going to trust you at all no matter who you are. They have a view, *The New York Times* has this left, liberal [leaning]. Others on the real left think we’re right wing.” They recounted their trip to a predominantly Republican and conservative state (not named here to avoid interviewee identification) for the needs of a story:

> I was just having a meal at the bar doing some reporting, and the bartender asks, "What are you doing?" I said, "I’m videoing. I’m a reporter for *The New York Times*". She went to the other end of the bar and wouldn’t serve me food or anything. Is this because of anything I have written or didn’t write? She’s not informed. There’s a view of what *The New York Times* is (…) Look, you do the best job you can, the chips fall where they may because these are partisan times. No matter how well you do your job, that’s not what *The New York Times* is going to be known for to a large percentage of, certainly, viewers in America. We’re part of the East Coast

> establishment, you know right? The liberal establishment? (…) I am not sure how much audience engagement is going to help any of that.

For NYTJ1, however, meaningful engagement with audiences and potential audiences can perhaps improve “media understanding and media literacy”. What they thought was useful to that end, was reading and responding to reader comments or engaging with audiences on social media “in a way that’s constructive and not just typical social media screening behaviour”. And they added: “Being humble, admitting when you’re wrong, things like that.” Likewise, NYTJ2 said that they “almost always” replied to readers’ emails, “even if they’re nasty”. However, NYTJ3 noted that how journalists engaged with readers on Twitter (now X) was a source of “constant debate” at the *Times*. More specifically, journalists were advised not to express strong points of view on political issues:

> Showing you’re biased may or may not spill over into your work. There are real differences of opinion about that (…) There are people that get into fights. That’s fair game if you’re Bret Stephens or Tom Friedman[6] (…) but if you’re a journalist covering an area, you shouldn’t have. There are lines you shouldn’t cross. Again, that’s just another example of all this information that is part of the atmosphere in deciding what to cover and no. (NYTJ3)

6.4.3 Collaborative efforts and changing journalistic skills

Although tensions emerging from the audience-oriented culture at the *Times* were evident throughout the interviews with journalists, they agreed that the substance of their work remained unchanged. This was despite substantial shifts in the circumstances and the environment of the business during the past years. As mentioned above, journalists were not formally required to interact with audiences online or decide on their reporting based on audience preferences. At the same time, they all described their interactions and collaboration with non-journalistic practitioners at the *Times* as constructive and fruitful. However, NYTJ2 and NYTJ3 said it was relatively rare for them to work in cross-disciplinary teams. In contrast, NYTJ1 mentioned that they were involved in a lot of project-based journalism, for which they collaborated with designers, software developers and the social media team. NYTJ1 described this interaction as “some of the most rewarding experiences” they have had at the *Times*.

---

[6] Bret Stephens and Thomas Friedman are renowned opinion columnists at *The New York Times*

Regarding how the audience turn in journalism has affected the skills required from journalists at the *Times*, NYTJ1 said that the "core responsibilities remain the same, which is getting the facts, getting them right and being able to write clearly and in a way that a reader will want to read." However, they added that the way information is conveyed is "shifting away from text". They explained that this change can pose a challenge to a generation of journalists who had careers in print, as well as to news organisations that look to harness their expertise and at the same time take advantage of the new media:

> I think that's an ongoing challenge for individual journalists and how they evolve. Also, organisations that have a staff full of people who are quite skilled at writing text. You're an organisation that perhaps wants to get more towards video or audio and things like that.

NYTJ2 and NYTJ3 also commented that there has been a need for data-savvy staff, for example people who possess database analysis and data presentation skills. While no journalist mentioned that they felt threatened from these changes, NYTJ1 highlighted that there were instances in which journalists resisted doing work they were not familiar with. "Just writing things in different ways and trying to be faster and things like that, of course, invariably creates tension," they said. In addition, NYTJ3 remarked that tensions may arise as audience numbers in a story depend a great deal on the placement on the website page or the mobile app and this can cause frustration among journalists. And they added:

> The joke here is, if you look at the Stela traffic [the in-house analytics tool], Spelling Bee, which is these word games, is a million page views a day, at least. It's the most popular thing consistently by far. It's a source of irritation to the masthead people because in terms of invested resources and so forth that go into this compared to other things, it seems an injustice.

Nevertheless, NYTJ1 noted that journalists have become more aware of business decisions and the wall of separation has "blurred a bit". "There's a new generation of journalists and media executives who understand the modern dynamics around creating a news organisation which is different than in the past. I think that is leading to new thinking around how you build a company," NYTJ1 said. "The business obviously affects editorial. To pretend otherwise is foolish."

6.5 Conclusion

In summary, the exploration of design practices in the context of audience-centred innovation at *The New York Times* has provided some valuable insights. The interviews with the designers revealed a breadth of applications of design at the *Times*, ranging from the more technical aspects, that include accessibility and reader experience, to audience engagement and broader audience strategy projects aimed at dealing with systemic problems of journalism, such as trust and transparency. As designers explained, quantitative and especially qualitative audience research, as well as experimentation and early failure, took up a considerable part of editorially focused product design at the *Times*. Even though designers stressed the role of design at facilitating cross-functional collaboration, this collaboration was described as involving the higher ranks within the organisation and less so journalists. Furthermore, although designers repeatedly emphasised their lack of editorial judgement, they were well able to raise and delve into issues pertaining to journalistic norms and values. At the same time, they would comment on the perceived similarities between design and journalism. Both findings could explain the fact that no significant tensions with the editorial staff were reported from designers.

On the contrary, such tensions were made more evident during interviews with other audience-oriented professionals, such as technologists and audience editors, working in cross-disciplinary teams, who mentioned that they often had to take a strategic approach in their dealings with editors and journalists. Both sets of practitioners discussed how their work helped to shape editorial decisions, suggesting an ingress of audience-centric practices and values to the journalistic field. However, they also commented on their organisation's aim to balance its editorial mission and audience preferences. On their part, journalists acknowledged that journalism has become more audience-centric due to digitalisation. Although they said that the focus of their work has not changed, they recognised that audience centricity and outside pressures have transformed traditional journalistic capital, as more technological skills are now required. Furthermore, they said that following and responding to audiences preferences may lower journalistic standards, while they stressed the importance of editorial autonomy as opposed to external influences, such as audience metrics. Lastly, they described audience engagement more in terms of active participation in the news and media literacy, and less in terms of number-focused engagement as captured by audience analytics.

Chapter 7. The Washington Post

This chapter presents the findings of *The Washington Post* case study, and includes interviews with two designers (WPD1 and WPD2), one senior professional working in UX product strategy (WPA1), and a journalist (WPJ1). The structure of the case study is guided by the main themes that emerged from coding, as discussed in Chapter 5. However, as the number of participants is low, findings from each professional group are presented altogether instead of breaking them down into different sections. The first section (7.1) discusses the most recent developments in the *Post*, after it was purchased from Jeff Bezos in 2013, and changed its direction from being a DC-focused publication to an international news organisation. Then the discussion shift (Section 7.2) on how the *Post* utilises design for its audience research and strategy, drawing on Theme 1. Design applications and Theme 3. Approach to audience-oriented innovation. Section 7.3 touches upon the areas of collaboration and tensions between audience-oriented professionals and journalists, presenting results from Themes 1. Design applications, Theme 2. Cross-functional collaboration and Theme 4. Implications from audience-centric culture. Section 7.4 focuses on the place of audience-centred innovation in the *Post's* organisational culture, touching on Theme 1. Design applications, Theme 2. Cross-functional collaboration, and Theme 3. Approach to audience-oriented innovation. Lastly, Section 7.5 discusses how the *Post* approaches personalised news experiences to drive audience engagement, building on Theme 3. Approach to audience-oriented innovation and Theme 4. Implications from audience-centric culture.

7.1 The 'Bezos effect' and the 'Trump bump'–and slump

Following the first election of Donald Trump as president of the United States, *The Washington Post*, among other news organisations in the country, saw its digital subscriptions steadily increase, as a response to the former president's anti-media rhetoric, in what was called the "Trump bump" (Fischer, 2020; Debré, 2021). In particular, between 2016 and 2020, the *Post's* digital subscriptions nearly tripled, reaching almost three million digital subscribers (Fischer, 2020), making it back then second only to *The New York Times*. The *Post's* transformation from a regional newspaper to a national and global publication (Prakash, 2016; Ryan, 2020) followed a series of investments undertaken by Amazon founder Jeff Bezos, who purchased the newspaper from Graham family for $250 million in 2013 (Farhi, 2013). In an attempt to overcome its financial hurdles, the *Post* had started introducing changes to its business model (Hollander, 2013) months before Bezos took over.

These developments resulted in a paywall and a subscription model—which was reluctantly adopted out of fear it could drive readers outside Washington D.C. away (Mufson, 2013)—but were not enough to overturn the collapse of the *Post's* economic model. In addition, reports commented on the newspaper's lack of direction, and "some odd strategic thinking", such as placing the internet newsroom miles away from the *Post's* main building (Pilkington, 2013). However, the transition from publicly traded family ownership to being privately held under Bezos marked an era of both expansion but mostly uncertainty. For example, as *The New York Times* reported, Bezos, who kept a close eye on the budget, classified editors as "indirect employees" and aimed to keep their numbers low (Mullin and Robertson, 2023). This led Martin Baron, editor of the *Post* from 2012 to 2021, to find workaround job titles for new roles that did not include the word editor but rather referred to analysts or strategists (ibid).

One of the most discussed changes Bezos introduced during the first year of his ownership, was to appoint Fred Ryan, co-founder of the digital news organisation Politico, and former Reagan administration official, as publisher and chief executive to lead the *Post's* new endeavours (Bond, 2014). These efforts focused on expanding the size of the newspaper's digital audience, investing heavily on its data analytics capabilities and building a product mindset (Bond, 2014; Morrissey, 2015; Nelson and Miner, 2022). In addition, the *Post's* digital transition involved the redesign of its digital and print layouts, the improvement of the loading speed of its website and apps, the engagement of users through various online platforms, the development of personalised recommendation systems, frequent content and updates, A/B tests on the performance of headlines, and the creation of multimedia content with an emphasis on video (Kennedy, 2016). As Ryan (2020) put it, with these changes, the *Post* aimed to consolidate its position as a global player "because in the digital world, digital implies global". To that end, Bezos allocated significant resources to develop the newspaper's engineering team, which according to Ryan (ibid) increased from four people in 2011 to 400 in 2020. At the same time, the newsroom staff increased from 580 to almost 1,000 people, while an emphasis was placed on the expansion of the technology and the investigations teams and the creation of new departments, such as climate and wellness (Izadi and Sommer, 2023). Furthermore, the *Post* introduced Arc XP, its in-house cloud-based publishing platform, which later developed as software-as-a-service (SaaS) platform sold to a large number of other publications across the world (Nelson and Miner, 2022), and a design and development office in New York, called WPNYC (WashPostPR, 2014). The latter employed designers, UX experts, strategists and engineers to focus on the Post's web platform and create "a faster, more reader-focused product" (ibid). As the *Post's* top executives would back then explain, product thinking, data analytics and design-led innovation across the company were the main focus of the newspaper's digital-future endeavours alongside its journalism (Marburger, 2016; Prakash, 2019).

While these investment initiatives made news headlines and prompted optimistic views on how the *Post's* digital transformation would secure its future in a turbulent economic environment, the "Bezos effect" (Kennedy, 2016) wore off as soon as Trump was voted out of power and the post-pandemic ripples were made evident. In 2022 Ryan announced a "single-digit percentage" reduction in the organisation's 2,500-person staff, including layoffs in the newsroom (Ellison and Izadi, 2023). No more than a year later, as *The New York Times* reported (Mullin and Robertson, 2023), the *Post* was on track to impose further reductions in its staff, with 250 voluntary byouts— an announcement that "caught staffers off guard" (Sommer and Izadi, 2023). Ryan was replaced by Will Lewis, a former executive in several major news organisations and more recently a co-founder of a news start-up aimed at younger audiences (Robertson and Mullin, 2023). His appointment was perhaps indicative of Bezos' intent to expand the newspaper's reach to diverse and young audiences across platforms (WashPostPR, 2023), in a time when the company had lost approximately half of its audience since 2020, and more than $70 million between 2023 and 2024 (Darcy, 2024). The situation worsened when Bezos reportedly blocked the endorsement of the Democratic candidate, Kamala Harris, for the American presidential election, which saw Trump eventually winning a second term. The controversial end to the newspaper's presidential endorsements resulted in the cancellation of over 200,000 subscriptions, resignations by columnists and editorial board members, articles from staffers opposing the decision, and ultimately Bezos' admission that he was not the "ideal owner" for the *Post* (Folkenflik, 2024).

Before these events, and in the face of the continuing financial woes, Lewis had announced the management's plans to introduce additional subscription tiers, flexible payment options, and new product offerings for readers, as well as the integration of AI into newsroom operations (Darcy, 2024). Furthermore, he discussed initiatives to strengthen the newspaper's relationship with its audience in order to emphasise "the human element of its journalism" (ibid). This audience-centric approach is, indeed, present in the participants' accounts below, which focus on the newspaper's experimentation with audience research, personalised reader experiences, and new storytelling formats.

7.2 Design for audience research and strategy

WPD1 said that *The Post's* interest in DT and HCD grew significantly in recent years, and came in parallel with an experimental initiative called 'Next Generation'—a cross-functional project aimed at attracting new audiences, increasing revenue, and broadening the newspaper's national and global readership (WashPostPR, 2021). Launched in 2021 and lasting for three years (Djinis, 2024), 'Next Generation' was a cross-departmental effort, which as WPD1 explained, included journalists and editors, as well as professionals from analytics, product, design, and marketing. "That team was really founded with the hope of approaching the work in new ways, so design thinking has become pretty synonymous with that effort just because it is so plugged into the audience and so interested in innovating in that way," they added. WPD1 said that their role included conducting design-led audience research, which spanned the company and touched "a lot of decisions beyond product and design". A big part of the research WPD1 and their team were doing focused on how they could gain younger and more diverse audiences for the *Post* and included interviews with the audience, surveys and diary studies[7]. They explained that there has been a shift regarding audiences they wanted to reach out to and that came down to two factors. First, the *Post* has been actively pursuing to attract new subscriptions. By utilising DT, WPD1 said, they have been trying understand and resonate with these new audiences, "get in those psychological spaces to understand what is valuable and why" and "build the things for them that they feel are worth paying for." "Every single legacy organisation is struggling with getting subscribers who are not just white and not just over 60. That's a big part of the research we are doing. It is just a lot of exploration of opportunities we may have in those markets," WPD1 added.

Then, they explained, it was about serving the broader mission of journalism, and contribute to "a more informed society". "Are we doing that? Are the things we are doing going to push us toward that goal?" They emphasised that through DT efforts they aimed to bring in diverse voices who are usually left out of the conversation or people "whose lives are not represented by people who work at the *Post*". As WPD1 pointed out:

> We have done all these interviews with Gen Z, people from 18 to 24, talking to them about the impact that news has on their mental health. They are so cognizant of their

[7] A diary study is a UX qualitative research method used to understand long-term behaviours, such as habits and motivations. It includes having participants log their thoughts or experiences over a period of time (Salazar, 2016)

> mental health, compared to some of the older folks we talked to, like under 45. The things we make take a toll on people, and not intentionally. We are reporting the facts, but we need to understand to the core the people that we are serving (…) We have plenty of voices that are white and male, we do not need to hear from.

The Post defines young audiences as those under the age of 45. However, as WPD2 explained, their work involved examining the differences in news consumption among various sub-age groups within this broader category. For instance, as discussed in Chapter 4, by researching how news impacts the mental health of specific demographics, news organisations can develop a deeper insight into news avoidance. WPD2 mentioned an example of conducting a diary study to experiment with and "test different articles and pieces of content with different age groups." They explained how their work affects the journalistic output:

> For example, during the election time, we were testing on a weekly basis the different articles and younger audiences' reactions to them. In terms of data intake, we asked our readers to provide us with their reaction through videos. They could record themselves basically and send us their videos, or audio or text, or whatever it is, just to get a sense of what we are doing. Based on those reactions, we were in real-time adjusting from week to week the content that we were producing during the elections.

WPD2 also commented on the distinct reader journeys of different age groups:

> Based on the interviews that we have conducted, it seems overall millennials and super millennials, so between the ages of 25 to 45 (…) they wake up in the morning, they check the news, they go to specific news sources. Then afterward, they rely on social media heavily throughout their day. In the morning, it's intentional and then throughout their day, it's unintentional through alerts or social media feeds or aggregators. Then for Gen Z (…) they rely heavily on audio in the mornings, and then again on social media heavily throughout the day as well.

Both WPD1 and WPD2 mentioned that, as designers, they mostly conducted qualitative audience research. However, they said that they also collaborated with people who were involved in quantitative research and analytics. WPD1, who mentioned that they were not "a numbers person", pointed out that qualitative and quantitative research were complementary and that there was generally not "that much friction when it comes to making recommendations about decisions." "We have a ton of quantitative data and analytics that's coming from every single side. I don't touch that," WPD1 said. WPD2 explained that sometimes quantitative and qualitative audience research produce conflicting results, with the latter being used to investigate a question more deeply. An example of such discordance between qualitative and quantitative data, WPD2, said, was when they were exploring alternative communication channels to reach their users. "Instead of email, we were trying to explore SMS," WPD2 said. They explained that even though quantitative data showed an increased engagement rate when readers were conducted through text messages, the participants in qualitative studies said that they wanted to keep text as a "personal space" and not as a way to be contacted for products or publications. "That's one of those things (…) when you actually look and dig deeper into the data, it reveals very interesting insights," WPD2 added.

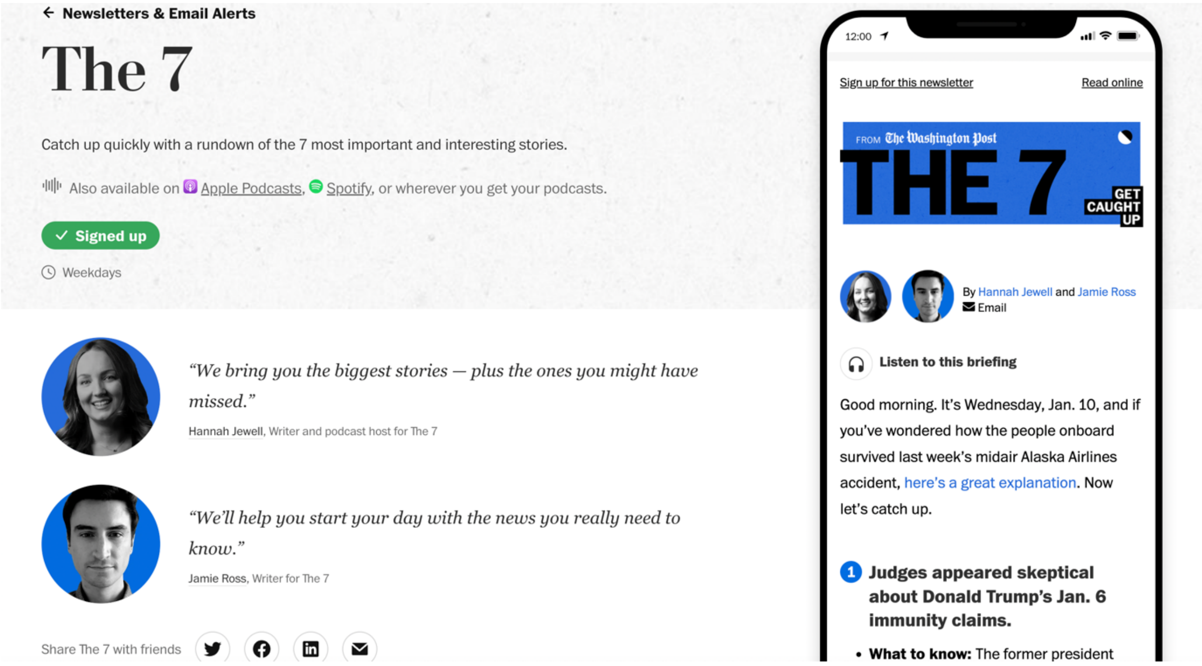
WPA1, working in UX product strategy, said they dealt with both qualitative and quantitative audience research. They explained that first they identified a hypothesis they wanted to validate from a qualitative perspective, and if the idea proved valuable, they moved on to bring it to production experience and measure its performance over time.

> There are certainly things that are very clear. I think an example being this video experience where it's quick, snappy (…) We heard in user interviews that that's something that people are familiar with and then we went and brought that to our owned and operated platform and it performed very well. That's a very direct translation of identifying a market trend, doing user interviews and research to validate an idea, and then bringing it to a production environment where it succeeds in that way.

Then, WPDA1 added, there were other instances where what users said and what showed up in user behaviour differed or did not translate into a long-term habit in the same way. "In those instances (…) a research loop begins to form (…) We will go back and do more research to unpack the problem at a qualitative level, to then identify opportunities to iterate and adjust," they explained.

However, when it comes to involving audiences in the production of news rather than conducting research on the reception side, things become more complicated. WPD1 said that even though they have done some light co-creation with the audience at the *Post*, this kind of engagement often stumbled into management and organisational limitations coupled with a tendency to be "walled off from people" and protect journalism's gatekeeping role. "We are like the *Post*, and we have professional reporters. We don't want just like anybody inserting themselves in the process," WPD1 said. WPJ1 agreed that involving audiences in the production side of news was not "the present dynamic at *The Washington Post*", with the exception of sourcing practices, such as reader callouts. Nevertheless, WPD1 talked about when they brought readers in for "more than just research" before the launch of a podcast called "The 7"(see Figure 15).

Figure 14: A screenshot of the podcast "The 7" taken from the Post's website (Source: The Washington Post, n.d.b)



"Before we launched the pilot, we brought in probably like 10 people individually to listen to (…) They were people who already listened (…) to some other morning news podcast or news briefing," and discussed what they liked about them, WPD1 said. And they added:

> [We] then played the podcast, and stopped when they told us to stop so they could ask questions, pause so they could give us feedback, and really just sat down with them and heard what they would be thinking if they were listening to it on Spotify while they were brushing their teeth. Then had them actually write pieces of like, "Oh, that felt a little hinky." [and asked] 'What would you have preferred he said there?' Or 'what would you have preferred, if he said a source said something, or would you have preferred the source say something?' 'What would that feel like to you?' Really, spending 30 minutes with each person talking about five minutes of audio and just diving in, and letting them lead the way. I thought that was a really nice win because we were testing a pilot with people without having to go through 97 hoops of NDAs[8] from legal. People were comfortable with it [the process] and really liked it and they were leading the project. We're really excited to do more projects like that. I'm seeing we're breaking through, but it's tough.

However, WPD1 said that even though audiences want to be represented in the news and have "things provided to them that are immediately useful" with "the right magic percentage of serendipity of things they didn't know about", it is not certain that they want to be involved in the crafting of a story. WPD1 explained that audiences prefer to think more hypothetically when it comes to the direction of the news they consume and less practically,

[8] Non-Disclosure Agreements

such as helping to craft an actual news story. But "when it comes to crafting (…) an entirely new product, that's what people are more interested in doing," WPD1 concluded.

To sum up, interviewees discussed the role of design-led audience research at the *Post*, with a focus on attracting younger and more diverse audiences. More specifically, they described how they utilised different qualitative and quantitative research methods to investigate news consumption habits, develop new products, and promote audience engagement. Designers said that they were mostly involved in qualitative audience research, and that they would occasionally engage in light co-creation projects with the audience, which is in line with the participatory design discourse presented in Chapter 4. While these accounts indicate an effort to promote audience engagement and participation projects, designers clarified that these initiatives primarily revolved around utilising audience insights to create new products, rather than directly influencing journalistic work itself.

7.3 Collaboration with the newsroom

Although some comments were made off the record, all participants described a collaborative culture at the *Post*. However, some tensions pertaining to conflicting priorities between editorial teams and other departments, as well as the precarity of journalistic work, were also reported. The importance of communicating audience-oriented initiatives and building trust relationships with journalists was highlighted, with the shaping of editorial practices increasingly seen as the work of negotiation between journalistic professional values and commercial influences. WPD1 talked about how the research they conducted for their then newly relaunched climate desk (see Figures 16 and 17), and how their recommendations were utilised by reporters. The research included talking to people under 40, who followed climate news, without necessarily being climate activists or climate change being their primary interest. "It is a beat that they follow, and we just talk to them about what their needs are," WPD1 explained. And continued:

> We put some tweets in front of them from some of our more prominent climate journalists and talk to them about everything from tiny like, "What do you think of the wording in this tweet?", "Does this feel cool?", "Does this feel too cheesy?". [We asked about] their existential fears about climate change and everything in between and had these really rich hour-long interviews with these people and then broke those down and synthesised them and brought our recommendations to the climate team like, "Hey, there are some really easy wins with climate coverage that we're not doing now."

Some of these recommendations included creating more visual reporting about climate, which was “easy because we have an entire world-class team of journalists, videographers, and photojournalists”, or analysis and comments on climate. Other recommendations, such as building personalities, suggestions “about the actual team and approach” were less familiar to journalists or would take more effort to implement.

> We just gave them those recommendations and they were like, we love them, thank you so much (…) and asked follow-up questions every once in a while. [Then] we didn't hear anything for months. Then we saw in September and October, the climate desk starting to ramp up this relaunch, and (…) they basically turned our recommendations into a playbook and went through and made the changes we were talking about and followed up on the recommendations and did even more than what we thought they would with video journalism. That, to me, is such a success story (WPD1)

Figure 15: A screenshot of the climate section that includes highly visual content, interactive features, solution journalism, and explainers (Source: The Washington Post, n.d.a)

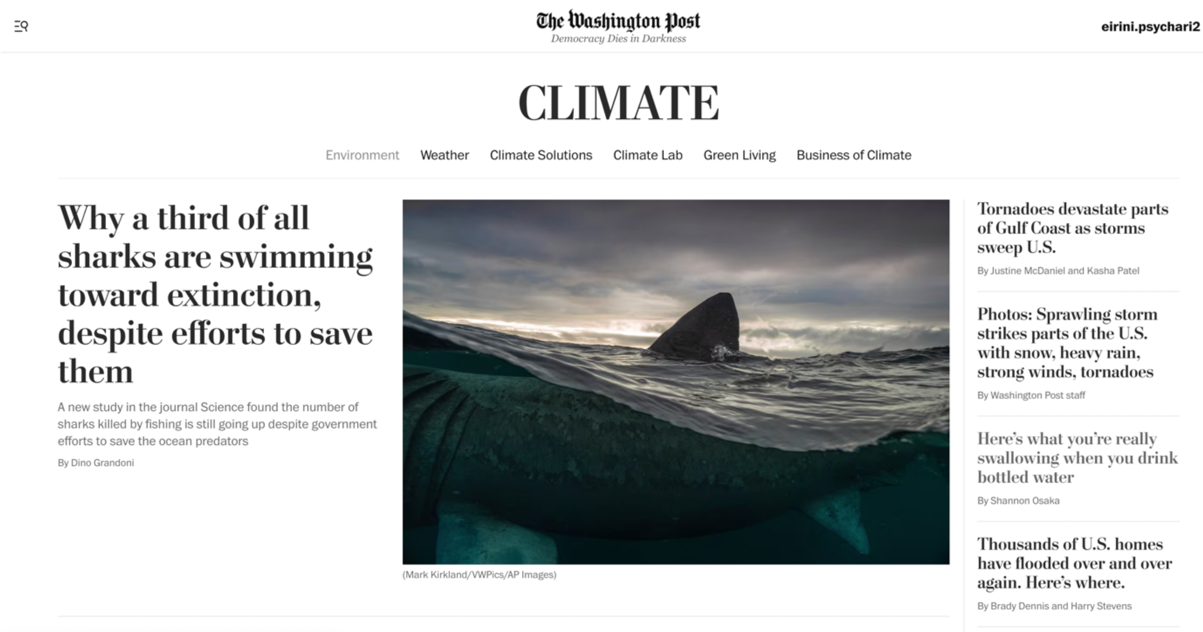


Figure 16: A project with interactive visual design features (Source: Campoy, Kommenda,and Voisin, 2023)

Furthermore, WPD2 referred to an audience-oriented initiative, called 'Audience Innovation Lab', that has required extensive collaboration with journalists. "It acts as an incubator programme from within the *Post* where journalists if they have a specific innovative project in mind, they apply for the programme, they run through a screener, and then we filter them out and we accept just a handful", WPD2 explained. "Once we accept them, they run through the programme. Basically, the programme is comprised of the mentorship, a very well-rounded mentorship in terms of whatever they want to accomplish. Then by the end of it, they're able to publish these big-scale experiments," they added. In terms of how designers approached journalists and helped them understand and utilise audience research and insights, WPD2 said that they would provide and train them on DT tools, such as empathy maps[9]:

> After sharing our research, we have to make sure to emphasise the value of having an audience in mind before writing an article. The way we do that, is by providing them certain tools, and one of these tools are designed thinking tools, such as an empathy map (…) and we host training sessions on how they can fill [it] out (…) Some journalists found that it was very, very helpful for them to focus on what audience they can have in mind before writing the article.

[9] An empathy map is a DT tool inspired by IDEO and further developed by Stanford d.school, and is considered the first step in the design process. It is a visualisation of what the user "says, thinks, does, feels" to understand and prioritise their needs (Gibbons, 2018; Kelley, 2018)

Although both WPD1 and WPD2 made specific mentions to DT as their preferred design methodology, WPD1 said that when working with the newsroom, they tried to use methods that were based on trust. “There is a very specific way of working [in the newsroom]. They really need a lot of guidance and a lot of explanation. I try and use methodologies with the newsroom that are more or less based on trust,” WPD1 pointed out and added that other teams, such as the marketing function, were more comfortable working within the traditional DT space. “A lot of design research methodologies and human-centred design [is about] trusting the process. We’re going to do this thing and it’s going to get us to this point. Newsrooms really have a hard time going along with that,” they added.

A solution to this problem was to provide journalists with more transparency and show them the work as it was happening rather than presenting them with a barrier to entry, WPD1 explained. “The reporters are very practical people. They have learnt their craft and they’re good at their craft. Anything that’s asking them questions, even benign questions can come across as a little picking at what they do very well.” WPD1 also pointed out that journalists felt threatened because of unfavourable working conditions and could oppose top-down, audience-oriented changes to their practices and routines, which as discussed in Chapter 4, can present as a form of managerial control. “I think the other part of it too is just the built-in subconscious trauma of working in news. Particularly, at least in the US where journalism you constantly see layoffs and you never know when the next shoe was going to drop” WPD1 said. “I feel they're always just a little bit on edge about if their job is going to be at risk. When I’m like, ‘Hey, let’s bring in this new way of thinking, let’s think about this new stuff.’ It's like ‘Wait, I need to do all these new things or else.’ I get subconsciously why they get very cagey about it.” For that reason, WPD1 said that their team approached journalists as people and not as stakeholders to avoid alienating them and made sure not to challenge their professional authority. Furthermore, they said that they tried to build personal connections with the editorial staff and communicate the value of audience-centred initiatives. “It is a top-and-bottom approach” WPD1 explained. First, they said that they tried to get to know leaders in the newsroom and build both professional and personal trust, instead of just present them with roadmaps, objectives, and data. Then, WPD1 added that it was helpful to make connections with reporters who were on the ground, and not only “the big names at *The Washington Post*”:

> They are so interested in doing their work better and so interested in serving the audience they want to reach, that individually they’re really open to this kind of work. Some are like, “Okay.” I just had a great coffee with a video game reporter the other

> day. She was in a presentation we did, asked great questions, and afterward I was like, “Hey, let’s get coffee.” We had a lovely time and bonded and had this half professional, half fairly gossipy coffee, but at the end then she was like, “I didn’t even know this was possible. I didn’t even know what you did existed at the *Post*.”

Nevertheless, resistance from journalists can occur when they are faced with deviating patterns from more traditional ways of doing journalism to accommodate audience trends and needs. For example, WPJ1 remarked that journalistic professional boundaries and skills have been redefined by the audience turn in journalism:

> Even five years ago, there were digital editor positions and reporter positions, where the digital editor was doing all of the optimization and formatting the story and all that. Literally the reporter was just sending in a Google doc of text. Now a lot of reporters are responsible for doing a lot more of that content production, and so it’s kind of become one job. I do feel eventually reporters will absorb part of the SEO audience part of it.

In addition, WPA1 said that experimenting with new technologies can pose a challenge to journalists who are called to consider the impact on the integrity of the information being conveyed. Similarly, WPD2 pointed out that the main resistance often revolved around brevity and how to pass on accurate information in digital platforms, which favour speed over quality:

> [Younger audiences] really prefer the quick take. They’re just busy. They want something on the go. They prefer audio and that’s why they lean heavily on social media, but when you obviously try to communicate that to legacy journalists, it’s very hard because you want to make sure that you’re providing brevity without sacrificing quality.

WPJ1 said that most of the times tensions between journalists and audience-oriented professionals come down to different considerations and priorities:

> No audience person will think about ‘How feasible is it to report the story?’ or ‘What are the editorial considerations with this?’. They do think about that, but not to a deeper extent. Then sometimes the reporter or editor is not thinking about whether the story is important to our audiences.

Although WPJ1 highlighted that these tensions often resulted in productive discussions between audience-oriented professionals and the newsroom, they also said that as a journalist they were not involved in decisions about the *Post’s* audience strategy. This situation can lead to uncertainty among journalists, especially when such top-down decisions affect news production practices, journalistic routines and editorial autonomy (Lowrey and Gade, 2011). WPA1 said that one way to overcome such difficulties is the creation of new tools with the needs of the newsroom in mind, and guidelines to navigate through, communicate and document the results of audience research and the changes in the industry:

> We are working across so many different mediums and these reporters that we are building tools for also have their own sets of challenges and problems. Not only are we thinking about the end users, our readers and our viewers, but also our newsroom and the tools that they need to tell stories in all of these different ways and how that storytelling is interwoven (…) That wasn't possible back in a newspaper age when everything was delivered once a day. How does writing change? What do users expect? (…) Then as we work to build new tools, we're very intentionally developing documentation and guidelines around how to then put these new tools into practice and what they end up resulting in for the reader experience.

Lastly, WPD1 proposed a more organic approach through a "democratised design research practice" in the *Post*, where other teams, including journalists, would be empowered "to make audience-centred strategy second nature to them (…) and really understand the value of having empathy for their users." WPD1 added that at the time of the interview they focused their efforts on the news desks that were "more open and innovative" or tried to immerse journalists in the process whenever they got the opportunity. However, they said that in the future they would like to start training all news desks on how to apply audience-centred principles to their work and learn to "work with the audience instead of just handing things over the fence". This description aligns with the conceptualisation of design as a socially constructed practice based on inclusive and participatory methods and processes, discussed in Chapter 4.

7.4 Design and audience-centred innovation in the organisational culture

All four interviewees agreed that the *Post* promoted an audience-centric culture, in which research to define audience needs and how these change over time permeated business decisions. The interviews revealed a drive to create a "mindset shift" (WPD2) through audience-oriented initiatives, which also extended to addressing some of the challenges the industry faces, such as lack of trust and news avoidance. Additionally, WPA1 described audience centricity as the "default" mode of operation at the *Post*, adding that responding to audience needs was an involving opportunity especially with the rise of AI and personalisation in journalism. This comment perhaps suggests a drive to shape technological capabilities in a way that will reflect journalistic values, which as discussed in Chapter 4, can be facilitated by applying HCD guidelines. In the same vein, WPD2 pointed out that there was a "huge push and embracement from upper management to have audiences be at the front and centre of our work," while WPD1 explained that the *Post* has invested in audience-centred innovation because "there are so many other places that people can get their news from". For that reason, WPD1 said, understanding audiences, and innovating in that space, has been deemed essential "for the survival of the *Post*" because its brand alone is not enough to "turn the ship":

> The interest in a legacy organisation and the trust people have for that is not a huge deal to people anymore. I definitely trust the *Post.* I definitely trust the *Times*. [But] if I see someone telling me the news on TikTok, I'm not going to write it off. We can't ride on those laurels of being *The Washington Post* anymore. We need to do what our competitors are doing, which is engaging in a bunch of different ways with a bunch of different audiences that we want to resonate with, and we need to work quickly and take risks.

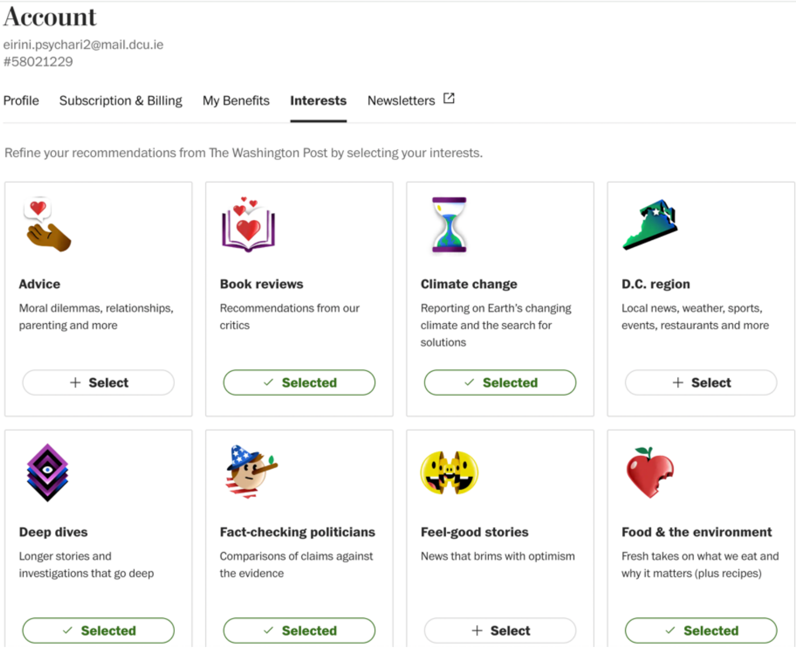
WPJ1 acknowledged that the culture at the *Post* was "very reader-focused" with the audience being a big, "but not the only deciding factor" in terms of how their team decided on their staffing, reporting, and the stories they wrote. Although WPJ1 explained that they were part of a team which was more audience-oriented compared to other news desks (the exact team is not mentioned here to protect the interviewee's anonymity), they said that the *Post's* leadership aimed to introduce the same principles across the newsroom. Whereas the interviews highlighted a strong audience orientation at the *Post*, organisational limitations, including financial difficulties, clash with traditional structures, and a lack of clarity over audience-centred practices were also reported. For example, WPD2 explained that even though cross-functional collaboration was encouraged at the *Post*, they would like to see a more seamless experience between product and the newsroom, with more tools given to journalists as well as more workshops and incubator programmes, such as the 'Audience Innovation Lab', mentioned in the previous section. They added that it was trickier to implement and act on the insights of audience research in a legacy newspaper compared to other industries, such as tech, because the product, in the end, is journalism. "Just making sure that whatever you're providing in terms of insights and information is more of a cohesive, comprehensive, strategic opportunity," WPD2 explained. Besides the hiring freeze that affected their team as well, WPD1 said that difficulties in implementing HCD initiatives could also ensue by lack of clarity over its scope. "There's no one saying, 'We're not gonna do that,' (…) but they don't quite understand what it is," WPD1 said. They explained that this situation stemmed from the fact that, as also raised in Chapter 4, there are many functions under the umbrella of design practices, such as product design, UX, DT, design for strategy, and visual design. Especially in a newspaper setting, WPD1 said, design is more often associated with visual design and "what is on the actual page, what is getting people to click." "The link between those has been one of the biggest hurdles that my team is constantly having to overcome. It's like, 'Why aren't you guys just a binary? Why aren't you just going to do a usability test on user testing.com?" WPD1 said, further indicating a confusion over how design could be leveraged to cultivate an audience-centred culture at the *Post*, as opposed to its more technical aspects.

7.5 User experience and personalisation for audience engagement

WPJ1 said there was an ongoing effort for journalists and reporters at the *Post* to engage and be more aware of what their "audiences are reading and care about". This push included the use of audience analytics in real time, SEO practices, experimentation with multi-platform story formats, interaction in the comment section of the articles, training on Google trends and website optimisation. They added that strengthening their relationship with the audience was seen as a way to bring in more diversity in the newsroom and their stories. "There are a lot of things very DC-centric at the *Post*. I think the more that we are able to expand beyond that, will help our audiences grow, but then also paying more attention to them will help diversify where we live and work and where we come from," they explained. In 2016, the *Post* introduced the 'Global Opinions' section in an effort to reach more readers outside the US, and in 2021, presented the 'Voices Across America' platform to showcase the work of on-the-ground writers across the country and highlight local opinions in national issues (Tameez, 2021).

