METRICS AND ANALYTICS IN THE NEWSROOM:

An Ethnographic Study Exploring How Audience Data Are Changing Journalistic Practice

> Nicole Blanchett Neheli A thesis submitted to Bournemouth University in partial fulfillment of the requirements for a Doctorate of Philosophy

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Metrics and Analytics in the Newsroom: An Ethnographic Study Exploring How Audience Data are Changing Journalistic Practice Nicole Blanchett Neheli

Abstract

The use of metrics and analytics is now embedded in and directly impacting newsroom practice and routines. As audience data are used to shape and promote content that help form societal narratives, development of best practice is crucial, not only to enhance fulsome public discourse but as a means of reputation building for media outlets fighting to retain relevance and public trust, both of which are intrinsically tied to revenue and/or funding. This thesis explores the potential conflicts between journalism's mandate to keep the public informed through quality, contextualised news coverage and the use of metrics and analytics to build scale and a sustainable business model.

Empirical research is based on ethnographic observation in four news organisations on two continents in three different countries: Norway's national broadcaster, NRK, which has developed its own analytics system that uses both qualitative and quantitative data; The Canadian Press, Canada's national news agency, which is exploring ways to track how its content is being used with little direct access to audience data; *The Hamilton Spectator*, a local newspaper in Canada making the shift from print to digital; and a similarly sized and situated local paper in the United Kingdom, *The Bournemouth Daily Echo*. Participant observation and interviews were used to investigate how metrics and analytics impact newsroom routines; how journalists feel their work is impacted by the use of audience data; and how practices pertaining to the use of metrics and analytics are challenging the boundaries of journalism. The thesis employs a bricolage of theories within a sociological framework, through the lens of media logic, and draws on the author's own perspective of working in a newsroom and, currently, in an academic media faculty.

The research provides observed examples of the ways in which changing boundaries are impacting definitions of journalism and who is a journalist; it proposes best practice for the use of metrics and analytics in newsrooms that might better situate media outlets to serve their communities and survive in a rapidly changing media landscape; it offers suggestions for media scholars on best practice to perform research that better reflects newsroom routines particular to the use of metrics and analytics; the thesis contributes a new gatekeeping model that identifies two primary channels related specifically to the use of metrics and analytics: promotional and developmental; finally, the thesis demonstrates how a bricolage of complementary theories and the selection of multiple sites of study might best support the reflexive investigation of complex social structures within a rapidly changing field.

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Preface/Acknowledgments

The genesis of this project dates back to an industry advisory meeting for the journalism program I was then coordinating, where I noticed a former student who worked in marketing and the journalists sitting at the table were all referencing the use of analytics in the same manner. This was my first indication that industry practice was changing in a way I needed to understand more fully in order to best serve my students. However, the theoretical nascence of this thesis began when I was doing my Master's research and one of my professors, Dr. Phillip Vannini, sent me a paper by Dr. David Altheide (2004) that introduced me to media logic and forever changed the lens through which I examined journalistic practice. I have since had the opportunity to meet Dr. Altheide, and during the process of this project he provided me with much appreciated encouragement.

This thesis, though, would not have been possible without the stalwart support of my two supervisors, Dr. Stephen Jukes and Dr. Karen Fowler-Watt, whose industry and academic experience provided me with unparalleled expertise. I am also indebted to my participants, who provided me with incredibly rich data, much appreciated candour, and time they did not have to spare; Mary Lynn O'Shea for her eagle-eyed editing; and Cheryl Vallender for her assistance in the visualisation of my participative gatekeeping model. This project also benefited from a sabbatical being awarded by my employer, Sheridan College, and all of the friends and family who provided assistance that allowed me to carve out the time to collect data, think, and write—for which I am very grateful.

To borrow from Dickens, the data gathering and writing for this thesis were completed during the best and worst of times—both of my children suffered life-threatening illnesses, one being hospitalized for four months. Although I was often asked how I was able to continue working on my research, it provided me a virtual sanctuary. The theoretical struggle was genuinely demanding; however, it was respite from the reality of ICU at 3am. Such challenging times on a personal level also allowed me to keep the struggle of PhD work in perspective and was a constant reminder of the need for a holistic approach to the interpretation of all data gathered in interviews: participants are not subjects, they are people. Finally, I would like to thank my children, Emmet and Maeve, who are far better and braver individuals than I could ever hope to be. This thesis may very well be one of my biggest accomplishments, but it pales in comparison to being their mom.