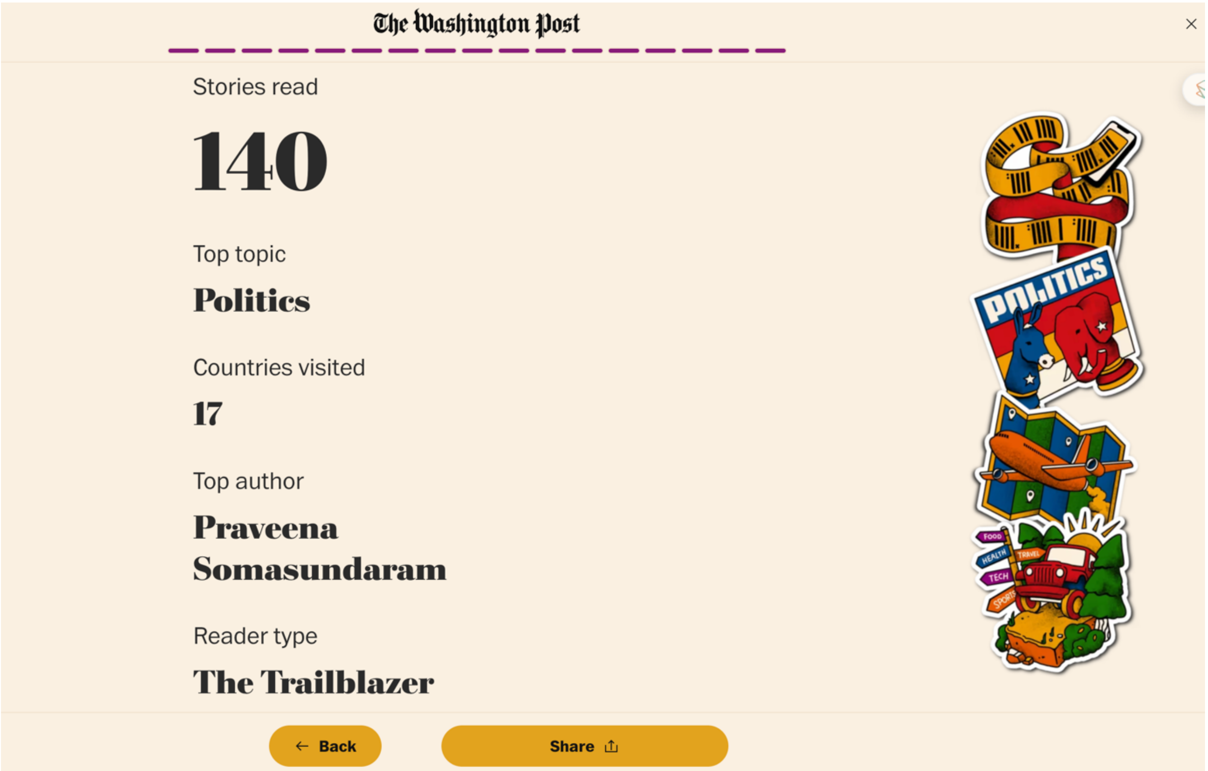
In addition, WPA1 commented on how the Post's transformation from being a DC-focused newspaper to delivering information nationally and globally was tied to understanding and defining "its audiences and their differing needs clearly". Such an approach, they explained, has helped the *Post* to introduce "diversity and balance" in people's news consumption through personalisation, which, in turn, was an important step to respond to news avoidance. The *Post* has invested heavily in personalisation and the creation of news experiences to maximise audience engagement and flexibility in news consumption. A feature that offered enhanced personalisation was the 'My Post' tool (Figure 18), which allowed subscribers to customise their reading experience by adding articles to their reading list, scrolling through story recommendations based on their reading habits and selected interests, and signing up to newsletters and email alerts.

Figure 17: Screenshot of 'My Post' subscriber feature.



Another personalisation initiative with an aim to deepen engagement and build habit among readers, was the introduction of 'Newsprint' (Figure 19), an interactive summary of subscribers' most-read news stories, favourite topics and most-read journalists of the past year (WashPostPR, 2022). Described as a cross-functional project with enhanced UX features (Blum Carrier, 2023), Newsprint has also allowed subscribers to discover stories of interest they might have missed, watch videos from journalists, learn about their reading habits, and share their results on social media.

Figure 18: Screenshot from the Newsprint subscriber feature



According to WPA1, key to creating personalised news experiences was to learn from user behaviour patterns and news consumption off-platform[10] and adapt them to the needs of the *Post's* app and website, and vice versa:

> There's the news experience we create on our owned and operated platform. Our app, our website, and then there's the news experience that we help facilitate and capture attention around off-platform. YouTube, on Instagram, on TikTok, you name it, Twitter. We can learn a lot from the user engagement patterns happening off-platform as a way to assess new user patterns, new behaviours (…) An example that's pretty relevant is when we started creating Instagram reels, so video reels for our

[10] Platforms audiences interact and get their news from as are referred to as "off-platform", as opposed to news organisations' own apps and websites which are called "on-platform".

> Instagram audience, and we saw how people were engaging with that pattern—short, often very raw, and authentic storytelling. Less scripted, more like a reporter holding up a phone telling a story as a storytelling mechanism. We are seeing how that performs and resonates in other places and then using that as a way to measure how we then prioritise building things for our own platform.

WPA1 explained that the *Post* was constantly evaluating the information and media landscape to adapt storytelling mechanisms and drive engagement both on and off-platform. They said: "How do we translate that storytelling model to the users that come to us every day and also as a means to attract the users that are familiar and enjoy that type of storytelling but aren't coming to the *Post* directly?" This described experimentation with on and off-platform data and storytelling formats, however, is suggestive of a strategic use of technological affordances, rather than the eroding of editorial autonomy. For example, WPA1 commented on the importance of striking the right balance between the *Post's* "editorial voice and algorithmic discovery". Similarly, WPJ1 said that while the incorporation of audience analytics into the journalistic work was "anticipated", it was not a part of how journalists were evaluated with news value being the priority.

> "This is what's trending. This is what's top of Google News, top of Google Trends," but then also historically, has that type of story worked for us in the past? Have readers responded to it? Timing of the story. Of course, the veto is always news value (…) I would say that it's like first, news value, second, audience analytics, third, whether we have the resources to do a good job on that story. They all interact together, but audience analytics are definitely up there. (WPJ1)

WPJ1 added that audience preferences were merely an indication of "how things are doing, rather than a guiding force", and that news judgement was not compromised by business considerations. "I have never felt (…) that it was like, 'If this story does not make us money, it is not worth doing' (…) Our priority is journalism, and if we do good journalism, business will follow," WPJ1 said. Furthermore, they invoked journalism's public service role and expressed pride in their work. "It sounds cheesy, but it's the reason why I got into journalism. I thought I would be working in business, like marketing or something [but] I thought, 'I don't really want to spend my whole life just making money for other people,'" they said. Finally, they added that succumbing to audience preferences will eventually have a negative impact on news quality: "That would just end up being a cycle of junk food." To summarise, while interviews revealed a drive at the *Post* to leverage audience analytics and personalisation to remain economically competitive, editorial autonomy was described by interviewees, especially the journalist, as largely unaffected by business pressures. This indicates a tension between the need to safeguard journalistic professional ideals and the latest developments at the *Post* under Bezos' leadership. Furthermore, the participants' views on the need to balance editorial autonomy and algorithms reflect the discussion in Chapter 4 about how news organisations, and especially legacy ones, negotiate their institutional position vis-à-vis online platforms to support their traditional gatekeeping functions.

7.6 Conclusion

The interviews with practitioners from *The Washington Post*, while limited in number, generated useful information on the application of design and audience-centred innovation in the organisation. The two designers were key participants as they were involved in audience research and strategy, including the *Post's* mission to attract new and more diverse audiences. Design, while perhaps was still finding its place in the organisation in this capacity, was reported as utilised to generate rich qualitative audience insights, understand differences in news consumption, and translate them into strategy decisions which are not narrowly focused on technology. In this regard, it seemed to take a central role in audience-oriented innovation at the *Post*, even though the team was affected by organisational limitations, including financial difficulties, and lack of clarity over design methodologies and purpose, and resistance from journalists. Furthermore, the interviews with designers revealed an intention to systematically train other teams, including the newsroom, on design methods and audience-centred strategy, in what they called a "democratised design research practice". Designers were also involved in experimental audience-oriented initiatives, such as the 'Audience Innovation Lab', a project incubator for journalists who want to try new approaches to storytelling. While the case study would have benefitted from the participation of more participants, especially journalists, the interviews revealed an ongoing effort at the *Post* to be more aware of audience needs and innovate in that space by creating news experiences through personalisation projects and multi-platform storytelling. Nevertheless, the journalist reaffirmed the newspaper's editorial mission, saying that the audience-centric culture guided but did not determine news judgement.

Chapter 8. The Guardian

The Guardian case study starts off by presenting a brief outline of its digital transition, with a focus on the organisation's decision not to introduce a paywall and instead adopt a membership scheme to fund its journalism (Section 8.1). The next section (8.2) discusses the applications of design at *The Guardian*, and more specifically the role of design in introducing internally and externally facing audience-oriented changes (8.2.1), its use on accessibility and reader experience (8.2.2) and product discovery (8.2.3), and the tensions with the editorial staff and journalists that arise in the process (8.2.4). These sections draw on Theme 1. Design applications, Theme 2. Cross-functional collaboration, and Theme 3. Approach to audience-oriented innovation. Then, the attention shifts to how journalists at *The Guardian* perceive the audience-centred culture in their organisation and how this affects journalistic practices and skills (8.3), touching on Theme 4. Implications from audience-centric culture for journalists.

8.1 Towards "reader-centric" and "reader-funded" journalism

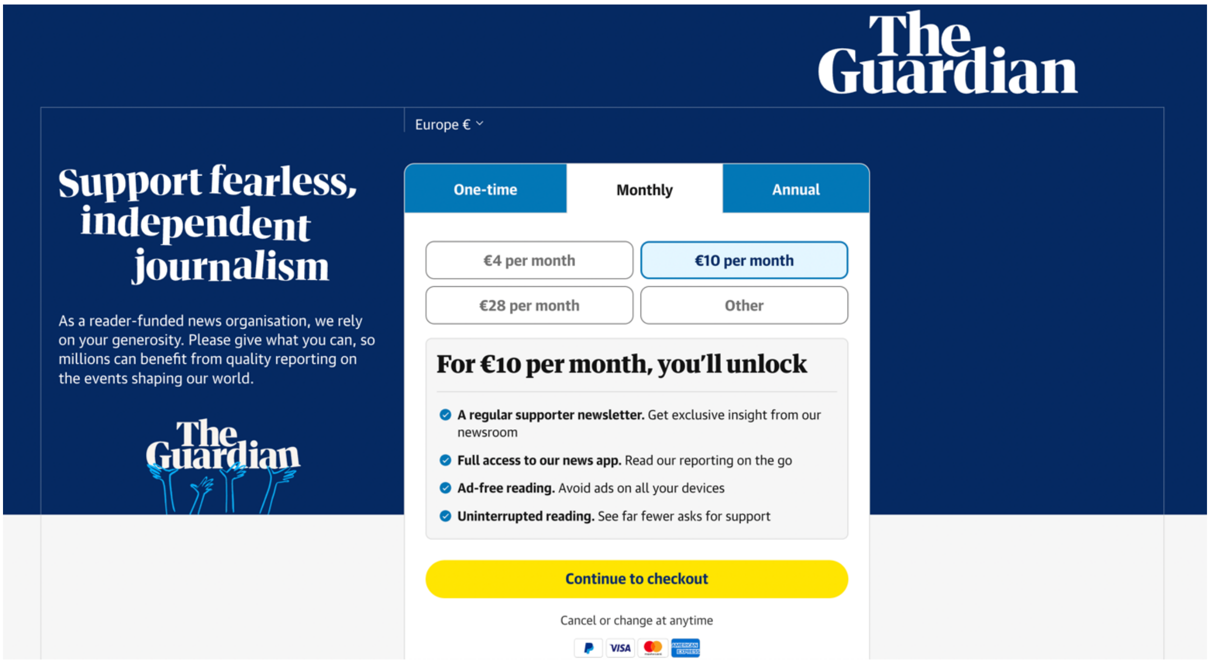
When during the 2010s, Alan Rusbridger, then editor[11] of *The Guardian*, was laying out the digital strategy of the newspaper amid a rapidly changing media environment and declining print advertising and revenues, he was deemed "unrealistic" for not introducing a paywall to its articles (Luckhurst, 2010), but choosing to invest in a voluntary contribution scheme that would keep the newspaper "as a public good" (Rusbridger, 2021). Rusbridger later wrote that his belief that digital revenues would compensate for print losses—the visualisation of this idea was famously referred to as the "Rusbridger Cross"— was mocked, especially when "giving away content for free" was regarded as the "original sin" (ibid). *The Guardian* and *The Guardian Weekly*, alongside their sister publication *The Observer*, are part of the Guardian Media Group (GMG), whose only shareholder is the Scott Trust that "ensures editorial interests remain free of commercial pressures" (Guardian Media Group, n.d.). This ownership form, that is profit-seeking but not profit-oriented, was perhaps one of the reasons *The Guardian* was able to shift to its digital-first phase following a strategy that allowed investments despite company losses and cultivated an open-to-change organisational culture (Lischka 2015). In the years that followed, *The Guardian*, on top of its UK edition, launched

[11] The editor is the highest-ranking executive at *The Guardian*, as there the publisher is the Guardian News & Media (GNM) (Guardian Media Group, n.d.) GNM, publisher of *The Guardian* and *The Observer*, is the core business of GMG.

its US online-only edition in 2011 and then its Australian one in 2013, marking the beginning of its expansion as a global brand (ibid). The strategy of digital international growth also saw the launch of an international edition in 2015 (Elliott, 2015), and a European edition in 2023 that ran alongside *The Guardian's* "Not for sale" global marketing campaign to reaffirm its ethos of "open, independent journalism" (GNM press office, 2023).

In addition, in 2018, *The Guardian* underwent a rebranding and redesign across print and online, introducing its tabloid format (it had switched from broadsheet to Berliner in 2005), and a new masthead and font (Viner, 2018). As Katharine Viner (ibid), who succeeded Rusbridger as editor in 2015, said, the changes reflected the newspaper's global perspective and aimed at serving its international readership "across mobile, apps, and desktop". As briefly mentioned in Chapter 4, user research and testing were central to *The Guardian's* rebranding effort, with DT being utilised across the organisation for the development of its digital products and strategy (Design Council, 2018). The new format and application of design methods was in line with *The Guardian's* three-year business plan laid out in 2016 to reduce costs and break even at an operating level by April 2019 (Design Council, 2018; GNM press office 2018). The plan, which was launched with the stated goal to forge "deeper relationships with readers" and increase revenues (GNM press office, 2019), among other measures, included: a 20% reduction of the annualised cost base, the relaunch of an enhanced membership offer to double reader revenues, the aforementioned international expansion, the creation of a data and insight team to support editorial and commercial innovation, and the alignment of editorial and commercial operations to capitalise on digital opportunities (GNM press office, 2016). In 2019, GMG announced the successful completion of its three-year turnaround strategy, recording an operating profit (£0.8 million) for the first time since 1998 (Rajan, 2019), record numbers of regular readers and digital traffic (1.35 billion page views in March 2019 compared to 790 million in April 2016), 655,000 monthly paid supporters, and a significant increase in international revenues which doubled since 2015/16 (GNM press office, 2019). To this day, *The Guardian* offers its journalism paywall-free, operating on a diverse reader-revenue model, with print subscriptions (in 2021 it sold an average of 105,134 copies daily, and the figures since are being kept private), and an online support scheme with one-time, monthly, and annual voluntary contributions (see Figure 20).

Figure 19: A screenshot from The Guardian's voluntary contribution plans (Source: The Guardian, n.d.)



According to GMG's financial results, in 2023 *The Guardian* had more than one million paying supporters, with digital reader revenues reaching 31% of overall revenues (Guardian Media Group, 2023). It should also be noted that during the same period more than 50% of digital reader revenues came from outside the UK. Investments in international growth and staffing, however, resulted in *The Guardian* announcing an operating loss even though total revenues increased. More specifically, the headcount increased by almost 9%, reaching more than 1,600 persons across the group, out of which 1,000 were employed in the newsroom (ibid). During the same period, *The Guardian* announced the launch of its new three-year strategy, which included the realignment of its operating model to reflect a "reader-centric" model, new investments in journalism and product offerings, the development of its data capabilities, and the forging of "deep, personalised, and trusted relationships" with the readers (Guardian Media Group, 2023, p. 3). The plan was based on a number of strategic pillars, which aimed at further advancing *The Guardian's* technological capabilities and international growth, and at cultivating a deeper understanding of their audiences (ibid).

8.2 Design applications at *The Guardian*

This section presents the findings from the interviews with four designers (GuardianD1, GuardianD2, GuardianD3, GuardianD4), and a technologist working in analytics (GuardianA1) who collaborates with designers and the product team. All interviewees spoke under the condition of anonymity, however, those in senior roles were notified that they could be identifiable. Some comments from Aron Pilhofer (who was interviewed for *The*

New York Times case study but has also worked for *The Guardian*) were used for context, but his interview was not coded alongside *The Guardian* professionals in NVivo. The interviews are supported by secondary data found online.

8.2.1 Design as an organisational resource

The Guardian's rebranding and redesign, as described in the previous section, initially started as a cost-cutting exercise, by changing to its tabloid format and outsourcing its print operations. However, it moved from the traditional visual design implementation to a wider application of design methods across different areas of activity (Design Council, 2018). These included digital product development, editorial decisions, reader revenue, strategy and marketing (ibid). According to *Guardian* executives, DT was utilised to achieve a broader understanding of the audience's needs on the one hand, and promote a cultural shift of increased collaboration and the creation of cross-functional teams on the other (Breuer and Herman, 2018; Design Council, 2018). In this regard, design in *The Guardian* has been leveraged both as a set of methods to create products and experiences that respond to user needs, and as a process of new ways to organise work and inform strategic direction.

As Aron Pilhofer—who left *The New York Times* to join *The Guardian* in 2014 as Executive Editor of Digital and Interim Chief Digital Officer—explained in our interview, one of the externally facing changes *The Guardian* introduced was to move from embracing scale in content to optimising for conversion and support its financial model. "They created a lot of content. When I got there, *The Guardian* staff was half the size of *The New York Times*, and they produced three times as much content. That was unsustainable and there is no way you can tell me all this content is super valuable to people," Pilhofer explained. And he added:

> This scale strategy was tied to advertising and advertising was a good business for *The Guardian* for a while, until it wasn't, like for everybody else. When we went from that ad-driven, scale-driven mentality to—now it's actually about donors, it's about members, it's about conversion, it's not about scale anymore.

Pilhofer recalled how Chris Moran, then Audience Editor and since 2020 Head of Editorial Innovation, reduced the amount of content by 25%. "It was extraordinary. Do you know what happened? Nothing. Page views continued where they basically were, the membership model continued to grow." He said that the transition to a more audience-centred approach that optimised for conversion required an internal change, and the introduction of a "different mentality" across the organisation along with a strategy that would reflect the reasons people read *The Guardian*. "All that stuff gets picked out, because all this crap is flowing. It's this fire hose of junk." This process called for the emotional engagement of readers, in order to cultivate a relationship that would ultimately attract a financial commitment or contribution (Breuer and Herman, 2018). As GuardianD1 said, the main objective of their design approach in this regard was to "add and demonstrate value in a very clear way" to support *The Guardian's* financial model. As a designer working in strategy and research projects, GuardianD1 explained that their work was audience-focused and future-oriented: "What we are trying to do is to get better at understanding, in a bottom-up way, users' needs and behaviours or concerns. [We are] proactively trying to meet their needs rather than just fix problems that occur." Therefore, they added, design was not used to create value only "at a product level" but to add up "to *The Guardian's* ethos of being a good and trustworthy source people will want to support." GuardianD4, corroborated that some of most important projects designers were involved in concerned "supporter proposition, which is basically how people support us."

Internally, *The Guardian* established agile, collaborative approaches based on DT and more specifically the Design Council's double diamond methodology (see Chapter 4) to be used by cross-disciplinary teams (Design Council, 2018). The interviewees explained that these tools and processes included design sprints and workshops, hack days, and other agile methodologies, such as Dual Track Agile[12]. As a UX designer, GuardianD3, described how they had recently participated in a cross-disciplinary service design sprint to look at different projects for the web and the app, how they overlapped, their prioritisation, and the impact on the readers. "There is a big drive slowly changing the organisation culture to a more customer-centric approach," they said.

Collaborative methods and processes have been also introduced to break down silos and create cross-disciplinary teams, which have started to operate in more formalised and streamlined ways and boost *The Guardian's* digital-first journalism (Reid, 2014). One such example was the restructuring of the Visuals Team, under Pilhofer, to include designers, developers, graphic artists, photographers, multimedia teams, and project editors (ibid). Nevertheless, changes that affected editorial decisions and practices led to discussions on

[12] A design sprint is an intense, usually five-day, process to tackle design problems though ideating, prototyping and testing solutions with users. UX hack days or hackathons are short-term events dedicated to problem-solving, where designers and other professionals come together to solve a specific problem. Lastly, Dual Track Agile, is a software and product development framework for product discovery and delivery. It is an agile methodology which integrates product discovery and delivery efforts and promotes collaboration across product, design, and engineering (Flus and Hurst, 2021; August, 2022; Stevens, 2023)

how to transform the organisational culture that until then was mostly based on clicks and views to become more audience-oriented and build incentives around conversions—"the metric that matters", as Pilhofer said.

> That's a question of strategy and that's a question of culture, and how involved is the newsroom in deciding these things. At *The Guardian*, the newsroom was pretty much leading it (…) The editor, Kath Viner, embraced the strategy piece by piece (…) so, that's why it was embraced by the newsroom. (Pilhofer)

How journalists perceive the audience-centred culture at *The Guardian* will be discussed later in the chapter. However, GuardianD4, said that even though design was valued across the organisation, one of the challenges for human-centred and product design team was to build confidence in the approach. "You can't just come into any organisation and say 'You just have to listen to us.' For me, it's about trying to carefully pick where you can make an impact and show people new ways of working that might reveal something new, but not trying to force the approach down people's throats." GuardianD4 added that one of the changes that had been recently introduced to improve the impact of the design approach, was the reorganisation of the various design teams which included UX researchers, UX designers, visual designers, and strategists, under the umbrella of the "product design discipline". Furthermore, they said they were working towards creating a design framework that would be "fit for an editorial organisation". The framework, they explained, would retain the basic and more abstract steps of design methodologies, such as the Double Diamond, but adjust the language to fit the needs of the newsroom.

In the same vein, GuardianD2 said that audiences were at the "heart of decision-making" at *The Guardian*. However, the priority was to safeguard the newspaper's reputation as an independent publisher. "What comes back in terms of feedback from users is that they appreciate that there's no Rupert Murdoch, there's no billionaire businessman that controls what the output of the news is. Everyone sees *The Guardian* as an independent publisher," GuardianD2 said. In this regard, they added, HCD "can do no harm to that reputation because it's making sure that everybody has access to independent journalism, basically."

8.2.2 Design for accessibility and reader experience

For its redesign *The Guardian* employed extensive user research and testing among readers and non-readers led by the design and research teams for a series of design choices, ranging from the switch to tabloid to other smaller visual changes in colour, layout and font, both offline and online (Design Council, 2018). On its website, for example, Breuer and Herman

(2018) said, *The Guardian* modified its navigation to include five key “pillars”, instead of a much larger set of sections that reflected the internal structure of the newsroom and were more difficult for the reader to navigate (Figure 21).

Figure 20: A screenshot of The Guardian's website main page, depicting the main five "pillars" or sections (Source: theguardian.com)

This tweak in accessibility improved the discovery journey of the reader by simplifying the process at the “first moment of contact and need” and resulted in a big increase in traffic to these sections (ibid). Such changes are not simply aesthetic in nature. As GuardianD2, who worked in product design with a focus on UI and UX, pointed out, it is an issue of a mindset change that you must “ingrain into everyone” in the organisation to cater for different onward journeys and types of readers. They commented on technological affordances, explaining that readers who use the app are generally more invested and might return to specific articles or go to the home page and look for related articles. Therefore, UI design focuses on creating personalised experiences and smooth navigation between features. *The Guardian* registered but free app, for example, has allowed users to choose their edition and favourite topics, hide or show sections, save articles for later use, change the text size and line spacing, swipe between articles, and alternate between light and dark mode. The paid premium tier app, which is ad-free, further offered access to crosswords, live content, enhanced selections of long-read articles and features, and the option to download all sections for offline reading. By creating and modifying these features, designers aimed to provide a “holistic experience”, as GuardianD2 said, that understood the different ways distinct demographics consume the news.

> It’s something that nearly everyone has actually taken much more seriously in the past years. Someone might have cognitive challenges (…) or physical disabilities, maybe visual impairment (…) They are a smaller section of the audience. The mindset is if you make sure their needs are met then everybody else in the middle benefits as well (…) A bad experience does not reflect well on the publisher and your website. (…) There’s been a big push to make that right. When you do that, it’s long-lasting and then baking these things into everybody in the organisation. (GuardianD2)

Improving the accessibility and reader experience in the app and the website was described as requiring a lot of collaboration with software engineers. This process mostly concerns the "delivery" side of designers' work, GuardianD3 explained. In this regard, part of their responsibilities, GuardianD3 added, was to know "the main things happening in the app" and "what the engineers are doing".

> [We work] on this tool called the Dual Track Agile (…) that is divided between product discovery and product delivery. On the delivery track we work with product managers, but mostly with the engineers and the scrum master[13], to oversee what's being implemented. That's quite heavy work sometimes because although we try to design flows and anticipate everything, by the time that the engineers start working, they usually raise more questions. There are many things that we have to decide on the go or otherwise we block them. (GuardianD3)

The product discovery side, on the other hand, GuardianD3 said, is about "assessing and reassessing opportunities" that come from the users' side, from research, and from business needs. This work requires collaboration with more teams, including the editorial and marketing. Compared to the past, GuardianD3 said, the work was spread in a more distributed way, which has allowed their team to discover organisation-wide design opportunities. This aspect of design application in *The Guardian* is discussed in the next section.

8.2.3 User research and product discovery

All designers said that they were involved in user research in different capacities, with "an emphasis on qualitative research", as GuardianD4 pointed out. They said that they were mostly involved in usability testing[14], surveys, diary studies, and in-depth interviews. These research methods were used in projects that concerned the development of new products and services, editorial tools, the improvement of audience engagement for the app and website, the creation and performance of newsletters or marketing material, and studies on reader behavioural traits or news consumption. Bringing up the example of reader onboarding journeys, GuardianD2 explained that user testing can help to identify the end-user pain

---

[13] The scrum master is the person that facilitates the process of the agile method used by the team.

[14] The usability testing is the process of testing a product on real users who have no prior knowledge of its functions, to assess its performance, identify problem and areas of improvement (Bruton, 2023). Whereas usability testing provides qualitative data about the behaviour of the user, A/B testing provides quantitative data about user preferences and what performs better on a website.

points and create products and services that address the sometimes-conflicting needs of different departments at *The Guardian*.

> Someone's just agreed to create an account with The Guardian. They have three to four steps that they go through before they can come back to their article. We did some user testing around this and obviously everybody hates to jump through hoops. You ask them to do one thing and then another thing and then another and another (…) There is a frustration on the user end, but there are some business needs in this process. For example, marketing want people to say that we can send them marketing emails, editorial, say 'we've got 40 plus newsletters.' We want people to sign up for newsletters, data and privacy. That's just legal. That absolutely has to happen (…) One thing that we desperately try to do from a design side is say, 'let's remember the user in all of this. How can we make this quicker? How can we stop them getting frustrated?' (GuardianD2)

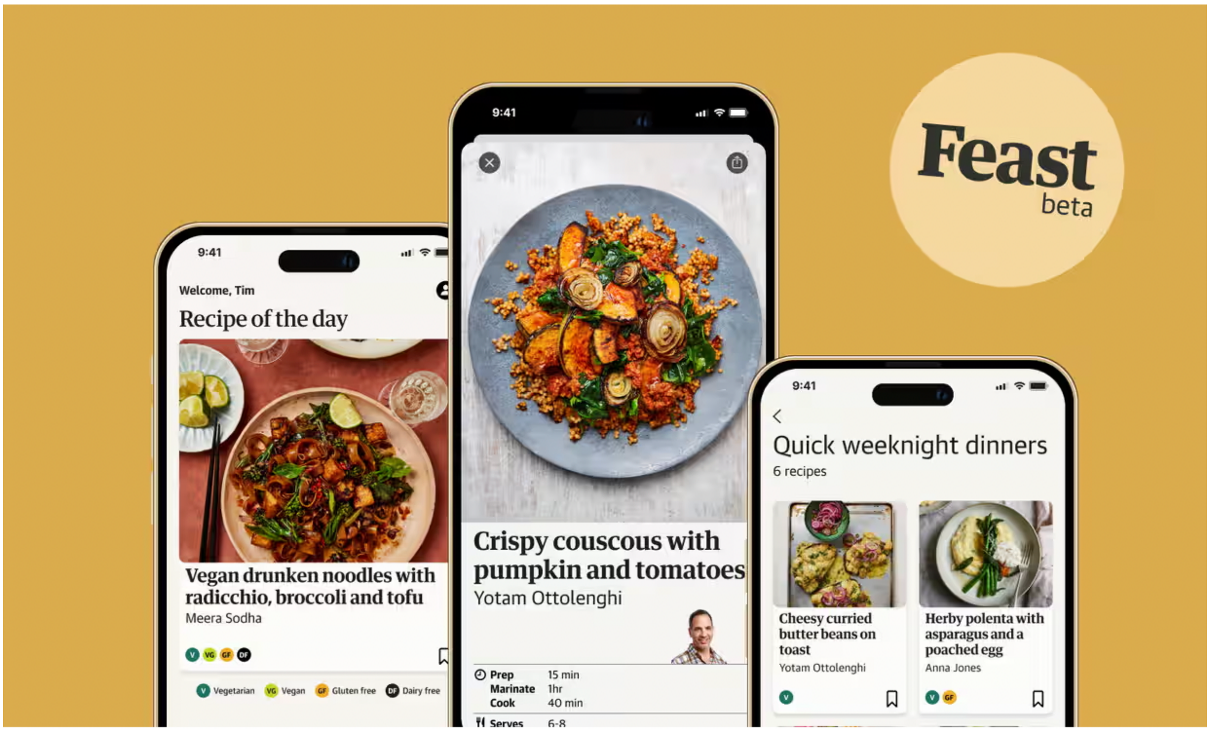
GuardianD2 added that user testing showed that readers sometimes confused marketing material and editorial newsletters, which could prevent them from signing up to the latter. "We basically changed the design where we didn't show images, so they didn't seem it was the same thing that they were signing up for. When they checked these things, they were just like, 'So, this is marketing material.' 'Fine, this is newsletters.' It just made less friction in that process." Audience research is also used to understand how different demographics engage with *The Guardian*, and how they perceive the news. GuardianD4 said that there was a push from upper management for qualitative research to "understand the different types of customers" and their behavioural traits, in the places *The Guardian* operates, to align with the organisation's global strategy. "We have done various bits of exploration to understand that, and we are bringing that together in the form of personas" to find out why they engage with *The Guardian*, how they understand the news, and the emotional engagement that make people support journalism, GuardianD4 explained.

Similarly, GuardianD1 said that through qualitative research "audiences become visible to stakeholders (…) Situating them in the real lives of the people that we're talking to and therefore creating products for." They added that quantitative research, such as surveys (GuardianD3 pointed out that surveys with more than 200 responses are considered quantitative), is usually used to "start things off". Then, qualitative research, such as diaries and in-depth, one-to-one interviews, allows designers to go deeper on how people experience *The Guardian* and go beyond simply verifying hypotheses, GuardianD1 added. For example, GuardianD3 brought up a project *The Guardian* organised in collaboration with the Guardian Foundation[15], called ‘Future of News’.

> We were running workshops with students (…) where we talked about *The Guardian*. We presented design, how we do design at *The Guardian*, and user experience, and product and engineering, what it means. Then there was an exercise specifically about the future of news, where we talked about trends in general. There was a group ideation where we asked them to create storyboards with user journeys for the year 2030, how people would be consuming the news in 2030. We were trying to use some bits of design thinking and future thinking with the students. (…) We saw a lot of dystopian scenarios for news, like, with surveillance and everything connected, but also a lot of personalisation. It was really interesting to engage them to think about the news and the importance of news. That was the main objective of the whole session in a more interactive, creative way. (GuardianD3)

Such hands-on design sessions have been used for idea generation and co-creation, in which designers hear directly from readers about the strengths and weaknesses of *The Guardian’s* products (Melo, 2018). More recently, *The Guardian* introduced a beta version of its new cooking app, called Feast (Figure 22), for which they recruited participants to test and provide feedback on the UX prior to the final release (Lusher, 2024).

Figure 21:The Guardian released a beta version of its new cooking app, called Feast, to test with users before it goes live (Source: Lusher, 2024)



[15] A charity to promote press freedom which belongs to the Scott Trust.

Nevertheless, as GuardianD3 pointed out, the recruitment of good participants for qualitative audience research can be difficult as they may participate for the money or lie in their responses. This situation can lead to discordance between qualitative and quantitative data, they added. Sometimes, the input of other teams is sought. GuardianA1, who worked in analytics, explained that their team had recently started collaborating with designers to help them test the results of their qualitative research. Even though, they said, this collaboration was mostly ad hoc rather than consistent, it led to more cohesive results and projects.

Such collaborative efforts seem to be at the heart of audience-oriented innovation at *The Guardian*. GuardianD4 differentiated between what they called "continuous" and "radical innovation". Continuous innovation, according to GuardianD4, usually concerns exploratory projects taken by the engineering team and designers outside of their business-as-usual work, or during hack days, where they explore products and product features. On the other hand, radical innovation brings together people from different teams to tackle specific challenges using design:

> If we took something like live blogs and we said, "Look, if we really pushed the boundaries on this, we might decide to run a design sprint where we bring together people from different functions to set a specific challenge and tackle that for a design process." Then, I think you've got the more radical innovation. (GuardianD4)

However, GuardianD4 stressed that this type of innovation historically has happened in a lot of different ways, and there is an effort at *The Guardian* to put a framework around these processes, so they become more formalised and fit for a news organisation. This approach to innovation reflects the discussion presented in Chapters 2 and 4. First, GuardianD4 described innovation at *The Guardian* as the interplay of technological advancements, embedded structures, shared practices, and professional cultures, facilitated by cross-functional collaboration and design-led methods. As it was made evident in earlier chapters, the adoption of innovative processes is often met with resistance by journalists, who view new entrants as a threat to their professional autonomy. However, organisational rules and directives can help to coordinate and formalise these new processes, by aligning cross-disciplinary knowledge and practices. GuardianD4 touched on the importance of creating a fit-for-purpose framework several times during our interview. This perhaps points to an ongoing negotiation at *The Guardian* to internalise new practices and processes, rather than disrupt traditional journalistic values and norms. These issues and the tensions that are created in the process are further raised in the next section.

8.2.4 Collaboration and tensions with the editorial staff

As designers and the interviewee working in analytics said, their work was not only about researching audience needs to come up with new products and features and support reader revenue. They also said that they collaborated internally with editors and journalists for the needs of editorial tools and processes. They explained that there are teams which are specifically assigned to assist with editorial tools, such as Ophan, the in-house analytics tool, or with different article formats. Collaboration with editors and journalists creates tensions pertaining to journalistic autonomy, power dynamics, and negotiations of competing views of the audience. Resistance from journalists and editors to new ideas and practices is evident in the interviews with designers and the data analyst. The interviewees described journalists and editors as having "an inherent knowledge of the audience" (GuardianD4), a different work culture (GuardianA1; GuardianD1; GuardianD3), a feeling of a threat writing for an intended audience (GuardianD1), and journalists being a "protected area" (GuardianA1).

More specifically, GuardianD4, said that journalists often present designers with a solution, which runs counter to design's intuitive approach to problem solving: "There is a strong feeling from within the newsroom that they're presenting us with a solution," rather than starting off with a problem, as the design methodology requires. "That becomes really difficult to unravel," GuardianD4 explained. Similarly, GuardianD1, explained that they were under the impression that journalists "might sometimes feel like they have an idea of what the answer is, rather than wanting to go into something exploratory or think about a bigger-picture problem." They pointed to a different mindset, where designers want to build products based on people's preferences, whereas journalists view "writing for an intended audience (…) as a bit of a threat". As discussed in Chapter 4, the digital environment exacerbates the effects of journalists' aversion to follow audience preferences, by widening the news gap which in turn can undermine journalism's role as a privileged space for public communication. This situation creates tensions pertaining to inflexibility in news selection and to relations between journalists and other practitioners, whose role involves promoting audience-oriented innovation practices. This tension can lead to a state of affairs where designers "need to take in [journalistic] hypotheses and their knowledge into designing and framing the research challenge so that (…) we are listening and that we're building on what they know already rather than starting from scratch," GuardianD1 added.

GuardianD4 also explained that designers are called to abide by certain news values, such as timeliness, as well as an "inherent knowledge of the audience", which can present them with challenges not commonly encountered in other industries. GuardianD4 said that this situation often created a friction between the product design team “trying to follow the right process to design to customer needs, versus an editorial team having an intuition about what is good for the customer and an urgency to maybe not test things as thoroughly as we might want to.” In the end, GuardianD4 added, designers “have to respect that if someone’s worked in a newsroom for 20 years, and they’ve been an editor for decades, there’s some of this stuff they might just get right.” Also linked to these tensions is the fact that, as discussed in Chapter 4, audience-centred and digital innovation practices can create extra work for journalists, who are called to learn new technologies and write for multiple platforms. “If, say, we decide, ‘Look, live blogs would be better if people could comment, or had videos or pictures,’ that creates work for the newsroom. That’s more work than one person can do,” GuardianD4 said. Innovative features can often result in a “form of pushback” if their feasibility is not well considered. “We have to be really clear that there is going to be a strong benefit to that feature before we are going to create more workload for people in the newsroom,” they added. GuardianD4 repeated their intention of coming up with a framework that would clearly map these processes and would help to tackle challenges “around the intuition of the newsroom”.

The sentiment that the newsroom operates under a “different culture” was common among all interviewed audience-oriented practitioners at *The Guardian*. GuardianA1, for example, indicated that sometimes their colleagues felt that journalists were “a bit of a protected area” and editors were acting “almost like gatekeepers”. They added that you “have to be very careful with what you were telling them because you are talking about how well their work is doing, and that (…) could upset people.” To the same extent, GuardianD3 described their main interaction with the journalistic side as a meeting held once a week with an editor to discuss projects[16]. Less often, these interactions would involve the participation of editors in workshops for the discovery phase of products, where they were presented with the results of audience research. During these meetings, GuardianD3 said, editors would express their concerns “from an editorial point of view, and they bring the urgency of their agenda, of their priorities, which as an editorial organisation, many times influence a lot.” In the end, editorial considerations would become a priority, “even though it is not a priority for users. It is not an opportunity we have found through user research.” GuardianD3 recalled an

[16] It should be noted that these interviews took place when most interviewees were still working from home or under a hybrid model, and this had affected their usual way of working in some respects.

incident during a team-wide discovery research, in which this hierarchical power structure became more pronounced.

> The person from editorial (…) said, "Look, we need to be treated in a different way because we know things that no one here knows." There was an actual official request to be treated and involved in a different way, and with time I started to learn that there is definitely a hierarchy, the power balance of the departments, and editorial is actually at the top, and they are aware of this power. They use this power to influence the other departments. (GuardianD3)

During another project on personalisation, tensions ensued when designers presented editors with research which showed that readers wanted to follow their favourite topics and staff and see them all in one place. Editors were very reluctant to accept this structure, GuardianD3 said, because it would compromise *The Guardian's* editorial mission.

> Editorial said, "No, look, if you want to personalise, separate the space. Make it very clear what's *The Guardian*." Until we came to a point where we agreed in the solution on this project as well (…) because we allow in the app people to follow favourite writers. We weren't allowed to put all the writers in one place, because in the design it would create a hierarchy of who is the most famous writer. There would be some sort of hierarchy on the screen because we cannot show everyone in one little screen. Then they said you can show one person as an example, and that's it, and then let them search, put a search field (GuardianD3)

In the same vein, GuardianD2 said that resistance to audience preferences extended to audience analytics, especially from "the old guarders who don't necessarily want to listen to what the data says." This reluctance, and natural tendency to separate business from journalism, can lead in some strategic initiatives ending up "lost in the wilderness, not really being used" outside marketing and more tactical teams, GuardianA1 explained.

> In my team, much of what we are doing is improving engagement, and therefore we need journalism to be brought into trialling these things that we're saying improve engagement (…) We're not necessarily saying, "You have to write specifically about this one thing." One of the things we might want to do is say, "For this group of people we want to, actually, start promoting more of the opinion content rather than the news content." At that top level there's a general buy-in, but if you start to go any more granular than that, people are less bought into doing something like that. (GuardianA1)

Such negotiations between audience-oriented practitioners and the editorial staff can involve different projects, ranging from operational issues, such as finding new revenue streams, to efforts concerning more intricate journalistic problems, such as news avoidance or lack of trust. However, while most audience-oriented practitioners could easily touch upon the details of how their role could bring "more money to the organisation" (GuardianD3), they were hesitant to comment on issues related to normative functions of journalism. For example, GuardianD3 said that "people complain a lot about bad news, and they want to see more cheering news, happy news," and design could help by bringing in "more awareness of the qualitative side of the user needs." However, they invoked editorial judgement as the primary factor for deciding the right approach on this issue. "I do not really know how to solve that; I am not an editor (…) If [*The Guardian*] starts changing too much and adapting too much to what the readers and customers want, they are going to (…) lose the essence of what they are famous and good for." Such feelings were predominant across all interviews with audience-oriented practitioners at *The Guardian*, perhaps suggesting a tendency to preserve clear boundaries between editorial and business activities. Equally important is the fact designers and the analyst oftentimes used the word "customers" to refer to the audience, further indicating a disposition to view the audience mostly as a form of economic capital. While these sections presented the application of design practices at *The Guardian* and the tensions that are created between audience-oriented practitioners and the editorial staff in the process, the interviews with journalists and how they view the audience-oriented culture in their organisation are presented below.

8.3 Journalists' perceptions of audience-centred culture

This part outlines the findings from the interviews with journalists at *The Guardian*. All three journalists (GuardianJ1, GuardianJ2, GuardianJ3) spoke anonymously. However, there were mentions on specific stories, backgrounds, and places of residency, which are omitted to avoid the risk of identification. The first part (8.3.1) discusses journalists perspectives on audience engagement in their organisation. The second part (8.3.2) shifts the focus on journalist's attitudes towards audience preferences as expressed in audience metrics. The last part (8.3.3) discusses how journalists perceive the ongoing changes in journalistic boundaries and skills due to the audience turn in *The Guardian*.

8.3.1 Engaging the audience

All journalists agreed that *The Guardian* is highly aware of its audiences and expressed pride in their organisation's reader-funded model. They said that newsrooms cannot function if they disregard their readers' needs (GuardianJ3), and that the way news organisations address audiences can no longer be "one-directional" (GuardianJ1). GuardianJ2 referred to Rusbridger's decision to avoid introducing a paywall as the turning point in the organisation's relationship with its audience. "He [Rusbridger] was quite visionary in the sense that he understood very early on, that the internet was a medium of exchange and that paywalls would be a disaster, particularly for a paper like *The Guardian*," they noted. This decision, GuardianJ2 added, later turned into a clear strategic direction to embrace a membership model, which was based on two premises: First, to expand *The Guardian's* audience "so asking them for money can have a sizeable effect," and then, maintain a good relationship and know "a lot about the audience". Likewise, GuardianJ1 explained that it is difficult to detach *The Guardian's* funding model from the relationship the organisation wants to cultivate with its audience. While, as they said, the membership scheme started as a "money-making thing," it was still based on the notion that *The Guardian* reader is invested:

> Although it's tempting to view it through a commercial lens, I do think the membership system that *The Guardian* is currently using now is much more than that. It is something that is more meaningfully felt. *The Guardian* does view its role as being to contribute something meaningful in a sense, and the reader has always been an important part of that (…) There is something pulling the two together in a way that is quite interesting.

While the value of engaging the audience emotionally around *The Guardian's* editorial mission to solicit financial support links back to the discussion in the previous sections about the role of design, journalists mentioned a shift in the way they viewed the audience as well. These changes were prompted and enabled by the digitalisation of the profession that created new opportunities to connect and interact with readers. Journalists mentioned several ways *The Guardian* has "opened the door" (GuardianJ1) to promote a deeper interaction and perhaps a more collaborative relationship with the audience over the years—what was described in previous chapters as production-oriented audience engagement. GuardianJ1, for example, referred to the comment page that was launched in the mid-2000s to allow readers express their voice on the basis that comments were free and open to everyone:

> It was this idea that rather than being this almost elitist opinion piece where it's the same people telling you roughly the same thing on different subjects every week, we would be much more open. As anyone, you would be able to say, "I'd like to write this piece for you on The Guardian." We would sometimes say yes and sometimes say no. There is still a filter in a sense from the editorial side of things, but (…) that was absolutely one way of opening up the gates and letting more people in and not being so controlled.

Similarly, GuardianJ3 said that as *The Guardian* depends on its readers to support its journalism, it puts emphasis "on giving readers a voice and representing people who otherwise might not have the opportunity to speak to journalists or tell their stories." Both

GuardianJ2 and GuardianJ3 mentioned their collaboration with the audience team to find case studies for their stories through reader callouts. “The community team wrote a call-out, people got in touch. I used a combination of that and providing my own sources to write the article,” GuardianJ3 said. They added that their articles often included the voices of underrepresented communities and people who lived in precarious conditions (examples of such articles were provided but are not included here to avoid the identification of the interviewee). “That is the point of journalism (…) You are letting the readers have a voice. They sometimes might mention things in the callout that you hadn’t even thought of,” they said.

GuardianJ2 agreed that “the web has made journalism more open, more engaged with its readers, and more democratic in that sense”, and that journalists have developed “a more relaxed and informal and chatty style.” They said that journalists often use social media to reach out to and engage with readers, as well as follow tips, interests, and suggestions. They recalled how a few years back, *The Guardian* came up with an “audience-driven” product for which they used Twitter (now X)[17]: “I did four or five different reporting trips (…) which were entirely Twitter-driven. I just launched myself on Twitter and said, ‘Where should I go, who should I talk to, and what are the good stories here?’ They were really driven by the responses that we got. We did several of those.”

However, the democratising force of the internet has its limitations. For example, GuardianJ3 said that reader callouts are often limited to people who read *The Guardian*, and these “cannot be representative of the whole country.” To attenuate such distortions, GuardianJ3 invokes their journalistic judgement: “You just have to be aware of that when using them as sources. It can be democratising, but equally, I don’t think that it can be the only source because it might not be representative.” However, diversity in stories can be obstructed by a lack of diversity within the newsroom. GuardianJ1 mentioned that journalism faces a problem with credentialism, and this can affect the way journalists view the audience and pursuit engagement. “There is simply an expectation that if you’re going to be a professional journalist, you will have got a journalism degree or an MA or something (…) That, I think, is very elitist.” In the same vein, GuardianJ2 acknowledged that journalism’s elitist tendencies can affect public trust. “I think we can justifiably sometimes

[17] The newspaper has since announced that it would stop promoting its journalism on X, which characterised as a “toxic media platform” (The Guardian, 2024).

be accused of sitting in an ivory tower and being a bit detached from reality and from the concerns of some of our readers" GuardianJ2 said. To help tackle this problem, they added, journalism should not change the key criteria of what constitutes good journalism but increase transparency. "[We should be] much more transparent about how we work and the processes that we use to get to our stories." GuardianJ2 brought up the example of *The Guardian's* masterclasses, as a way to cultivate trust and transparency through familiarity. They described the masterclasses as a form of audience engagement through which attendees seek to gain practical experience in journalistic topics (for example, writing classes), but also deepen their connection with *The Guardian*. GuardianJ2 commented on the participants' mix when they delivered one of these masterclasses:

> Thirty or 40 people would come to have a masterclass (…) maybe three or four of them were journalists or potential journalists and maybe another four or five were people who used some kind of writing in their work, so people who worked for NGOs or were in communications, broadly speaking. At least three-quarters of the people in the audience were basically just *Guardian* readers who wanted to get closer, they just wanted to meet a Guardian [journalist] and get closer to the paper and just feel a closer connection to it.

Whereas journalists were quick to acknowledge the importance of forging deeper relationships with their readers, interacting, and listening to their concerns, they expressed more ambivalent views towards the use of audience analytics. This is discussed in the next section.

8.3.2 Attitudes towards audience analytics

Even though journalists said they used audience analytics in varying degrees, they agreed that quantified audience preferences should not determine what gets published as this can undermine journalism and its relationship with the audience. More specifically, GuardianJ1 said they followed analytics in a non-detailed way, to the degree that these could offer a structured way to partially measure audience interests. Similarly, GuardianJ3, mentioned that they checked Ophan to get a sense of their articles' performance to inform their future writing. Conversely, GuardianJ2 said they did not consult analytics for their work, but instead used their journalistic judgement of newsworthiness. Despite these variations, all journalists repeatedly said that external indicators should not be the deciding factor of news selection, while they highlighted the threat to traditional news values and journalistic autonomy if audience preferences are blindly followed.

> I think [audience preferences] should be taken into consideration, but it shouldn't be the main motivation for what stories journalists pursue. If journalists are swayed by how many reading figures they got, they might not publish some articles. There are definitely some articles that get very few views, but they're important because they tell a story that otherwise would have gone untold. (GuardianJ3)

In a similar fashion, GuardianJ1 said that succumbing to audience quantified preferences threatens journalism's civic role, and therefore, its relationship with the public:

> Immediately you jettison most of what my team does, which is to focus on very obscure things that the public don't know they're interested in because they don't know about them. Immediately you've chucked that out and it puts you on a slippery slope towards celebrity journalism and getting the highest number of clicks possible. You completely and utterly devalue any meaningful relationship because people can, quite frankly, get that crap anywhere else.

On their part, GuardianJ2 described journalism as a "trade-off" between what journalists know is important but may not be interesting, and what they know is interesting but not particularly important:

> What we spend our lives trying to do is turning stories that are really important and significant into stories that people will like. That's our job in a way (…) For *Guardian* readers, there are certain stories that you know will always appeal to them. Essentially, any kind of bad news about Brexit will always do very, very well on the website because *Guardian* readers are massively anti-Brexit. Those are also significant stories.

Despite these accounts, all journalists demonstrated high familiarity with the use of audience analytics within *The Guardian*, saying they were exposed to such figures as part of their everyday job. "We get a daily email from the audience department which gives us the top 20 most-read stories and the top 20 highest-engagement stories, so the length of time that people spent on those stories," GuardianJ2 explained. As the interviews revealed, *The Guardian* had used the highest-engagement indicator internally for years, before it was launched as a "Deeply read" list on its regionalised pages (Guardian staff, 2024). The list appears alongside the "Most Read" one, in an attempt to differentiate between the popularity of topics and the active time readers spend on articles depending on their length. "Within about a year or two ago, we introduced what's called the clock time (…) which comes up with an automatically generated estimate for how much time you would need to be on the page in order to read the article completely and then it tells you what proportion of readers stuck around for that time," GuardianJ1 explained. Although this metric is used from *The Guardian* as an indicator of an article's quality (Guardian staff, 2024), GuardianJ1 said it cannot be a determinant: "It might be that you wrote a really good piece, but nobody cared.

They weren't interested in the subject," they said. And added: "Do I look at them? Absolutely. Speaking purely for myself, I don't allow them to guide me." Likewise, GuardianJ2 said that even though dwell time is an important metric, it is about "a fairly standard journalistic skill anyway": "You want people to stay reading your story for as long as you can, and you construct your story in that way."

Nevertheless, journalists said that such indicators can be useful to tweak the more technical details of their articles, rather than influence the topics they choose to cover. "It could be helpful because you could say, 'Oh, I see when I write the intro like this, the audience react like this. Maybe they read the article for a longer period of time, which is good because you want people to read more of it", GuardianJ3 said. Similarly, GuardianJ2, explained that *The Guardian* has focused heavily on headline optimisation and the pulling power of the headline. "We've come to a lot of important conclusions about how you can ensure that stories will be most read in terms of how you design the headline. That's very important," they said. However, in the end, newsworthiness comes down to the "journalistic gut feeling":

> In terms of the actual story itself, I'm not sure. I'm not conscious as a journalist who's lived through the transition from print to web, because when I began, we didn't even have a website. I'm not really conscious of changing how I write a story in terms of my news values and my sense of storytelling. (GuardianJ2)

To sum up, even though journalists spoke favourably about having audience analytics at their disposal, they all described their job as mainly an exercise of autonomous news judgement and editorial values vis-à-vis *The Guardian's* culture and market position. Even GuardianJ3, who as a younger journalist has been socialised within a digital-first, audience-centred culture, was quick to point out that analytics did not drive their sense of newsworthiness, which was guided by, as GuardianJ2 put it, *The Guardian's* "well-defined set of editorial values." Of course, journalists' views on audience engagement and preferences are linked to how the audience-centred culture in their organisation has altered journalistic boundaries and skills, an aspect that is discussed in the final section of this chapter.

8.3.3 Changing journalistic boundaries and skills

Journalists said that they most commonly collaborated with the picture desk, visuals and graphics, engineers, as well as the audience and social media teams. However, they said that journalism at *The Guardian* is now largely the outcome of cross-disciplinary work, with non-journalistic, usually technology and audience-oriented practitioners, having growing influence on the end result. This development has affected the skills that are required from journalists, with the core, however, being unchanged. GuardianJ1 mentioned that while some of these practitioners, such as graphic designers and visualisation artists, have been a part of journalism for many years, they are now involved in a much more structured and organised way:

> Previously, you might have had like one guy who did this sometimes. Now we've got a whole team and they will be part of the conversation. When we've done an investigation, prior to publication, we will have a discussion with the picture team, the video team, the podcast team, the design team, the visuals team, the legal team.

Even though these professionals do not think of themselves as journalists, GuardianJ1 added, they have absorbed part of the journalistic culture of working in the news. This observation chimes with designers' descriptions presented above, about how they adhere to journalistic norms and values, which suggests a process of institutionalisation of new practices related to the audience turn of journalism. Nevertheless, GuardianJ1 also pointed out that these new entrants in the journalistic field, in turn, have affected news-production practices: "You do have a greater breadth of skills being brought to bear on (…) moments of publication," they said. GuardianJ2 agreed that journalistic work has been infused with more cross-disciplinary practices, a development which they said is welcome, as long as it serves the journalistic values and purpose:

> We have our user experience people, SEO people, our audience people, the site designers, the web front editors. Everybody's bigger. They're all becoming much more important in the process. I don't think that's necessarily a bad thing (…) as long as it serves that ultimate purpose (…) which is imparting information that we consider to be significant in a way that the audience will find engaging (…) and as long as everyone is working towards that, I'm very happy.

However, as a result of this development, journalistic skills have started to change too. GuardianJ1 and GuardianJ3 said that journalists are now expected to be more familiar with using technology, managing data, recognise and analyse patterns in them. In addition, GuardianJ2 pointed out that while the core journalistic skills have not changed, the consequences of the audience turn in journalism "became very clear very early on." Even though GuardianJ2 said they have absorbed parts of this culture, such as working with social media, they added that sometimes keeping up with technology and creating content for different platforms can present journalists with difficulties:

> I've always found TV and video work a bit frustrating in the sense that, for me, the technology really dominates. I think (…) you had to construct the thing around the

> images that you had rather than what you actually wanted to say. That was a constraint that was imposed by the technology. As a writing journalist, I found that quite frustrating.

As discussed in Chapter 4, the adoption of engagement-oriented technologies in newsrooms and the often fluid working structures they create, can lead to multiple tensions between both new entrants and the editorial staff, and young and more senior journalists. These tensions were discernible in some of them comments of *The Guardian* journalists as well. GuardianJ3, for example, pointed to an ongoing cultural shift in journalism from the influx of a younger generation of journalists who possess more digital skills and a "knowledge of the importance of reader engagement". "I do think journalism now is so different to what it was (…) Even when I talk to people at the paper, they're like, 'In my day we never had to do things like that. It's changing so quickly. I don't see why it wouldn't continue changing," GuardianJ3 said. They mentioned some tensions between the editorial and the social media team perhaps due to a lack of understanding among the former about how to use social media to engage with readers: "It's not that bad (…) They still engage. They might be asked 'Oh, can you do. A TikTok about this?' They're like 'Why would I do a TikTok?'" Nevertheless, all journalists irrespective of their seniority seemed to have embraced the audience-centric culture in their organisation and the ongoing transformation of the profession. For example, the most senior journalist, GuardianJ2, said that the audience turn in *The Guardian* has provided them with new tools to use in their job, but has not changed its nature. Lastly, all journalists welcomed cross-functional collaboration as long as their interactions with non-journalistic practitioners were "in keeping with *The Guardian's* ethos", as GuardianJ1 said.

8.4 Conclusion

The Guardian case study discussed the application of design in audience-oriented innovation practices, as well as the interplay between the organisation's audience-centric culture and its editorial values. The case study would have benefitted from interviews with editors heavily involved, and perhaps leading, some of these innovation efforts. However, the interviewees were key participants and able to provide helpful information for a thorough, yet not exhaustive, examination of the subject. While at the time of the interviews there was an ongoing reorganisation of the various design teams under the umbrella of product design, the interviews revealed a clear course of adapting and integrating design practices into the editorial mission of *The Guardian*. Tensions between designers and other audience-oriented practitioners and the editorial staff were evident, as well as the wall of separation between business and editorial. However, *The Guardian* seems to be benefitting from a well-articulated strategic direction that puts emphasis on its editorial values and commitment to open-for-all independent journalism. Indeed, the interviews with journalists revealed a favourable attitude towards *The Guardian's* audience-oriented culture, as they were able to retain a high degree of journalistic autonomy.

Chapter 9. The Irish Times

The Irish Times case study presents the findings from the interviews with a UX designer (ITD1), an audience researcher (ITA1), a journalist (ITJ1), and a senior editor (ITJ2), who was able to discuss editorial decision-making, the involvement of the design team, and the overarching innovation efforts and audience-centred strategies. As discussed in Chapter 5, *The Irish Times* case study is less comprehensive compared to the other three due to limitations related to both interviewee access as well as the final mix of participants. Additional challenges emerged when some potential interviewees, despite initially expressing their interest in participating, encountered difficulties in responding promptly. This challenge was not unique to *The Irish Times*. However, the smaller size of the organisation made it more difficult to find alternative participants. While this was an adverse outcome, the four interviewees provided very useful insights that enrich the overall analysis of this project. The first section (9.1) of this chapter offers a brief overview of the newspaper's road to digitalisation and the wider media environment in Ireland. The next section (9.2) presents some of the applications of design at *The Irish Times* and discusses audience research, addressing Theme 1. Design applications and Theme 3. Approach to audience-oriented innovation. In Section 9.3 the discussion shifts to cross-functional collaboration and the tensions that arise in the process, touching on Theme 2. Cross-functional collaboration and Theme 3. Approach to audience-oriented innovation. Lastly, Section 9.4 presents the journalistic views on the audience-centric culture at *The Irish Times*, which draws on Theme 4. Implications from audience-centric culture for journalists.

9.1 The road to digitalisation

The Irish Times was the first newspaper in Ireland and Britain, and among the first 30 in the world to establish a website in 1994 (The Irish Times Trust, n.d.). The decision, in line with Ireland's advancing information technology sector, was an early response to the evident transformations being imposed on the newspaper industry by the evolving web landscape (Brown, 2015). The online edition of *The Irish Times* remained free of charge until 2002 when a subscription model was introduced to provide a new revenue stream (Kennedy, 2008). This was abolished in 2008, when the newspaper transitioned its website from ireland.com to irishtimes.com and launched its new design aimed, as the then editor Geraldine Kennedy (ibid) wrote, at meeting "the changing demands of online readers". In addition to these changes, *The Irish Times* integrated its print and online newsrooms, which had previously operated in separate buildings (ibid). According to ITJ2, 2012 marked the year when the newspaper became "very serious" about its online presence. They emphasised that data analysis turned into a crucial factor in decision-making, especially in determining how the newspaper was going to charge for its online offerings or the launch date of new products. Indeed, in 2015, *The Irish Times* became the first major daily Irish newspaper to introduce a metered paywall system, allowing access to some free content on the website and the app, and charging their more regular users (Lichterman, 2015). As ITJ2 explained:

> Our idea was to create a funnel and the funnel has a large number of readers coming in at the top of the funnel. As you went down through the funnel, you had people who were more and more loyal. At the very bottom of the funnel, you are having people who are most likely to become subscribers. We were trying to reach a critical mass overall, and this would be paid views and users, but mostly paid views, where we felt we had a big enough entry point to the funnel. Then at the bottom of the funnel, we were going to have a large enough proportion of those people who were going to be willing to subscribe.

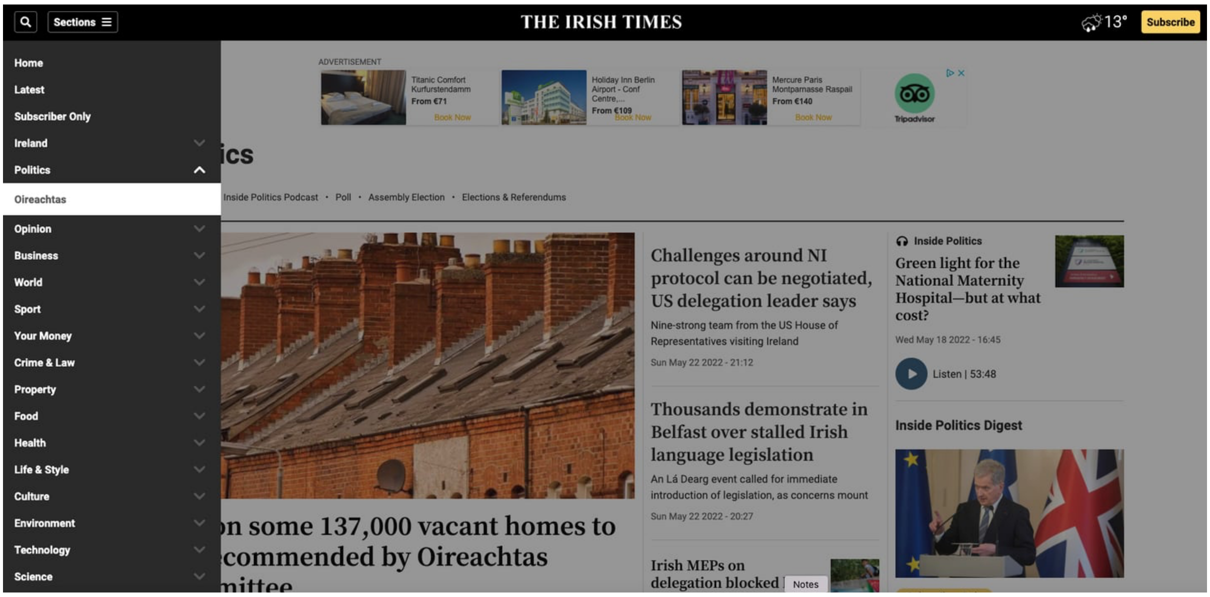
ITJ2 further explained how *The Irish Times* invested in an analytics team to refine its approach to audience data. To do so, ITJ2 added, they relied on both in-house expertise and research, as well as observations of practices in other news organisations. These developments prompted discussions about the potential strategic use of audience data, including the degree of its integration into journalistic practices and affected decisions regarding the newspaper's digital presence. Some aspects of how *The Irish Times* has integrated data analysis and audience research and how this process affects journalistic practices will be discussed in the following sections. While these descriptions present a clear manifestation of the heteronomous forces of technology and the economy at play in *The Irish Times*, ITJ2 was quick to emphasise the unusual structure of the organisation, which sets it apart within the Irish media landscape. Owned by The Irish Times Trust CLG since 1974, the newspaper operates under a business model in which profits are not sought after to "satisfy shareholders", as ITJ2 pointed out, but with an aim to be reinvested in order to secure the publication's editorial independence and mission (The Irish Times Trust, n.d.). Like in *The Guardian*, this structure allows for greater autonomy for growth and digital investments to counteract diminishing advertising revenues and declining circulation. In 2006, *The Irish Times* acquired the property-listing website myhome.ie for €50 million (McManus, 2006), and in 2018, the Cork-based Landmark Media, which owned, among others, the *Irish Examiner* and its respective website, seven regional newspapers, and the website breakingnews.ie (Hancock, 2018). In 2022 *The Irish Times* introduced its newly designed website and app with an enhanced reader experience, new and revised sections, consistent content across platforms and exclusive features for subscribers (Logue, 2022). These changes, which are further discussed in the next section, were described as the result of a major project undertaken in conjunction with *The Washington Post's* Arc XP (see Chapter 7) specialists, part of which was the introduction of the Arc's content management system (ibid). Investments in technological capabilities aimed at increasing digital subscriptions, which saw a 10% rise across the group for the year to the end of December 2022, estimated at almost 150,000 based on figures released the year before (Slattery, 2022; Hancock, 2023). Based on the 2023 Digital News Report, *The Irish Times* was the most paid digital subscription/membership title in Ireland at 41%, followed by the *Irish Independent* at 32%, as well as *The Guardian* and *The New York Times* at 14% each (Murrell *et al.*, 2023).

Nevertheless, uncertainty in the wider Irish media landscape coupled with the rise of energy and printing costs, and the cost-of-living crisis, resulted in declining print circulation revenues and an overall €5 million loss for 2022 (Hancock, 2023). While the group is the biggest print publisher in Ireland, having acquired a contract to publish for Mediahuis, which owns the *Irish Independent*, the *Sunday Independent*, and the *Sunday World* and several regional titles (ibid), its economic performance is affected by the increasing internationalisation of media in the country, both in terms of ownership and content (Media Ownership Monitor Ireland 2023, n.d.). In particular, The Irish Times Group stands out as the only exclusively Irish-owned print news publisher in Ireland. In contrast, the *Business Post* has both Irish and Swedish ownership, while the remaining publishers are owned by US (News Corp), UK (GMGT, Reach) and Belgian (Mediahuis) companies (ibid). Even though Ireland belongs to the North Atlantic/Liberal media system which is common in all case studies in this research, its market size and media ecology are suggestive of a strong process of de-differentiation driven by economy forces, as discussed in Chapter 2. This converged media ecosystem has an effect on both business decisions and sometimes journalistic content, to the degree that this is created with international audiences in mind (ibid). Furthermore, even though *The Irish Times* is a relatively small news organisation with approximately 450 employees (The Irish Times Designated Activity Company, 2023, p.30), it inevitably competes with much bigger entities for market share, such as *The New York Times* and *The Guardian*. This situation also points to an organisational-level process of further homogenisation which is reflected in decisions to adopt technologies and practices of agents that occupy more powerful positions in the field, as mentioned above. This issue is again raised in the next section, which discusses the applications of design at *The Irish Times*.

9.2 Design applications and audience research

As mentioned above, in 2022, *The Irish Times* launched its redesigned website and app, which was characterised as the "biggest single development and design project" since the newspaper expanded into digital publishing (Logue, 2022). The new design was described as offering an enhanced experience for readers, with a minimalist and consistent presentation across desktop, mobile website, and iOS and Android phone apps (ibid). Notable changes included the introduction of new and revised sections, including a Climate Crisis home and a dedicated section for podcasts, audio versions of almost all published articles, a "burger" navigation icon leading to a push-out menu of all sections (Figure 23), and a wider desktop site to allow greater visibility of more stories across the screen (ibid).

Figure 22: The "burger" navigation icon that leads to a push-out menu of all sections (Source: Logue, 2022)



In addition, the app included new subscriber-only features, such as push alerts for favourite sections, the option to save articles for later, and a search function (ibid). These design changes were developed based on business needs and audience research before and after the launch of the new website and app. In particular, audience input was sought to determine popular content areas and some new features, such as the search function in the app. As ITJ2 said, *The Irish Times* ran audience panels to evaluate the efficacy of these updates and make necessary refinements. They also pointed to the use of in-house expertise and external agencies to conduct audience research, that includes one-on-one interviews, focus groups and surveys among readers and non-readers, and subscribers and non-subscribers of *The Irish Times*. ITJ2 discussed the involvement of the UX team in the audience research process, saying that they could contribute to the design of the research itself by providing insights into crafting effective survey questions. Additionally, they mentioned the formation of multidisciplinary project groups to address outcomes and implement necessary changes, with participation from designers and other teams.

In a similar vein, ITA1 characterised audience research as a "support function," engaging different teams across the organisation, including editors, designers, data analysts, and advertisers. ITA1 pointed to an increasing need to understand how and why audiences interact with *The Irish Times* and inform various projects from lower-level initiatives to overarching strategic decisions. "You are trying to advocate for people, for our readers. I suppose break down some of the stereotypes that people may have in their head about who your readers or your audience are as well," ITA1 said. They also emphasised the importance of moving away from perceiving the audience as a singular entity and instead recognising the various segments comprising it. This aspect is especially important in journalism, ITD1 said, in which audience understanding relies heavily on implicit assumptions, unlike other fields that incorporate audience research and UX earlier on. Although their work as a designer in the Development team[18] focused primarily on providing consistent and user-friendly experiences on the website, ITD1 explained that design principles can help news organisations gain a richer understanding of their audiences and their behaviour, and be more receptive to feedback from readers.

Discussing the impact of UX design on news production practices, the interviewee said that it depended on the project. However, they described how they helped editors integrate news updates and news cues into the UI, and guide them towards optimal UX, particularly regarding user flows[19]. ITD1 also said that part of their role was to collaborate with editors to improve navigation consistency and readability for users, especially regarding the headline length. Furthermore, they explained that the transition to the Arc XP content management system (CMS) proved beneficial for editorial purposes, as opposed to the previous CMS which was "old and difficult to manage". However, they said that adopting a CMS modelled after *The Washington Post's* template resulted in a lack of uniqueness and highlighted the UX challenges of tailoring it to *The Irish Times'* specific needs. "You go around many newspapers and see that the look and feel is the same (…) Obviously, each

[18] User experience, design, development, and QA (quality assurance) teams are under the Product Innovation and Development function.

[19] User flows are the interactions or steps that users take when navigating the website.

newspaper has their own market, their own needs, their own requirements," ITD1 noted. These observations confirm Bourdieu's (1998b) postulation that market pressures and competition tend to favour uniformity of media products, which in turn can result in the erosion of autonomy in the journalistic field. As ITD1 remarked, early design adoption can perhaps help to mitigate some of the problems related to creating news products and services by tailoring them to specific organisational needs. However, they added that stakeholders, including editorial teams, should have a clear understanding of the distinction between the different strands of design and their functions. More specifically, they explained that it is common for concepts such as UX and UI to be confused, a situation that can lead to incomplete design results. For instance, as ITD1 said, focusing solely on aesthetic adjustments, such as altering button colours or shapes, often ignores other underlying UX issues. Instead, they noted that more effective solutions for improving the overall reader experience could be identified and implemented easier if design principles are introduced early in product development. "UX research and UX design are about early introduction. It is not quite there at the moment," ITD1 said. They went on to say that while design was often present in discussions at *The Irish Times*, it was not consistently taken into account in decision-making. As discussed in the following section, the power dynamics associated with traditional newsroom hierarchies can lead to tensions and sometimes obstruct collaboration efforts.

9.3 Cross-functional collaboration and tensions

According to the interviewees, cross-functional collaboration was actively promoted at *The Irish Times*. However, they described collaborative efforts as broadly involving editors and non-journalistic professionals, with the newsroom operating under a different mindset, a situation that can result in tensions. In addition, traditional newsroom structure was mentioned as limiting efforts to incorporate more digital products and processes into journalistic work. ITD1 explained that the idea behind the Innovation and Development team was to include as many functions as possible across the organisation and involve them in relevant projects from the beginning. However, they emphasised that collaboration usually did not involve the newsroom directly but only the editorial team. ITD1 explained that the idea was to "encourage work with editors in multi-experimenting" as the best approach in product development and said that this kind of work was generally encouraged at *The Irish Times*. In the same vein, ITA1 noted a positive attitude towards multidisciplinary collaboration, although they said that engagement with the editorial staff happened on a project basis rather than daily. They added that editors were receptive towards audience research and relevant data, especially towards "qualitative research, because it gives them a more rounded view of who our readers are, and what they want". Nevertheless, they pointed to a "level of trepidation" associated with this audience-centric culture, stemming from traditional structures within the newsroom and the need to protect editorial independence. This resistance was also confirmed by ITD1, who observed a difficulty in overcoming a mindset rooted in traditional print media practices, which can hinder efforts to fully transition to the digital age and embrace audience innovation practices. They said that often decisions are taken based on what the editorial staff believe is the best solution or approach, rather than being guided by insights from audience research.

Similarly, ITJ1 said that editorial is at the core of *The Irish Times* ethos and they are the ones who set the objectives of the organisation. While these observations confirm the discussion in Chapter 2 about how fields tend to preserve their operational logic, ITJ1 acknowledged that new entrants in journalism now have more influence in the organisation, yet not without resistance. They mentioned that in their role at the time of the interview, they did not work a lot alongside other practitioners, which they characterised as "a shortcoming of the current setup". However, ITJ1 noted that in some of their previous roles within *The Irish Times*, for example as an online editor, they collaborated a lot with the IT, software developers, UX designers and others. They mentioned that as a journalist they found this interaction "sometimes frustrating" yet "intellectually stimulating" and described collaboration as "two very different mindsets coming together to try and coalesce". Nevertheless, IJ1 pointed to a lack of formalisation of collaborative processes at *The Irish Times*, stemming partly from the fact that technologists and audience-oriented practitioners are not fully integrated in the newsroom and editorial operations. They mentioned the example of product designers who "build things that journalists think of":

> We're like this service industry and that's not the way it should be because they are some of the brightest people in the building. Everybody in the room should be able to ask why are we building this f****** thing? I've seen it happen where we build things that were just stupid and somebody should call stop.

The relatively siloed way of working at *The Irish Times* has an impact on how journalists interact with and accept technology and innovation efforts. "I find a lot of journalists are really not well-educated in the realities of what's achievable and what's doable," ITJ1said. And they added:

> [Journalists] have no concept at all of iterative development. [They] are very short-term, they're very goldfishy. In an ideal world, what do I think would improve our

> relationship with our readers and improve the quality of our product? Here's some small things, here's some big things. I'm perfectly happy that none of them are going to be done by tomorrow. That's grand. Let's have that as part of everybody's workflow. That has not been the case. Most journalists still hear with dread that there's going to be a content management system introduced. They know that that's got to be incredibly disruptive, and it's going to ruin their lives for a couple of months. They'll get through it and then they'll just come down again. We had one in 2013, we have another one in 2022, hopefully, we won't have another one for 20, 30 years. That is so much the wrong way to think about how a modern media organisation should be now. I think we're still trapped in that mindset. It makes me cry sometimes. It's terrible.

Furthermore, ITJ1 said that such structural constraints, coupled with budget limitations, affect both journalistic work and subsequently, how audiences perceive journalism. They discussed how larger media organisations with greater resources have put significant effort into data journalism, which has the potential to improve journalism's credibility in an increasingly mistrustful society, whereas this "has stalled in *The Irish Times*". Nevertheless, ITJ1 acknowledged a gradual transformation of journalistic work due to the influx of new entrants, namely technologists and audience-oriented practitioners. These practitioners, ITJ1 said, now have a greater influence on news production practices and the journalistic content, even though their impact is often manifested in the form of exchange of ideas rather than prescriptive interventions.

> They wouldn't really see it as their role to say, "I don't like the approach such and such took," [or] "I don't think that was the way to approach that article." They wouldn't do that. They might say, "I think here's an area that we could give some input into you guys doing it better, and let's sit down and do some work on that." They would say that kind of thing. (ITJ1)

This influence is also expressed in efforts of these practitioners to secure their professional identity in news organisations. "In the olden days, it would have been just journalists who would have been revolting," ITJ1 said. "Now you see, when there's kinds of attempted protests, cancellations, whatever it is you want to call them, that there are people from the IT side, in particular, making their voices heard," they added.

9.4 Views on audience-centric culture

Both ITJ1 and ITJ2 highlighted that editorial independence is non-negotiable at *The Irish Times*, and audience preferences inform but do not lead editorial decisions. However, they acknowledged that journalism has become more audience-oriented, a development that has had a great impact on how *The Irish Times* has evolved over the years. For example, they mentioned several restructuring efforts the newspaper has undergone as a result of journalism's audience turn, including the introduction of the new CMS and the creation of an audience team. ITJ1 said that much of the discussion about the role of the audience in journalism is not unique to *The Irish Times* but shared with similar news organisations both in Ireland and abroad. However, they noted, the challenges arising from this culture have perhaps been amplified by Ireland's small market size and the fact that the country belongs to the Anglosphere but does not have the same level of protection for journalism as other small European countries.

On their part, ITJ2 discussed the fundamental change in *The Irish Times'* business model after the newspaper became more responsive to its digital audience. "The way it worked years ago was that some editors somewhere decided what people needed to see based on their own life view in most cases and their own set of biases and even prejudices and what have you," ITA2 said. And they added: "There would be a certain amount of validation of that in the purchases of the newspaper that would happen every day (…) Obviously, your shop window is your front page and people might make that decision based on what was on your front page." However, in the digital age this dynamic has shifted. "Your unit of currency (…) is the single story, or the single piece of content (…) You are making a commitment based on a series of single stories, not one package as you might see it," ITJ2 explained. ITJ1 said that previous overreliance on one-off newspaper print sales rather than subscriptions had left *The Irish Times* vulnerable to revenue declines.

Nevertheless, during the past decade the newspaper has managed to build upon its reputation as a quality news brand in Ireland and cultivate a loyal readership among the university-educated ABC1 urban professionals, who are "probably the most lucrative" part of the market, as ITJ1 pointed out. While this process was described as "one step forward, two steps back or two steps forward, one step back", ITJ1 said that *The Irish Times* has managed to free up resources to focus towards the digital audience and "take ownership of audience metrics in a way that had not been done previously". Besides the creation of the audience team, mentioned above, ITJ1 said that *The Irish Times* brought audience analytics into the work of the various news desks and "at the centre of daily conferences". Increased awareness of audience preferences has undoubtedly influenced journalistic content, ITJ1 said:

> People do react to metrics, if a certain type of story seem to do well people will discuss doing more of those types of stories. Maybe not just in terms of the content as well, but the style of them too. One would take lessons from those, they're not terribly complicated lessons. The importance of things like explainers, the importance of consumer-focused articles that give people "a how to" about how to

> save money, or invest money, or work with their pensions, or all those types of things. There's definitely an increased focus on those, and that's a direct response to perceived audience appetite.

However, ITJ1 added that journalists gradually became wary of other forms of audience engagement, such as interacting on social media or in readers' comments, and the idea of "opening out the newspaper to the crowd" has created a cultural change "to the opposite direction". "They weren't too terribly enthusiastically taken on board (…) and there's no doubt that there has been a change of temperature in the organisation as a whole," ITJ1 said. This development was the result of how social media and audience reactions there have turned out, and an inherent conservative approach towards audience innovation at *The Irish Times*, ITJ1 explained. Moreover, it may reflect broader considerations about the balance between audience preferences and editorial autonomy. For example, ITJ2 said that editors are often called to decide on stories that consistently underperform with very few page views, "maybe just a few hundred page views in some cases". Some of these stories are dropped, but others are kept being produced "because they satisfy part of our mandate (…) or because they're aimed at a small but targeted segment of our readership, who we believe to be important," ITJ2 explained. This perhaps is indicative of an intent to deepen the relationship with paid subscribers which can "reduce the real challenge of things like churn[20]", as ITJ1 said.

Both ITJ1 and ITJ2 referred to the need to leverage news judgement to inform the public about issues that may be challenging for them to discern. The normative role of journalism to contribute to a more informed society, however, is often contradicted by its elitist tendencies, as also discussed in previous chapters. ITD1 for example, pointed to the fact that no matter how many details about the audience journalists have at their disposal, *The Irish Times* appeals to a relatively small fragment of the Irish population. They explained that societal dynamics within a changing political and cultural environment threaten to further disconnect journalism from society.

> We're in a culture which is changing. We're in a political culture which is changing. Sure, we are players, we have agency within that (…) It's not just about distrust of newspapers or distrust of media, it's about distrust of the needs, it's about class resentment, it's about quite deep, strong things that are going on in society. I think one of the dangers for us is that we're a very bourgeois newspaper, we're a very

[20] Churn is used to describe the rate of customers who no longer pay for a product/service.

> middle-aged newspaper. There's a definite legitimate fear that we may be losing touch with the next generation (ITJ1)

This is why, as ITJ1 further explained, audience analytics do not necessarily reflect sentiment and what journalistic work may mean for the public. Going after stories that the audience cares about, as expressed by pageviews, paid views, and even dwell time, may further alienate the public, as also discussed in Chapter 4. In the end, news selection depends on journalists' sense of newsworthiness: "There is still something in there which is about editorial gut instinct about what overall coverage should be," ITJ1 concluded.