Author's Declaration

At the same time this thesis was being written, a paper I authored containing specific elements of research contained herein related to *The Hamilton Spectator* and the significance of the pageviews metric with regards to newsroom practice related to metrics and analytics was accepted for publication by the journal *Digital Journalism*. That paper includes the definition of metrics and analytics included in this thesis; however, this thesis was referenced in that paper¹. A book chapter on the impact of metrics and analytics on local coverage was also in the process of publication.

¹ Assigned doi <u>https://doi.org/10.1080/21670811.2018.1504626</u>

Chapter 1 Introduction

Her hands were never still, her mouse always moving as her eyeballs bounced back and forth between multiple monitors. She leaned into the screens, continually checking the dashboard of the analytics platform Chartbeat. Her job was like that of a busy traffic cop or air traffic controller, but instead of planes or cars she was dealing with a constant flow of information, endeavouring to put the right story in the right place at the right time and promote it in a way that would catch a "wave" of readers and help meet website traffic targets imposed by head office (notes from participant observation 26 April 2017).

The use of metrics and analytics² is now embedded in and directly impacting newsroom practice and routines. Newsworkers,³ whether working with or without traffic targets and quotas, continually monitor pageviews and pathways. This process involves more than just using metrics to measure a story's success on the website—traffic flows are also scrutinised within and from a variety of social media and online content is constantly enhanced and promoted in the hopes of expanding reach and drawing a larger audience. However, managing promotion and placement of content is just one aspect of the ways in which I observed metrics and analytics being used in this multi-organisational, multi-national study on news practice. Audience data are also being utilised to determine what stories will be selected, the depth of coverage, story formats, when stories will be posted, and what platforms will host them.

This use of analytics and metrics is contributing to a change in newsroom culture. The relentless tracking of story performance and the demand to keep content fresh on websites have created a shift in job responsibilities and the time journalists have to dedicate to original reporting in newsrooms where the pace of work is frenetic. Added to the mix is a

² Data collected on audience consumption, terms that will be defined in a more detailed manner presently.

³ The term "news workers," or in the spelling I choose to adhere to "newsworkers," is used by a number of scholars, including Altheide (1976 and all work beyond), in part, to distinguish that not everyone in a newsroom is performing what could be defined as journalism or acting as a journalist even though they are contributing to the production of content shared in a news format. It also alludes to the idea of those in newsrooms producing content in line with "assembly-line" or "factory-like" production. In this thesis, it is used in an effort to avoid using the term "journalist" as a catch-all for many different types of newsroom work, including new roles that fall outside traditional practice. The term journalist is used specifically in reference to participants that are doing/or have done work traditionally acknowledged as journalistic activities as outlined by Shapiro (2014), in order to provide clarity in observations and analysis.

widespread industry mantra of a digital-first future, with no existing, transferable business model to ensure, or even project, success⁴. This discrepancy between promise and reality is also seen in discussions surrounding which digital metrics have value. Although the popular narrative is that engagement, for example, time spent watching and/or reading, is more important than simple pageviews, at this point, many advertisers are still more interested in clicks than counting time, and purchased ad space often comes with the promise of a certain number of "impressions" or, in other words, eyeballs. Even in newsrooms where ad revenue is not an issue, pageviews are still widely used as a measure of both reach and audience preference.

This thesis examines the use of metrics and analytics at four media outlets in North America and Europe: Norway's national broadcaster, NRK, which has developed its own analytics system that uses both qualitative and quantitative data to determine the success of a story; The Canadian Press, Canada's national news agency, which is working to track how its content is being used by its clients in order to make better use of limited resources and use such data as leverage in contract negotiations; *The Hamilton Spectator*, a local newspaper in Canada making the shift from print to digital; and a similarly sized and situated local paper in the United Kingdom, *The Bournemouth Daily Echo*. Using a bricolage of theories within a sociological framework, through the lens of media logic, and from my own perspective having worked in a newsroom and currently working as media faculty, I explore the potential conflicts between journalism's mandate to keep the public informed through quality, contextualised storytelling and the use of metrics to build a bigger audience and sustainable business model.

My original research question, "Do analytics impact editorial decision-making" was irrefutably answered as "yes" based on a combination of my ongoing literature review and the early stages of my data gathering. As a result, I revised my first question to "How does the use of metrics and analytics impact news practice?" This led to my second question, "Do journalists feel their work is impacted by the use of metrics and analytics?" and the third, "How are practices developed by the use of metrics and analytics challenging the boundaries of what it means to be a journalist and the definition of journalism?"

⁴ Hansen and Goligoski (2018) offer models of best practice, but none have proven to be widely transferable from one audience to another.

1.1 What Is Best Practice?

With the speed at which the use of metrics and analytics is becoming entrenched in daily routines, developing best practice is imperative to the future of journalism (MacGregor 2014; Hindman 2015; Cherubini and Kleis Nielsen 2016). As a measure of the speed of entrenchment, in a 2015 study Cohen said, "5,000 media outlets use Chartbeat" (p.108). In 2017, that number had multiplied tenfold, with Chartbeat serving 50,000 outlets in 65 countries (CB1 personal communication, 14 November 2017; see also Petre 2018 and Christin 2018). There is no question that metrics and analytics are impacting news practice but determining *just how* is complex given the pace of change in the technology used to gather audience data. Analysis is further muddled by other issues facing newsrooms including a collapse of the traditional business model with no transferable one to take its place (Freedman 2010; Drohan 2016; Cornia et al. 2016; Newman et al. 2017; Standing Committee on Canadian Heritage (SCCH) 2017), changing perceptions around the role and importance of journalism in a democratic society, changing definitions surrounding who is a journalist and what constitutes journalism, and the changing relationships amongst journalists internally in newsrooms and externally with their audience (Mitchell and Holcomb 2016; Greenspon 2017).

In order to best examine the influence of the audience, there are calls for more research on analytics' specific impact on gatekeeping—the process of story selection, promotion, and development in newsrooms (Vu 2014; Lee et al. 2014; Zamith 2015; 2018). Gatekeeping is a theory finding new depths in relation to examining the use of metrics (Tandoc 2013). In today's newsrooms, newsworkers, particularly those working primarily online, often do not base editorial choices solely on their gut instinct or news values, but their interpretations of what the audience wants based on metrics and analytics (Anderson 2011; Groves and Brown 2011; Bright and Nicholls 2014; Tandoc 2014; Petre 2015; Schlesinger and Doyle 2015; Bunce 2017; Hanusch and Tandoc 2017; Björkman and Franco 2017). However, it is not just the relationship between newsworkers and their audience that is evolving.

1.2 What Does It Mean to Be a Journalist?

There is also a change in the relationship amongst newsworkers themselves, and negotiations within the profession over what being a journalist actually means in practice (Shapiro 2014; Carlson 2015c; Lewis and Usher 2016; Deuze and Witchsge 2017). Giervn (1983) said, "The boundaries of science are ambiguous, flexible, historically changing, contextually variable, internally inconsistent, and sometimes disputed" (p. 792)—and the exact same can be said of journalism. In some newsrooms I visited, there were clear lines drawn between those working exclusively on the digital side and those with more traditional roles in terms of what was editorially acceptable and what work was considered "journalism." Participants described a "silicon ceiling" that prevented those with a digital background from reaching the most senior positions at traditional media outlets, and pointed out that the work of social media experts and data journalists was not always given the same import as the work of those in more traditional roles. There was also friction surrounding what qualified as clickbait, original reporting, the types of stories being covered, and how they were covered. Journalists I spoke with expressed differing opinions on whether chasing traffic could damage brand and quality of content because resources were focused on sensationalistic or trivial stories versus those deemed as journalistically significant, and whether the curation/aggregation and enhancement of stories with the aid of metrics and analytics, versus gut instinct and original reporting, constituted journalistic activities.

1.3 Historical Context for Imagining and Commodifying the Audience

The collection of audience data has a long history (Lee et al. 2014; Zamith 2015; Carlson 2018) and online metrics often mimic the role of more traditional ones, such as print circulation numbers (MacGregor 2007; Thurman 2014). Media outlets have long strived to predict the popularity of news content with the audience; however, now they have the tools to implicitly quantify detailed aspects of that audience and how individual members of the audience consume news (Cottle 2000; Anderson 2011; Napoli 2011; Zamith 2015). The idea of catering content to audience likes and dislikes, sometimes regardless of its editorial worth or sensationalist nature, is an inveterate part of news coverage (Altheide 1976; Bourdieu

1996; Pariser 2011; Allen 2013). As a result of more easily accessible data, though, some argue there is now more pressure for journalists to choose what is popular over what is relevant (Lowrey 2009; Witschge 2012a; Heinderyckx 2015). As the earliest studies on the explicit use of online metrics in newsrooms in relation to editorial-decision making did not surface until the first decade of the 2000s (for example, MacGregor 2007), there is not a long history of peer-reviewed evidence on their impact in newsrooms. However, there is growing literature as scholars, and journalists, continue to explore the parameters that define specific audience behaviours, such as engagement (Ferrer-Conill and Tandoc 2018), and how the use of audience data is or is not serving as a tool to promote participation of the audience in the news process (Lee and Tandoc 2017). Although the distinctive use of metrics and analytics is a relatively new area of study, journalistic decision-making is not. Such literature allows for historical context and comparison on the impact of audience data on story selection, particularly through the use of gatekeeping theory (White 1950; Bright and Nicholls 2014).