9.5 Conclusion

The Irish Times case study has identified some key aspects of design in the organisation, notably its technical applications in UX and UI, and its part in audience research. Unfortunately, due to the mix of participants it was not possible to discern how design contributes to overarching audience-innovation strategies due to limitations in participant access. This would have enriched the discussion and understanding of design applications in a news organisation with significantly fewer resources compared to the rest of the case studies, and in a much smaller media market. One key finding, however, was a process of de-differentiation due to commercial logics that favour uniformity in media products. This is reflected in the adoption of Arc XP's CMS, as well in an interviewee's comments about the reproduction of practices of more powerful agents in the field. As the designer observed, an earlier introduction of design principles in the organisation's product development could have perhaps alleviated problems associated with a lack of uniqueness, and some technical issues that ensued in the process of tailoring products to specific needs post-implementation.

Regarding cross-functional collaboration, the designer said that their team tried to encourage collaboration with editors and other departments at *The Irish Times*, as well as experimentation with various projects. However, interviews revealed that work largely remained siloed under traditional newsroom hierarchies. At the same time, technologists and audience-oriented practitioners were not fully integrated in the newsroom, a situation that, according to an interviewee's accounts, hindered digital journalism efforts. Lastly, descriptions of the audience-centred culture at *The Irish Times*, revealed a retrenchment in some forms of audience engagement. However, interviewees talked about an effort to fully capitalise on the potential of audience analytics, all while maintaining editorial integrity, which was described as the cornerstone of the organisation's identity as a quality news brand in Ireland.

Chapter 10. Discussion

The previous chapters presented the findings of each case study, according to the themes that emerged from the coding process, discussed in Chapter 5. As mentioned previously, secondary data, such as archival records, company and industry reports, online articles, public professional profiles of interviewees, screenshots, and other publicly available information, were used to inform the data collection process, provide context for the case studies, and support the in-depth interviews data. While, as already discussed in Chapter 5, statistical generalisation is not possible in case studies, theoretical or analytical generalisation can be developed by comparing the results of the case studies to existing theory. In a multiple case study design, this analytical and interpretive process can take the form of cross-case analysis, as presented in Section 10.1, which provides a summarisation of the empirical findings of this research, discussed against literature. After this preliminary discussion of the themes, a more substantial discussion follows in Section 10.2, which addresses the research questions by critically engaging with Bourdieu's field theory, as well as journalism and design literature (see Chapters 2-4). Consistent with the replication logic described in Chapter 5, all case studies display similar characteristics in relation to the research questions, with most differences observed in *The Irish Times* for anticipated reasons. These issues are discussed in the following sections.

10.1 Cross-case analysis of themes

As explained previously, the case studies were organised around the four themes that were derived from the NVivo coding process (see Chapter 5). While the themes were presented differently across cases due to variations in participant numbers within these news organisations, this flexible approach allowed for a more focused exploration of each case. The following sections present a discussion of each of the four themes—1. Design applications 2. Cross-functional collaboration, 3. Approach to audience-oriented innovation, and 4. Implications from audience-centric culture for journalists—within a cross-case analysis framework.

10.1.1 Theme 1: Design applications

All four case studies revealed similar characteristics in how design is applied within audience-oriented innovation, with each news organisation adopting DT and HCD to respond to evolving audience needs and news consumption habits. As demonstrated in the case studies design finds application across various areas in these news organisations, ranging from the more traditional design context with an emphasis on visual features to creating consistent reader experiences across devices. In addition, design serves as an organisational resource for product development, cross-functional collaboration, and audience-focused strategic initiatives. This holistic approach was identified in three of the case studies (see Appendix D), but not in the case of *The Irish Times*, for which it was not possible to discern how it informed strategic direction due to limitations in accessing more participants.

More specifically, participants in all four news organisations discussed how design can be utilised to create consistent news experiences across devices, personalisation features and improve accessibility for readers. These projects included the dark mode, the transcript for podcasts and 'Storylines' for *The New York Times* (see Section 6.2.1), the 'My Post' and the 'Newsprint' personalisation features in *The Washington Post* (see Section 7.5), and the redesign of their respective websites and apps to allow navigation consistency in *The Guardian* (see Section 8.2.2) and *The Irish Times* (see Section 9.2). While such features link back to the strong visual design tradition of these newspapers, they come as, what Aitamurto, Borges-Rey, and Diakopoulos (2023) call, a parallel development to the digitalisation of the field, moving beyond aesthetics and presentation to affect how journalism is produced, distributed, and consumed through digital artefacts. Indeed, as participants from *The New York Times* commented (see Chapter 6), UX features and enhanced accessibility not only make it easier for readers to access journalism through different pathways, but also help them build their own knowledge by providing context around a topic. Similarly, interviewees from *The Guardian* pointed to how design features improve the discovery journey of the readers, proving a holistic experience in how audiences consume the news.

However, as Appelgren (2017) argues, the design of technological features in data journalism, often creates the illusion of interactivity without granting real control to users who have very limited options to choose from. This situation can exaggerate paternalistic tendencies in journalism and further undermine public trust, as interactive and other technological features may be perceived as nudging people towards certain choices rather than democratising information. While, according to Appelgren (ibid), the solution to this problem could lie in being transparent about the news production processes so audiences can independently assess the information presented, Anderson and Borges-Rey (2019) draw attention to how the emphasis on interactivity is being replaced by an 'audience-first' approach in which journalism offers experiences that place the audience at the forefront.

This perspective highlights the importance for news producers—especially those experimenting with data-driven storytelling—to understand how different users interact with and make meaning of journalism (ibid), thereby highlighting a process of cognitive elaboration and learning, as opposed to simply accessing information online (Tremayne and Dunwoody, 2001). Drawing on behavioural sciences to emphasise experiences over merely the functionality of artefacts is a central aspect of participatory and service design, which focus on engaged involvement, cooperative processes, and emancipatory objectives (Holmlid, 2009).

Designers from *The New York Times*, *The Washington Post*, and *The Guardian* discussed how they involved audiences through primarily qualitative and ethnographic research methods—such as surveys, diaries, and in-depth interviews—to discover and understand readers' interests and preferences, explore how they experience journalism, develop ideas and hypotheses, come up with new products and features or make refinements to existing ones. Most importantly, as NYTD2 said (see Section 6.2.1), design-led audience research helps to identify motivation behind media consumption, which can counterbalance the quantifiable culture in audience engagement posed by metrics. However, as Steensen, Ferrer-Conill, and Peters (2020, p. 1665) observe, identifying audience emotions and intentions, what they define as "felt engagement", is not as straightforward as measuring performance-related engagement. While this view reflects wider discussions on how to conceptualise and theorise audience engagement in journalism research (e.g. Couldry, Livingstone, and Markham, 2010; Picone, 2015; Ferrer-Conill and Tandoc, 2018; Steensen, Ferrer-Conill, and Peters, 2020; Nelson, 2021) and will be further addressed when answering the RQs, the case studies revealed an experimentation with projects in these news organisations to engage readers as co-creators in the design process. Some of these projects included the redesign of the Opinions section in *The New York Times* (see Section 6.2.3), the podcast 'The 7' in *The Washington Post* (Section 7.2), and the Feast app in *The Guardian* (see Section 8.2.3). Such initiatives were described by WPD1 in *The Washington Post* as bringing readers in "for more than just research" (see Section 7.2), signifying an approach in which the audience is viewed as a partner in the development of products and services rather than the subject of research (Sanders and Stappers, 2008) in line with the participatory design tradition as discussed in Chapter 4. Furthermore, as designers from *The Guardian* and *The Washington Post* pointed out, group ideation projects with the audience and other design methods aim to explore in depth how different demographics perceive and are affected by the news and get "in those psychological spaces to understand what is valuable and why” (see Section 7.2). The insights inform product development but also feed into wider strategic initiatives, discussed below.

10.1.2 Theme 2: Cross-functional collaboration

Interviewees across the case studies reported that cross-functional collaboration was actively promoted by upper management. However, its implementation varied based on the dynamics between newsroom and management, the financial situation, and the newsroom tradition of each newspaper. Participants from *The New York Times* specifically described an organic approach to cross-functional collaboration, often characterised by decentralised, lean teams and at times blurred boundaries between the newsroom and the business side of the organisation. Although non-journalistic interviewees mentioned that this structure sometimes hindered workflow and decision-making due to complex internal communication channels, most referred to practices built around cross-disciplinary teams to reflect the digital-first, audience-centric, and product-heavy business model of the newspaper. Designers and other audience-oriented practitioners reported increased collaboration with the journalistic side, particularly with editors on strategic initiatives, and with the newsroom on projects that required contextually rich storytelling. These accounts align with the discussion in Section 4.3.2 on how the adoption of a matrix structure in large newsrooms can bring together expertise from different teams and enhance technical excellence (Grubenmann, 2016), and perhaps reflect a more distributed model of gatekeeping in the newsroom (Steensen, 2009). While cross-functional collaboration was described as the result of incremental change in *The New York Times* (see Section 6.3.2.1), and is indicative of the newspaper’s successful response to structural changes (Cornia, Sehl, and Nielsen, 2020), resistance from journalists was also reported, revealing the broader tensions surrounding the adoption of innovation in the newsroom, as discussed in Section 2.5.

These conflicts were related to journalists’ fatigue of constantly having to learn new technologies and to boundary negotiations over journalistic authority, and were discernible across the case studies—despite the fact that audience-oriented practitioners repeatedly commented that they were not involved in editorial decisions directly but only through the development of editorially focused tools, products, and processes. Other tensions reported involved the allocation of resources within the organisation, a tendency in the newsroom to oppose top-down decisions perceived as means of managerial control, an inherent knowledge of the audience grounded in print practices, reluctance to follow audience preferences, and resistance to deviating from typical ways of doing journalism.

For instance, *The Washington Post* case study results showed that convergence and cross-functional collaboration often clashed with professional norms and values, particularly when journalists viewed the changes as the result of managerial pressure that intensified their workload and led to job precarity. At *The Guardian*, conflicting agendas were particularly pronounced, with audience-oriented practitioners arguing that the newsroom operated "under a different culture," and editors acted as gatekeepers to protect their work from external pressures. In this case, editorial priorities overrode user needs identified through research, even if as GuardianD4 said, they were merely based on the intuition of the newsroom about what is good for the audience (see Section 8.2.4). In the end, audience-oriented practitioners said that they abided by editorial directives, resulting in some missed opportunities for strategic initiatives or in a form of pushback from the journalistic side towards some innovative approaches. Interviewees from *The Irish Times* pointed to how traditional newsroom hierarchies, the need to protect editorial independence, and the resulting siloed way of working often impeded efforts to fully transition into the digital age (see Section 9.3). This was despite the fact that a positive attitude towards multidisciplinary collaboration was reported from the participants.

An interesting finding from across the case studies is that audience-oriented practitioners, especially designers, focused on their role in bringing about a cultural shift or mindset change by creating new ways of approaching work, involving as many teams as possible, and encouraging multi-disciplinary teamwork and exchange of ideas within their organisations. In this process, they emphasised the importance of proactively developing tools that would simplify processes and enable journalists to utilise audience research insights and make independent decisions. To overcome resistance, they needed to strategically communicate the value of audience-oriented initiatives and audience insights, and to explain to journalists how their use enhanced, rather than impeded, the quality of their work (see Sections 6.3.2.1 and 7.2). These findings support previous empirical studies on how news organisations negotiate the dynamics of cross-functional collaboration, shifting journalistic practices, clashing professional expectations, and diverging views of audience needs. For example, in his systematic literature review on data journalism, de-Lima-Santos (2024, p. 275) explains how well-resourced news outlets invest in multidisciplinary teams to develop in-house solutions based on the needs of their organisations. The resulting tools and processes are made available to journalists and other professionals in these news organisations, so they can independently produce visuals and data-driven stories (ibid). However, as mentioned elsewhere, research has shown that such technological tools can often present as a form of managerial surveillance and evaluation (Petre, 2021; Hayes and O'Sullivan, 2024). Therefore, the benefits of innovative technologies are often strategically disseminated by managers and editors in order to persuade journalists to adjust their priorities (Bunce, 2019). This includes presenting technological innovation as liberating news workers from tedious routines, which, as Milosavljević and Vobič (2021) argue, understates the complexities of technological innovation in newsrooms. Nevertheless, as Ryfe (2012) has suggested, for journalism to survive the digital revolution, it should reconsider its deeply ingrained professional habits and cultural inertia that inhibit change and innovation. In doing so, journalism should foster relationships with its audiences and communities to improve its unravelling public relevance, and be open to collaborative forms of reporting. These issues are further explored in the discussion of the RQs.

10.1.3 Theme 3: Approach to audience-oriented innovation

As discussed in Section 2.5, newsrooms are slow to adopt innovation, and when they innovate, their approach is typically reactive and inconsistent. In journalism, innovation is more often associated with the technological advancements to which the profession has historically been exposed (Plavlik, 2001), while a common assumption is that news organisations' ability to survive is intertwined with how successfully they respond to technological disruption (Hermida and Young, 2021). However, as raised in Section 2.5, scholarship is now moving away from viewing innovation under the narrow lens of technology to studying change in newsrooms as a complex system of structural, cultural, and material factors. This shift focuses on the audience's role beyond being merely a statistical product (Raetzsch, 2015). The interviews across the case studies, indicate that innovation has been implemented to address a number of challenges, including loss of revenue, competition from platforms, shrinking audiences, detachment from audience needs, and shifts in news consumption habits. Participants defined innovation in terms of researching and identifying audience needs in order to explore new storytelling formats and create journalistic products, services, processes, and tools that meet both public expectations and organisational objectives.

In particular, while interviewees from *The New York Times*, described a data-informed approach to audience-oriented innovation, they were quick to point out how they aimed to steer away from personalising the whole experience, to balance audience preferences with the newspaper's editorial mission (see Section 6.3.1). NYTA1 said that innovation efforts focused on "new ways to tell stories". Furthermore, designers explained how qualitative audience research informed strategic initiatives in their organisation. For example, design-led research has been utilised for the development of overarching strategic projects around trust and transparency, and to reach new audiences beyond the newspaper's traditional readership (see Section 6.2.3). Designers at *The New York Times* also discussed how qualitative research insights enabled the newspaper to identify meaningful audience engagement, instead of "over-engineering to the clicks" (see Section 6.2.4), suggesting a rather cautious approach to click-driven demands—an observation which was consistent across the case studies.

In the same vein, designers from *The Washington Post* explained how design-led methods and processes were utilised to inform audience-oriented strategic initiatives. Examples of these were the 'Next Generation' innovation project to attract younger and more diverse audiences, and the 'Audience Innovation Lab', an incubator programme to explore new approaches to storytelling with journalists (see Sections 7.2 and 7.3). Additionally, the team at the *Post* referred to how their audience strategy revolved around two main factors: a push to attract new subscriptions, and a drive to understand the news consumption habits of younger audiences across different platforms. The latter involved a project on the impact of news on Gen Z, a demographic cohort which they found to be more mindful of its mental health compared to older ones, as well as research to determine how different articles affected various audience segments. The insights helped the team understand the drivers of news avoidance and make recommendations on content strategy across platforms (see Section 7.2). Such initiatives are important because, as research suggests, audience engagement, news participation, and news avoidance can vary depending on several factors. These include trends in social media use, public discourse portraying news as toxic and depressing (Eddy, 2023), and issues related to the mis- and underrepresentation of certain demographics, which affects trust in news (Arguedas et al., 2023). For that reason, scholars argue, news organisations that seek to improve how audiences experience the news should offer a healthy online environment to encourage interaction (Eddy, 2023) and actively listen to these audiences to understand their concerns (Arguedas et al., 2023).

Moving on to *The Guardian*, interviewees mentioned that the audience was at the heart of their organisation's decision-making (see Section 8.2.1). Designers explained how innovation was supported by design-led research and placed particular emphasis on cross-functional collaboration to create value both at a product and an organisational level. Additionally, they said they were involved in audience-focused and future-oriented projects, which helped to shape strategic direction, reaffirm the newspaper's ethos, and support its reader-funded model (see Section 8.2.1). Designers regularly referred to the audience as customers, perhaps indicating a clearer distinction between the editorial and business functions of the newspaper compared to *The New York Times* and *The Washington Post*.

Lastly, at *The Irish Times*, an even stronger separation between business and editorial functions was observed, with audience-oriented practitioners saying they were operating as a support function (see section 9.3). The adoption of audience-centred initiatives was found to be obstructed by what was described as a mindset "rooted in print practices". Nevertheless, audience-oriented practitioners said that editors were receptive to audience insights, which were taken into consideration for strategic decisions, however inconsistently.

These results are suggestive of an audience-centred approach to innovation in at least three of the case studies (*The New York Times*, *The Washington Post*, and *The Guardian*), with technology serving as an enabler of innovation rather than being the end goal itself. In their pursuit of innovation, they were found to place a focus on long-term strategic objectives, which aligns with Küng's (2017a) observation about the importance of organisational transformation as opposed to simply incorporating new technologies. Both *The New York Times* and *The Guardian* exhibited most of the characteristics that, according to Küng (2015), define successful innovation in digital news: a clear purpose embedded in the organisation's DNA, a strategic focus, strong leadership, a pro-digital culture, and deep integration of technology and journalism. However, developments at *The Washington Post*—including controversies surrounding its ownership, consecutive layoffs, as well as staff pushback against Bezos' decisions (see Section 7.1)—point to a lack of the clear direction and strong leadership elements, while *The Irish Times* seems to lag behind in the pro-digital culture, and most importantly, the integration of technology and journalism. It should be noted that audience-oriented professionals from across the case studies emphasised the significance of cross-functional collaboration in achieving innovative outcomes. These findings align with previous studies on newsroom innovation, which portray the role of cross-disciplinary teams and the coordination of knowledge as a key driver in the development of digital news (Sehl, Cornia, and Nielsen, 2017; Posetti, 2018; Westlund, Krumsvik, and Lewis, 2020; Pérez-Seijo and Silva-Rodríguez, 2024). Lastly, while most audience-oriented participants linked their work to driving subscriptions and reader revenue—which highlights the tension between journalism's civic role and the need for commercial success (Jönsson and Örnebring, 2011)—adopting an audience-centred approach alongside a clear editorial mission has perhaps the potential to foster a strong connection with the audience and achieve a sustainable business model (Cornia, Sehl, and Nielsen, 2020).

10.1.4 Theme 4: Implications from audience-centric culture for journalists

Three broad trends were derived from the interviews with journalists across the case studies. The first is that, while journalists were naturally exposed to audience analytics, they expressed ambivalence about their use and value, favouring those they perceived as more meaningful for their work. All journalists agreed that succumbing to audience preferences, as expressed by analytics, would eventually lower journalistic standards and affect editorial autonomy, though they did not consider this to be an issue for them. They said that they had freedom to produce articles based on their news judgement and not quantified audience trends, which perhaps is indicative of the strong editorial culture in their organisations. While these findings reflect the long-running discussion about the tension between editorial autonomy and independence and the increasing influence of audience analytics (e.g. Lewis, 2012; Tandoc, 2014; Carlson, 2020), most journalists also described a situation where they were exposed to figures as part of their everyday job. Perhaps more pronouncedly, this was reflected in a comment by WPJ1 about how there was a push for journalists to develop skills in using real-time metrics, SEO strategies, and Google Trends (see Section 7.5). Although the journalist from the *Post* painted these developments in a rather positive light, suggesting that these tools would enhance journalistic work, research has shown that they can lead to precarious working conditions (Cohen, 2019; Petre, 2021). For example, Petre warns that, because of their habit-forming design, real-time analytics may not be viewed by journalists in their proper context—as a reflection of the power imbalance between journalists and upper management—but rather as an obsessive behaviour that journalists cannot resist. Furthermore, Petre posits, the traffic game intensifies workload and fosters competition among journalists. This aspect was highlighted by two journalists at *The New York Times*, who noted how audience metrics' emphasis on speed amplifies competitive pressure and creates frustration, particularly as traffic numbers are heavily influenced by the placement of stories on the website page (see Sections 6.4.1 and 6.4.3).

Moreover, journalists voiced concerns that audience analytics did not fully capture public sentiment and that those they had at their disposal were not intuitive enough (see Section 6.4.1), which is in line with the discussion presented in section 4.1. Instead, they highlighted that more nuanced indicators, such as the time readers spend on an article or *The Guardian's* then newly introduced 'Deeply Read' metric, were more useful to them (see Section 8.3.2), echoing Thurman's (2017) observation that news organisations have yet to fully embrace metrics that reveal what audiences value in journalism, as opposed to those that merely capture clicking activity. Lastly, even though the extent to which journalists utilised audience metrics varied, with some being more receptive than others, all agreed that metrics were merely tools to inform their work on a technical level, rather than influencing their journalistic judgment of newsworthiness. Although research shows that journalists sometimes downplay the influence of external factors on their work, perhaps due to "occupational pride" (Vu, 2014), the interviewees explained how they leveraged their news judgment to counteract the distorting effects of audience feedback. This included ensuring that audiences stayed informed about important issues they struggled to identify themselves and covering issues relevant to underrepresented communities outside their organisation's typical readership (see Sections 8.3.1 and 9.4).

The second trend evidenced in the interviews is that, despite their mixed views on analytics, journalists recognised that their work had become more audience-aware and less one-directional, as digitalisation created new ways to interact, consult, and connect with readers. They generally held favourable views regarding their organisations' opening up to the audience. This has resulted in what GuardianJ1 described as a "more collaborative relationship over the years," a development closely tied to *The Guardian's* reader-funded model (see Section 8.3.1). GuardianJ1 also referred to the democratising force of the internet, saying that "the web has made journalism more open, more engaged with its readers." The same view was shared by other journalists. For example, ITJ2 described how the internet has changed the self-validating model of the print-era, when readers would buy the newspaper based on the "shop-window" of the front page decided by editors who used their own biases and assumptions to determine what they thought the audience would find appealing. Similarly, journalists at *The New York Times* noted how the internet changed the way the audience interacts with journalism, presenting new opportunities in engagement.

Despite their ambivalence towards audience analytics, discussed previously, most participants held favourable views on qualitative forms of audience engagement. In particular, they referred to emails, suggestions on social media, initiatives to promote transparency, and reader callouts as meaningful ways to connect with the audience and source stories which would have otherwise been overlooked (see Sections 6.4.1 and 8.3.1). However, these forms of dialogue do not presuppose an always positive form of engagement.

IJ1 pointed to how journalists became increasingly wary of online interactions, leading to a cultural shift away from opening the newspaper to the public. Such retraction can be attributed to what research calls negative or "dark participation" (e.g. Quandt, 2018; Steensen, Ferrer-Conill, and Peters, 2020; Dodds, Geboers, and Boukes, 2024), which includes harmful behaviours online, such as threats, trolling, and harassment against journalists.

The third trend identified in the interviews is the change in journalistic skills prompted by digitalisation and the influx of new entrants in the field. Although journalists said that the core journalistic skills remained largely unaltered, they agreed that their work had turned more audience-oriented. Participants noted that as journalism has become more collaborative, with non-journalistic practitioners having a growing influence on the journalistic product, the profession has been infused with new, mostly digital, skills. This situation has placed increased pressure on journalists as they are expected to be familiar with data, as well as their management and interpretation (see section 8.3.3). GuardianJ2 said that this requirement can be frustrating for journalists who try to keep up with technology and create content for different platforms. In the same vein, journalists from *The New York Times* noted that as journalism becomes increasingly visual, there is a growing demand for data-savvy staff in their organisation, which can pose a challenge to those whose careers grew in the print era (see Section 6.4.3). Journalists, however, observed a cross-fertilisation of practices and skills between themselves and non-journalistic practitioners, an issue that will be raised again in the discussion of the RQs. For example, WPJ1 noted that journalists would eventually take on tasks previously handled by digital editors (see Section 7.3), while GuardianJ1 highlighted how non-journalistic practitioners had incorporated elements of the journalistic culture and how journalists were increasingly involved in technology-related work (see Section 8.2.4).

Lastly, GuardianJ3 pointed to a cultural change driven by a younger generation of journalists with stronger digital skills and an audience-engagement interest. This finding clearly reflects the discussion in Section 4.3.2 about how news organisations sometimes prefer to employ younger journalists, who are digitally adept and audience-oriented, in order to avoid the cost of training older journalists, who may be more resistant to change. Therefore, the results of the case studies perhaps indicate that journalists are faced with a process of both deskilling and multiskilling: they either struggle to keep up with technology and are left with simpler and fewer jobs—potentially with an attendant loss of autonomy—or they experience multiskilling, with training beyond traditional journalistic competencies, a situation that can result in more autonomy but also intensification of their work, especially if combined with a reduction in workforce (Saltzis and Dickinson, 2008; Wallace, 2013; Nygren, 2014; Bro, Hansen, and Andersson, 2016).

10.2 Answering the research questions

As stated in Chapter 1, the aim of this study is to examine how design practices, not only in the context of looks and functionality of products but as a set of processes and mindset directed at fostering a human-centred culture, support audience-oriented innovation in legacy newspapers, and the implications for journalism (RQ1). It also aims to explore the areas of cooperation and struggle that arise in this process (RQ2), and how journalists perceive the audience-centric culture in their organisations (RQ3). As explained in Chapter 5 (Section 5.1 under "Critical realism"), the discussion of the research questions follows a multi-level analysis to align with the critical realism paradigm and the deployment of Bourdieu's three main field theory conceptual tools: field, habitus, and capital. The first subsection (10.1.1) answers RQ1, focusing on the macro level and the heteronomous forces in the journalistic field. Here, the different applications of design practice in the case studies are viewed as the result of external forces in the field, and more specifically, technology and the economy. These external influences prompt changes to how journalism views its audiences and responds to audience engagement, while they result to an influx of new entrants in the field, affecting journalism's boundaries, practices, and autonomy. The next subsection (10.1.2) addresses RQ2 and touches on the meso level, which is defined as the habitus. The meso level is where structure and agency meet and produce practices, which are characterised by negotiations and tensions between journalists and new entrants, in this case designers and other audience-oriented practitioners. Lastly, subsection 10.1.3 discusses RQ3 by focusing on the micro level, or the journalistic capital, which is a source of legitimisation and professional autonomy for journalists. Whereas part of this field-specific capital is how journalists perceive their role (Vos, Eichholz and Karaliova, 2019), this is subject to change by the influx of new practices in the field associated with the increasing audience-centric culture in news organisations. This process affects both journalistic skills and how journalists view their audiences. While these different levels of analysis steer the discussion that follows, they are also interconnected, implying that each research question does not focus exclusively on one theoretical aspect of field theory.

10.2.1 Design in audience-oriented innovation practices and implications for journalism

To answer RQ1 (*"How does design support audience-oriented innovation practices in legacy newspapers and what are the implications for journalism?"*) the findings of the case studies are analysed against Bourdieu's field theory, journalism, and design literature. While the utilisation of design capabilities in the case studies is consistent with the literature presented in Chapter 4, the results of this research raise several key points pertaining to the macro level of analysis and the heteronomous forces that prompt changes to the journalistic field. To begin with, all designers interviewed for this research led or sat within product teams. Some of these teams included either "innovation" or "strategy" in their titles. For some of the participants, especially those in more senior positions, this aspect was evident from the recruitment phase. However, for others, details about their exact teams and role descriptions were explained during the interviews. This fact, in conjunction with designers listing the creation of new products among their primary responsibilities, indicates that design is not just a "product-adjacent" (Royal and Kiesow, 2021) function but has a primary role in product development and product research within at least three of these news organisations (*The New York Times*, *The Washington Post*, and *The Guardian*). Instead of design solely being an agile tool used for new product development (NPD) and innovation, designers are heavily involved in or lead the creation of digital products and services in these news organisations, among cross-disciplinary teams with multiple internal and external stakeholders.

Due to the size of *The New York Times* and *The Washington Post* such roles and teams are more diffused. However, in both organisations, designers led product development and research teams, with the former having a "Product and Design" team, and the latter a "Product Research and Strategy" team. *The Guardian* has a more defined structure, in which its "Product Design" team, led by a designer, was described as steering the organisation's approach to innovation and feeding into strategic decisions. In the case of *The Irish Times*, the designer talked about a need to introduce design earlier in the process of the product development process, which suggests that design may not be as integrated in relevant initiatives or that the organisation lacks the streamlined and more formalised processes of the other case studies. This deviation can be attributed to budget limitations affecting team composition, as *The Irish Times* is a smaller news organisation and a stronger church-state divide culture, evident throughout the interviews with all *Irish Times* participants. However, the organisation had, at the times of the interviews, a "Product Innovation and Development" function, also led by a designer. At this point, it should be noted that all interviewees used various terms to refer to design practices, including HCD and user-centred design UCD, or simply design, while interviewees from *The Washington Post*, *The Guardian*, and Aron Pilhofer from *The New York Times*, specifically pointed to DT as the favoured design methodology (the various iterations of design were introduced in section 1.3). Nevertheless, all designers described their practice as bringing the voice of the audience to the forefront of the organisation's wider culture by using, as discussed above, research methods that dig deeper into audience preferences and needs. At the same time, some designers emphasised their role in bringing more revenue to their organisation by helping to increase subscriptions, reflecting the fact that their teams belonged to the commercial/business side. In general, designers' descriptions of their work corresponded to DT's stated goal of creating and prioritising conditions that lead to innovative human-centred products and services (see Chapter 4). However, a question is raised about what the human or audience-centric culture cultivated and promoted by design teams entails, and how it feeds into the wider discussion of how journalism can understand and improve its relationship with its audiences.

First, as the discourse on the audience turn in journalism focuses on what audiences experience as informative, valuable, and important (Costera Meijer, 2013; Vos, Eichholz, and Karaliova, 2019; Costera Meijer, 2020; Swart *et al.*, 2022; Costera Meijer, 2022), the question is whether design's promise corresponds to true audience needs, or these are dictated by economic demands. Research has shown that audiences value journalism that incorporates their individual and collective wisdom, takes their views and concerns into account, and provides them with a captivating presentation, and layered information (see section 4.3.3). Designers touched on all these three prerequisites of "valuable journalism" (Costera Meijer, 2013): they build products and services based on audience insights and research; they try to understand what motivates audiences to interact, engage and pay for journalism, and explore opportunities to reach out to audiences beyond their organisations' traditional readership; and present journalistic work in a visually satisfying and accessible way.

While at first glance such accounts imply a process of agency on the part of the audience, this seems to be mostly structured around how readers react to or perceive journalism and journalistic products, rather than a democratic deliberation of opening up journalism production to the audience. Indeed, despite some co-creation projects with the audience, discussed previously, some designers stated that editorial autonomy was non-negotiable, even that their organisation tended to be "walled off from people" (see section 7.2). This discussion confirms Nelson's (2021, p. 33) observation that the distinction between production-oriented and reception-oriented audience engagement (see section 4.1) is not always clear-cut. This was evident across all newsrooms explored in this research, where engagement strategies were reported to blend production and reception orientations (ibid).

Seen from this perspective, design practices promote both forms of audience engagement. On the one hand, they serve production-oriented engagement to the degree they involve the audience in hands-on sessions for idea generation and co-creation; explore what readers want from their news and what makes them feel empowered; lead or participate in projects addressing critical journalism issues, such as trust and transparency, news avoidance and misinformation; and engage in initiatives to reach underrepresented demographics. On the other hand, they are primarily concerned with reception-oriented engagement when tasked with determining what drives audience subscriptions and complements other, more quantifiable measures, which Nelson (ibid) describes as valuable to advertisers. From the interviews with designers, it can be argued that the latter involve their day-to-day responsibilities, and the former, offshoot projects touching issues closer to the journalistic doxa, a distinction that clearly reflects the dual nature of the audience as a source of both social and economic capital for journalism (see Chapter 2), or legitimacy and revenue (Vos, Eichholz, and Karaliova, 2019). Naturally, and in line with Bourdieu, discussions of legitimacy are connected to what audiences believe is of social value (ibid). However, as Costera Meijer (2022) notes, journalism commonly refers to value within the framework of newsworthiness, which views the news as a hybrid good "with both a price-tag and a symbolic/public worth" (De Maeyer, 2020, p. 124). According to Costera Meijer (2022), this strict professional context of attaching values to a product fails to capture the impact it has on the audience. Furthermore, the gap between how scholarship describes the normative dimensions of responding to audience needs and the reality, which mostly addresses engagement in terms of quantified popularity, pose further limitations to the conceptualisation of what constitutes a valuable user experience.

Back to the discussion about the dual role of audiences for news organisations, some differences across the case studies were also observed that can be attributed to the distinct nature of these newspapers, despite the similarities discussed above. More specifically, in *The Guardian* and *The Irish Times*, where the separation between business and editorial was more explicit, designers would not address issues pertaining to journalistic values. It is also characteristic that designers at *The Guardian* often used the word "customers" to refer to the audience. In contrast, designers and other audience-oriented practitioners from *The New York Times* and *The Washington Post* were more comfortable discussing editorial norms, although they did comment on their lack of editorial judgement. This observation can perhaps be attributed to the fact that, as discussed previously, the boundaries between editorial and business operations have become more integrated in these news organisations, a development that can be attributed to profit-driven pressures (Cornia, Sehl, and Nielsen, 2020), especially in the case of the product-heavy business model of *The New York Times*.

Another point that warrants attention is a process of differentiation/de-differentiation (see section 2.5.1) at play in these newspapers. Starting with de-differentiation, this is expressed by the relevant uniformity in design and other audience-oriented practices observed in the case studies, prompted by heteronomous influences from technology and the economy. The commercial homogeneity between the case studies was also evident in some comments made by interviewees, who described a situation where their work was linked to ever-changing trends in tech platforms, developments in competitors ("We need to do what our competitors are doing" – section 7.4), or in the case of *The Irish Times,* the adoption of technologies, such as the Arc XP CMS, coming from more powerful players in the field. While Bourdieu argues that commercial homogeneity poses a risk to the autonomy of the field (see section 2.5.1), the designer from *The Irish Times* drew attention to the potential of design to bring authenticity to products and services if it is introduced early in the process. This observation is in line with literature on design, and especially DT. For example, Brown (2009, p. 20) argues that human-centredness stands opposite to "the oppressive uniformity of some many products on the market today" caused by the capitalistic mass production of the industrial economy. However, such evangelical account of DT fails to critically examine design as a phenomenon of capitalism itself, rooted in the corporate need for innovation in commodities and services (Seitz, 2020). Seen under this lens, the creation of user-friendly products in these legacy newspapers is centred around leveraging audience insights to gain a competitive edge and stay economically viable.

Nevertheless, design's role in infusing news organisations with new ideas and practices to better understand and respond to journalism's increasingly complex relationship with its audiences should not be overlooked. For instance, by employing sociological qualitative models for audience research, designers not only complement or balance the distortive effects of audience metrics, as discussed above, but also help editors become more receptive to audience input, as their work aligns more closely with journalistic practices and values.

As shown in the case studies, editors are more positively inclined towards qualitative research that explores audience behavioural traits and their experience of journalism, while journalists tend to favour qualitative audience engagement methods. In this regard, the utilisation of ethnographic and sociological methods for design-led projects, as presented in the case studies, can be seen as an ongoing effort to move beyond a market-oriented logic towards what Blassnig and Esser (2022, p. 64) call a "connection-strengthening audience logic". Even though their analysis focuses on news media logic (Altheide and Snow, 1979), Blassnig and Esser (ibid, p. 65) argue that commercial logic—a source of heteronomy in journalism (Bourdieu, 2005) and stronger in for-profit news organisations—has peaked, and an audience logic has emerged. The latter revolves around the increased inclusion and participation of audiences, and a stronger orientation of news production towards the preferences of individual users (Blassnig and Esser, 2022, p. 65). Linked to the emergent audience logic is a need to place audiences at the centre of innovation efforts. More specifically, as shown in the discussion of Theme 3, interviews with designers and other audience-oriented practitioners confirmed a shift away from the "bright, shiny things syndrome", centred around an unfocused quest for technological innovation in news organisations (Posetti, 2018). During the interviews, there were multiple accounts of a move towards longer-term strategies that integrate editorial needs, technology, and audience preferences that go beyond numbers and metrics, and become part of the broader organisational culture. Here, a process of differentiation is also observed, as these news organisations break away from the "narrow confines of technology" (Bossio and Nelson, 2022, p. 1378), pursue practices that help sustain the field's operational logic, and promote an innovation culture that addresses both the economic and societal goals of journalism (Klaß, 2020).

Within this framework, it may be more advantageous to view design as a process of structuring work around audience-centred innovation, rather than solely concentrating on the products or services under development (Seitz, 2020). Indeed, according to journalism research, product-related practitioners in news organisations help to bridge the gap between business and editorial, align priorities among different departments, and manage complexity by bringing different logics together (Kosterich and Royal, 2024). This effort was perhaps more discernible at *The Guardian*, where there were explicit mentions of leveraging design to break down organisational silos, promote a cross-functional way of organising work, and achieving innovation outcomes. Design literature suggests that DT is well-suited for NPD and innovation in rapidly evolving markets in which user needs are uncertain, or for mature markets with latent user needs (Luchs, 2016, p. 2). Although journalism can fall under both categories, the rapid transformation of the field and the uncertainty around audience needs (Nelson, 2021) perhaps explain why designers occupy leading product and innovation roles within the case studies.

In addition, GuardianD4 distinguished between “radical” and “continuous” innovation at *The Guardian*, explaining that DT is the preferred method for exploring the former as it aims to push boundaries and leverage the expertise of cross-disciplinary teams (see section 8.2.3). This perspective aligns with the discussion presented in Chapter 4, according to which DT typically deals with ill-defined, or “wicked”, problems in complex environments where multiple unknown variables come into play. Such scenarios are said to benefit from cross-disciplinary collaboration, knowledge sharing, low-cost experimentation, and early-failure initiatives (such as the NYT Now app discussed in section 6.1). In contrast, “continuous” or “incremental” innovation addresses well-defined problems or established user needs, which, as explained by GuardianD4, usually require smaller teams. Based on these observations it can be argued that, even though media organisations tend to resort to “incremental innovation”, as it involves small changes in products and processes and does not challenge market logic (Porcu, 2020), at least some of the newspapers studied here utilise design capabilities to expand into both innovation realms.

On the one hand, innovation seems to have incremental qualities, and concern user-facing changes focused on the refinement of products and services, based on the identification and in-depth understanding of audience preferences. On the other hand, it becomes more radical when it is concerned with ways of structuring work around the development, production, and delivery of products and services (Radnejad, Sarkar, and Osiyevskyy, 2022), and is aimed at shaping practices around a distributed innovation process of knowledge management across organisational boundaries (Chesbrough, 2003; Chesbrough and Bogers, 2014). In this regard, innovation requires both an innovative product offering, as well as an innovative business model that is based on a greater distribution of knowledge (Chesbrough, 2003). Indeed, most designers in the interviews agreed that the impact of the design approach in achieving innovation outcomes is often difficult to measure. When designers talked about their work they focused more on the processes through which innovation was pursued rather than on the outcome itself. In particular, they commonly referred to the facilitation of cross-disciplinary collaboration aimed primarily at shifting attitudes and mindsets towards an audience-centred culture by mobilising collective knowledge and expertise within the organisation.

While the implications of viewing design as a facilitator of cross-functional collaboration for innovation are reflected upon in the next section, the conditions that prompted its adoption by news organisations came as a result or in parallel with their digital transformation, as discussed in the previous section. As made evident in the case studies, these newspapers introduced digital-first strategies and products in an attempt to move past their legacy formats and consolidate their online presence in a media environment increasingly characterised by the domination of digital platforms (Nieborg and Poell, 2019). These technologically bounded changes have seen these legacy newspapers experimenting with revenue generation, adapting their business models, and as discussed above, becoming more audience-focused by investing in personalisation, audience research, reader accessibility and engagement. Therefore, design-based approaches in these news organisations have emerged concurrently with an audience-centric appetite, catalysed by journalism's digital turn, and exacerbated by its economic challenges (Vos, Eichholz, and Karaliova, 2019). These external forces to the field have induced a pull towards an *audience-oriented* form of *heteronomy*. This conceptualisation reflects other studies using a Bourdieusian framework to map the structural influences of other fields, examining the role of political heteronomy (Maares and Hanusch, 2023), digital heteronomy (Lindblom, Lindell, and Gidlund, 2022), the management of heteronomy's effects in the field (Leeds, 2023), and autonomy as a dynamic concept in a web of external pressures (Wandels, Mast, and Van Den Bulck, 2023). This research adds an extra dimension by situating heteronomy in the historically complex relation of journalism with its audiences. The audience, itself, is not a monolithic entity, while the field is a space of interconnected practices (see Section 2.3). Therefore, audience-oriented heteronomy does not reflect pressures coming from a specific field. Instead, this research uses Couldry's (2004, p. 117) term of "media-oriented practices" through which he referred to an "open set of practices relating, to or oriented around media", to anchor audience-oriented heteronomy to a set of innovation practices and the influx of new agents enabled by, relating to, and directed towards the audience. In this regard, it follows Wang's dimensional model of the journalistic field, where the audience mobilises forces in the heteronomous and the autonomous poles, to the degree that it serves as both an economic and a social capital (see Section 2.5.1). How the field negotiates these changes and rejects or institutionalises them is discussed in the next sections.