1.4 Audience Data and Journalistic Capital

Although this thesis is not directly related to the ubiquitous conversations taking place surrounding the spread of misinformation in an online age, those conversations are interwoven with creating content based on popularity, the use of audience data, in general, and the overall standards and values of journalism. This is because newsworkers with limited resources often rush to catch the wave of the audience, sometimes not fully understanding the impact of their decisions (Phillips 2018), nor the data they are using to make such decisions (Gabielkov et al. 2016; Duffy et al. 2017). They are working in newsrooms that are operated with fewer journalists, producing more content, on multiple platforms, using both editorial and technical skills, while being encouraged to develop a brand and social media presence to build their own audience and draw more viewers. This relentless cycle of production combined with a concentration on volume of traffic/ratings can lead to the amplification of misinformation by mainstream media (Marwick and Lewis 2017; Faris et al. 2017; Wardle and Derakhshan 2017). The focus on numbers can also lead to a focus on quantifying the audience in order to commodify it, versus contributing to informed civic discourse (Tandoc and Thomas 2015; Farhi 2016). With growing strategies to personalise

news content (Newman 2018), there are also growing concerns over how such strategies might impact discourse in the public sphere (Heinderycx 2015; Frizzera 2018), particularly as concerns to the spread of knowledge on the internet, a platform even digital pioneers describe as "broken" (Streitfeld 2017; Kulwin 2018). Mistakes/misinformation spread rapidly (Vosoughi et al. 2018); live endlessly online, despite any subsequent corrections (Solomon 2018); and, when identified, negatively impact journalism's social and political capital, which are inherently tied to its economic capital. As a result, examining how newsroom practice in relation to metrics and analytics impacts the decisions of newsworkers, who, ideally, are responsible for helping to ensure a well-informed public, and what strategies particular to metrics and analytics might best support more holistic measures of a story's success, is of utmost importance.

1.5 Structure of the Thesis

This introduction marks the first chapter of this thesis, followed by Chapter 2 which will provide further historical context on the use of audience data and outline relevant literature surrounding the use of metrics and analytics in newsrooms and journalism. This includes the impact of technology on media logic and gatekeeping, the documented practice of chasing audience traffic that often results in putting popularity and profit over information sharing, differing viewpoints on the actual impact of audience behavior and the use of analytics and metrics, as well as ideas relating to best practice. The literature review also sets forth discussion on issues related to journalistic capital—economic and social—as the industry continues to struggle to manage revenue and develop successful business strategies in a more digitally focused market where much content is available for free. As well, this chapter explores how the use of metrics and analytics makes news agencies more likely to amplify "clickbait" and/or misinformation, along with the changing relationship between newsworkers and their audiences. Shifting boundaries surrounding practice and traditional newsroom positions will be examined through the parameters of boundary work, including what constitutes as an act of journalism, along with fluid definitions of the term journalist.

The third chapter will discuss the methodology of the ethnographic approach of this project—where equal importance was placed on participant observation and interviews—and

the decision to use a bricolage of theories for analysis. Briefly, field theory was used to define the parameters of the area of study and efforts within the defined field to retain editorial autonomy in the face of economic pressures; gatekeeping theory was used to examine the particular impact of analytics and metrics on story selection and promotion; boundary work to examine changing roles, actors, and rules within the field of the newsroom; and role negotiation to examine how individual newsworkers were responding to such changing boundaries. All analysis was done through the lens of media logic (Altheide and Snow 1979; 1991), which, due to its particular focus on the development of processes, routines, and formats, allowed for a critical examination of the ways in which forces from outside the journalistic field help shape everyday routines and the subsequent impact on information sharing. This chapter also introduces my efforts to approach this project from the viewpoint of an academic, rather than a journalist, through the prioritisation of reflexivity.

A different case study presenting a cross-cultural perspective is offered in each of four subsequent chapters. The fourth chapter, "NRK: Analytics from a Public Broadcasting Perspective," explores practice at Norway's public broadcaster. This includes efforts to use metrics and analytics in ways which reflect NRK's public service mandate to inform its audience, such as the development of its in-house analytics system ARK, which had a qualitative component where stories were measured against traditional journalistic standards like quality of writing and sources. This chapter also investigates how the use of audience data is impacting routines and relationships between NRK's main newsroom in Oslo and the local offices. Findings from NRK also begin to shape the concepts of what I define as promotional, or real-time/short-term, versus developmental, or longer-term, gatekeeping with the use of metrics and analytics. Within this first chapter of findings, I also begin to identify the tangible boundaries between a variety of newsworkers, including older and younger journalists, those with a background in private versus public media, and the shifting boundaries between journalists and technologists who speak a different "language" but are becoming more reliant on each other in their daily work. This chapter also introduces the idea that despite widespread use of metrics and analytics, there is widespread misinterpretation, and some would say misuse, of audience data in the name of supporting ideologies and departmental goals.

The fifth chapter, "Working Blind': The Quest for Analytics at The Canadian Press," examines how subscription-based news agencies are struggling to cater to their clients without having access to frontline metrics. Throughout the chapter I detail the ways in which CP worked around a perceived lack of crucial audience data through the use of social media metrics and analytics, manual tracking of content, and limited information provided by clients, and how the data they were able to glean impacted gatekeeping. Being subscriber based, CP's reputation of providing accurate and quality content free of discernable ideology was crucial in terms of meeting the demands of its diverse clients—integrity and objectivity sold subscriptions. However, there was acknowledgment that editorial boundaries were being challenged by audience-driven story development and the new types of positions and tasks being developed to monitor audience trends—boundaries some traditionally-minded editors did not want to shift. This chapter provides a unique look into the inner workings of a news agency attempting to find the balance between editorial integrity/autonomy and creating popular, digitally progressive content that would be widely used by clients and a variety of audiences.

The sixth 'chapter, "'Static is Death': The Push for Pageviews at *The Hamilton Spectator*," explores how pageview-driven advertising models impact news practice at a local paper in Canada and how large media conglomerates impact local newsrooms, including centralised services and corporately assigned traffic targets that can trigger conflict due to differing goals and editorial strategies for differing platforms, in this case print versus web. I also examine how efforts to place boundaries around or sequester print editorial autonomy and quality from web, or thinking of the web as a secondary and less important platform from an editorial standpoint, might limit community engagement and community building and/or stifle analysis of audience data to its most basic function, counting clicks. *The Spectator* also provides crucial data to further unpack the idea of promotional gatekeeping, or the use of real-time metrics, to make decisions related to the placement and promotion of content on the website, and how a focus on traffic can lead to a focus on real-time data that skews popularity of more sensationalistic items. Throughout this chapter, the unyielding pace of journalistic work in digital newsrooms is revealed.

The seventh chapter, "Making Metrics Count: Analytics Practice at *The Bournemouth Daily Echo*," provides contrast to *The Spectator*, and another viewpoint of the struggle of

local newsrooms to adapt to digital content production. *The Echo* also had what staff described as traffic targets⁵; however, in contrast to *The Spectator*, analytics were used in story selection and development for both print and web platforms, there was a clear strategy introduced by head office to incorporate the use of analytics into everyday work, and, overall, there was more balanced weight placed on both platforms of delivery. In this chapter, I will investigate how a unified editorial strategy can create cohesion and encourage a more multiplatform, community focused mindset. However, I will also examine how the cost-cutting measures instituted to make such strategies feasible impact the work lives of journalists. This chapter provides examples of how changing the boundaries of traditional reporting solely by adding new tasks —in this case increasing duties to include production work—can erode journalistic standards and hamper innovation. Although there was a clear analytics strategy in place at *The Echo*, observations suggest no one seemed to have the time to institute it as designed. Findings also provide a glimpse into the changing boundaries between advertising and newsroom editorial.

Chapter 8 offers a detailed discussion of my research and presents conclusions, including nine major findings related to the specific impact of metrics and analytics on a spectrum of practice as journalists negotiate doxa and daily routines, and the struggles to define boundaries and definitions of journalistic work. I present a new model of what I define as participative gatekeeping—which captures the particular influence of the audience on editorial decision-making via metrics and analytics. The model reflects the different and shifting forces, specific to promotional, or real-time, use of metrics used on websites compared to the forces that impact developmental, or longer-term analysis of audience data that shapes editorial content and formats. I also explore the idea that there are both positive and typical, or negative, forces of media logic, and how the use of analytics, in a best-case scenario, provides newsworkers with the opportunity to design routines and formats aimed at developing stories that better engage the audience with important issues. The ninth chapter contains final reflections and observations that, although related, fell outside the purview of my research questions but provide richness and perspective to the findings. It also suggests new ideas surrounding best practice in relation to the development and implementation of

⁵ As will be outlined within this chapter, although staff referred to having traffic targets, a senior manager said there were only "benchmarks" and expectations of "growth."

methodology for ethnographic work in relation to journalistic studies, particularly related to the use of metrics and analytics. The formal chapters are followed by the appendices, picture gallery, and a glossary of terms.