10.2.2 Areas of collaboration and struggle

To answer the second research question (*"What areas of collaboration and struggle arise between non-journalistic audience-oriented professionals and journalists?"*) this research looks at Bourdieu's concept of habitus, or what is described here as the meso level of analysis where practices are produced. As illustrated in the literature review, change in journalism most often involves external shocks to the field, including the influx of agents who bring with them new heterodox ideas and practices. Here, audience-oriented practitioners are regarded as new entrants to the field, with a distinct "professional habitus" (Schultz, 2007, p. 193) and dispositions directed towards the audience and innovation. While in a constant struggle for power to improve their position in the field, tensions between them and the editorial staff were evident across the case studies. However, they were more pronounced, or more explicitly stated, in *The Guardian* and *The Irish Times*, which as mentioned above can be attributed to a stronger separation culture between business and editorial.

First, it should be noted that most audience-oriented practitioners, and all designers, mentioned that they worked more frequently alongside editors and less often with journalists. This indicates that cross-functional collaboration in the case studies typically involved the higher ranks of the newsroom, where audience-centred approaches were already agreed upon and understood, leading to fewer reported frictions. However, as discussed above, this collaboration occurred on the premise that audience-oriented practitioners would support editorial decision-making rather than challenging the hegemonic doxa. Even though professional boundaries and responsibilities were sometimes fluid (see section 6.3.1), audience-oriented practitioners generally agreed that they were careful not to interfere with journalistic autonomy or challenge editorial authority, as shown in the cross-case analysis. Sometimes this situation led them to adopt a strategic approach when addressing journalists or the editorial staff, as discussed in the themes above. These findings align with Porcu, Hermans, and Broersma's (2024) research, which argues that collaboration in news organisation is often obstructed by organisational structures that affect the way journalists perceive and accept innovative initiatives. They say that "creative autonomy" in newsrooms, or the flexibility to experiment and be creative beyond the (journalistic) professional autonomy of news construction (p.2), is hindered by the hierarchical distance between management and the newsroom. This observation is of particular importance, because as discussed above, journalists in the case studies appeared to work within a protected area, with less frequent collaboration with audience-oriented practitioners. Instead, such collaboration was primarily handled by editors, echoing the discussion in Section

10.1.2 about the role of editors as both gatekeepers of journalistic values and mediators for business objectives. Furthermore, as shown in *The Washington Post* case study, journalists were not involved in decisions about the newspaper's audience strategy. This finding clearly indicates a lack of communication between management and the newsroom, and confirms Porcu, Hermans, and Broersma's (2024) postulation that "creative autonomy" usually involves the newsroom elites. This situation, they argue, often stems from the fact that management wants to run innovative projects "under the radar" to avoid protests in the newsroom (p. 16) as journalists tend to protect their autonomy against hierarchical interference (p. 15).

Indeed, while most of the conflicts reported between audience-oriented practitioners and the journalistic side in the case studies traced back to traditional journalistic norms and the need to safeguard professional control against external pressures that weaken the field's autonomy, the results showed that cross-functional collaboration was actively encouraged in all four newspapers. More significantly, the need to institutionalise processes around cross-functional collaboration and audience-oriented innovation was expressed. For example, GuardianD4 discussed an initiative to create a framework around design-led innovation at *The Guardian* to support journalistic goals (see section 8.2.3), while other interviewees talked about the development of guidelines to document the use and impact of UX research, tools, and processes at *The New York Times* and *The Washington Post* (see sections 6.2.2 and 7.3), or the need to formalise collaborative processes at *The Irish Times* (see section 9.3). Developing frameworks that align these efforts with the professional values and practices of journalism can perhaps help newsrooms overcome cultural barriers that often impede innovation, especially in legacy ones (Porcu, 2020). This is particularly helpful, as audience-oriented practitioners in the interviews noted that resistance from journalists often stems from a knowledge gap that disrupts their comfort zone.

Equally important to this discussion is that, as mentioned in section 2.5, innovation in news organisations can be the result of individual initiative and good relationships between organisational members and it is hindered by informal power structures (Steensen, 2009). An advantage of viewing design as an enabler of structuring work around audience-oriented innovation, as discussed in the previous section, is that it allows one to look into the importance of these relationships in achieving innovative outcomes. For example, designers commented on how they collaborated with individuals or teams that were more receptive to innovation or how they tried to build networks based on professional and personal trust with both editors and journalists to communicate the value of audience-centred initiatives (see sections 6.3.2.1 and 7.2). This implies that the adoption of frameworks and the creation of networks of relationships can facilitate the acceptance of digital-first strategies, which are sometimes obstructed by a lack of clear communication about the implemented changes, fuelling tensions between various hierarchical levels in the organisation (Hendrickx and Picone, 2020). The tendency to institutionalise these processes also indicates that in order for these new agents to be recognised as legitimate players in the field, they cannot deviate too much from the accepted journalistic doxa and habitus (Broersma and Singer, 2021).

In addition, as discussed in section 7.2, WPD1 mentioned their intention to work towards a "democratised design research practice" to empower journalists and other teams intuitively adopt qualities like having empathy for their users and translate them into audience-centric strategies. This practice-based approach in design further holds the advantage of decentralising the designer as the main agent of design activity (Kimbell, 2011; 2012) by creating "communities of practice" (CoP) (Lave and Wenger, 1991; Wenger, McDermott, and Snyder, 2002) within which innovation can be organically achieved through regular interaction and knowledge sharing. Literature suggests that collaborative teams are more likely to achieve innovative outcomes compared to focused groups of like-minded people (Davis, 2010), as different practitioners are brought together by a set of problems, concerns, or interest to interact and share their ideas and expertise (Ahva, 2017).

This collaborative framework based on collective knowledge could perhaps address some of the reported challenges designers face when working with editorial teams, such as having to deal with editors' implicit assumptions about the audience or preconceived solutions to problems. Additionally, it could mitigate issues regarding the early introduction of design in the process of product development to prevent later complications, as shown in the case of *The Irish Times*. Indeed, research has shown that through "mutual engagement and joint enterprise" journalists adjust to new situations by learning from others, while knowledge becomes a natural part of the newsroom's collective practices (Schmitz Weiss and Domingo, 2010, p. 1168).

Finally, the interviews revealed that all audience-oriented practitioners in the case studies adhered to the prevailing journalistic doxa. Especially designers, instead of presenting themselves as disruptive forces—as design literature often depicts them—they aim at bringing about slow change to their organisations by acting as facilitators of audience-oriented innovation. In this regard, they tend to reproduce the field's internal structure

(Benson and Neveu, 2005), but at the same time promote gradual change in news organisations, which materialises through the infusion of new ways of learning from the audience and from other practitioners, and structuring work practices around the processes that lead to audience-oriented innovation.

This way, journalists' meaning-making of the journalistic field is exposed to heterodox ideas from designers and other audience-oriented practitioners. Instead of being subjected to unfamiliar and top-down processes, journalists can get accustomed to these new, audience-oriented, practices through frequent interaction and collaborative frameworks. Therefore, their practical understanding of the journalistic game—what Bourdieu (1998a) describes as the "feel for the game" (see section 2.2)—can be infused with *empathetic traits* around the needs of the audience, inherent in design practices. While the infusion of these new ideas into the field can lead to the transformation of the journalistic doxa (Wandels, Mast, and Van Den Bulck, 2023), how journalists accept these changes is influenced by their journalistic capital, discussed below.

10.2.3 Journalists' perceptions of audience-centric culture

The third research question asks: *"How do journalists perceive the audience-centric culture in their organisations?"* Having discussed the macro and meso levels of analysis, attention now shifts to the micro—the journalistic capital, that represents the capital which is unique to the field of journalism. The journalistic capital, a source of autonomy, is subject to change by external pressures and the influx of new agents to the field, including the audience (Vos, Eichholz, and Karaliova, 2019). Central to this discussion, is how journalists perceive their roles vis-à-vis the audience and the changes that the audience-centric culture in their organisations has brought to their work.

When discussing the audience-centric culture in their organisations, journalists focused on the impact of technology and new entrants on journalistic skills and norms, and the use(fulness) of audience analytics. To summarise what was discussed in Theme 4, journalists agreed that succumbing to audience preferences would eventually lower journalistic standards and affect editorial autonomy. They also raised concerns about how analytics did not adequately reflect audience preferences, and they argued that the tools that were available to them were not intuitive enough, expressing their preference for more sophisticated and nuanced indicators. In addition, journalists were in support of qualitative forms of audience participation, such as reader callouts, and recognised the need of engaging their audiences. Lastly, journalists acknowledged the growing influence of other professionals—particularly technologists and audience-oriented practitioners—on the final product of journalism.

Despite these broader trends in findings across cases outlined above, differences were also observed among organisations and individuals. Reflecting the findings of previous studies (e.g. Powers and Vera-Zambrano, 2019), the interviews revealed that journalists with high levels of journalistic capital, derived from seniority, expressed stronger opinions against the use of audience analytics and following audience preferences. These journalists could afford to ignore the effects of the audience-centric culture and were the ones whose roles involved less interaction with other teams. On the contrary, younger journalists who occupied lower positions in the hierarchy expressed more favourable views towards the use of technology, collaborative efforts, online norms, and audience engagement, perhaps looking to improve their status in the field and chances of professional development. In addition, journalists in mid-level positions and several years of experience or those in more audience-oriented roles, stood in between, displaying a positive outlook to the ongoing changes in journalism and the blurring of boundaries between editorial and business functions.

A situation of hysteresis was also observed and confirmed in the interviews with journalists and audience-oriented practitioners: even though the core journalistic skills remain the same, news organisations increasingly employ data-savvy, and audience-oriented individuals to respond to the ongoing structural changes. Some journalists, especially those whose capital reflected the print era expressed frustration at having to learn new technologies or engaging audiences. In the case of *The Irish Times*, a newsroom whose culture was described as rooted in traditional print practices, journalists resisted absorbing reader comments and social media interactions into their work practices, perhaps regarding this kind of engagement as "low-quality" (Banjac, 2022). On the other hand, *The Guardian* stood out as the organisation whose journalists were more positively inclined towards engaging their readers as well as efforts to diversify their audiences. Moreover, they broadly supported their organisation's audience-centric culture, and the integration of new, audience-oriented innovation practices, to the degree that these aligned with *The Guardian's* well-defined editorial ethos, strategic direction, and reader-funded business model. This finding supports previous studies indicating journalists are receptive to changes which are consistent with the journalistic doxa and are conveyed through a clear organisational vision and mission (Ekdale *et al.*, 2015; Porcu, 2020).

Although journalists believed in the importance of playing the "journalistic game"—what Bourdieu calls illusio (see Section 3.2.1)— they were also exposed to doxic shifts due to structural transformations in the field, as discussed above. The interviews revealed that, while journalists were sceptical or mistrustful of the usefulness of audience analytics, and were looking to counter-balance their distorting effects through more substantial forms of engagement (Belair-Gagnon, Nelson, and Lewis, 2019), they were more receptive towards those which they believed would help them fulfil their journalistic role. In line with previous studies that have identified new forms of journalistic capital (Hellmueller, Vos, Poepsel, 2013; Lindblom, Lindell, and Gidlund, 2022), this research finds that the ongoing transformation of the journalistic field may have caused the emergence of a new form of field-specific capital—what is here called the *meaningful engagement capital*—centred around the need to recognise and pay attention to audiences' needs. The degree to which journalists pick up this new form of capital depends on their own position-taking in the field (Schultz, 2007, p. 194) and how their organisation views audience engagement. This means that despite claiming autonomy against external pressures that have opened up journalism to audiences, journalists are often seen to adjust their behaviour to respond to audiences' expectations. While scholars have cautioned against the introduction of new forms of capital (Nevue, 2018; Lindblom, Lindell, and Gidlund, 2022), the conditions that have led to the transformation of the field have imposed new pressures on journalists whose professional capacity is strongly linked to their performance against the normative ideals of journalism (Gajardo, Costera Meijer, and Domingo, 2023). The *meaningful engagement capital* captures the tension between journalists' adherence to this normative performance and the need to respond to audience's expectations by observing, listening and connecting to make journalism relevant and appealing (ibid). This research agrees with Gajardo, Costera Meijer, and Domingo (ibid, p. 520) observation that audience engagement should be normatively re-evaluated as "conducive to the democratic role of journalism".

10.3 Conclusion

First, this chapter discussed the findings of the case studies through a cross-case analysis format, focusing on the four main themes as they emerged from coding: 1. Design applications, 2. Cross-functional collaboration, 3. Approach to audience-oriented innovation, and 4. Implications of audience-centric culture for journalists. This was an important step to summarise the results of the in-depth exploration of the case studies and provide a basis for the critical discussion of the RQs against Bourdieu's field theory and its three main conceptual tools: field, habitus, and capital.

The first RQ discussed the role of design in audience-oriented innovation practices in the case studies by focusing on the macro level of analysis, which was defined as the journalistic field. This section presented the role of design in product development, audience research, and innovation. It argued that news organisations are shifting away from defining innovation in technologically deterministic terms towards longer-term strategies that take audience needs into consideration. The adoption of design practices in the case studies came as a result of technological and economic challenges. In this process, a new form of heteronomy emerged: the *audience-oriented* form of *heteronomy* characterised by the influx of audience-oriented practitioners and innovation practices in the journalistic field.

The second RQ explored the areas of collaboration and struggle between audience-oriented practitioners and journalists, focusing on the meso level of analysis, the habitus. Audience-oriented practitioners are considered here new entrants to the journalistic field who brought with them fresh ideas and innovation practices. As the interviews suggested these practitioners were careful not to challenge the prevailing doxa, and they aimed to institutionalise the new practices by adopting frameworks to mitigate tensions and improve collaborative efforts. In the end, they aimed to bring about gradual change to the field, infusing the journalistic game with *empathetic traits*, a situation that can lead to the transformation of the journalistic doxa.

Lastly, the third RQ addressed the capital, which was defined as the micro level. This part explored how journalists perceived the audience-centric culture in their organisations. While journalists acknowledged the importance of engaging the audience, they also raised doubts about the use of audience analytics, saying they could undermine editorial standards. The discussion concluded that a new form of journalistic capital is emerging: the *meaningful engagement capital*, whereby journalists adopt those engagement practices that feel closer to their professional values.

Chapter 11. Conclusion and implications

By addressing the three research questions and investigating the application of design in four legacy newspapers, this research contributes to the growing body of knowledge about the interplay of design and journalism. A decision was made from the conception of this research to investigate the phenomenon holistically. Instead of focusing on one strand of design (e.g. UX design or strategy design) this project allowed the unravelling of its complexity as documented in design, and recently journalism, literature to reveal its use for audience-oriented innovation in the process. Similarly, the whole armoury of Bourdieu's field theory was used instead of focusing on a specific concept, which allowed for greater flexibility in the analysis. Perhaps the scope of the research was wide or ambitious to begin with; however, since the topic was finalised, there has been a number of scholarly publications on journalism and design, focusing on specific aspects of design in newsrooms (see Chapter 4). So far, and to the best of the researcher's knowledge, there has been no comprehensive research on the holistic application of design for audience-oriented innovation in legacy newspapers using practice theory, and more specifically Bourdieu's field theory, as its theoretical framework.

This research contributes to journalism and design scholarship with three main findings:

1. The themes that emerged from the case studies revealed a wide application of design and DT approaches across these news organisations. These included the more technical areas, such as UX and UI design, as well as the traditional aspects of visual design. However, design also played a central role in product development, audience research, strategy, innovation, and cross-functional collaboration. Most designers were able to discuss or bring up nearly all these themes, although this varied slightly based on their organisation and the specifics of their role. This confirmed the holistic nature of design, indicating that designers worked with different parts and teams within the organisation. However, all designers were found to lead or sit within product teams, with words "innovation", "research", or "strategy" included in their titles. By exploring designers' role in product development, this research shed light to some of the characteristics of "product" and "product-adjacent" roles within news organisations, that according to Royal and Kiesow (2021), remain relatively understudied.
2. The research discerned two design-led, audience-oriented innovation processes within the case studies: i. An externally facing innovation, concerned with the identification of audience needs to develop news-related products and services, ii.

And an internally facing innovation, focused on cross-disciplinary collaboration, interaction, and knowledge-sharing, aiming to bring about a mindset shift and achieve audience-oriented innovation outcomes. The first form of audience-oriented innovation is often more technologically based (e.g. UX, accessibility, and personalisation features), requires smaller teams, and easier to measure its impact (e.g. the adoption or the commercial success of a product). The second innovation outcome is more wide-reaching, involves larger teams, promotes a cultural change in the organisation, and feeds into strategic decisions. In this context, rather than focusing on the end-product, design is examined as a process of organising work around audience-oriented innovation, ensuring that the innovative mindset becomes ingrained in the organisational culture and navigates around boundary tensions.

3. Building on and advancing previous studies, which have utilised a multi-level Bourdieusian framework (Lindblom, Lindell, and Gidlund, 2022; Maares and Hanusch 2023; Wandels, Mast, and Van Den Bulck, 2023), this research explicates the following theoretical implications for journalism. While audience-oriented practitioners and approaches are an increasingly common occurrence in news organisations, they are still met with resistance from editors and journalists who are in a constant battle to protect journalism's professional boundaries and editorial autonomy. However, the changes in the journalistic field are evident: technological and economic pressures have resulted in what this research calls an *audience-oriented* form of *heteronomy*. This situation is characterised by the influx of new entrants and heterodox ideas revolving around audiences and their needs. To be accepted as legitimate players in the field, these new entrants do not challenge the journalistic doxa, but manipulate the conditions of practice to bring about gradual change in the field. By seeking to institutionalise the new audience-oriented practices they can transform the professional beliefs and self-explaining norms of journalistic practice, or what Bourdieu calls doxa. The journalistic game is infused with *empathetic traits,* inherent in design practices, whereby journalists are socialised to have empathy for their audiences and pay attention to their needs. However, how journalists accept these changes depends on their journalistic capital: the interviews revealed that journalists with high-level of journalistic capital can afford to partially ignore the changes or not fully incorporate them in their routines, while younger journalists who seek to change their position in the field tend to adopt audience-oriented practices more quickly. Nevertheless, interviews suggested that all journalists recognised the changes and critically adopted audience-oriented practices

that felt closer to their doxa, such as nuanced metrics, and qualitative forms of audience engagement and research, leading to the emergence of a new form of journalistic capital—the *meaningful engagement capital*.

11.1 Recommendations for practitioners and news organisations

Several key points emerged from this research, leading to a set of recommendations for practitioners and news organisations. These are as follows:

1. One problem commonly mentioned by designers during the interviews is a difficulty to measure the value and understand the scope of design within their organisations. This was due to the fact that, as discussed above, design has many different strands and designers are involved in multiple projects. In addition, in newspapers, design is often associated only with visual design or its more technical aspects of how to structure information on a page. This lack of clarity can sometimes impede design initiatives and cross-functional collaboration. Furthermore, putting the different design teams under the same umbrella, as *The Guardian* was doing at the time of the interviews, and creating frameworks and guidelines to document the associated processes can help overcome confusion over design's purpose, and overcome cultural barriers caused by a gap in knowledge and lack of communication in these news organisations.
2. Interviews with designers and journalists revealed that journalists are not consistently involved in design and other collaborative projects, while cross-functional collaboration and especially decision-making most commonly involves editors. However, this approach overlooks what NYTD2 emphasised: "the product is journalism". Therefore, increasing the involvement of journalists in cross-collaborative projects and decisions can perhaps result in improved journalistic products and services. Furthermore, the implementation of more experimental initiatives, such as the *Post's* 'Audience Innovation Lab', can help journalists become more familiar and adopt new audience-oriented practices and methods. On the other hand, journalists' exclusion from collaborative initiatives can obstruct innovation outcomes and block the organisations' ability to implement changes necessary for adapting to the new environment.
3. More design-led co-creation projects with the audience will inform audience research and idea generation, help news organisations involve the audience in the production side of journalism, foster emotional connections, and build brand affinity. This will

allow them to reconceptualise their audience engagement strategies to become more inclusive and less algorithmically driven, connect with audiences in meaningful ways and foster stronger relationships with them, and empower journalists to fulfil their civic role.

4. Journalists are motivated by journalistic ideals and favour changes that they believe increase the quality of their work. *The Guardian* case study showed that where journalistic ethos is strong and clearly expressed, changes are more readily embraced. An editorial mission clearly reflected in the organisation's strategic direction can help overcome resistance among journalists.

11.2 Limitations

This research has limitations that should be acknowledged. The first pertains to its highly qualitative nature. While it has been justified why the multiple case study design with in-depth interviews as the main data-collection method was the most appropriate approach for this study, its results are not generalisable. Furthermore, despite the interviews being rich in both value and depth, challenges in accessing these legacy leading newspapers resulted in a relatively limited total of 26 participants. A second notable limitation is the unequal distribution of interviewees across the four case studies. While *The New York Times* and *The Guardian* case studies benefitted from a higher number of interviewees, *The Washington Post* and *The Irish Times* had four participants each. In the case of *The Washington Post* interviews with more journalists would have expanded the discussion of how journalists perceive the audience-centric culture in their organisation. In the case of *The Irish Times* more interviews with designers were needed to better understand the applications of design in the organisation. Despite these setbacks, the depth of the interviews and the high-level participants provided valuable insights that informed the discussion. A third limitation is that the research focused on legacy newspapers. Despite differences between them, these news organisations have significant resources for investment and experimentation with innovation. While *The Irish Times* is a significantly smaller organisation with limited global reach compared to the other three, it remains a market leader in Ireland. A final limitation pertains to the Western-centric, economically and politically homogenised nature of the research, with all case studies belonging to the North Atlantic/Liberal media system. As explained in Chapter 5, this decision was made to limit the selection to English-speaking countries, thereby avoiding language barriers in the in-depth interviews, as well as ensuring access to leading newspapers that could be readily identified to apply design methods.

11.3 Future research

It is important to note that the four case studies examined here are predominantly liberal and/or centre-left, legacy newspapers, which, as discussed throughout the research, attract a specific demographic—typically college-educated, wealthy, and urban. This orientation influences decision-making on business models, how journalists perceive their roles and their audiences, and conversely, audiences' expectations for journalistic role performance. Future research can explore a more diverse selection of news organisations. For example, it can focus on how local newsrooms or public service media utilise design methods to reach out and engage their communities. Moreover, initiatives such as *The Washington Post's* 'Audience Innovation Lab' warrant closer examination, particularly regarding the design methods and tools used to train journalists. It can be examined whether such approaches lead to greater tensions—if, for instance, they are perceived by journalists as a top-down, market-driven process of managerial surveillance—or instead reaffirm the concept of *meaningful engagement capital* by broadening the scope of audience engagement methods, including the discovery of new forms of storytelling. Newsroom ethnography would be particularly useful in this context, as potential conflicts and tensions could be directly observed rather than relying solely on interview data.

Another area for future research could be *The Guardian's* design team reorganisation, focusing on how its design framework has evolved around the intuition of the newsroom to facilitate innovative outcomes. This could be examined using a diffusion of innovations lens, by focusing on how innovation processes are matched to organisational problems, specific needs, and structures, and how they are put into widespread use, and routinised (Rogers, 2003). Future research could also explore whether such collaborative frameworks for innovation infuse the journalistic game with *empathetic traits* around the needs of the audience and promote a cultural shift within the organisation by exposing journalists to design methods, greater interaction and collaboration, and foster creative autonomy, as discussed in Section 10.2.2.

Lastly, more attention should be given to how news organisations negotiate the ongoing hybridisation of news production by utilising HCD methods. Through the lens of the *audience-oriented* form of *heteronomy*, future research could explore how design-led collaborative methods, with a focus on co-creation and knowledge sharing, can facilitate the incorporation of journalistic ethics into the employment of AI tools in the newsroom, in the context of integrating technological capabilities, audience centricity, and editorial requirements (Diakopoulos 2020, Gutierrez Lopez *et al*., 2023). This approach could follow a CoP framework to investigate how newsrooms can organise around an area of interest and develop skills and expertise through shared practice, collective learning, interaction, and mutual engagement (Lave and Wenger, 1991).

Bibliography

About IDEO: our story, who we are, how we work (no date) *IDEO*. Available at: https://www.ideo.com/about (Accessed: 22 September 2022).

Ahva, L. (2017) 'How is participation practiced by "In-betweeners" of journalism?', *Journalism Practice*, 11(2–3), pp. 142–159. Available at: https://doi.org/10.1080/17512786.2016.1209084.

Ahva, L. and Steensen, S. (2019) 'Journalism theory', in K. Wahl-Jorgensen and T. Hanitzsch (eds) *The Handbook of Journalism Studies*. 2nd edn. New York: Routledge, pp. 38–54.

Aitamurto, T., Borges-Rey, E. and Diakopoulos, N. (2023) 'The future of design + journalism: a manifesto for bridging digital journalism and design', *Digital Journalism*, 11(3), pp. 399–410. Available at: https://doi.org/10.1080/21670811.2023.2185649.

Akhavan-Majid, R. and Wolf, G. (1991) 'American mass media and the myth of libertarianism: Toward an "elite power group"; theory', *Critical Studies in Mass Communication*, 8(2), pp. 139–151. Available at: https://doi.org/10.1080/15295039109366787.

Alexander, C. (1964) *Notes on the synthesis of form*. Cambridge: Harvard University Press.

Alexander, J.C. (1995) *Fin de siècle social theory: relativism, reduction, and the problem of reason*. London ; New York: Verso.

Allen, G. (2013) *Making national news: a history of Canadian Press*. Toronto ; Buffalo ; London: University of Toronto Press.

Altheide, D.L. and Snow, R.P. (1979) *Media logic*. Beverly Hills, CA: Sage Publications.

Alvesson, M. (2003) 'Beyond neopositivists, romantics, and localists: a reflexive approach to interviews in organizational research', *Academy of Management Review*, 28(1), pp. 13–33. Available at: https://doi.org/10.5465/amr.2003.8925191.

Ananny, M. and Crawford, K. (2015) 'A Liminal Press: Situating news app designers within a field of networked news production', *Digital Journalism*, 3(2), pp. 192–208. Available at: https://doi.org/10.1080/21670811.2014.922322.

Anderson, B. and Borges-Rey, E. (2019) 'Encoding the UX: User interface as a site of encounter between data journalists and their constructed audiences', *Digital Journalism*, 7(9), pp. 1253–1269. Available at: https://doi.org/10.1080/21670811.2019.1607520.

Anderson, C.W. (2012) 'Towards a sociology of computational and algorithmic journalism', *New Media & Society*, 15(7), pp. 1005–1021. Available at: https://doi.org/10.1177/1461444812465137.

Anderson, C.W. (2013) *Rebuilding the news: metropolitan journalism in the digital age*. Philadelphia: Temple University Press.

Anderson, C.W. (2015) ‘Between the Unique and the Pattern: Historical tensions in our understanding of quantitative journalism’, *Digital Journalism*, 3(3), pp. 349–363. Available at: https://doi.org/10.1080/21670811.2014.976407.

Anderson, C.W. (2019) ‘Journalism, online and offline’, in J. Curran and D. Hesmondhalgh (eds) *Media and Society*. 6th edn. New York: Bloomsbury Academic, pp. 227–243.

Anderson, C.W. and Revers, M. (2018) ‘From counter-power to counter-pepe: the vagaries of participatory epistemology in a digital age’, *Media and Communication*, 6(4), pp. 24–25. Available at: https://doi.org/10.17645/mac.v6i4.1492.

Anderson, C.W. and Schudson, M. (2020) ‘Objectivity, professionalism, and truth seeking’, in K. Wahl-Jorgensen and T. Hanitzsch (eds) *The Handbook of Journalism Studies*. 2nd edn. New York: Routledge, pp. 136–150.

Andoh-Arthur, J. (2019) ‘Gatekeepers in Qualitative Research’, in P. Atkison (ed.) *Sage research methods foundations*. London: SAGE Publications. Available at: https://methods-sagepub-com.dcu.idm.oclc.org/foundations/gatekeepers-in-qualitative-research (Accessed: 10 October 2023).

Andrews, L. (2020) *Facebook, the media and democracy: big tech, small state?* Oxon ; New York, NY: Routledge (Disruptions: Studies in digital Journalism).

Appelgren, E. (2017) ‘An Illusion of Interactivity: The paternalistic side of data journalism’, *Journalism Practice*, 12(3), pp. 308–325. Available at: https://doi.org/10.1080/17512786.2017.1299032.

Archer, A., De Castro, A., Valbuena, A., Zhu, D., Kohlmann, J., Gilbert, K., Murray, M., Clancy, N., Dixon, R. and Brossier, V. (2023) *Bringing dark mode to our news apps*, *Medium*. Available at: https://open.nytimes.com/bringing-dark-mode-to-our-news-apps-409266136ed4 (Accessed: 27 September 2023).

Archer, B.L. (1984) ‘Systematic method for designers’, in N. Cross (ed.) *Developments in design methodology*. Chichester: John Wiley & Sons, pp. 57–82.

Archer, M., Bhaskar, R., Collier, A., Lawson, T. and Norrie, A. (eds) (1998) *Critical realism: essential readings*. London, UK: Routledge.

Arguedas, A.R., Banerjee, S., Mont’Alverne, C., Toff , B., Fletcher, R. and Nielsen, R.K. (2023) *News for the powerful and privileged: how misrepresentation and underrepresentation of disadvantaged communities undermine their trust in news Reuters Institute for the Study of Journalism*. Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/news-powerful-and-privileged-how-misrepresentation-and-underrepresentation-disadvantaged (Accessed: 10 October 2024).

Assir, F. (no date) *The New York Times: Designing a mobile-first news app*, *Farah Assir*. Available at: https://www.farahassir.com/casestudies/peaks-5fj9w-l78pp-9xtxz-672n6 (Accessed: 20 May 2023).

August , M. (2022) *Dual Track Agile*, *Agile First*. Available at: https://agilefirst.io/dual-track-agile/ (Accessed: 20 August 2023).

Banjac, S. (2022) ‘Audiences as a discursive institution? How audience expectations disrupt the journalistic field’, in P. Ferrucci and S. Eldridge (eds) *The institutions changing journalism: Barbarians inside the gate*. Abingdon: Routledge, pp. 75–88.

Banjac, S., Juarez Miro, C. and Hanusch, F. (2024) ‘Expectations of journalistic actors in the digital age: A conceptual framework’, *Communication Theory*, 34(2), pp. 60–70. Available at: https://doi.org/10.1093/ct/qtae002.

Banks, S. (no date) *Outlook 21: Online and digital media forecasts*, *Core*. Available at: https://onecore.ie/intel/outlook/online-and-digital-media-forecasts/ (Accessed: 27 September 2021).

Barnard, S.R. (2018) *Citizens at the gates*. Cham: Palgrave Macmillan.

Barnhurst, K.G. and Nerone, J. (2009) ‘Journalism history’, in K. Wahl Jorgenson and T. Hanitzsch (eds) *The Handbook of Journalism Studies*. New York: Routledge, pp. 17–28.

Barthel, M., Matsa, K.E. and Worden, K. (2020) ‘Coronavirus-driven downturn hits newspapers hard as tv news thrives’, *Pew Research Center’s Journalism Project*. Available at: https://www.pewresearch.org/journalism/2020/10/29/coronavirus-driven-downturn-hits-newspapers-hard-as-tv-news-thrives/ (Accessed: 27 August 2021).

Beam, M.A. (2014) ‘Automating the news: how personalized news recommender system design choices impact news reception’, *Communication Research*, 41(8), pp. 1019–1041. Available at: https://doi.org/10.1177/0093650213497979.

Bechmann, A., Bilgrav-Nielsen, K. and Korsgaard Jensen, A.-L. (2016) ‘Data as a revenue model: sharewall as a payment method and editorial algorithm in the news industry’, *Nordicom Information*, 38(1), pp. 76–82.

Belair-Gagnon, V., Nelson, J.L. and Lewis, S.C. (2019) ‘Audience engagement, reciprocity, and the pursuit of community connectedness in public media journalism’, *Journalism Practice*, 13(5), pp. 558–575. Available at: https://doi.org/10.1080/17512786.2018.1542975.

Benson, R. (1999) ‘Field theory in comparative context: A new paradigm for media studies’, *Theory and Society*, 38(3), pp. 463–498.

Benson, R. (2006) ‘News media as a “journalistic field”: what Bourdieu adds to new institutionalism, and vice versa’, *Political Communication*, 23(2), pp. 187–202. Available at: https://doi.org/10.1080/10584600600629802.

Benson, R., Neff, T. and Hessérus, M. (2018) ‘Media ownership and public service news: how strong are institutional logics?’, *The International Journal of Press/Politics*, 23(3), pp. 275–298. Available at: https://doi.org/10.1177/1940161218782740.

Benson, R. and Neveu , E. (2005) ‘Introduction: Field theory as a work in progress’, in R. Benson and E. Neveu (eds) *Bourdieu and the journalistic field*. Cambridge: Polity Press.

Benton, J. (2014) ‘The leaked New York Times innovation report is one of the key documents of this media age’, *Nieman Lab*. Available at: https://www.niemanlab.org/2014/05/the-leaked-new-york-times-innovation-report-is-one-of-the-key-documents-of-this-media-age/ (Accessed: 20 May 2023).

Berger, A.A. (2014) *Media and communication research methods*. 3rd edn. Thousand Oaks, CA: Sage Publications.

Berry, M. (2019) 'Neoliberalism and the Media', in J. Curran and D. Hesmondhalgh (eds) *Media and Society*. 6th edn. New York: Bloomsbury Academic, pp. 57–82.

Bhaskar, R. (2008) *A realist theory of science*. New York: Routledge.

Billard, T.J. and Moran, R.E. (2023) 'Designing trust: design style, political ideology, and trust in "fake" news websites', *Digital Journalism*, 11(3), pp. 519–546. Available at: https://doi.org/10.1080/21670811.2022.2087098.

Bird, S.E. (2011) 'Are we all produsers now? Convergence and media audience practices', *Cultural Studies*, 25(4–5), pp. 502–516. Available at: https://doi.org/10.1080/09502386.2011.600532.

Blanchett, N., Mellado, C., Brin, C., Nemat Allah, S. and Vallender, C. (2023) 'Is it us or them? The challenge of getting journalists to participate in academic research', *Journalism Studies*, pp. 1–19. Available at: https://doi.org/10.1080/1461670X.2023.2216796.

Blassnig, S. and Esser, F. (2022) 'The "audience logic" in digital journalism: an exploration of shifting news logics across media types and time', *Journalism Studies*, 23(1), pp. 48–69. Available at: https://doi.org/10.1080/1461670X.2021.2000339.

Bleyer-Simon, K., Brogi, E., Carlini, R., Da Costa Leite Borges, D., Nenadic, I., Palmer, M., Parcu, P.L., Trevisan, M., Verza, S. and Zuffova, M. (2022) *Monitoring media pluralism in the digital era: Application of the Media Pluralism Monitor in the European Union, Albania, Montenegro, the Republic of North Macedonia, Serbia and Turkey in the year 2021*. Centre for Media Pluralism and Media Freedom. Available at: https://cmpf.eui.eu/mpm2022-results/.

Blöbaum, B. (2014) *Trust and journalism in a digital environment*. Reuters Institute. Available at: https://ora.ox.ac.uk/objects/uuid:1db59385-cdf4-4c00-8373-a940629922a1/download_file?f ile_format=pdf&safe_filename=Trust%2Band%2BJournalism%2Bin%2Ba%2BDigital%2 BE nvironment&type_of_work=Working+paper.

Blum Carrier, H. (2023) *LinkedIn*. Available at: https://www.linkedin.com/feed/update/urn:li:activity:7140724379247607808/ (Accessed: 8 January 2024).

Boczkowski, P.J. (2004) *Digitizing the news: Innovation in online newspapers*. Cambridge, Mass: MIT Press.

Boczkowski, P.J. and Mitchelstein, E. (2013) *The news gap: when the information preferences of the media and the public diverge*. Cambridge, Mass: The MIT Press.

Boczkowski, P.J. and Mitchelstein, E. (2017) 'The gap between the media and the public.', in M. Broersma and C. Peters (eds) *Rethinking journalism again: Societal role and public relevance in a digital age.* . Oxon: Routledge, pp. 175–187.

Bogner, A., Littig, B. and Menz, W. (2018) ‘Generating qualitative data with experts and elites’, in U. Flick (ed.) *The SAGE handbook of qualitative data collection*. Sage Publications, pp. 652–665.

Bond, S. (2014) ‘Jeff Bezos picks Fred Ryan of Politico to run Washington Post’, *Financial Times*. Available at: https://www.ft.com/content/29f586b0-32b9-11e4-b86e-00144feabdc0 (Accessed: 20 October 2022).

Borch, C. (2011) *Niklas Luhmann*. New York: Routledge.

Bossio, D. and Nelson, J.L. (2021) ‘Reconsidering innovation: situating and evaluating change in journalism’, *Journalism Studies*, 22(11), pp. 1377–1381. Available at: https://doi.org/10.1080/1461670X.2021.1972328.

Bourdieu, P. (1977) *Outline of a theory of practice*. Cambridge: Cambridge University Press.

Bourdieu, P. (1984) *Distinction: a social critique of the judgement of taste*. Cambridge: Harvard University Press.

Bourdieu, P. (1993) *Sociology in question*. London : Sage Publications.

Bourdieu, P. (2000) *Pascalian meditations*. Stanford, California: Stanford University Press.

Bourdieu, P. (2005) ‘The political field, the social science field, and the journalistic field. ’, in R.D. Benson and E. Neveu (eds) *Bourdieu and the journalistic field*. Cambridge ; Malden, MA: Polity, pp. 29–47.

Bourdieu, P. (1990b) *In other words: essays towards a reflexive sociology*. Stanford, California: Stanford University Press.

Bourdieu, P. (1998b) *On television*. New York: New Press.

Bourdieu, P. (1998a) *Practical reason: on the theory of action*. Cambridge: Polity Press.

Bourdieu, P. (1990a) *The logic of practice*. Cambridge: Polity Press.

Bourdieu, P. and Wacquant, L.J.D. (1992) *An invitation to reflexive sociology*. Chicago: University of Chicago Press.

Boyatzis, R.E. (1998) *Transforming qualitative information: thematic analysis and code development*. Thousand Oaks, CA: Sage Publications.

Brants, K. (2013) ‘Trust, cynicism, and responsiveness. The uneasy situation of journalism in democracy’, in C. Peters and M. Broersma (eds) *Rethinking journalism: Trust and participation in a transformed news landscape*. Oxon: Routledge, pp. 15–27.

Braun, V. and Clarke, V. (2006) ‘Using thematic analysis in psychology’, *Qualitative Research in Psychology*, 3(2), pp. 77–101. Available at: https://doi.org/10.1191/1478088706qp063oa.

Braun, V., Clarke, V., Hayfield, N. and Terry, G. (2019) 'Thematic analysis', in P. Liamputtong (ed.) *Handbook of research methods in health social sciences*. Sage, pp. 843–860.

Brenner, W., Uebernickel, F. and Abrell, T. (2016) 'Design thinking as mindset, process, and toolbox. Experiences from research and teaching at the University of St.Gallen', in W. Brenner and F. Uebernickel (eds) *Design thinking for innovation. Research and practice*. Switzerland: Springer.

Breuer, A. and Herman, T. (2018) 'The Guardian: The benefits of design thinking'. Available at: https://www.designcouncil.org.uk/our-resources/archive/articles/guardian-benefits-design-thinking (Accessed: 6 October 2021).

Bro, P., Hansen, K.R. and Andersson, R. (2016) 'Improving productivity in the newsroom? : deskilling, reskilling and multiskilling in the news media', *Journalism Practice*, 10(8), pp. 1005–1018. Available at: https://doi.org/10.1080/17512786.2015.1090883.

Brock, G. (2013) *Out of print: journalism and the business of news in the digital age*. London ; Philadelphia: Kogan Page .

Broersma, M. (2007) 'Form, style and journalistic strategies. An introduction.', in M. Broersma (ed.) *Form and style in journalism. European newspapers and the representation of news,1880–2005*. Leuven;Paris;Dudley, MA: Peeters, pp. ix–xxix.

Broersma, M. (2019) 'Audience engagement', *The International Encyclopedia of Journalism Studies*. Edited by T.P. Vos, F. Hanusch, D. Dimitrakopoulou, M. Geertsema-Sligh, and A. Sehl. John Wiley & Sons.

Broersma, M. (2020) 'Americanization, or: the Rhetoric of Modernity How European Journalism Adapted US Norms, Practices and Conventions', in A. Klaus, P. Preston, and S. Kinnerbrock (eds) *The Handbook of European Communication History*. Hoboken: Wiley Blackwell, pp. 403–419.