Chapter 2 Literature Review

2.1 Introduction

The literature review for this research is focused on four separate areas: how metrics and analytics impact gatekeeping, or the selection and promotion of stories; how the economic, social, and political standing of journalism and journalists impacts the use of metrics and analytics; how the use of metrics and analytics is changing boundaries in journalism and the role of journalists in society; and how gearing content to information gleaned from audience data, particularly based on perceived popularity, might impact information sharing. The review begins with a compressed history of the use of audience data in newsrooms.

2.2 History of Analytics

"While penny press editors in the 1830s might have looked over the shoulders of newspaper readers on city streets to help them make decisions about future story coverage and placement...online newsroom editors today are relying more and more on digital tracking tools to understand the popularity of news items in order to maximize their presentation of content that audiences will be more likely to click on" (Lee et al. 2014, p.519).

The industrialisation of news content runs parallel with strategies to measure its worth from both an economic perspective, to attract advertisers, and from a social perspective, in terms of cultural influence (Tandoc 2015; Carlson 2018). Although the real-time use of metrics to track audience consumption and preference is a relatively new phenomenon (Petre 2018), media have been devising methods to measure popularity for almost two centuries (Lee et al. 2014). In an historical breakdown of "formal audience research," making reference to Napoli, Zamith (2015) chronicles milestones leading to current methods of audience data collection, including 1930s magazine reader surveys, 1950s television ratings, and the use of consultants to perform formal research in the 1970s. Zamith identifies a current "third wave" of media attempts at understanding the audience "characterized by the intense development of systems to capture, link, and organize…digital trace data" (p.25). As Napoli (2011) wrote, analytics "are making it possible for media industries to fundamentally redefine what media audiences

mean to them and how they factor into the economics and strategy of their businesses" (p.5). Instead of making editorial decisions for what Cottle (2000) describes as their "imagined audience⁶" (p.28), journalists now have an audience that can be both quantified and analysed. Data can also be gleaned through new forms of advertising like the "clickable ad" (Wang 2018, p.475) that allows for exposure of a product and measurement of an individual consumer's, or audience member's, behaviour.

In one of the first studies involving the use of online metrics in newsrooms, MacGregor (2007) found "data were often rated as the best way journalists could know their audience" (p.289). However, he also noted there were reservations regarding the fulsome use of metrics and analytics because journalists were concerned such tools measured a story based on popularity versus news value, which could lead to diminished quality of content. Just like the idea of measuring popularity, though, creating content that hovers at or below the bar of newsworthy in order to attract the widest audience is a mainstay of news production. As Pariser (2011) noted, "Since the 1800s, papers have boosted their circulations with sensationalist reports" (p.70). Popular news items entertain (Harcup and O'Neill 2017), are odd, unusual, or unexpected (Shoemaker et al. 2010), and often focus on crime (Smith Fullerton and Patterson 2017). Popularity of stories continues to directly impact editorial decision-making because website analytics mirror the traditional role of circulation and other ratings data (MacGregor 2007). Thurman (2014) says newspapers, in particular, "started and continue publicly to report their online consumption using metrics ('page impressions' and 'unique users') that compare favourably with their print circulations" and suggests that strategy might "have hastened the shift in advertising revenues from print to online by legitimising simplistic exposure-based measures at the exclusion of data on attention and engagement⁷" (p.19). As measures that might promote attention and engagement or even amplify audience participation in the journalism process⁸ are not as easily quantified, volume of traffic often becomes the priority.

However, even at this surface level, metrics and analytics do provide some level of collaboration with the audience, when journalists make editorial decisions by extrapolating

⁶ A term also noted by Hindman (2015).

⁷ However, as evidenced at my own sites of study, traffic-based measures of success are still the most prominent, with or without the need for advertisers.

 $^{^{8}}$ As in the manner of participatory journalism where collaboration between the audience and journalists leads to diversified discourse (Singer et al. 2011).

a story's appeal based on real-time metrics or data from stories previously published that proved to be popular and/or engaging. Audience participation in story selection is further integrated when journalists use other forms of audience feedback, such as user comments, in story selection (Lee and Tandoc 2017). As Anderson (2011) found in a study of three US newsrooms, "...news consumers were increasingly being discussed as creative, active participants in the news-making process that needed to be simultaneously empowered, catered to, and captured for analytical measurement purposes" (p.564). However, the focus on quantifying audience interest, particularly based on the volume of traffic, offers "a thin, incomplete view of the audience driven by commercial considerations rather than professional ones" (Coddington 2015, p.79). There is evidence to support that this "incomplete view," based on misuse or misinterpretation of data, also has a long history.

In the 1970s, despite the fact that ratings organisations such as Nielsen warned that a "sample home" did not, necessarily, reflect choices of every other home, television news executives used ratings to infer that viewers *chose* not to watch a program, thus judging content using "motives and rationale...unwarranted by the diary data⁹" (Altheide 1976, p.42). Such data have also long been used to help support professional codes. As Altheide (1976) noted, referring to television newsrooms, ratings can "define 'good' and 'bad' programming, and by implication, 'good' and 'bad' work" (p.42), which in turn leads to standardised formats designed to repeat perceived success. Bourdieu (1996) was concerned that the fixation with audience ratings was imposing "the sales model on cultural products" (1996, p.27), which is borne out in newsrooms putting renewed emphasis on attracting eyeballs and advertisers by developing popular content (Heinderyckx 2015; Witschge 2012a). As noted by Napoli (2011),

"...traditional approaches to media audiences fail to capture all of the important dimensions of audience behavior...Exposure-focused analytical approaches ...emphasize only the more passive element of media consumption—basic exposure—to the neglect of more active elements that may have substantial economic and strategic value for media organizations" (p.9).

Even though "the audience is no longer the ignored quantity it was in off-line journalism" and "has a clear impact on journalistic practice" (Bright and Nicholls 2014, p.178), in keeping

⁹ Challenges to traditional ratings systems have surfaced recently when shows that were not "popular" were cancelled, only to be saved after an online uproar from loyal fans (Gonzalez 2018).

with journalistic tradition, audience influence on gatekeeping in many newsrooms continues to be primarily driven by basic, volume-based data because, often, "news production is directed more by organization and commercialism than it is by an adequate epistemology" (Altheide and Snow 1979, p.101). As such, although metrics and analytics are having a significant impact on gatekeeping, that impact is limited, and sometimes shaped, by entrenched news practice and advertising models.

2.3 Gatekeeping

"In order to attract an audience no longer loyal to legacy news, journalism dances in a provocative manner—publishing stories about the wildest celebrities, uploading adorable cat videos, highlighting salacious headlines—hoping to attract attention, to increase traffic" (Tandoc 2014, p.572).

Before examining how analytics and metrics are used in the editorial process, it is necessary to understand how the process of gatekeeping has evolved to include such audience data and the activities of actors outside the journalistic field. As recounted by Shoemaker and Vos (2009), the idea of gatekeeping originated with Lewin in relation to food consumption, with negative and positive forces in front of and behind gates that impact the passage of items¹⁰. Within a journalistic context, White (1950) described gatekeeping as the process wherein a journalist selects content to be shared with the audience based on individual, subjective criteria. In this definition, the journalist is the primary gate through which any type of content, or information, must pass before it reaches the public at large. Shoemaker and Vos (2009) expanded on gatekeeping theory, identifying factors that impede news coverage. For example, lack of proximity could be an obstruction to covering an event; however, if an event is deemed important enough, it could be covered regardless of incovenience. At that point, in order to get value for money spent and justify the expenditure, the cost of covering an event could turn into a positive force, and result in more exposure. Shoemaker and Vos (2009), referring to Donahue et al. (1972), also identify that "broader" gatekeeping includes formatting content "in an attractive

¹⁰ Shoemaker and Vos also refer to the work of others including Gieber 1956; Westley and MacLean 1953; McNelly 1959; Bass 1969; Chibnall 1976; Gandy 1982.

or attention-getting fashion" to maximise exposure¹¹. The concept of newsworthy events needing to meet such criteria is also recognised by those outside of the newsroom looking to be part of the news. Bourdieu (1996) and Champagne (2005) both describe how demonstrations and events are "prepared and designed" (Champagne 2005, p.54) to improve the chances of having a story produced within news formats. The use of audience data and feedback is also having a profound effect on the gatekeeping process.

2.3.1 Opening Up the Gates

As Lee et al. (2014) noted, "...digital audiences are driving a subsidiary gatekeeping process that picks up where mass media leave off" (p.519). This audience feedback, or what Shoemaker et al. (2010) describe as an "audience channel," creates a "more circular flow of information and a substantial increase in the power of the audience within the gatekeeping process" (p.62), through measures such as clicks, comments, and social media shares (Chin-Fook and Simmonds 2011; Tandoc and Vos 2015; Duffy et al. 2017). Some argue the eradication of traditional gatekeeping structures has eliminated mainstream media's control of the news agenda (Bruns 2003; 2009; Benkler 2006; Shirky 2008); however, different types of gatekeepers are emerging online, including those who are given prominence on websites based on their social capital, measured by their ability to find and share popular content (Meraz 2009; Van Dijk and Poell 2013; Altheide 2013).