Broersma, M. and Peters, C. (2013) ' Introduction. Rethinking journalism: The structural transformation of a public good', in C. Peters and M. Broersma (eds) *Rethinking journalism: Trust and participation in a transformed news landscape*. Oxon: Routledge, pp. 1–12.

Broersma, M. and Singer, J.B. (2021) 'Caught between innovation and tradition: young journalists as normative change agents in the journalistic field', *Journalism Practice*, 15(6), pp. 821–838. Available at: https://doi.org/10.1080/17512786.2020.1824125.

Brown, T. (2009) *Change by design: how design thinking transforms organizations and inspires innovation*. New York: HarperCollins.

Brown, T. (2015) *The Irish Times: 150 years of influence*. London; New Delhi; New York; Sydney: Bloomsbury.

Brown, T. and Wyatt, J. (2010) 'Design thinking for social innovation', *Stanford Social Innovation Review*, 8(1), pp. 30–35.

Brownstein, M. (2023) ‘A “plain-spoken” way to share our location’, *The New York Times*, 26 May. Available at: https://www.nytimes.com/2023/05/26/insider/new-york-times-datelines.html (Accessed: 26 August 2023).

Bruns, A. (2008) *Blogs, Wikipedia, Second life, and beyond: from production to produsage*. New York: Peter Lang (Digital formations, v. 45).

Bruns, A. (2016) ‘Big data analysis’, in D. Domingo , A. Hermida , T. Witschge, and C.W. Anderson (eds) *The SAGE handbook of digital journalism*. London: SAGE, pp. 509–527.

Bruton, L. (2023) *Why UX testing is so important for your product in 2023 - UX Design Institute*. Available at: https://www.uxdesigninstitute.com/blog/why-ux-testing-is-so-important/ (Accessed: 3 December 2023).

Buchanan, R. (1992) ‘Wicked problems in design thinking’, *Design Issues*, 8(2), p. 5. Available at: https://doi.org/10.2307/1511637.

Bunce, M. (2019) ‘Management and resistance in the digital newsroom’, *Journalism*, 20(7), pp. 890–905. Available at: https://doi.org/10.1177/1464884916688963.

Byrne, D. (2022) ‘A worked example of Braun and Clarke’s approach to reflexive thematic analysis’, *Quality & Quantity*, 56(3), pp. 1391–1412. Available at: https://doi.org/10.1007/s11135-021-01182-y.

Cairncross, F. (2019) *The Cairncross Review: a sustainable future for journalism*, *GOV.UK*. Available at: https://www.gov.uk/government/publications/the-cairncross-review-a-sustainable-future-for-journalism (Accessed: 23 September 2021).

Camillus, J.C. (2008) ‘Strategy as a wicked problem’, *Harvard Business Review*, 1 May. Available at: https://hbr.org/2008/05/strategy-as-a-wicked-problem (Accessed: 24 April 2019).

Campoy, A., Kommenda, N. and Voisin, S.L. (2023) *On the hunt for climate disease*, *The Washington Post*. Available at: https://www.washingtonpost.com/climate-environment/interactive/2023/climate-disease-dengue-malaria-outbreaks-amazon/.

Carlson, M. (ed.) (2020) *Measurable journalism: digital platforms, news metrics and the quantified audience*. 1st edn. Routledge. Available at: https://doi.org/10.4324/9780429347108.

Carlson, M. and Lewis, S. (2020) ‘Boundary work’, in K. Wahl-Jorgensen and T. Hanitzsch (eds) *The handbook of journalism studies*. 2nd edn. New York: Routledge, pp. 123–136.

Carlson, M. and Usher, N. (2016) ‘News Startups as Agents of Innovation: For-profit digital news startup manifestos as metajournalistic discourse’, *Digital Journalism*, 4(5), pp. 563–581. Available at: https://doi.org/10.1080/21670811.2015.1076344.

Carvajal, M., García-Avilés, J.A. and González, J.L. (2012) ‘Crowdfunding and non-profit media: The emergence of new models for public interest journalism’, *Journalism Practice*, 6(5–6), pp. 638–647. Available at: https://doi.org/10.1080/17512786.2012.667267.

Castells, M. (2009) *The rise of the network society*. 2nd edn. Chichester, West Sussex; Malden, MA: Wiley-Blackwell (The information age: economy, society, and culture. Volume 1).

Chaplin, H. (2016) *Guide to journalism and design*, *Columbia Journalism Review*. Available at: https://www.cjr.org/tow_center_reports/guide_to_journalism_and_design.php/ (Accessed: 23 April 2019).

Cherubini, F. (2018) 'The rise of bridge roles in news organizations', *Nieman Lab*. Available at: https://www.niemanlab.org/2017/12/the-rise-of-bridge-roles-in-news-organizations/ (Accessed: 25 July 2022).

Cherubini, F. and Nielsen, R.K. (2016) *Editorial analytics: How news media are developing and using audience data and metrics*. Reuters Institute. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/editorial-analytics-how-news-media-are-developing-and-using-audience-data-and-metrics.

Chesbrough, H. and Bogers, M. (2014) 'Explicating open innovation: Clarifying an emerging paradigm for understanding innovation keywords.', in H. Chesbrough, W. Vanhaverbeke, and J. West (eds) *New Frontiers in Open Innovation*. Oxford: Oxford University Press, pp. 3–28.

Chesbrough, H.W. (2003) *Open innovation: the new imperative for creating and profiting from technology*. Boston, Mass: Harvard Business School Press.

Christians, C.G., Glasser, C.G., McQuail, D., Nordenstreng, K. and White, R.A. (2009) *Normative theories of the media: journalism in democratic societies*. Urbana; Chicago: University of Illinois Press (The history of communication).

Christin, A. (2020) *Metrics at work: journalism and the contested meaning of algorithms*. Princeton: Princeton University Press.

Clarke, V. and Braun, V. (2017) 'Thematic analysis', *The Journal of Positive Psychology*, 12(3), pp. 297–298. Available at: https://doi.org/10.1080/17439760.2016.1262613.

Coddington, M. (2014) 'Defending judgment and context in "original reporting": Journalists' construction of newswork in a networked age', *Journalism: Theory, Practice & Criticism*, 15(6), pp. 678–695. Available at: https://doi.org/10.1177/1464884913501244.

Coddington, M. (2015) 'Clarifying journalism's quantitative turn: A typology for evaluating data journalism, computational journalism, and computer-assisted reporting', *Digital Journalism*, 3(3), pp. 331–348. Available at: https://doi.org/10.1080/21670811.2014.976400.

Coddington, M., Lewis, S.C. and Belair-Gagnon, V. (2021) 'The imagined audience for news: where does a journalist's perception of the audience come from?', *Journalism Studies*, 22(8), pp. 1028–1046. Available at: https://doi.org/10.1080/1461670X.2021.1914709.

Cohen, N.S. (2019) 'At work in the digital newsroom', *Digital Journalism*, 7(5), pp. 571–591. Available at: https://doi.org/10.1080/21670811.2017.1419821.

Cornia, A. (2017) ‘Experimenting with innovation: Europe’s legacy media’, *European Journalism Observatory - EJO*. Available at: https://en.ejo.ch/digital-news/experimenting-with-innovation-legacy-media (Accessed: 30 September 2021).

Cornia, A., Sehl, A. and Nielsen, R.K. (2020) ‘“We no longer live in a time of separation”: A comparative analysis of how editorial and commercial integration became a norm’, *Journalism*, 21(2), pp. 172–190. Available at: https://doi.org/10.1177/1464884918779919.

Cornia, A., Sehl, A., Simon, F. and Nielsen , R.K. (2017) *Pay models in European news*, *Reuters Institute for the Study of Journalism*. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/pay-models-european-news (Accessed: 29 August 2021).

Costera Meijer, I. (2013) ‘Valuable journalism: A search for quality from the vantage point of the user’, *Journalism*, 14(6), pp. 754–770. Available at: https://doi.org/10.1177/1464884912455899.

Costera Meijer, I. (2020) ‘Understanding the audience turn in journalism: from quality discourse to innovation discourse as anchoring practices 1995–2020’, *Journalism Studies*, 21(16), pp. 2326–2342. Available at: https://doi.org/10.1080/1461670X.2020.1847681.

Costera Meijer, I. (2022) ‘What is valuable journalism? Three key experiences and their challenges for journalism scholars and practitioners*’, *Digital Journalism*, 10(2), pp. 230–252. Available at: https://doi.org/10.1080/21670811.2021.1919537.

Cottle, S. (2009) ‘Journalism and Globalization’, in K. Wahl-Jorgensen and T. Hanitzsch (eds) *The handbook of journalism studies*. New York: Routledge, pp. 341–356.

Couldry, N. (2003) ‘Media meta-capital: Extending the range of Bourdieu’s field theory’, *Theory and Society*, 32(5/6), pp. 653–677. Available at: https://doi.org/10.1023/B:RYSO.0000004915.37826.5d.

Couldry, N. (2004) ‘Theorising media as practice’, *Social Semiotics*, 14(2), pp. 115–132. Available at: https://doi.org/10.1080/1035033042000238295.

Couldry, N., Livingstone, S. and Markham, T. (2010) *Media consumption and public engagement. Beyond the presumption of attention*. London: Palgrave Macmillan UK. Available at: https://doi.org/10.1057/9780230800823_10.

Creswell, J.W. (2007) *Qualitative inquiry & research design: choosing among five approaches*. 2nd ed. Thousand Oaks; London; New Delhi: Sage Publications.

Creswell, J.W. and Creswell, J.D. (2018) *Research design: qualitative, quantitative, and mixed methods approaches*. 5th edn. Thousand Oaks, California: Sage Publications.

Crilley, R. and Gillespie, M. (2019) ‘What to do about social media? Politics, populism and journalism’, *Journalism*, 20(1), pp. 173–176. Available at: https://doi.org/10.1177/1464884918807344.

Cross, N. (1992) ‘Research in design thinking’, in N. Cross, K. Dorst, and N. Roozenburg (eds) *Research in design thinking*. Delft University Press, pp. 3–10.

Cross, N. (1997) ‘Creativity in design: analyzing and modeling the creative leap’, *Leonardo*, 30(4), p. 311. Available at: https://doi.org/10.2307/1576478.

Cross, N. (2001) ‘Designerly ways of knowing: design discipline versus design science’, *Design Issues*, 17(3), pp. 49–55. Available at: https://doi.org/10.1162/074793601750357196.

Curran, J. (2011) *Media and democracy*. Oxford ; New York: Routledge.

DaCosta, M. (2018a) *Part I: An Interview with Brian Hamman, VP of Engineering for News Products at The New York Times*. Available at: https://www.enigma.com/blog/part-one-interview-brian-hamman (Accessed: 23 April 2019).

DaCosta, M. (2018b) *Part II: An Interview with Brian Hamman, VP of Engineering for News Products at The New York Times.* . Available at: https://www.enigma.com/blog/part-two-interview-brian-hamman (Accessed: 23 April 2019).

Dam, R.F. and Siang, T.Y. (2019) *What is design thinking and why is it so popular?*, *The Interaction Design Foundation*. Available at: https://www.interaction-design.org/literature/article/what-is-design-thinking-and-why-is-it-so-popular (Accessed: 8 September 2020).

Darcy, O. (2024) *The Washington Post publisher disclosed the paper lost $77 million last year. Here’s his plan to turn it around | CNN Business*, *CNN*. Available at: https://www.cnn.com/2024/05/23/media/washington-post-will-lewis-turnaround-plan/index.html (Accessed: 24 May 2024).

Davis, B.M. (2010) ‘Creativity & innovation in business 2010 teaching the application of design thinking to business’, *Procedia - Social and Behavioral Sciences*, 2(4), pp. 6532–6538. Available at: https://doi.org/10.1016/j.sbspro.2010.04.062.

De Maeyer, J. (2020) ‘“A Nose for News”: From (News) Values to Valuation’, *Sociologica*, 14(2), pp. 109–132. Available at: https://doi.org/https://doi.org/10.6092/issn.1971-8853/11176.

Debré, E. (2021) ‘The media used trump to sell subscriptions. Now what?’, *Slate*, 12 May. Available at: https://slate.com/business/2021/05/media-fundraising-trump-bump-slump.html (Accessed: 20 October 2022).

Denzin, N.K. (2009) *The research act: a theoretical introduction to sociological methods*. New York: Routledge.

Denzin, N.K. and Lincoln, Y.S. (2003) ‘Introduction: The discipline and practice of qualitative research’, in N.K. Denzin and Y.S. Lincoln (eds) *Collecting and interpreting qualitative materials*. 2nd edn. Thousand Oaks, California; London, United Kingdom; New Delhi, India: Sage Publications.

Denzin, N.K. and Lincoln, Y.S. (2005) ‘Introduction: The discipline and practice of qualitative research.’, in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 3rd edn. Thousand Oaks, California: Sage Publications, pp. 1–32.

Design Council (2018) *The design economy 2018 – The Guardian*, *Design Council*. Available at: https://www.designcouncil.org.uk/resources/case-study/design-economy-2018-guardian (Accessed: 6 October 2021).

Design thinking. A guide for prototyping and testing solutions for the sustainable development goals (2017). UNDP.

Deuze, M. (2003) ‘The web and its journalisms: considering the consequences of different types of newsmedia online’, *New Media & Society*, 5(2), pp. 203–230. Available at: https://doi.org/10.1177/1461444803005002004.

Deuze, M. (2005) ‘What is journalism?: Professional identity and ideology of journalists reconsidered’, *Journalism*, 6(4), pp. 442–464. Available at: https://doi.org/10.1177/1464884905056815.

Deuze, M. (2007) ‘Convergence culture in the creative industries’, *International Journal of Cultural Studies*, 10(2), pp. 243–263. Available at: https://doi.org/10.1177/1367877907076793.

Deuze, M. (2008) ‘The changing context of news work: Liquid journalism and monitorial citizenship’, *International Journal of Communication*, 2, pp. 848–865.

Deuze, M. and Witschge, T. (2018) ‘Beyond journalism: Theorizing the transformation of journalism’, *Journalism*, 19(2), pp. 165–181. Available at: https://doi.org/10.1177/1464884916688550.

Diakopoulos, N. (2019) ‘Towards a design orientation on algorithms and automation in news production’, *Digital Journalism*, 7(8), pp. 1180–1184. Available at: https://doi.org/10.1080/21670811.2019.1682938.

Diakopoulos, N. (2020) ‘Computational news discovery: towards design considerations for editorial orientation algorithms in journalism’, *Digital Journalism*, 8(7), pp. 945–967. Available at: https://doi.org/10.1080/21670811.2020.1736946.

Dimitrakopoulou, D. and Lewis, S.C. (2023) ‘The Generative Dialogue Framework and the pursuit of better listening by journalists: A design-centered approach for more constructive conversations with audiences’, *Digital Journalism*, 11(3), pp. 547–568. Available at: https://doi.org/10.1080/21670811.2022.2075415.

DiTrolio, M. (2022) ‘Inside the making of inside the times’, *The New York Times*, 20 November. Available at: https://www.nytimes.com/2022/11/20/insider/inside-the-making-of-inside-the-times.html (Accessed: 26 May 2023).

Djinis, E. (2024) ‘How a youth-focused experiment queued up The Washington Post to cover an unprecedented election’, *Poynter*, 4 November. Available at: https://www.poynter.org/reporting-editing/2024/washington-post-next-gen-z-election-coverage/ (Accessed: 8 November 2024).

Dodds, T., Geboers, M. and Boukes, M. (2024) ‘“It became no man’s land”: the burden of moderating online harassment in newswork’, *Journalism Practice*, pp. 1–18. Available at: https://doi.org/10.1080/17512786.2024.2387664.

Doherty, S. (2016) ‘NewsCubed: Journalism through design’, *Journalism Practice*, 10(5), pp. 569–588. Available at: https://doi.org/10.1080/17512786.2015.1049645.

Doherty, S., Johnston, J. and Matthews, B. (2023) ‘Materialising new forms of journalism: a process model’, *Digital Journalism*, 11(3), pp. 504–518. Available at: https://doi.org/10.1080/21670811.2022.2087097.

Domingo, D., Quandt, T., Heinonen, A., Paulussen, S., Singer, J.B. and Vujnovic, M. (2008) ‘Participatory journalism practices in the media and beyond: an international comparative study of initiatives in online newspapers’, *Journalism Practice*, 2(3), pp. 326–342. Available at: https://doi.org/10.1080/17512780802281065.

Drew, K.K. and Thomas, R.J. (2018) ‘From Separation to Collaboration: Perspectives on editorial–business collaboration at United States news organizations’, *Digital Journalism*, 6(2), pp. 196–215. Available at: https://doi.org/10.1080/21670811.2017.1317217.

Eddy, K. (2023) *Unpacking news participation and online engagement over time*. Reuters Intitute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2023/unpacking-news-participation-online%20engagement-over-time (Accessed: 10 October 2024).

Eide, M. (2014) ‘Accounting for journalism’, *Journalism Studies*, 15(5), pp. 679–688. Available at: https://doi.org/10.1080/1461670X.2014.891856.

Eide, M. and Knight, G. (1999) ‘Public/private service: service journalism and the problems of everyday life’, *European Journal of Communication*, 14(4), pp. 525–547. Available at: https://doi.org/10.1177/0267323199014004004.

Eisenhardt, K.M. (1989) ‘Building theories from case study research’, *The Academy of Management Review*, 14(4), p. 532. Available at: https://doi.org/10.2307/258557.

Ekdale, B., Singer, J.B., Tully, M. and Harmsen, S. (2015) ‘Making change: diffusion of technological, relational, and cultural innovation in the newsroom’, *Journalism & Mass Communication Quarterly*, 92(4), pp. 938–958. Available at: https://doi.org/10.1177/1077699015596337.

Ekström, M. and Westlund, O. (2019) ‘Epistemology and journalism’, *Oxford Encyclopedia of Journalism Studies* [Preprint]. Available at: https://doi.org/https://doi.org/10.1093/acrefore/9780190228613.013.806.

Elliott, C. (2015) ‘The Guardian’s international homepage opens up new worlds of possibility’, *The Guardian*, 12 October. Available at: https://www.theguardian.com/commentisfree/2015/oct/12/guardian-international-homepage-opens-up-new-worlds-of-possibility (Accessed: 23 September 2022).

Ellison, S. and Izadi, E. (2023) ‘Washington Post lays off 20 newsroom employees’, *Washington Post*, 24 January. Available at: https://www.washingtonpost.com/media/2023/01/24/washington-post-layoffs/ (Accessed: 3 November 2023).

Elridge, S.A. (2017) ‘The Digital Journalist: The journalistic field, boundaries and disquieting change’, in B. Franklin and S.A. Elridge (eds) *The Routledge Companion to Digital Journalism Studies*. Oxon: Routledge, pp. 44–54.

Elvestad, E. and Phillips, A. (2018) *Misunderstanding news audiences: seven myths of the social media era*. London ; New York: Routledge.

Ember, S. (2016) ‘New York Times to shelve NYT Now app’, *The New York Times*, 18 August. Available at: https://www.nytimes.com/2016/08/19/business/media/new-york-times-to-shelve-nyt-now-app.html (Accessed: 24 September 2022).

Farhi, P. (2013) ‘Washington Post to be sold to Jeff Bezos, the founder of Amazon’, *Washington Post*. Available at: https://www.washingtonpost.com/national/washington-post-to-be-sold-to-jeff-bezos/2013/08/05/ca537c9e-fe0c-11e2-9711-3708310f6f4d_story.html (Accessed: 20 October 2022).

Fawzi, N. (2019) ‘Untrustworthy news and the media as “enemy of the people? ” How a populist worldview shapes recipients’ attitudes toward the media’, *The International Journal of Press/Politics*, 24(2), pp. 146–164. Available at: https://doi.org/10.1177/1940161218811981.

Fenton, N. (2010) ‘Drowning or waving? New media, journalism and democracy’, in N. Fenton (ed.) *New media, old news*. Los Angeles; London; New Delhi; Singapore; Washington DC: Sage Publications, pp. 3–16.

Ferrer-Conill, R. and Tandoc, E.C. (2018) ‘The audience-oriented editor: making sense of the audience in the newsroom’, *Digital Journalism*, 6(4), pp. 436–453. Available at: https://doi.org/10.1080/21670811.2018.1440972.

Ferrucci, P. and Kuhn, T. (2022) ‘Remodeling the hierarchy: an organization-centric model of influence for media sociology research’, *Journalism Studies*, 23(4), pp. 525–543. Available at: https://doi.org/10.1080/1461670X.2022.2032805.

Ferrucci, P., Nelson, J.L. and Davis, M.P. (2020) ‘From “Public Journalism” to “Engaged Journalism”: Imagined audiences and denigrating discourse’, *International Journal of Communication*, 14, pp. 1586–1604. Available at: https://ijoc.org/index.php/ijoc/article/view/11955.

Fink, K. (2019) ‘The biggest challenge facing journalism: A lack of trust’, *Journalism*, 20(1), pp. 40–43. Available at: https://doi.org/10.1177/1464884918807069.

Fischer, S. (2020) *Trump bump: NYT and WaPo digital subscriptions tripled since 2016*. Available at: https://www.axios.com/2020/11/24/washington-post-new-york-times-subscriptions (Accessed: 20 October 2022).

Fisher, C. (2016) ‘The trouble with “trust” in news media’, *Communication Research and Practice*, 2(4), pp. 451–465. Available at: https://doi.org/10.1080/22041451.2016.1261251.

Fletcher, A.J. (2017) ‘Applying critical realism in qualitative research: methodology meets method’, *International Journal of Social Research Methodology*, 20(2), pp. 181–194. Available at: https://doi.org/10.1080/13645579.2016.1144401.

Fletcher, R. (2019) *The rise of populism and the consequences for news and media use*, *Reuters Institute Digital News Report*. Available at: https://www.digitalnewsreport.org/survey/2019/the-rise-of-populism-and-the-consequences-for-news-and-media-use/ (Accessed: 17 September 2024).

Fletcher, R. (2020a) *The truth behind filter bubbles: Bursting some myths | Reuters Institute for the Study of Journalism*. Reuters Institute. Available at:

https://reutersinstitute.politics.ox.ac.uk/news/truth-behind-filter-bubbles-bursting-some-myths (Accessed: 19 February 2023).

Fletcher, R. (2020b) *Trust will get worse before it gets better*, *Reuters Institute Digital News Report*. Available at: https://www.digitalnewsreport.org/publications/2020/trust-will-get-worse-gets-better/ (Accessed: 11 May 2020).

Fletcher, R. and Nielsen, R.K. (2017) 'Paying for Online News: A comparative analysis of six countries', *Digital Journalism*, 5(9), pp. 1173–1191. Available at: https://doi.org/10.1080/21670811.2016.1246373.

Fletcher, R. and Nielsen, R.K. (2021) *How do people think about the financing of the commercial news media?*, *Reuters Institute for the Study of Journalism*. Digital News Report 2021. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021/how-do-people-think-about-financing-commercial-news-media (Accessed: 27 September 2021).

Fletcher, R. and Park, S. (2017) 'The impact of trust in the news media on online news consumption and participation', *Digital Journalism*, 5(10), pp. 1281–1299. Available at: https://doi.org/10.1080/21670811.2017.1279979.

Flus, M. and Hurst, A. (2021) 'Design at hackathons: new opportunities for design research', *Design Science*, 7, p. e4. Available at: https://doi.org/10.1017/dsj.2021.1.

Flynn, K. (2021) *As subscriber growth slows, The New York Times reveals 100 million registered users | CNN Business*, *CNN*. Available at: https://www.cnn.com/2021/05/05/media/new-york-times-earnings-q1-2021/index.html (Accessed: 15 March 2023).

Folkenflik, D. (2024) 'Over 200,000 subscribers flee "Washington Post" after Bezos blocks Harris endorsement', *NPR*, 29 October. Available at: https://www.npr.org/2024/10/28/nx-s1-5168416/washington-post-bezos-endorsement-president-cancellations-resignations (Accessed: 12 November 2024).

Fortunati, L. and O'Sullivan, J. (2021) 'Reading and writing news: Why consumption and production modes matter', *Journalism*, 22(9), pp. 2421–2436. Available at: https://doi.org/10.1177/1464884919870042.

Friess, E. (2010) 'The sword of data: does human-centered design fulfill its rhetorical responsibility?', *Design Issues*, 26(3), pp. 40–50. Available at: https://doi.org/10.1162/DESI_a_00028.

Gajardo, C., Costera Meijer, I. and Domingo, D. (2023) 'From abstract news users to living citizens: assessing audience engagement through a professional lens', *Journalism Practice*, 17(3), pp. 508–524. Available at: https://doi.org/10.1080/17512786.2021.1925949.

Gallo, A. (2017) 'A refresher on A/B testing', *Harvard Business Review*, 28 June. Available at: https://hbr.org/2017/06/a-refresher-on-ab-testing (Accessed: 30 November 2023).

Gallo, M. (2020) *Journalism has been disrupted. Can product thinking save it?*, *Northwestern University Knight Lab*. Available at:

https://knightlab.northwestern.edu/2020/11/09/journalism-disrupted-can-product-thinking-save-it/ (Accessed: 22 March 2022).

Gans, H.J. (1979) *Deciding what's news: a study of CBS evening news, NBC nightly news, Newsweek, and Time*. New York: Random House.

Geidner, N. and D'Arcy, D. (2015) 'The effects of micropayments on online news story selection and engagement', *New Media & Society*, 17(4), pp. 611–628. Available at: https://doi.org/10.1177/1461444813508930.

Gherardi, S. (2009) 'Practice? It's a matter of taste!', *Management Learning*, 40(5), pp. 535–550. Available at: https://doi.org/10.1177/1350507609340812.

Gibbons, Sarah (2018) *Empathy mapping: the first step in design thinking*, *Nielsen Norman Group*. Available at: https://www.nngroup.com/articles/empathy-mapping/ (Accessed: 12 August 2023).

Gibbons, S (2018) *Journey Mapping 101*, *Nielsen Norman Group*. Available at: https://www.nngroup.com/articles/journey-mapping-101/ (Accessed: 29 July 2021).

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), p. 781. Available at: https://doi.org/10.2307/2095325.

Gilbert, J. (no date) 'Human-centered journalism', *Nieman Lab*. Available at: https://www.niemanlab.org/2020/12/human-centered-journalism/ (Accessed: 5 September 2021).

GNM press office (2016) 'The Guardian outlines three year business plan to staff', *The Guardian*, 25 January. Available at: https://www.theguardian.com/gnm-press-office/2016/jan/25/the-guardian-outlines-three-year-business-plan-to-staff (Accessed: 6 October 2021).

GNM press office (2018) 'Guardian and Observer launch new tabloid format and digital redesign', *The Guardian*, 14 January. Available at: https://www.theguardian.com/gnm-press-office/2018/jan/14/guardian-and-observer-launch-new-tabloid-format-and-digital-redesign (Accessed: 6 October 2021).

GNM press office (2019) 'Guardian Media Group announces outcome of three year turnaround strategy', *The Guardian*, 1 May. Available at: https://www.theguardian.com/gnm-press-office/2019/may/01/guardian-media-group-announces-outcome-of-three-year-turnaround-strategy (Accessed: 7 October 2021).

GNM press office (2023) 'The Guardian launches new Europe edition alongside global marketing campaign', *The Guardian*, 20 September. Available at: https://www.theguardian.com/gnm-press-office/2023/sep/20/the-guardian-launches-new-europe-edition-alongside-global-marketing-campaign (Accessed: 2 December 2023).

Goode, L. (2009) 'Social news, citizen journalism and democracy', *New Media & Society*, 11(8), pp. 1287–1305. Available at: https://doi.org/10.1177/1461444809341393.

Goyanes, M., Demeter, M. and de Grado, L. (2022) 'The culture of free: Construct explication and democratic ramifications for readers' willingness to pay for public affairs news', *Journalism*, 23(1), pp. 207–223. Available at: https://doi.org/10.1177/1464884920913436.

Granger, J. (2023) *From problem solver to innovator: how bridge roles have evolved in newsrooms | Media news*. Available at: https://www.journalism.co.uk/news/from-problem-solver-to-opportunist-how-bridge-roles-have-evolved-in-newsrooms/s2/a1015423/ (Accessed: 25 July 2023).

Grubenmann, S. (2016) 'Matrix Organisation: The design of cross-beat teamwork in newsrooms', *Journalism Practice*, 11(4), pp. 458–476. Available at: https://doi.org/10.1080/17512786.2016.1140588.

Guardian Media Group (2023) *Guardian Media Group plc. Annual report and consolidated financial statements for the year ended 2 April 2023*. Guardian Media Group.

Guardian Media Group (no date) *The Guardian*. Available at: https://www.theguardian.com/about/organisation (Accessed: 8 March 2023).

Guardian staff (2024) 'What is the "Deeply read" list?', *The Guardian*, 28 February. Available at: https://www.theguardian.com/info/2024/feb/28/what-is-the-deeply-read-list (Accessed: 3 March 2024).

Guba, E.G. (1990) *The Paradigm dialog*. Newbury Park, California: Sage Publications.

Gulyás, Á. (2016) 'Social media and journalism. Hybridity, convergence, changing relationship with the audience, and fragmentation', in S.A. Elridge II and B. Franklin (eds) *The Routledge Companion to Digital Journalism Studies*. 1st edn. London: Routledge, pp. 396–404.

Gutierrez Lopez, M., Missaoui, S., Makri, S., Porlezza, C., Cooper , G. and MacFarlane, A. (2019) 'Journalists as Design Partners for AI. ', in. Glasgow, UK.

Gutierrez Lopez, M., Porlezza, C., Cooper, G., Makri, S., MacFarlane, A. and Missaoui, S. (2023) 'A question of design: strategies for embedding AI-driven tools into journalistic work routines', *Digital Journalism*, 11(3), pp. 484–503. Available at: https://doi.org/10.1080/21670811.2022.2043759.

Haberman, M. and Swan, J. (2023) 'Trump says he hopes meadows will remain "loyal" to him in election case', *The New York Times*, 17 September. Available at: https://www.nytimes.com/2023/09/17/us/politics/trump-meadows-meet-the-press.html (Accessed: 7 October 2023).

Habermas, J. (1991) *The Structural transformation of the public sphere: an inquiry into a category of bourgeois society*. Cambridge, Mass: MIT Press.

Hagardon, A. (2003) *How breakthroughs happen: the surprising truth about how companies innovate*. Boston, MA: Harvard Business School Press.

Hallin, D.C. (2005) 'Field theory, differentiation theory, and comparative media research', in R. Benson and E. Neveu (eds) *Bourdieu and the journalistic field*. Cambridge; Malden, MA: Polity Press, pp. 224–243.

Hallin, D.C. and Mancini, P. (2004) *Comparing media systems: three models of media and politics*. Cambridge ; New York: Cambridge University Press.

Hallin, D.C. and Mancini, P. (2017) ‘Ten years after *comparing media systems* : what have we learned?’, *Political Communication*, 34(2), pp. 155–171. Available at: https://doi.org/10.1080/10584609.2016.1233158.

Hancock, C. (2018) *Irish Times completes acquisition of ‘Examiner’ and Landmark titles*, *The Irish Times*. Available at: https://www.irishtimes.com/business/media-and-marketing/irish-times-completes-acquisition-of-examiner-and-landmark-titles-1.3560212 (Accessed: 22 June 2023).

Hancock, C. (2023) *Irish Times group reports rise in turnover but higher costs push it into red*, *The Irish Times*. Available at: https://www.irishtimes.com/business/2023/09/28/irish-times-group-reports-record-turnover-but-higher-costs-push-it-into-red/ (Accessed: 20 October 2023).

Hanitzsch, T. (2007) ‘Deconstructing journalism culture: toward a universal theory’, *Communication Theory*, 17(4), pp. 367–385. Available at: https://doi.org/10.1111/j.1468-2885.2007.00303.x.

Hanusch, F. and Banjac, S. (2019) ‘Studying role conceptions in the digital age. A critical appraisal’, in S. Elridge and B. Franklin (eds) *The Routledge Handbook of Developments in Digital Journalism* . Oxon: Routledge, pp. 28–39.

Hartley, J. (1996) *Popular reality: Journalism, modernity, popular culture*. London: Arnold .

Hasso Plattner Institute of Design at Stanford (no date) ‘An introduction to design thinking. Process guide. ’. Available at: https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf (Accessed: 27 September 2020).

Hayes, K. and O’ Sullivan, M. (2024) ‘Labouring the news: Management control strategies and work intensification in the digital newsroom’, *Journalism*, 25(6), pp. 1346–1364. Available at: https://doi.org/10.1177/14648849231174059.

Hazard Owen, L. (2015) ‘Two out of two news organizations recommend user research’, *Nieman Lab*. Available at: https://www.niemanlab.org/2015/07/two-out-of-two-news-organizations-recommend-user-research/ (Accessed: 3 October 2021).

Hazard Owen, L. (2018) ‘With “Times in Person,” The New York Times puts its national journalists in front of local crowds’, *Nieman Lab*. Available at: https://www.niemanlab.org/2018/01/with-times-in-person-the-new-york-times-puts-its-national-journalists-in-front-of-local-crowds/ (Accessed: 22 November 2022).

Heinonen, A. (2011) ‘The journalist’s relationship with users’, in J.B. Singer, A. Hermida, D. Domingo, A. Heinonen, S. Paulussen, T. Quandt, Z. Reich, and M. Vujnovic (eds) *Participatory Journalism: Guarding Open Gates at Online Newspapers*. Malden, MA: Wiley-Blackwell, pp. 34–55.

Heinonen, A. and Luostarinen, H. (2008) ‘Reconsidering “journalism” for journalism research’, in M. Löffelholz and D. Weaver (eds) *Global journalism research: Theories, methods, findings, future*. Malden, MA: Blackwell Publishing, pp. 227–239.

Hellmueller, L., Vos, T.P. and Poepsel, M.A. (2013) ‘Shifting journalistic capital? Transparency and objectivity in the twenty-first century’, *Journalism Studies*, 14(3), pp. 287–304. Available at: https://doi.org/10.1080/1461670X.2012.697686.

Hendrickx, J. and Picone, I. (2020) ‘Innovation beyond the buzzwords: the rocky road towardsa digital first-based newsroom’, *Journalism Studies*, 21(14), pp. 2025–2041. Available at: https://doi.org/10.1080/1461670X.2020.1809494.

Herman, E.S. and Chomsky, N. (1994) *Manufacturing consent: the political economy of the mass media*. London: Vintage (A Vintage original).

Hermida, A. (2011) ‘Mechanisms of participation: How audience options shape the conversation’, in J. B. Singer, A. Hermida, D. Domingo, A. Heinonen, S. Paulussen, T. Quandt, Z. Reich, and M. Vujnovic, *Participatory journalism: Guarding open gates at online newspapers*. Chichester: Wiley-Blackwell, pp. 13–33.

Hermida, A. and Thurman, N. (2008) ‘A clash of cultures: The integration of user-generated content within professional journalistic frameworks at British newspaper websites’, *Journalism Practice*, 2(3), pp. 343–356. Available at: https://doi.org/10.1080/17512780802054538.

Hermida, A. and Young, M.L. (2021) ‘ Journalism innovation in a time of survival.’, in M. Luengo and S. Herrera-Damas (eds) *News media innovation reconsidered: Ethics and values in a creative reconstruction of journalism*. Wiley, pp. 40–52.

Hirsch, L., Draper, K. and Rosman, K. (2022) ‘New York Times Co. To buy The Athletic for $550 million in cash’, *The New York Times*, 6 January. Available at: https://www.nytimes.com/2022/01/06/business/new-york-times-the-athletic.html (Accessed: 8 August 2023).

Hollander, G. (2013) ‘The Washington Post to mirror Telegraph model as it goes behind paywall’, *Press Gazette*, 6 June. Available at: https://pressgazette.co.uk/news/the-washington-post-to-mirror-telegraph-model-as-it-goes-behind-paywall/ (Accessed: 20 October 2022).

Holm, A.B. (2016) ‘Could freemium models work for legacy newspapers?’, *Nordicom Information*, 38(1), pp. 83–87.

Holmlid, S. (2009) ‘Participative, co-operative, emancipatory: From participatory design to service design’, in *Linköping Electronic Conference Proceedings*. Oslo: Linköping University Electronic Press.

Hoolohan, C. and Browne, A.L. (2020) ‘Design thinking for practice-based intervention: Co-producing the change points toolkit to unlock (Un)sustainable practices’, *Design Studies*, 67, pp. 102–132. Available at: https://doi.org/10.1016/j.destud.2019.12.002.

Hujanen, J. (2016) ‘Participation and the blurring values of journalism’, *Journalism Studies*, 17(7), pp. 871–880. Available at: https://doi.org/10.1080/1461670X.2016.1171164.

Ignatow, G. and Robinson, L. (2017) ‘Pierre Bourdieu: theorizing the digital’, *Information, Communication & Society*, 20(7), pp. 950–966. Available at: https://doi.org/10.1080/1369118X.2017.1301519.

Innovation (2014). The New York Times, pp. 1–96. Available at: https://sriramk.com/memos/nytimes-innovation-report.pdf (Accessed: 10 October 2022).

Introducing the Reader Center (2017) *The New York Times Company*. Available at: https://www.nytco.com/press/introducing-the-reader-center/ (Accessed: 22 November 2022).

Izadi, E. and Sommer, W. (2023) 'Washington Post cuts follow rapid expansion, unmet revenue projections', *Washington Post*, 11 October. Available at: https://www.washingtonpost.com/style/media/2023/10/11/washington-post-buyouts-metro-cuts/ (Accessed: 1 December 2023).

Jenkins, H. (2004) 'The cultural logic of media convergence', *International Journal of Cultural Studies*, 7(1), pp. 33–43. Available at: https://doi.org/10.1177/1367877904040603.

Jenkins, H. (2006) *Convergence culture: where old and new media collide*. New York: New York University Press.

Jenkins, J. and Graves , L. (2019) *United States*. In Digital news report 2019. Available at: https://www.digitalnewsreport.org/survey/2019/united-states-2019/ (Accessed: 11 May 2020).

Jenkins, J. and Graves, L. (2021) *Digital news report 2021*. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021 (Accessed: 28 September 2021).

Jenkins, R. (1982) 'Pierre Bourdieu and the reproduction of determinism', *Sociology*, 16(2), pp. 270–281. Available at: https://doi.org/10.1177/0038038582016002008.

Johannson, U. and Woodila, J. (2009) 'Towards an epistemological merger of design thinking, strategy, and innovation', in. Aberdeen, Scotland.

Jönsson, A.M. and Örnebring, H. (2011) 'User-generated content and the news: empowerment of citizens or interactive illusion?', *Journalism Practice*, 5(2), pp. 127–144. Available at: https://doi.org/10.1080/17512786.2010.501155.

Karlsson, M. (2010) 'Rituals of transparency: evaluating online news outlets' uses of transparency rituals in the United States, United Kingdom and Sweden', *Journalism Studies*, 11(4), pp. 535–545. Available at: https://doi.org/10.1080/14616701003638400.

Kelley, T. (2018) *Build your creative confidence: empathy maps*, *IDEO*. Available at: https://www.ideo.com/journal/build-your-creative-confidence-empathy-maps (Accessed: 12 August 2023).

Kennedy, D. (2016) 'The Bezos effect: how Amazon's founder is reinventing the Washington Post – and what lessons it might hold for the beleaguered newspaper business', *Shorenstein Center*, 8 June. Available at: https://shorensteincenter.org/bezos-effect-washington-post/ (Accessed: 20 October 2022).

Kennedy, G. (2008) *'The Irish Times' free online at irishtimes.com*, *The Irish Times*. Available at: https://www.irishtimes.com/news/the-irish-times-free-online-at-irishtimes-com-1.1273513 (Accessed: 22 June 2023).

Kimbell, L. (2011) 'Rethinking design thinking: part I', *Design and Culture*, 3(3), pp. 285–306. Available at: https://doi.org/10.2752/175470811X13071166525216.

Kimbell, L. (2012) 'Rethinking design thinking: part II', *Design and Culture*, 4(2), pp. 129–148. Available at: https://doi.org/10.2752/175470812X13281948975413.

Klaß, N. (2020) 'Open innovation in media innovation research – a systematic literature review', *Journal of Media Business Studies*, 17(2), pp. 190–218. Available at: https://doi.org/10.1080/16522354.2020.1724498.

Kolko, J. (2010) *Abductive thinking and sensemaking: the drivers of design synthesis*, *jonkolko.com*. Available at: https://www.jonkolko.com/writing/abductive-thinking-and-sensemaking (Accessed: 3 June 2022).

Kormelink, T.G. and Costera Meijer, I. (2018) 'What clicks actually mean: Exploring digital news user practices', *Journalism*, 19(5), pp. 668–683. Available at: https://doi.org/10.1177/1464884916688290.

Kosterich, A. and Royal, C. (2024) 'Institutional arbitrageurs: the role of product managers as a locus of change in journalism', *Media and Communication*, 12. Available at: https://doi.org/10.17645/mac.7374.

Krämer, B. (2018) 'Populism, media, and the form of society', *Communication Theory*, 28(4), pp. 444–465. Available at: https://doi.org/10.1093/ct/qty017.

Küng , L. (2017a) *Going Digital. A Roadmap for Organisational Transformation*. Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/going-digital-roadmap-organisational-transformation.

Küng , L. (2017b) *Strategic management to the media: Theory to practice*. Los Angeles: Sage Publications.

Küng, L. (2015) *Innovators in digital news*. London ; New York: I.B. Tauris & Co. Ltd in association with the Reuters Institute for the Study of Journalism, University of Oxford.

Kvale, S. and Brinkmann, S. (2009) *InterViews: learning the craft of qualitative research interviewing*. 2nd ed. Los Angeles: Sage Publications.

Larrondo, A., Domingo, D., Erdal, I.J., Masip, P. and Van den Bulck, H. (2016) 'Opportunities and Limitations of Newsroom Convergence: A comparative study on European public service broadcasting organisations', *Journalism Studies*, 17(3), pp. 277–300. Available at: https://doi.org/10.1080/1461670X.2014.977611.

Lasswell, H.D. (no date) 'The structure and function of communication in society', in L. Bryson (ed.) *The communication of ideas*. New York: Harper and Row, pp. 37–51.

Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Leeds, T. (2023) 'The journalistic field in the platform economy: the *New York Times* and the inverted pyramid', *Social Problems*, 70(3), pp. 849–867. Available at: https://doi.org/10.1093/socpro/spac045.

Lewis, S.C. (2012) ‘The tension between professional control and open participation: journalism and its boundaries’, *Information, Communication & Society*, 15(6), pp. 836–866. Available at: https://doi.org/10.1080/1369118X.2012.674150.

Lewis, S.C. and Westlund, O. (2015) ‘Actors, actants, audiences, and activities in cross-media news work: a matrix and a research agenda’, *Digital Journalism*, 3(1), pp. 19–37. Available at: https://doi.org/10.1080/21670811.2014.927986.

Li, A. (2013) ‘Journalism case studies that apply design thinking’, *Poynter*. Available at: https://www.poynter.org/newsletters/2013/journalism-case-studies-that-apply-design-thinking/ (Accessed: 29 September 2021).

Lichterman, J. (2015) ‘How The Irish Times developed its new (Very relaxed) metered paywall’, *Nieman Lab*. Available at: https://www.niemanlab.org/2015/03/how-the-irish-times-developed-its-new-very-relaxed-metered-paywall/ (Accessed: 26 June 2023).

Liedtka, J., King, A. and Bennett, K.B. (2013) *Solving problems with design thinking: 10 stories of what works*. New York: Columbia Business School Publishing.

Liedtka, J., Salzman, R. and Azer, D. (2017) *Design thinking for the greater good: innovation in the social sector*. New York, NY: Columbia University Press.

Lindblom, T., Lindell, J. and Gidlund, K. (2022) ‘Digitalizing the journalistic field: Journalists’ views on changes in journalistic autonomy, capital and habitus’, *Digital Journalism* [Preprint]. Available at: https://doi.org/10.1080/21670811.2022.2062406.

Lindell, J. (2015) ‘Bourdieusian media studies: returning social theory to old and new media’, *Distinktion: Journal of Social Theory*, 16(3), pp. 362–377. Available at: https://doi.org/10.1080/1600910X.2015.1040427.

Lindner, A.M., Connell, E. and Meyer, E. (2015) ‘Professional journalists in “citizen” journalism’, *Information, Communication & Society*, 18(5), pp. 553–568. Available at: https://doi.org/10.1080/1369118X.2015.1012530.

Lindsay, S. (2022) ‘A comparative analysis of data quality in online Zoom versus phone interviews: An example of youth with and without disabilities’, *Sage Open*, 12(4). Available at: https://doi.org/https://doi-org.dcu.idm.oclc.org/10.1177/21582440221140098.

Lischka, J.A. (2015) *Pressure and organisational change in the digital age. Strategy transformation in response to changing environmental conditions in Swiss and UK legacy news organisations over the past decade*. Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/pressure-and-organisational-change-digital-age.

Lischka, J.A. (2020) ‘Fluid institutional logics in digital journalism’, *Journal of Media Business Studies*, 17(2), pp. 113–131. Available at: https://doi.org/10.1080/16522354.2019.1699764.

Löffelholz, M. (2008) ‘Heterogeneous – multidimensional – competing: Theoretical approaches to journalism – an overview’, in M. Löffelholz and D. Weaver (eds) *Global journalism research. Theories, methods, findings, future*. Malden, MA: Blackwell Publishing, pp. 15–27.

Logue, P. (2022) *The Irish Times unveils redesigned website and app*, *The Irish Times*. Available at: https://www.irishtimes.com/media/2022/05/23/the-irish-times-unveils-redesigned-website-and-app/ (Accessed: 22 March 2023).

Loosen, W. (2015) ‘The notion of the “blurring boundaries”: journalism as a (De-)differentiated phenomenon’, *Digital Journalism*, 3(1), pp. 68–84. Available at: https://doi.org/10.1080/21670811.2014.928000.

Løvlie, A.S., Waagstein, A. and Hyldgård, P. (2023) ‘“How trustworthy is this research? ” designing a tool to help readers understand evidence and uncertainty in science journalism’, *Digital Journalism*, 11(3), pp. 431–464. Available at: https://doi.org/10.1080/21670811.2023.2193344.

Lowrey, W. (2018) ‘Journalism as institution’, in T.P. Vos (ed.) *Journalism*. Berlin: De Gruyter, pp. 125–148.

Lowrey, W. and Gade, P.J. (2011) ‘Complexity, uncertainty, and journalistic change’, in W. Lowrey and P.J. Gade (eds) *Changing the news. The forces shaping journalism in uncertain times*. New York; London: Routledge.

Lowrey, W., Sherrill, L. and Broussard, R. (2019) ‘Field and ecology approaches to journalism innovation: the role of ancillary organizations’, *Journalism Studies*, 20(15), pp. 2131–2149. Available at: https://doi.org/10.1080/1461670X.2019.1568904.

Luchs, M.G. (2016) ‘A brief introduction to design thinking’, in M.G. Luchs, K.S. Swan, and A. Griffin (eds) *Design thinking: New Product Development essentials from the PDMA*. Hoboken, NJ: John Wiley&Sons.

Luckhurst, T. (2010) *Is the Guardian beating its head against a paywall?*, *The Independent*. Available at: https://www.independent.co.uk/news/business/analysis-and-features/is-the-guardian-beating-its-head-against-a-paywall-1928815.html (Accessed: 8 March 2023).

Luhmann, N. (2000) *The reality of mass media*. Stanford: Stanford University Press (Cultural memory in the present).

Lunt, P. (2020) ‘Beyond Bourdieu: The interactionist foundations of media practice theory’, *International Journal of Communication* , 14(2020), pp. 2946–2963.

Lusher, T. (2024) ‘Get early access to the Feast app’, *The Guardian*, 18 January. Available at: https://www.theguardian.com/info/2024/jan/18/get-early-access-to-the-feast-app (Accessed: 7 February 2024).

Maares, P. and Hanusch, F. (2020) ‘Interpretations of the journalistic field: A systematic analysis of how journalism scholarship appropriates Bourdieusian thought’, *Journalism*, p. 146488492095955. Available at: https://doi.org/10.1177/1464884920959552.

Maares, P. and Hanusch, F. (2023) ‘Understanding peripheral journalism from the boundary: a conceptual framework’, *Digital Journalism*, 11(7), pp. 1270–1291. Available at: https://doi.org/10.1080/21670811.2022.2134045.

Maher, B. (2023) ‘How games are powering online subscriptions at The New York Times’, *Press Gazette*, 23 March. Available at: https://pressgazette.co.uk/north-america/new-york-times-games-puzzles-wordle-subscriptions/ (Accessed: 14 July 2023).

Mancini, P. (2020) ‘Comparing media systems and the digital age’, *International Journal of Communication*, 14, pp. 5761–5774.

Mancini, P. (2024) ‘Some ideas to update “Comparing Media Systems” to the digital age’, *Digital Journalism*, 12(3), pp. 407–412. Available at: https://doi.org/10.1080/21670811.2024.2318564.

Marburger, J. (2016) ‘Revolution at The Washington Post’. Available at: https://www.cjr.org/q_and_a/washington_post_bezos_amazon_revolution.php (Accessed: 20 October 2022).

Mari, W. (2023) ‘(Electronic) mailing the editor: Emails, message boards and early interactive Web design in the 1990s’, *Digital Journalism*, 11(3), pp. 569–586. Available at: https://doi.org/10.1080/21670811.2022.2043760.

Marlière, P. (1998) ‘The rules of the journalistic field: Pierre Bourdieu’s contribution to the sociology of the media’, *European Journal of Communication*, 13(2), pp. 219–234. Available at: https://doi.org/10.1177/0267323198013002004.

Maton, K. (2012) ‘Habitus’, in M. Grenfell (ed.) *Pierre Bourdieu. Key concepts*. 2nd edn. Acumen Publishing (Key Concepts), pp. 48–64.

Matthews, J. (2017) ‘The sociology of mass media’, in K.O. Korgen (ed.) *The Cambridge Handbook of Sociology: Volume 1, Core Areas in Sociology and the Development of the Discipline*. Cambridge: Cambridge University Press, pp. 205–216.

Maxwell, J.A. (2012) *A realist approach for qualitative research*. Thousand Oaks: SAGE Publications.

McChesney, R.W. (2015) *Rich media, poor democracy: communication politics in dubious times*. New York: The New Press.

McCombs, M. and Shaw, D.L. (1972) ‘The agenda-setting function of the mass media’, *Public Opinion Quarterly*, 36(2), pp. 176–187.

McInnis, K. (2022) *What is human-centered design? Here’s why it is so important*, *Fast Company*. Available at: https://www.fastcompany.com/90772846/human-centered-design.

McKernan, B., Stromer-Galley, J., Korsunska, A., Bolden, S.E., Rossini, P. and Hemsley, J. (2023) ‘A human-centered design approach to creating tools to help journalists monitor digital political ads: insights and challenges’, *Digital Journalism*, 11(3), pp. 411–430. Available at: https://doi.org/10.1080/21670811.2022.2064321.

McManus, J. (2006) *Irish Times buys MyHome.ie for €50m*, *The Irish Times*. Available at: https://www.irishtimes.com/business/irish-times-buys-myhome-ie-for-50m-1.1263303 (Accessed: 20 March 2023).

McQuail, D. (2010) *McQuail’s mass communication theory*. 6th ed. London ; Thousand Oaks, Calif: Sage Publications.

McQuail, D. (2013) ‘The media audience: a brief biography—stages of growth or paradigm change?’, *The Communication Review*, 16(1–2), pp. 9–20. Available at: https://doi.org/10.1080/10714421.2013.757170.

Media Ownership Monitor Ireland 2023 (no date) *The British are coming! And the Belgians, Americans, Germans... etc. The internationalisation of Irish media ownership and why it (might) matter.*, *Media Ownership Monitor Ireland 2023*. Available at: https://ireland.mom-gmr.org/en/findings/internationalisation-of-media-ownership/ (Accessed: 4 March 2024).

Melo, P.A. (2018) ‘How the Guardian co-designs with readers to improve our journalism’, *The Guardian*, 22 October. Available at: https://www.theguardian.com/info/2018/oct/22/how-the-guardian-co-designs-with-readers-to-improve-our-journalism (Accessed: 7 July 2022).

Meyer, S.B. and Lunnay, B. (2013) ‘The application of abductive and retroductive inference for the design and analysis of theory-driven sociological research’, *Sociological Research Online*, 18(1), pp. 86–96. Available at: https://doi.org/10.5153/sro.2819.

Mills, J. and Wagemans, A. (2021) ‘Media labs: Constructing journalism laboratories, innovating the future: How journalism is catalysing its future processes, products and people’, *Convergence: The International Journal of Research into New Media Technologies*, 27(5), pp. 1462–1487. Available at: https://doi.org/10.1177/1354856521994453.

Milosavljević, M. and Vobič, I. (2021) ‘“Our task is to demystify fears”: Analysing newsroom management of automation in journalism’, *Journalism*, 22(9), pp. 2203–2221. Available at: https://doi.org/10.1177/1464884919861598.

Mitchelstein, E. and Boczkowski, P.J. (2009) ‘Between tradition and change: A review of recent research on online news production’, *Journalism*, 10(5), pp. 562–586. Available at: https://doi.org/10.1177/1464884909106533.

Mohr, J.W. (2013) ‘Bourdieu’s relational method in theory and in practice: From fields and capitals to networks and institutions (and back again)’, in F. Dépelteau and C. Powell (eds) *Applying relational sociology*. New York: Palgrave Macmillan, pp. 101–135. Available at: https://doi-org.dcu.idm.oclc.org/10.1057/9781137407009_5.

Möller, J. (2021) ‘Filter bubbles and digital echo chambers’, in H. Tumber and S. Waisbord (eds) *The Routledge companion to media disinformation and populism*. London: Routledge (Routledge Media and Cultural Studies Companions), pp. 92–100.

Monzer, C., Moeller, J., Helberger, N. and Eskens, S. (2020) ‘User perspectives on the news personalisation process: agency, trust and utility as building blocks’, *Digital Journalism*, 8(9), pp. 1142–1162. Available at: https://doi.org/10.1080/21670811.2020.1773291.

Mootee, I. (2013) *Design thinking for strategic innovation: what they can’t teach you at business or design school*. Hoboken, N.J: John Wiley & Sons Inc.

Morris, A. (2015) *A practical introduction to in-depth interviewing*. London: Sage Publications.

Morrissey, B. (2015) *'The best product people come out of the newsroom': How The Washington Post adopted a product mindset*, *Digiday*. Available at: https://digiday.com/media/digiday-podcast-shailesh-prakash/ (Accessed: 20 October 2022).

Mosley, L. and Mosley, L. (2013) 'Introduction. "Just Talk to People"? Interviews in Contemporary Political Science', in *Interview research in political science*. Cornell University, pp. 1–28.

Mufson, S. (2013) 'Washington Post to phase in a paid online subscription model', *The Washington Post*. Available at: https://www.washingtonpost.com/business/economy/washington-post-to-phase-in-a-paid-online-subscription-model/2013/06/05/d2e1bce4-cdd4-11e2-8845-d970ccb04497_story.html (Accessed: 20 October 2022).

Mukumbang, F.C., Kabongo, E.M. and Eastwood, J.G. (2021) 'Examining the application of retroductive theorizing in realist-informed studies', *International Journal of Qualitative Methods*, 20, p. 160940692110535. Available at: https://doi.org/10.1177/16094069211053516.

Mullin, B. and Robertson, K. (2023) 'A decade ago, Jeff Bezos bought a newspaper. Now he's paying attention to it again.', *The New York Times*, 22 July. Available at: https://www.nytimes.com/2023/07/22/business/media/jeff-bezos-washington-post.html (Accessed: 13 November 2023).

Murphy, N. (no date) 'Core outlook 21: news and digital media forecasts', *Core*. Available at: https://onecore.ie/intel/outlook/news-media-forecasts/ (Accessed: 27 September 2021).

Murrell, C. (2021) *Reuters Institute Digital News Report 2021*. Reuters Institute, pp. 86–87. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021 (Accessed: 28 September 2021).

Murrell, C. (2024) *Reuters Institute Digital News Report 2024*. Reuters Institute, pp. 88–89. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2024 (Accessed: 2 September 2024).

Murrell, C., Park, K., Robins, D. and Wheatly, D. (2023) *Digital news report Ireland 2023*. Reuters Institute. Available at: https://www.cnam.ie/wp-content/uploads/2023/06/20230609_DNR-Final-Report_STRICT-EMBARGO-00.01-14-June-23_FINAL.pdf (Accessed: 20 October 2023).

Nah, S., Yamamoto, M., Chung, D.S. and Zuercher, R. (2015) 'Modeling the adoption and use of citizen journalism by online newspapers', *Journalism & Mass Communication Quarterly*, 92(2), pp. 399–420. Available at: https://doi.org/10.1177/1077699015574483.

Natow, R.S. (2020) 'The use of triangulation in qualitative studies employing elite interviews', *Qualitative Research*, 20(2), pp. 160–173. Available at: https://doi.org/10.1177/1468794119830077.

Nelson, C., Treichler, P.A. and Grossberg, L. (1992) 'Cultural studies: An introduction', in L. Grossberg, C. Nelson, and P.A. Treichler (eds) *Cultural studies*. New York; London: Routledge, pp. 1–16.

Nelson, Jacob L. (2021) *Imagined audiences: how journalists perceive and pursue the public*. New York: Oxford University Press (Journalism and political communication unbound).

Nelson, Jacob L (2021) 'The next media regime: The pursuit of "audience engagement" in journalism', *Journalism*, 22(9), pp. 2350–2367. Available at: https://doi.org/10.1177/1464884919862375.

Nelson, R. and Miner, K. (2022) 'Digital transformation at the Washington Post: Innovating for the Next Generation', *SSRN* [Preprint]. Available at: https://doi.org/10.2139/ssrn.4026900.

Nerone, J. (2013) 'The historical roots of the normative model of journalism', *Journalism*, 14(4), pp. 446–458. Available at: https://doi.org/10.1177/1464884912464177.

Neveu, E. (2007) 'Pierre Bourdieu: Sociologist of media, or sociologist for media scholars? ', *Journalism Studies*, 8(2), pp. 335–347.

Neveu, E. (2018) 'Bourdieu's Capital(s): Sociologizing an Economic Concept', in T. Medvetz and J.J. Sallaz (eds) *The Oxford Handbook of Pierre Bourdieu*. Oxford Academic, pp. 347–374.

Newman, N. (2021) *Reuters Institute Digital News Report 2021*, pp. 62–63. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021 (Accessed: 28 September 2021).

Newman, N. (2023) *Journalism, media, and technology trends and predictions 2023*. Reuters Institute for the Study of Journalism; University of Oxford. Available at: https://reutersinstitute.politics.ox.ac.uk/journalism-media-and-technology-trends-and-predictions-2023.

Newman, N. (no date) *Journalism, media, and technology trends and predictions 2023*, *Reuters Institute for the Study of Journalism*. Available at: https://reutersinstitute.politics.ox.ac.uk/journalism-media-and-technology-trends-and-predictions-2023 (Accessed: 26 April 2023).

Newman, N., Fletcher, R., Kalogeropoulos, A. and Nielsen, R.K. (2019) *Reuters Institute Digital News Report* . Reuters Institute for the Study of Journalism; University of Oxford.

Newman, N., Fletcher, R., Kirsten, E., Robertson, C.T. and Nielsen, R.K. (2023) *Reuters Institute Digital News Report*. Reuters Institute for the Study of Journalism; University of Oxford.

Newspapers fact sheet (2021) *Pew Research Center*. Available at: https://www.pewresearch.org/journalism/fact-sheet/newspapers/ (Accessed: 9 March 2022).

Nicey, J. (2013) 'Between reactivity and reactivation. User-generated news, photo agencies, new practices and traditional processes', in T. Storsul and A.H. Krumsvik (eds) *Media innovations. A multidisciplinary study of change*. Gothenburg: Nordicom, pp. 207–218.

Nicholls, T., Shabbir, N., Graves, L. and Nielsen, R.K. (2018) *Coming of age: Developments in digital-born news media in Europe. Digital news project*. Reuters Institute. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/coming-age-developments-digital-bornnews-media-europe (Accessed: 20 April 2020).

Nieborg, D. and Poell, T. (2019) 'The platformization of making media', in M. Prenger and M. Deuze (eds) *Making media: Production, practices, and professions*. Amsterdam: Amsterdam University Press, pp. 85–96.

Nielsen, R.K. (2019) 'Economic Contexts of Journalism', in K. Wahl-Jorgensen and T. Hanitzsch (eds) *The handbook of journalism studies*. New York: Routledge, pp. 324–340.

Nielsen, R.K. and Levy, D.A.L. (2010) 'A business perspective on challenges facing journalism', in D.A.L. Levy and R.K. Nielsen (eds) *The changing business of journalism and its implications for democracy*. Oxford: Reuters Institute for the Study of Journalism, pp. 3–15.

Norman, D. (2010) *Design thinking: a useful myth*, *Core77*. Available at: https://www.core77.com/posts/16790/Design-Thinking-A-Useful-Myth (Accessed: 18 September 2020).

Norman, D.A. and Draper, S.W. (eds) (1986) *User centered system design: new perspectives on human-computer interaction*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Norman, D.A. and Verganti, R. (2014) 'Incremental and radical innovation: design research vs. Technology and meaning change', *Design Issues*, 30(1), pp. 78–96. Available at: https://doi.org/10.1162/DESI_a_00250.

Nussbaum, B. (2011) *Design thinking is a failed experiment. So what's next?*, *Fast Company*. Available at: https://www.fastcompany.com/1663558/design-thinking-is-a-failed-experiment-so-whats-next (Accessed: 18 September 2020).

Nygren, G. (2014) 'Multiskilling in the newsroom – de-skilling or re-skilling of journalistic work?', *The Journal of Media Innovations*, 1(2), pp. 75–96. Available at: https://doi.org/10.5617/jmi.v1i2.876.

O'Donovan, B. (2024) 'Irish Independent publisher Mediahuis to cut 10% of staff', *RTÉ*. Available at: https://www.rte.ie/news/business/2024/0123/1428141-mediahuis-jobs/ (Accessed: 9 September 2024).

O'Sullivan, J. (2012) 'Challenging values: The "good" journalist online', in E. Siapera and A. Veglis (eds) *The handbook of global online journalism*. London: Wiley-Blackwell, pp. 39–58.

O'Sullivan, J. and Fortunati, L. (2021) 'Journalism's sharp end: fatal materiality and the algorithms of profit and political extremism', *Observatorio (OBS*)*, 15(2), pp. 139–156. Available at: https://doi.org/https://doi.org/10.15847/obsOBS15220211805.

O'Sullivan, J. and Heinonen, A. (2008) 'Old values, new media: Journalism role perceptions in a changing world', *Journalism Practice*, 2(3), pp. 357–371. Available at: https://doi.org/10.1080/17512780802281081.

Our strategy (2022) *The New York Times Company*. Available at: https://www.nytco.com/press/our-strategy/ (Accessed: 10 September 2022).

Panievsky, A. (2022) 'The strategic bias: how journalists respond to antimedia populism', *The International Journal of Press/Politics*, 27(4), pp. 808–826. Available at: https://doi.org/10.1177/19401612211022656.

Participatory design (no date) *The Interaction Design Foundation*. Available at: https://www.interaction-design.org/literature/topics/participatory-design (Accessed: 22 July 2022).

Patton, M.Q. (2002) *Qualitative research and evaluation methods*. 3rd edn. Thousand Oaks, CA: Sage Publications.

Paulussen, S. (2016) 'Innovation in the newsroom', in T. Witschge, C.W. Anderson, D. Domingo, and A. Hermida (eds) *The SAGE handbook of digital journalism*. London: Sage Publications, pp. 192–206.

Paulussen, S., Geens, D. and Vandenbrande, K. (2011) 'Fostering a culture of collaboration: Organizational challenges of newsroom innovation', in D. Domingo and C. Paterson (eds) *Making online news. Volume 2. Newsroom ethnographies in the second decade of internet journalism,*. New York: Peter Lang, pp. 3–14.

Pavlik, J.V. (2001) *Journalism and new media*. New York: Columbia University Press.

Pavlik, J.V. (2013) 'Innovation and the future of journalism', *Digital Journalism*, 1(2), pp. 181–193. Available at: https://doi.org/10.1080/21670811.2012.756666.

Pérez-Seijo, S. and Silva-Rodríguez, A. (2024) 'Innovation in digital media beyond technology: the audience-centered approach and pending challenges', *Journalism and Media*, 5(1), pp. 311–324. Available at: https://doi.org/10.3390/journalmedia5010021.

Peters, J.W. (2011) 'Times's online pay model was years in the making', *The New York Times*, 21 March. Available at: https://www.nytimes.com/2011/03/21/business/media/21times.html (Accessed: 24 September 2022).

Petre, C. (2021) *All the news that's fit to click: how metrics are transforming the work of journalists*. Princeton: Princeton University Press.

Pettegree, A. (2014) *The invention of news: how the world came to know about itself*. New Haven ; London, England: Yale University Press.

Phillips, A. (2014) *Journalism in context: practice and theory for the digital age*. London ; New York: Routledge, Taylor & Francis Group (Communication and society).

Phillips, A., Singer, J.B., Vlad, T. and Becker, L.B. (2009) 'Implications of technological change for journalists' tasks and skills', *Journal of Media Business Studies*, 6(1), pp. 61–85. Available at: https://doi.org/10.1080/16522354.2009.11073479.

Picard, R.G. (2007) 'Subsidies for Newspapers: Can the Nordic Model Remain Viable?', in H. Bohrmann , E. Klaus, and M. Machill (eds) *Media Industry, Journalism Culture, and Communication Policies in Europe*. Köln: Herbert von Halem Verlag, pp. 236–246.

Picard, R.G. (2010) ‘A Business Perspective on Challenges Facing Journalism’, in D.A.L. Levy and R.K. Nielsen (eds) *The Changing Business of Journalism and its Implications for Democracy*. Oxford: Reuters Institute for the Study of Journalism, pp. 17–24.

Picard, R.G. (2014) ‘Twilight or New Dawn of Journalism?: Evidence from the changing news ecosystem’, *Journalism Studies*, 15(5), pp. 500–510. Available at: https://doi.org/10.1080/1461670X.2014.895530.

Picone, I. (2007) ‘Conceptualising online news use’, *Observatorio (OBS*)*, 1(3), pp. 93–114.

Pilhofer, A. (no date) *LinkedIn profile*. Available at: https://www.linkedin.com/in/aronpilhofer/ (Accessed: 23 May 2023).

Pilkington, E. (2013) ‘Washington Post sale: Graham family’s final act for the newspaper it cherished’, *The Guardian*, 6 August. Available at: https://www.theguardian.com/media/2013/aug/06/washington-post-sale-graham-family (Accessed: 3 November 2023).

Pinch, T.J. and Bijker, W.E. (1987) ‘The social construction of facts and artifacts: Or how the sociology of science and the sociology of technology might benefit each other’, in W.E. Bijker, T.P. Hughes, and T.J. Pinch (eds) *The social construction of technological systems. New directions in the sociology and history of technology*. Cambrige, MA; London: The MIT Press, pp. 17–50.

Plambeck, J. (2010) ‘Newspaper circulation falls nearly 9%’, *The New York Times*, 26 April. Available at: https://www.nytimes.com/2010/04/27/business/media/27audit.html (Accessed: 20 May 2023).

Porcu, O. (2020) ‘Exploring innovative learning culture in the newsroom’, *Journalism*, 21(10), pp. 1556–1572. Available at: https://doi.org/10.1177/1464884917724596.

Porcu, O., Hermans, L. and Broersma, M. (2024) ‘Creative autonomy in the newsroom: how hierarchy impacts innovative behaviour’, *Journalism Practice*, pp. 1–20. Available at: https://doi.org/10.1080/17512786.2024.2310056.

Posetti, J. (2018) *Time to step away from the ‘bright, shiny things’? Towards a sustainable model of journalism innovation in an era of perpetual change*. Reuters Institute for the Study of Journalism.

Posetti, J., Shabbir, N. and Simon, F. (2018) *Journalism innovation project*, *Reuters Institute for the Study of Journalism*. Available at: https://reutersinstitute.politics.ox.ac.uk/research/journalism-innovation-project (Accessed: 7 September 2021).

Potter, G. (2000) ‘For Bourdieu, against Alexander: Reality and reduction’, *Journal for the Theory of Social Behaviour*, 30(2), pp. 229–246. Available at: https://doi.org/10.1111/1468-5914.00127.

Powers, M. (2015) ‘NGOs as journalistic entities. The possibilities, promises and limits of boundary crossing’, in M. Carlson and S. Lewis (eds) *Boundaries of Journalism. Professionalism, Practices and Participation*. Oxon: Routledge, pp. 186–200.

Powers, M. and Vera-Zambrano, S. (2019) 'Endure, invest, ignore: how French and American journalists react to economic constraints and technological transformations', *Journal of Communication*, 69(3), pp. 320–343. Available at: https://doi.org/10.1093/joc/jqz015.

Prakash, S. (2015) '"The best product people come out of the newsroom": How The Washington Post adopted a product mindset'. Available at: https://digiday.com/media/digiday-podcast-shailesh-prakash/ (Accessed: 20 October 2022).

Prakash, S. (2016) 'Revolution at The Washington Post'. Available at: https://www.cjr.org/q_and_a/washington_post_bezos_amazon_revolution.php (Accessed: 20 October 2022).

Prakash, S. (2019) 'How The Washington Post made its publishing platform a revenue driver'. Available at: https://www.forbes.com/sites/peterhigh/2019/04/29/how-the-washington-post-made-its-publishing-platform-a-revenue-driver/?sh=2b7c99ef78cd (Accessed: 20 October 2022).

Press Council of Ireland, Office of the Press Ombudsman (2019) *Annual Report 2018*. Press Council. Available at: https://www.presscouncil.ie/press-council-of-ireland-1/press-releases-and-annual-reports/annual-reports (Accessed: 25 August 2021).

Product and design (no date) *The New York Times Company*. Available at: https://www.nytco.com/careers/product-and-design/ (Accessed: 20 May 2023).

Product design (no date) *The Interaction Design Foundation*. Available at: https://www.interaction-design.org/literature/topics/product-design (Accessed: 20 July 2022).

Quandt, T. (2018) 'Dark participation', *Media and Communication*, 6(4), pp. 36–48. Available at: https://doi.org/10.17645/mac.v6i4.1519.

Quinn, F. and Prendergast, M. (2023) 'The content is the thing. Using content analysis to study economic journalism', in H. Silke , F. Quinn, and M. Rieder (eds) *How to read economic news. A critical approach to economic journalism*. London, New York: Routledge, pp. 117–144.

Radnejad, A.B., Sarkar, S. and Osiyevskyy, O. (2022) 'Design thinking in responding to disruptive innovation: A case study', *The International Journal of Entrepreneurship and Innovation*, 23(1), pp. 39–54. Available at: https://doi.org/10.1177/14657503211033940.

Raetzsch, C. (2015) 'Innovation Through Practice: Journalism as a structure of public communication', *Journalism Practice*, 9(1), pp. 65–77. Available at: https://doi.org/10.1080/17512786.2014.928466.

Rajan, A. (2019) 'Guardian records first operating profit since 1998', *BBC News*, 1 May. Available at: https://www.bbc.com/news/entertainment-arts-48111464 (Accessed: 7 October 2021).

Reckwitz, A. (2002) 'Toward a theory of social practices: a development in culturalist theorizing', *European Journal of Social Theory*, 5(2), pp. 243–263. Available at: https://doi.org/10.1177/13684310222225432.

Reese, S.D. (2016) *Theories of journalism*, *Oxford Research Encyclopedia of Communication*. Available at: https://oxfordre.com/communication/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-83 (Accessed: 12 January 2020).

Reese, S.D. and Shoemaker, P.J. (2016) ‘A media sociology for the networked public sphere: the Hierarchy of Influences model’, *Mass Communication and Society*, 19(4), pp. 389–410. Available at: https://doi.org/10.1080/15205436.2016.1174268.

Reid, A. (2014) *Guardian forms new editorial teams to enhance digital output | Media news*, *journalism.co.uk*. Available at: https://www.journalism.co.uk/news/guardian-forms-new-editorial-teams-to-enhance-digital-output/s2/a562755/ (Accessed: 1 March 2022).

Rittel, H.W.J. and Webber, M.M. (1973) ‘Dilemmas in a general theory of planning’, *Policy Sciences*, 4(2), pp. 155–169. Available at: https://doi.org/10.1007/BF01405730.

Ritzer, G. and Stepnisky, J. (2017) *Contemporary sociological theory and its classical roots: the basics*. Fifth Edition. Los Angeles: SAGE.

Robertson, K. (2023) ‘New york times revenue rises 6. 3%’, *The New York Times*, 8 August. Available at: https://www.nytimes.com/2023/08/08/business/media/new-york-times-q2-earnings.html (Accessed: 10 September 2023).

Robertson, K. and Mullin, B. (2023) ‘Will Lewis named C. E. O. of The Washington Post’, *The New York Times*, 5 November. Available at: https://www.nytimes.com/2023/11/04/business/media/washington-post-will-lewis-chief-executive.html (Accessed: 11 November 2023).

Robertson, T. and Simonsen, J. (2013) ‘Participatory design: An introduction’, in J. Simonsen and T. Robertson (eds) *Routledge international handbook of participatory design*. Oxon: Routledge.

Robinson, J.G. (2019) *The audience in the mind’s eye: how journalists imagine their readers*, *Columbia Journalism Review*. Available at: https://www.cjr.org/tow_center_reports/how-journalists-imagine-their-readers.php/ (Accessed: 8 October 2021).

Robinson, S. (2011) ‘Convergence crises: news work and news space in the digitally transforming newsroom’, *Journal of Communication*, 61(6), pp. 1122–1141. Available at: https://doi.org/10.1111/j.1460-2466.2011.01603.x.

Robinson, S. (2015) ‘Redrawing borders from within. Commenting on news stories as boundary work. ’, in M. Carlson and S. Lewis (eds) *Boundaries of Journalism. Professionalism, Practices and Participation*. Oxon: Routledge, pp. 152–168.

Robinson, S. (2019) ‘Crisis of shared public discourses: Journalism and how it all begins and ends with trust’, *Journalism*, 20(1), pp. 56–59. Available at: https://doi.org/10.1177/1464884918808958.

Robinson, S., Lewis, S.C. and Carlson, M. (2019) ‘Locating the “digital” in digital journalism studies: transformations in research’, *Digital Journalism*, 7(3), pp. 368–377. Available at: https://doi.org/10.1080/21670811.2018.1557537.

Rodgers, P.A. (2013) ‘Articulating design thinking’, *Design Studies*, 34(4), pp. 433–437. Available at: https://doi.org/10.1016/j.destud.2013.01.003.

Rogers, E., M. (2003) *Diffusion of innovations*. 5th edn. New York: Free Press.

Rosen, J. (2006) *The people formerly known as the audience*, *PressThink*. Available at: http://archive.pressthink.org/2006/06/27/ppl_frmr.html (Accessed: 28 April 2020).

Rosen, J. (2012) *Covering wicked problems*, *PressThink*. Available at: https://pressthink.org/2012/06/covering-wicked-problems/ (Accessed: 27 August 2021).

Ross Arguedas, A.A., Badrinathan, S., Mont’Alverne, C., Toff, B., Fletcher, R. and Nielsen, R.K. (2022) ‘“It’s a battle you are never going to win”: perspectives from journalists in four countries on how digital media platforms undermine trust in news’, *Journalism Studies*, 23(14), pp. 1821–1840. Available at: https://doi.org/10.1080/1461670X.2022.2112908.

Rouse, W.B. (1994) ‘Human-centred design of information systems’, in I. Wesley-Tanaskovic, J. Tokatlian, and K.H. Roberts (eds) *Expanding access to science and technology. The role of information technologies*. Tokyo, Japan: The United Nations University, pp. 214–223.

Royal, C. (2017) ‘Managing digital products in a newsroom context’, *#ISOJ Journal*, 7(1), pp. 45–66. Available at: https://isoj.org/research/managing-digital-products-in-a-newsroom-context/.

Royal, C., Bright, A., Pellizzaro, K., Belair-Gagnon, V., Holton, A.E., Vincent, S., Heider, D., Zielina, A. and Kiesow, D. (2020) ‘Product management in journalism and academia’, *Journalism & Mass Communication Quarterly*, 97(3), pp. 597–616. Available at: https://doi.org/10.1177/1077699020933872.

Royal, C. and Kiesow, D. (2021) ‘From boundary to bridge and beyond: the path to professionalization of product roles in journalism’, *Journalism Studies*, 22(11), pp. 1546–1565. Available at: https://doi.org/10.1080/1461670X.2021.1944277.

Ruhl, M. (2008) ‘Journalism in a Globalizing World Society’, in M. Löffelholz and D. Weaver (eds) *Global Journalism Research: Theories, Methods, Findings, Future*. Malden, MA: Blackwell Publishing, pp. 28–38.

Rusbridger, A. (2021) ‘“It was exhilarating”: how the Guardian went digital – and global’, *The Guardian*, 6 May. Available at: https://www.theguardian.com/media/2021/may/06/guardian-200-it-was-exhilarating-how-went-digital-and-global (Accessed: 8 March 2023).

Rutledge, P.B. and Hogg, J.L. (2020) ‘In-depth interviews’, *The International Encyclopedia of Media Psychology*. John Wiley & Sons.

Ryan, F. (2020) ‘High tech journalism’. Available at: https://www.youtube.com/watch?v=GrXKZ3KFoBI&list=PLlvn_hX7c6dUp7yZkmlGl4ssQ1-i2Wslp&index=8 (Accessed: 20 October 2022).

Ryfe, D. (2006) ‘Guest editor’s introduction: new institutionalism and the news’, *Political Communication*, 23(2), pp. 135–144. Available at: https://doi.org/10.1080/10584600600728109.

Ryfe, D. (2012) *Can journalism survive? An inside look at American newsrooms*. Cambridge ; Malden, MA: Polity Press.

Ryfe, D. (2016) ‘News institutions’, in T. Witschge, C.W. Anderson, D. Domingo , and A. Hermida (eds) *The Sage handbook of digital journalism*. Los Angeles, CA: Sage Publications, pp. 370–382.

Ryfe, D.M. (2018) ‘A practice approach to the study of news production’, *Journalism*, 19(2), pp. 217–233. Available at: https://doi.org/10.1177/1464884917699854.

Salazar, K. (2016) *Diary studies: understanding long-term user behavior and experiences*, *Nielsen Norman Group*. Available at: https://www.nngroup.com/articles/diary-studies/ (Accessed: 9 November 2023).

Saltzis, K. and Dickinson, R. (2008) ‘Inside the changing newsroom: journalists’ responses to media convergence’, *Aslib Proceedings*, 60(3), pp. 216–228. Available at: https://doi.org/10.1108/00012530810879097.

Sanders, E.B.-N. and Stappers, P.J. (2008) ‘Co-creation and the new landscapes of design’, *CoDesign*, 4(1), pp. 5–18. Available at: https://doi.org/10.1080/15710880701875068.

de-Lima-Santos, M.-F. (2024) ‘The entanglements between data journalism, collaboration and business models: A systematic literature review’, *Digital Journalism*, 12(2), pp. 256–281. Available at: https://doi.org/10.1080/21670811.2023.2247449.

Sayer, R.A. (2000) *Realism and social science*. London ; Thousand Oaks, CA: Sage Publications.

Schatzki, T. (2001b) ‘Introduction: Practice Theory’, in T. Schatzki, C. Knorr, and E. von Savigny (eds) *The practice turn in contemporary theory*. London, New York: Routledge, pp. 1–14.

Schatzki, T. (2001a) ‘Practice mind-ed orders’, in T. Schatzki, K. Knorr Cetina, and E. von Savigny (eds) *The practice turn in contemporary theory*. London, New York: Routledge, pp. 50–63.

Schmitz Weiss, A. and Domingo, D. (2010) ‘Innovation processes in online newsrooms as actor-networks and communities of practice’, *New Media & Society*, 12(7), pp. 1156–1171. Available at: https://doi.org/10.1177/1461444809360400.

Schön, D.A. (1983) *The reflective practitioner: how professionals think in action*. New York: Basic Books.

Schudson, M. (2003) *The sociology of news*. New York, London: W.W. Norton & Company.

Schudson, M. (2008) *Why democracies need an unlovable press*. Cambridge; Malden, MA: Polity.

Schultz, I. (2007) ‘The journalistic gut feeling: Journalistic doxa, news habitus and orthodox news values’, *Journalism Practice*, 1(2), pp. 190–207. Available at: https://doi.org/10.1080/17512780701275507.

Schultz, J. (1998) *Reviving the fourth estate: democracy, accountability, and the media*. Cambridge, UK ; New York, NY, USA: Cambridge University Press.

Schulz, A., Wirth, W. and Müller, P. (2020) ‘We are the people and you are fake news: a social identity approach to populist citizens’ false consensus and hostile media perceptions’, *Communication Research*, 47(2), pp. 201–226. Available at: https://doi.org/10.1177/0093650218794854.

Segelström, F. and Holmlid, S. (2012) ‘One case, three ethnographic styles: exploring different ethnographic approaches to the same broad brief’, in. Oxford: Blackwell Publishing, pp. 48–62.

Sehl, A., Cornia, A. and Nielsen, R.K. (2017) *Developing digital news in public service media* . Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/developing-digital-news-public-service-media-0 (Accessed: 11 October 2024).

Seitz, T. (2020) *Design thinking and the new spirit of capitalism: Sociological reflections on innovation culture*. Palgrave Macmillan.

Shalom, D. (2019) *From audio waves to words: episodes of “the daily” now come with transcripts*, *Medium*. Available at: https://open.nytimes.com/from-audio-waves-to-words-episodes-of-the-daily-now-come-with-transcripts-298ab8cb9481 (Accessed: 8 November 2022).

Shalom, D. (2021) *How we redesigned the new york times opinion essay*, *Medium*. Available at: https://open.nytimes.com/how-we-redesigned-the-new-york-times-opinion-essay-ad5e0270f5bc (Accessed: 8 March 2023).

Shalom, D. (2022) *LinkedIn*. Available at: https://www.linkedin.com/in/dalitshalom/recent-activity/all/ (Accessed: 5 May 2023).

Shalom, D. (2023) *LinkedIn*. Available at: https://www.linkedin.com/in/dalitshalom/recent-activity/all/ (Accessed: 25 August 2023).

Shoemaker, P.J. (1991) *Gatekeeping*. Newbury Park: Sage Publications (Communication concepts, 3).

Shoemaker, P.J. (2006) ‘News and newsworthiness: A commentary’, *Communications*, 31(1). Available at: https://doi.org/10.1515/COMMUN.2006.007.

Shoemaker, P.J. and Reese, S.D. (2014) *Mediating the message in the 21st century: a media sociology perspective*. 3rd edn. New York: Routledge/Taylor & Francis Group.

Shoemaker, P.J. and Vos, T.P. (2009) *Gatekeeping theory*. New York: Routledge.

Siegelbaum, S. and Thomas, R.J. (2016) ‘Putting the Work (Back) into Newswork: Searching for the sources of normative failure’, *Journalism Practice*, 10(3), pp. 387–404. Available at: https://doi.org/10.1080/17512786.2015.1025415.

Siles, I. and Boczkowski, P.J. (2012) ‘Making sense of the newspaper crisis: A critical assessment of existing research and an agenda for future work’, *New Media & Society*, 14(8), pp. 1375–1394. Available at: https://doi.org/10.1177/1461444812455148.

Simon, F.M. and Graves, L. (2019) *Pay models for online news in the us and europe: 2019 update*, *Reuters Institute for the Study of Journalism*. Available at: https://reutersinstitute.politics.ox.ac.uk/our-research/pay-models-online-news-us-and-europe-2019-update (Accessed: 18 August 2021).

Simon, H.A. (1996) *The sciences of the artificial*. 3rd ed. Cambridge, Mass: MIT Press.

Simons, M. (2017) ‘Journalism faces a crisis worldwide – we might be entering a new dark age’, *The Guardian*, 15 April. Available at: https://www.theguardian.com/media/2017/apr/15/journalism-faces-a-crisis-worldwide-we-might-be-entering-a-new-dark-age (Accessed: 3 July 2021).

Simons, T., Gupta, A. and Buchanan, M. (2011) ‘Innovation in R&D: Using design thinking to develop new models of inventiveness, productivity and collaboration’, *Journal of Commercial Biotechnology*, 17(4), pp. 301–307. Available at: https://doi.org/10.1057/jcb.2011.25.

Singer, J. (2008) ‘Ethnography of newsroom convergence’, in C. Paterson and D. Domingo (eds) *Making online news: The ethnography of new media production*. New York: Peter Lang, pp. 157–170.

Singer, J. (2015) ‘Out of bounds: Professional norms as boundary markers’, in M. Carlson and S. Lewis (eds) *Boundaries of journalism. Professionalism, practices and participation*. Oxon: Routledge, pp. 21–36.

Sjøvaag, H. (2013) ‘Journalistic autonomy: Between structure, agency and institution’, *Nordicom Review*, 34(1), pp. 155–166. Available at: https://doi.org/https://doi.org/10.2478/nor-2013-0111.

Sjøvaag, H. (2015) ‘Hard news/soft news: The hierarchy of genres and the boundaries of the profession’, in M. Carlson and S. Lewis (eds) *Boundaries of journalism: Professional, practices and participation*. New York: Routledge, pp. 101–117.

Slattery, L. (2022) *The Irish Times Group posts operating profit of €2.9m*, *The Irish Times*. Available at: https://www.irishtimes.com/business/2022/11/24/the-irish-times-group-posts-operating-profit-of-29m/ (Accessed: 20 October 2023).

Sleight, D. (2014) ‘What does a design director at ProPublica do? David Sleight on what happens when you engage design with reporting’, *Nieman Lab*. Available at: https://www.niemanlab.org/2014/05/what-does-a-design-director-at-propublica-do-david-sleight-on-what-happens-when-you-engage-design-with-reporting/ (Accessed: 2 October 2021).

Sommer, W. and Izadi, E. (2023) ‘Washington Post will offer buyouts to cut staff by 240’, *Washington Post*, 10 October. Available at: https://www.washingtonpost.com/style/media/2023/10/10/washington-post-staff-buyouts/ (Accessed: 3 November 2023).

Sotiriadou, P., Brouwers, J. and Le, T.-A. (2014) 'Choosing a qualitative data analysis tool: a comparison of NVivo and Leximancer', *Annals of Leisure Research*, 17(2), pp. 218–234. Available at: https://doi.org/10.1080/11745398.2014.902292.

Stake, R.E. (1995) *The art of case study research*. Thousand Oaks: Sage Publications.

Stake, R.E. (2005) ' Qualitative case studies', in N.K. Denzin and Y.S. Lincoln (eds) *The SAGE handbook of qualitative research*. 3rd edn. London; Thousand Oaks: Sage Publications, pp. 443–466.

Stake, R.E. (2006) *Multiple case study analysis*. New York, London: The Guilford Press.

Stake, R.E. (2010) *Qualitative research: studying how things work*. New York: Guilford Press.

Starr, P. (2011) 'Goodbye to the age of newspapers (Hello to a new era of corruption): Why American politics and society are about to be changed for the wors', in R.W. McChesney and V.W. Pickard (eds) *Will the last reporter please turn out the lights: The collapse of journalism and what can be done to fix it*. New York, London: The New Press, pp. 3–17.

Steensen, S. (2009) 'What's stopping them?: Towards a grounded theory of innovation in online journalism', *Journalism Studies*, 10(6), pp. 821–836. Available at: https://doi.org/10.1080/14616700902975087.

Steensen, S. and Ahva, L. (2015) 'Theories of Journalism in a Digital age: An exploration and introduction', *Digital Journalism*, 3(1), pp. 1–18. Available at: https://doi.org/10.1080/21670811.2014.927984.

Steensen, S., Ferrer-Conill, R. and Peters, C. (2020) '(Against a)Theory of audience engagement with news', *Journalism Studies*, 21(12), pp. 1662–1680. Available at: https://doi.org/10.1080/1461670X.2020.1788414.

Stevens, E. (2023) *How do design sprints work in UX?*, *UX Design Institute*. Available at: https://www.uxdesigninstitute.com/blog/how-do-design-sprints-ux/ (Accessed: 20 August 2023).

Stevenson, N. (2002) *Understanding media cultures: social theory and mass communication*. 2nd ed. London ; Thousand Oaks, CA: Sage Publications.

Stickdorn, M. (2011) 'This is service design thinking: basics, tools, cases', in M. Stickdorn and J. Schneider (eds). Amsterdam: BIS Publishers, pp. 24–36.

Streb, C.K. (2010) 'Exploratory case study', in A. Mills, G. Durepos , and E. Wiebe (eds) *Encyclopedia of case study research*. Sage Publications, pp. 372–373.

Stutchbury, K. (2022) 'Critical realism: an explanatory framework for small-scale qualitative studies or an "unhelpful edifice"?', *International Journal of Research & Method in Education*, 45(2), pp. 113–128. Available at: https://doi.org/10.1080/1743727X.2021.1966623.

Suárez, E. (2020) *How to build a successful subscription news business: lessons from Britain and Spain*. Reuters Institute for the Study of Journalism. Available at:

https://reutersinstitute.politics.ox.ac.uk/how-build-good-reader-revenue-model-lessons-spain-and-uk.

Swart, J., Groot Kormelink, T., Costera Meijer, I. and Broersma, M. (2022) ‘Advancing a radical audience turn in journalism. Fundamental dilemmas for journalism studies’, *Digital Journalism*, 10(1), pp. 8–22. Available at: https://doi.org/10.1080/21670811.2021.2024764.

Swidler, A. (2001) ‘What anchors cultural practices’, in T.S. Schatzki, K. Knorr Cetina, and E. von Savigny (eds) *In the practice turn in contemporary theory,*. London: Routledge, pp. 83–101.

Taamez, H. (2021) ‘The Washington Post opinion section is leaning into local with “Voices Across America”’, *Nieman Lab*. Available at: https://www.niemanlab.org/2021/06/the-washington-post-opinion-section-is-leaning-into-local-with-voices-across-america/ (Accessed: 23 January 2023).

Tameez, H. (2023) ‘The New York Times launches “enhanced bylines,” with more information about how journalists did the reporting’, *Nieman Lab*. Available at: https://www.niemanlab.org/2023/05/the-new-york-times-launches-enhanced-bylines-with-more-information-about-how-journalists-did-the-reporting/ (Accessed: 26 August 2023).

Tandoc, E.C. (2014) ‘Journalism is twerking? How web analytics is changing the process of gatekeeping’, *New Media & Society*, 16(4), pp. 559–575. Available at: https://doi.org/10.1177/1461444814530541.

Tandoc, E.C. (2015) ‘Why web analytics click: Factors affecting the ways journalists use audience metrics’, *Journalism Studies*, 16(6), pp. 782–799. Available at: https://doi.org/10.1080/1461670X.2014.946309.

Tandoc, E.C. and Jenkins, J. (2017) ‘The Buzzfeedication of journalism? How traditional news organizations are talking about a new entrant to the journalistic field will surprise you!’, *Journalism*, 18(4), pp. 482–500. Available at: https://doi.org/10.1177/1464884915620269.

Tandoc, E.C. and Thomas, R.J. (2015) ‘The Ethics of Web Analytics: Implications of using audience metrics in news construction’, *Digital Journalism*, 3(2), pp. 243–258. Available at: https://doi.org/10.1080/21670811.2014.909122.

Tandoc, E.C. and Vos, T.P. (2016) ‘The journalist is marketing the news: social media in the gatekeeping process’, *Journalism Practice*, 10(8), pp. 950–966. Available at: https://doi.org/10.1080/17512786.2015.1087811.

Tavernise, S., Natt, O., Zadie, M., Nguyen, D., Lin, S., Georges, M., Cowett, P., Powell, D., Ittoop, E., Lozano, M. and Moxley, A. (2023) ‘U. S. V. Google’, *The New York Times*, 11 October. Available at: https://www.nytimes.com/2023/09/11/podcasts/the-daily/google-monopoly-trial.html (Accessed: 8 November 2023).

The double diamond: A universally accepted depiction of the design process (no date) *Design Council*. Available at: https://www.designcouncil.org.uk/our-resources/the-double-diamond/ (Accessed: 21 April 2022).

The Guardian (2024) ‘Why the Guardian is no longer posting on X’, *The Guardian*, 13 November. Available at: https://www.theguardian.com/media/2024/nov/13/why-the-guardian-is-no-longer-posting-on-x (Accessed: 24 November 2024).

The Guardian (no date). The Guardian. Available at: https://support.theguardian.com/contribute (Accessed: 27 September 2023).

The Irish Times Designated Activity Company (2023) *Directors' report and consolidated financial statements for the financial year ended 31 December 2022*. The Irish Times Designated Activity Company . Available at: https://www.irishtimes.com/about-us/the-irish-times-trust/ (Accessed: 3 December 2023).

The Irish Times Trust (no date) *The Irish Times*. Available at: https://www.irishtimes.com/about-us/the-irish-times-trust/ (Accessed: 22 June 2023).

The New York Times (2018) ‘On trust and transparency: A. G. Sulzberger, our new publisher, answers readers’ questions’, *The New York Times*. Available at: https://www.nytimes.com/2018/01/22/reader-center/ag-sulzberger-publisher-reader-questions.html (Accessed: 6 November 2021).

The New York Times (2022a) ‘Behind the journalism: how The Times works’, *The New York Times*, 30 June. Available at: https://www.nytimes.com/explain/2022/new-york-times-journalism (Accessed: 3 March 2023).

The New York Times (2022b) ‘What does the new york times own?’ Available at: https://www.nytimes.com/article/what-does-the-new-york-times-own.html (Accessed: 13 February 2023).

The New York Times (no date) ‘Times insider’. Available at: https://www.nytimes.com/series/times-insider (Accessed: 3 September 2023).

The New York Times 2022 Annual Report (2023). The New York Times Company, pp. 1–125. Available at: https://nytco-assets.nytimes.com/2023/03/The-New-York-Times-Company-2022-Annual-Report.pdf (Accessed: 8 August 2023).

‘The rise of bridge roles in news organizations’ (no date) *Nieman Lab*. Available at: https://www.niemanlab.org/2017/12/the-rise-of-bridge-roles-in-news-organizations/ (Accessed: 25 July 2023).

The Washington Post (no date a) *Climate* , *The Washington Post*. Available at: https://www.washingtonpost.com/climate-environment/.

The Washington Post (no date b) *The 7*, *The Washington Post*. Available at: https://www.washingtonpost.com/newsletters/the-7/ (Accessed: 10 September 2023).

Thurman, N. (2017) ‘What’s a reader actually worth?’, *British Journalism Review*, 28(2), pp. 37–41. Available at: https://doi.org/10.1177/0956474817713963.

Tobitt, C. and Majit, A. (2021) *Most popular newspapers in the UK. National press ABCs*, *Press Gazette*. Available at: https://pressgazette.co.uk/most-popular-newspapers-uk-abc-monthly-circulation-figures/ (Accessed: 27 December 2021).

Tonkinwise, C. (2011) ‘A taste for practices: Unrepressing style in design thinking’, *Design Studies*, 32(6), pp. 533–545. Available at: https://doi.org/10.1016/j.destud.2011.07.001.

Tremayne, M. and Dunwoody, S. (2001) ‘Interactivity, information processing, and learning on the world wide web’, *Science Communication*, 23(2), pp. 111–134. Available at: https://doi.org/10.1177/1075547001023002003.

Tsfati, Y. and Cappella, J.N. (2003) ‘Do people watch what they do not trust? : exploring the association between news media skepticism and exposure’, *Communication Research*, 30(5), pp. 504–529. Available at: https://doi.org/10.1177/0093650203253371.

Tsfati, Y. and Cohen, J. (2005) ‘Democratic consequences of hostile media perceptions: the case of gaza settlers’, *Harvard International Journal of Press/Politics*, 10(4), pp. 28–51. Available at: https://doi.org/10.1177/1081180X05280776.

Tuchman, G. (1972) ‘Objectivity as strategic ritual: an examination of newsmen’s notions of objectivity’, *American Journal of Sociology*, 77(4), pp. 660–679. Available at: https://doi.org/10.1086/225193.

Tuchman, G. (1978) *Making news: a study in the construction of reality*. New York: Free Press.

Tuchman, G. (2002) ‘The production of news’, in K. Jensen and N.W. Jankowski (eds) *A handbook of qualitative methodologies for mass communication research*. London, New York: Routledge.

Turkewitz, J. and Rios, F. (2023) ‘She heeded Biden’s warning to migrants. Will she regret it?’, *The New York Times*, 24 October. Available at: https://www.nytimes.com/2023/10/24/world/americas/venezuela-migrants-darien-gap-biden.html (Accessed: 6 November 2023).

Ulken, E. (2018) ‘How the Philly papers are experimenting with design thinking in the newsroom’, *Lenfest Institute for Journalism*, 9 April. Available at: https://www.lenfestinstitute.org/diverse-growing-audiences/how-the-philly-papers-are-experimenting-with-design-thinking-in-the-newsroom/ (Accessed: 25 July 2022).

Usher, N. (2017) ‘Venture-backed news startups and the field of journalism: challenges, changes, and consistencies’, *Digital Journalism*, 5(9), pp. 1116–1133. Available at: https://doi.org/10.1080/21670811.2016.1272064.

Usher, N. (2021) *News for the rich, white, and blue: how place and power distort American journalism*. New York: Columbia University Press.

Uth, B., Badura, L. and Blöbaum, B. (2021) ‘Perceptions of trustworthiness and risk: How transparency can influence trust in journalism’, in B. Blöbaum (ed.) *Trust and communication: Findings and implications of trust research*. Cham: Springer, pp. 61–81.

Van Dijk, J. (2012) *The network society*. 3rd edn. London: Sage Publications.

Veen, M. (2021) ‘Creative leaps in theory: the might of abduction’, *Advances in Health Sciences Education*, 26(3), pp. 1173–1183. Available at: https://doi.org/10.1007/s10459-021-10057-8.

Viner, K. (2018) ‘Welcome to a new look for the Guardian’, *The Guardian*, 15 January. Available at: https://www.theguardian.com/media/2018/jan/15/guardian-new-look-online-katharine-viner (Accessed: 4 February 2023).

Vos, T.P., Eichholz, M. and Karaliova, T. (2019) ‘Audiences and journalistic capital: roles of journalism’, *Journalism Studies*, 20(7), pp. 1009–1027. Available at: https://doi.org/10.1080/1461670X.2018.1477551.

Vos, T.P. and Finneman, T. (2017) ‘The early historical construction of journalism’s gatekeeping role’, *Journalism*, 18(3), pp. 265–280. Available at: https://doi.org/10.1177/1464884916636126.

Vos, T.P. and Moore, J. (2018) ‘Who am I? Perceptions of digital journalists’ professional identity’, in S. Elridge II and B. Franklin (eds) *The Routledge Handbook of Developments in Digital Journalism Studies*. Oxon: Routledge, pp. 40–52.

Vos, T.P. and Moore, J. (2020) ‘Building the journalistic paradigm: Beyond paradigm repair’, *Journalism*, 21(1), pp. 17–33. Available at: https://doi.org/10.1177/1464884918767586.

Vu, H.T. (2014) ‘The online audience as gatekeeper: The influence of reader metrics on news editorial selection’, *Journalism*, 15(8), pp. 1094–1110. Available at: https://doi.org/10.1177/1464884913504259.

Wacquant, L.J.D. (1992) ‘The structure and logic of Bourdieu’s sociology’, in P. Bourdieu and L.J.D. Wacquant (eds) *An invitation to Reflexive sociology*. Cambridge: Polity Press, pp. 1–59.

Wahl-Jorgensen, K. and Hanitzsch, T. (2009) ‘Introduction: On why and how we should do journalism studies’, in K. Wall-Jorgensen and T. Hanitzsch (eds) *The Handbook of Journalism Studies*. Oxon: Routledge, pp. 3–16.

Waisbord, S.R. (2013) *Reinventing professionalism: journalism and news in global perspective*. Oxford; Maiden: Wiley (Key concepts in journalism).

Wall, M. (2017) ‘Citizen Journalism: Connections, Contradictions, and conflicts’, in B. Scott and A. Elridge (eds) *The Routledge Companion to Digital Journalism Studies*. Oxon: Routledge, pp. 235–243.

Wallace, S. (2013) ‘The complexities of convergence: Multiskilled journalists working in BBC regional multimedia newsrooms’, *International Communication Gazette*, 75(1), pp. 99–117. Available at: https://doi.org/10.1177/1748048512461764.

Wandels, N., Mast, J. and Van Den Bulck, H. (2023) ‘The changing face of journalistic autonomy: a case study of de standaard(1976–2020)’, *Journalism Studies*, 24(11), pp. 1418–1439. Available at: https://doi.org/10.1080/1461670X.2023.2216809.

Wang, Q. (2018) ‘Dimensional Field Theory: The adoption of audience metrics in the journalistic field and cross-field influences’, *Digital Journalism*, 6(4), pp. 472–491. Available at: https://doi.org/10.1080/21670811.2017.1397526.

Wang, Q. (2020) ‘Differentiation and de-differentiation: the evolving power dynamics between news industry and tech industry’, *Journalism & Mass Communication Quarterly*, 97(2), pp. 509–527. Available at: https://doi.org/10.1177/1077699020916809.

Ward, S.J.A. (2011) *Ethics and the media: an introduction*. Cambridge ; New York: Cambridge University Press (Cambridge applied ethics).

Ward, S.J.A. (2013) *Why hyping transparency distorts journalism ethics*, *MediaShift*. Available at: http://mediashift.org/2013/11/why-hyping-transparency-distorts-journalism-ethics/ (Accessed: 20 May 2020).

Ward, S.J.A. (2018) ‘Epistemologies of journalism’, in T.P. Vos (ed.) *Journalism*. Berlin; Boston: De Gruyter Mouton, pp. 63–82.

WashPostPR (2014) ‘The Washington Post to create WPNYC, a New York-based design and development office’, *The Washington Post*. Available at: https://www.washingtonpost.com/pr/wp/2014/03/03/the-washington-post-to-create-wpnyc-a-new-york-based-design-and-development-office/ (Accessed: 8 January 2023).

WashPostPR (2021) ‘The Washington Post to launch “Next Generation” initiative’, *Washington Post*, 4 August. Available at: https://www.washingtonpost.com/pr/2021/08/04/washington-post-launch-next-generation-initiative/ (Accessed: 8 January 2023).

WashPostPR (2022) ‘“Newsprint”: a new feature revealing what subscribers loved most’, *The Washington Post*, 30 November. Available at: https://www.washingtonpost.com/pr/2022/11/30/newsprint-new-feature-revealing-what-subscribers-loved-most/ (Accessed: 10 January 2023).

WashPostPR (2023) ‘The Washington Post announces William Lewis as publisher and CEO’, *The Washington Post*, 5 November. Available at: https://www.washingtonpost.com/pr/2023/11/04/washington-post-announces-william-lewis-publisher-ceo/ (Accessed: 11 November 2023).

Weischenberg, S. and Malik, M. (2008) ‘Journalism Research in Germany: Evolution and Central Research Interests’, in M. Löffelholz and D. Weaver (eds) *Global journalism research: Theories, methods, findings, future*. Malden, MA: Blackwell Publishing, pp. 158–171.

Wenger, E., McDermott, R.A. and Snyder, W. (2002) *Cultivating communities of practice: a guide to managing knowledge*. Boston, Mass: Harvard Business School Press.

Westlund, O. and Ekström, M. (2020) ‘News organizations and routines’, in *The handbook of journalism studies*. 2nd edn. New York: Routledge, pp. 73–89.

Westlund, O., Krumsvik, A.H. and Lewis, S.C. (2020) ‘Competition, change, and coordination and collaboration: tracing news executives’ perceptions about participation in media innovation’, *Journalism Studies*, 22(1), pp. 1–21. Available at: https://doi.org/10.1080/1461670X.2020.1835526.

White, D.M. (1950) ‘The gatekeeper: A case study in the selection of news’, *Journalism Quarterly*, 27(3), pp. 383–390.

Willig, I. (2013) ‘Newsroom ethnography in a field perspective’, *Journalism*, 14(3), pp. 372–387. Available at: https://doi.org/10.1177/1464884912442638.

Witschge, T., Anderson, C.W., Domingo , D. and Hermida, A. (2016) ‘Introduction’, in T. Witschge, C.W. Anderson, D. Domingo , and A. Hermida (eds) *The SAGE handbook of digital journalism*. London: Sage Publications, pp. 1–4.

Witschge, T. and Harbers, F. (2018) ‘The entrepreneurial journalist’, in S. Elridge and B. Franklin (eds) *The Routledge handbook of developments in digital journalism studies*. Abingdon: Taylor & Francis Group, pp. 101–119.

Witschge, T. and Nygren, G. (2009) ‘Journalistic work: a profession under pressure?’, *Journal of Media Business Studies*, 6(1), pp. 37–59. Available at: https://doi.org/10.1080/16522354.2009.11073478.

Wright, K. (2011) ‘Reality without scare quotes: Developing the case for critical realism in journalism research’, *Journalism Studies*, 12(2), pp. 156–171. Available at: https://doi.org/10.1080/1461670X.2010.509569.

Wunsch-Vincent, S. (2010) ‘Online news: Recent developments, new business models and future prospects’, in D.A.L. Levy and R.K. Nielsen (eds) *The changing business of journalism and its implications for democracy*. Oxford: Reuters Institute for the Study of Journalism, pp. 25–37.

Yang, Y. (2014) ‘Bourdieu, practice and change: beyond the criticism of determinism’, *Educational Philosophy and Theory*, 46(14), pp. 1522–1540. Available at: https://doi.org/10.1080/00131857.2013.839375.

Yin, R. (2009) *Case study research: Design and methods*. 4th edn. Thousand Oaks, CA: Sage Publications.

Yin, R.K. (2012) *Applications of case study research*. 3rd ed. Thousand Oaks, CA: Sage Publications.

Yin, R.K. (2018) *Case study research and applications: design and methods*. 6th edn. Los Angeles: Sage Publications.

Zelizer, B. (2004) *Taking journalism seriously: news and the academy*. Thousand Oaks; London; New Delhi: Sage Publications.

Zelizer, B. (2007) ‘Introduction: on finding new ways of thinking about journalism’, *Political Communication*, 24(2), pp. 111–114. Available at: https://doi.org/10.1080/10584600701312829.

Zelizer, B. (2013) ‘On the shelf life of democracy in journalism scholarship’, *Journalism*, 14(4), pp. 459–473. Available at: https://doi.org/10.1177/1464884912464179.

Zelizer, B. (2015) ‘Terms of choice: uncertainty, journalism, and crisis: terms of choice’, *Journal of Communication*, 65(5), pp. 888–908. Available at: https://doi.org/10.1111/jcom.12157.

Zelizer, B. (2018) ‘Resetting journalism in the aftermath of Brexit and Trump’, *European Journal of Communication*, 33(2), pp. 140–156. Available at: https://doi.org/10.1177/0267323118760318.

Zimmerman, J., Stolterman, E. and Forlizzi, J. (2010) 'An analysis and critique of research through design: Towards a formalization of a research approach', in *8th ACM conference on designing interactive systems - DIS '10*, pp. 310–319.

APPENDICES

Appendix A: Topic guides for interviewees

Designers:

- Job title/years of experience
- What does your role involve? How many people in your team? Can you describe your responsibilities?
- What other professionals do you work with?
- Do you work in cross-disciplinary teams daily or only for specific projects?
- What are the problems your organisation aims to tackle through a design approach?
- Does your organisation actively promote cross-functional collaboration?
- How do you create value for your readers/organisation through design?
- How does design support news production practices?
- How do you define innovation in your organisation?
- How do you utilise audience research?
- How do you measure the impact of your work?
- How often do you work alongside journalists and/or editors?
- How do you help journalists and editors utilise audience insights?
- Have you encountered tensions or resistance when working alongside journalists/editors?

Technologists/Audience analysts/Audience editors/Audience Researchers

- Job title/years of experience
- What does your role involve? How many people in your team? Can you describe your responsibilities?
- What other professionals do you work with?
- Does your organisation actively promote cross-functional collaboration?
- Do you work in cross-disciplinary teams daily or only for specific projects?
- Do you collaborate with designers and what does this include?
- How often do you work alongside journalists and/or editors?
- How do you help journalists/editors understand and utilise audience insights?

- How does your work support news production practices?
- Have you noticed tensions or resistance when you work alongside journalists/editors?
- How do you define innovation in your organisation?

Journalists/Reporters/Editors

- Job title/how many years with your organisation/years of experience
- How would you describe your organisation's current involvement/relationship with your readers?
- Has your work been affected by the audience turn in journalism?
- How do you feel about increased audience awareness in your organisation?
- Do you feel that the relationship with audiences has changed over the years and how?
- Do you follow audience analytics?
- Are you included in discussions about audience strategy?
- How do you feel about audience engagement?
- What other practitioners in your organisation do you work with?
- Do you work in cross-disciplinary teams daily or for specific projects?
- Have you worked alongside designers?
- What difficulties do journalists face when working in cross-disciplinary teams?
- Does your organisation actively promote cross-functional collaboration?
- Do you feel journalistic professional boundaries and skills are being redefined? How?

Appendix B: Research Ethics Approval

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

Dr John O'Sullivan
School of Communications

18th December 2020

REC Reference:	**DCUREC/2020/281**
Proposal Title:	**Designing the future newsroom: Using human-centred design and big data to restore trust in traditional newspapers in the digital age.**
Applicant(s):	**Dr John O'Sullivan, Eirini Evangelia Psychari**

Dear Colleagues,

This research proposal qualifies under our Notification Procedure, as a low risk social research project. Therefore, the DCU Research Ethics Committee approves this project.

Materials used to recruit participants should state that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee.

Should substantial modifications to the research protocol be required at a later stage, a further amendment submission should be made to the REC.

Yours sincerely,

Geraldine Scanlon

Dr Geraldine Scanlon
Chairperson
DCU Research Ethics Committee

DCU
Research & Innovation

Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

Research & Innovation Support
Dublin City University,
Dublin 9, Ireland

T +353 1 700 8000
F +353 1 700 8002
E research@dcu.ie
www.dcu.ie

Appendix C: Plain Language Statement and Informed Consent Form

DUBLIN CITY UNIVERSITY

Plain Language Statement

The study in which you are being requested to participate has the working title of "Designing the future newsroom: Using human-centred design and big data to restore trust in traditional newspapers in the digital age". It is being conducted by Eirini Evangelia Psychari, a PhD student in the School of Communications in Dublin City University (email address eirini.psychari2@mail.dcu.ie, 085 8872894), under the supervision of Dr John O'Sullivan (john.osullivan@dcu.ie), and funded by the Irish Research Council. Ethical approval for this research has been obtained by Dublin City University's Research Ethics Committee.

This study is aiming at determining whether mainstream newspapers that have incorporated the dyad of human-centred design and big data into their product development are moving towards an innovative and sustainable business model in the digital environment, and how this cultural change in legacy media goes beyond marketing activities and into the news agenda, journalistic practices, skills, and expectations. The research will include phone, email or face-to-face interviews with editors, journalists, designers, engineers and product developers in news organisations. The interviews which will be recorded (audio only) and the interviewees will be notified prior to the interview. If the interviewees prefer for the interviews not to be recorded, notes will be taken. The approximate length of each interview will not surpass 45 minutes.

There are no anticipated risks associated with participating in this study. No benefits are expected for being involved in this study. This research is expected to make practical contributions to journalism by studying how specific newsrooms combine human-centred design and data analytics to restore trust to their brand, how this can potentially lead to sustainable business models by increasing subscriptions, and what these changes mean for journalists' skills. Also, it is expected to make theoretical contributions to the discipline, by exploring how a user-centred oriented newsroom and news agenda affect journalistic discourse itself.

The interviews will be used exclusively for the needs of the study, and your identity, data and contact details, and interviews will not be stored for longer than this research requires. Data will be stored on the DCU Google Drive. The interviews will be transcribed, and you can review the transcriptions if you wish. You will be granted anonymity but given the small pool of the organisations studied in this project, there is no guarantee that you will not be identifiable. If you prefer some comments to be made off the record, you can indicate this during the interview, or when you review the transcript of the interview. Furthermore, there are exceptions to confidentiality mandated by the law. Your participation in this study is completely voluntary, and you may withdraw at any time without penalty. You may withdraw by informing the researcher in the contact details provided above that you no longer wish to participate (no questions will be asked).

If participants have concerns about this study and wish to contact an independent person, please contact:

The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail: rec@dcu.ie

DUBLIN CITY UNIVERSITY

Informed Consent Form

The study in which you are being requested to participate has the working title of "Designing the future newsroom: Using human-centred design and big data to restore trust in traditional newspapers in the digital age".

It is being conducted by Eirini Evangelia Psychari, a PhD student in the School of Communications in Dublin City University (email address eirini.psychari2@mail.dcu.ie, 085 8872894), under the supervision of Dr John O'Sullivan (john.osullivan@dcu.ie) and funded by the Irish Research Council. Ethical approval for this research has been obtained by Dublin City University's Research Ethics Committee.

This study is aiming at determining whether mainstream newspapers that have incorporated the dyad of human-centred design and big data into their product development are moving towards an innovative and sustainable business model in the digital environment, and how this cultural change in legacy media goes beyond marketing activities and into the news agenda, journalistic practices, skills, and expectations.

As stated in the Plain Language Statement, participants in this research will be requested to participate in telephone, Skype or face-to-face interviews, which the researcher will request to record (audio only). If preferred by the interviewee, notes can be taken. The interviews will be used for the researcher's dissertation, and this may include dissemination activities, such as publications in journals and presentations in conferences. Participants' involvement in this study is totally voluntary. As a participant you may withdraw from it at any point. There will be no penalty for withdrawing before all stages of the study have been completed.

The interviews will be used exclusively for the needs of the study, and your identity, data, contact details, and interviews will not be stored for longer than this research requires. The interviews will be transcribed, and you can review the transcriptions if you wish. You will be granted anonymity for the interviews but given the small pool of the organisations studied in this project, there is no guarantee that you will not be identifiable. Also, there are legal limitations to confidentiality.

Participant – please complete the following (Circle Yes or No for each question)

I have read the Plain Language Statement (or had it read to me) Yes/No

I understand the information provided Yes/No

I understand the information provided in relation to data protection Yes/No

I have had an opportunity to ask questions and discuss this study Yes/No

I have received satisfactory answers to all my questions Yes/No

I am aware that my interview will be audiotaped Yes/No

I acknowledge that I may withdraw from the Research Study at any point Yes/No

Signature:

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project

Participant's Signature:

Name in Block Capitals:

Witness:

Date:

Appendix D: Design applications in the case studies

Design applications/Organisation	***The New York Times***
Technical innovation (news experiences, personalisation, accessibility)	UX design was described as influencing how information is structured and presented, making it easier for readers to access and comprehend journalism. Enhanced accessibility features help readers build their own knowledge in a subject, providing different pathways into a story. Projects include the dark mode in the app, the transcript for podcasts, and Storylines.
Product and service development	Products in which designers were heavily involved include apps, such as NYT Cooking. Before that, NYT Now, which was later abandoned, was an example of a low-risk experimentation project for which DT was utilised.
Facilitation of cross-functional collaboration	Design's cross-disciplinary nature was described as one of its greatest strengths. Design sprints based around a hypothesis about comprehension and discoverability, experimentation and early failure are part of the design process which involves many different practitioners. Designers described the design process as being proactive, with an aim to create the tools and processes to empower others to make good decisions.
Audience research	Designers are involved in both qualitative and quantitative audience research to understand the different types of readers, their interests, and preferences, and how they interact with the *Times*. Qualitative research was described as being more informative than quantitative for the design process because it identifies motivation. It can balance out the datafied culture posed by audience metrics and bring into the fold the voice of the reader. Audience research studies range from surveys to more generative projects that involve co-creation with the audience.
Overarching strategic initiatives and innovation	Design is used to determine audience's affinity with the brand, and develop overarching initiatives connected to the Times' audience strategy. Some of these projects include 'Times Insider', 'Behind the Journalism', and the redesign of the Opinions section, which were created to increase trust and transparency and combat problems such as mis- and disinformation. Designers also focus on diversifying audiences, growth, and conversion.
Visual design	Designers described the *Times* as having a strong design culture, which links back to the traditional applications of design in the newspaper, such as graphic design and typography. Visual design was described as helping to manage complexity in information, process knowledge, and facilitate collaboration between different teams.

Design applications/Organisation	***The Washington Post***
Technical innovation (news experiences, personalisation, accessibility)	*The Post* has invested heavily on UX and personalisation for audience engagement. Examples of projects with enhanced personalisation and UX features are the 'My Post' tool that allows subscribers to customise their reading experience, and the 'Newsprint' feature, an interactive summary of subscribers' favourite topics and journalists.
Product and service development	Designers are involved in the development of new products, by exploring ideas and hypotheses, bringing them to production and measuring their performance over time. One example is the podcast 'The 7', which was the result of light co-creation with the audience.
Facilitation of cross-functional collaboration	Designers talked about their intention to implement a "democratised design research practice", by training other teams, including the newsroom on design methods so audience-centred principles become part of their work. They mentioned the example of Audience Innovation Lab, for which they would provide and train journalists on DT tools. Designers emphasised the importance of making connections with editors and journalists and help them utilise the knowledge of audience research, instead of imposing top-down changes to their work and routines.
Audience research	Designers are mostly involved is qualitative audience research, including interviews, surveys, diary studies, and some projects of what they called "light co-creation" with the audience. The results of audience research help inform product development, pursue new subscribers, and explore ways to combat problems such as news avoidance linked to news consumption habits of different demographics, especially younger audiences.
Overarching strategic initiatives and innovation	Design, and more specifically DT, is utilised for audience-centred strategy, such as the Next Generation, a cross-disciplinary innovation project to attract younger and more diverse audiences. Another audience-oriented initiative in which designers are involved, includes the Audience Innovation Lab, an incubator programme to explore new approaches to storytelling.
Visual design	Using design-led audience research, designers came up with recommendations for the new Climate desk, which included more visual content and interactive visual design features.

Design applications/Organisation	***The Guardian***
Technical innovation (news experiences, personalisation, accessibility)	UX and UI design were described as focusing on personalised experiences and smooth navigation between features. Tweaks in accessibility, such as the introduction of the five "key pillars" on the website in the place of sections that reflected the internal structure of the newsroom, were not only aesthetic in nature, but also improve the discovery journey of the reader and increase traffic. Personalisation preferences in the app aim to provide a holistic experience in consuming the news, based on the preferences of different demographics.
Product and service development	Designers identify end-user pain points and create products that address the conflicting needs of different teams and departments. They are involved in hands-on design sessions with readers to come up with products, such as the Feast cooking app.
Facilitation of cross-functional collaboration	DT has been used to promote a cultural shift of increased collaboration and the creation of cross-functional teams. Designers referred to design sprints and workshops, hack days and other agile and collaborative approaches using DT tools. The aim is to create a more "customer-centric" culture and create new ways of approaching work. Designers were working on a design framework that would be fit for a news organisation.
Audience research	Audience research, and especially qualitative research, was described as being actively promoted by upper management to understand how different demographics engage with *The Guardian*, their behavioural traits, and how they perceive the news. Designers are involved in surveys, diaries, in-depth interviews, they create personas of readers, verify hypotheses, and go deeper on how audiences experience *The Guardian* to inform product and editorial tools development. An example was the Future of News, a group ideation project in which designers utilised DT methods to engage and discuss with students how they imagined news trends would be in year 2030.
Overarching strategic initiatives and innovation	DT was utilised for *The Guardian's* rebranding and redesign in 2018, that reaffirmed the newspaper's position as a progressive global news brand. Designers are involved in audience-focused and future-oriented projects that inform strategic direction and support newspaper’s business model. Innovation was described as being facilitated by design-led methods and cross-functional collaboration.
Visual design	Visual design changes in colour, layout, and font, alongside the switch to tabloid, were introduced for the redesign of *The Guardian* in 2018. The traditional application of visual design led to a wider implementation of design methods across different areas in the organisation.

Design applications/Organisation	***The Irish Times***
Technical innovation (news experiences, personalisation, accessibility)	In 2022, *The Irish Times* introduced its redesigned website and app, offering a consistent reader experience across devices, revised news sections, a dedicated space for podcasts, and audio versions to articles. A new "burger" navigation icon leading to a push-out menu of all sections was also introduced. UX and UI design is used to improve navigation consistency for users.
Product and service development	The designer mentioned the need to introduce design earlier in the product development process to create products according to the specific requirements of the newspaper to avoid uniformity and a lack of uniqueness.
Facilitation of cross-functional collaboration	The designer said that the idea behind the Innovation and Development team, where designers belong to, was to include as many functions as possible across the organisation, involve them in relevant projects from the beginning and encourage work with editors in multi-experimenting. A need to formalise collaborative processes was observed.
Audience research	Audience research is a support function, for which designers provide insights into crafting effective survey questions. Audience research helps to recognise the various segments and of the audience, instead of relying on implicit assumptions. *The Irish Times* utilises a number of audience research tools, such one-on-one interviews, focus groups and surveys. Audience input determined popular content areas and new features for its major redesign of its website and app in 2022. Audience panels were used to evaluate the efficacy of the updates and make refinements.
Overarching strategic initiatives and innovation	UX design and research, while often included in strategy discussions, were described as not "consistently valued" in decision making.
Visual design	The redesigned website and app included a minimalist and consistent presentation across desktop, mobile website, and iOS and Android phone apps. A wider desktop site was introduced to allow greater visibility of more stories across the screen. Designers work with editors with regards to cosmetic changes that improve readability.