Meanwhile in newsrooms, the glut of information available to journalists and the demand for increased story production can itself influence gatekeeping because "the constant flow of the agency wire and the need to keep the home page updated" works to "paralyze the selection intuition of the gatekeeper" (Le Cam and Domingo 2015, p.127) making them more likely to rely on algorithmic data to select what content will get promoted and, therefore, accrue greater visibility. Wallace (2017) describes contemporary gatekeeping as "an iterative news dissemination process" (p.279) with "information flows and dominant agents" that contribute to "diffusion." All of this taken into account, there are more, not fewer, gates in the age of digital and "gatekeeping continues to evolve, modify, and shift in tandem with

¹¹As seen in newsroom practices shaped by media logic (Altheide and Snow 1979;1991).

media and our culture" (Chin-Fook and Simmonds 2011, p.30), and, perhaps most significantly, with technology.

2.3.2 The Impact of Technology on Gatekeeping

The most significant developments in relation to gatekeeping can be directly related to that of technology¹², including the telegraph (Carey 2009; Allen 2013) and "multiplexed telephone lines for data transmission" (Allen 2013, p.306) that allowed for more content to be shared at increasing speeds¹³. Most recently, this can be seen in the creation and use of computer algorithms used on the internet (Wallace 2017), including analytics systems and bots, that can act as gatekeepers and promoters (Boersma and Graham 2012; Newman et al. 2017)¹⁴. Newman et al. (2017) found the majority of people, particularly in the younger audience, trust algorithmic news selection over human editors because algorithms are seen as less biased. However, Frizzera (2017) asserts that media algorithms can develop "code bias" and are a gatekeeper "organism" (2018, p.49) that actually "perpetuate" the gatekeeping function, with news values and newsworthiness coded to represent specific journalistic values, reproduced in a digital space. He suggests the idea of the computer as a neutral gatekeeper is inaccurate, something particularly significant given algorithmic media are becoming the primary determiners of the flow of information. Phillips (2015) agrees that "the gatekeeper is now computer operated" (p.80). However, even though the computer mediated exchange of information is becoming ubiquitous, as Gillmor (2006) identified, "the sifting process" (p.164) of news story selection is still being done by both people and computers. Wallace (2017) made note of this by identifying four levels of gatekeepers: journalists, individual amateurs, strategic professionals, and algorithms.

Changing use of social media is also impacting story selection and development. Twitter still "alerts journalists to trends or issues hovering under the news radar" (Hermida

¹² Innis (2004), from a Canadian perspective, analyses the significance of changing technology on news production and communication in general.

¹³ However, Tsui (2009) believes that the "organizational constraints of the newsroom and the institutional ecology it operates in" (p.54) impinge upon the ability of journalism to harness technology effectively.

¹⁴ Altheide (1994) describes the growing influence and interconnectedness of technology, communication formats, and social activity—and the "organizational criteria" (p.666) to facilitate the use of such technology—as the "ecology of communication.".

2010, p.302); however, as evidenced by my own research and the US president's Twitter feed, 140 words can now take the place of press releases and news conferences. This makes it easier for journalists to get a quote but also allows politicians to avoid facing questions and explaining or expanding on any given statement (Broersma and Graham 2012). The use of algorithms to allow easy access to information through a simple search is also changing gatekeeping; although, the motives for providing easy access are in no way altruistic. Google is run for profit (Goldberg 2011), corporations and individuals can pay to appear first in Google's search lists (Frizzera 2018), and search terms can be bought as a means to control messages (Mathieu 2010). Also, as Phillips (2015) noted in relation to search engine optimisation (SEO), technological advancement does not, necessarily, support raising the bar of quality content creation:

"News desks now closely follow the analytics telling them exactly what words audiences are clicking on. One interviewee mentioned a directive to produce as many stories as possible that could include the word 'breasts,' as this is a word that is often searched for online" (p.74).

Whether considered to be a positive or negative influence, technological advances in relation to quantifying and engaging the audience are becoming intrinsically tied to the implementation of routines and systems that are often designed around building traffic.

2.3.3 Media Logic and the Risk to Journalistic Autonomy

Media logic is "the process through which media transmit and communicate information" (Altheide 2013, p.225), where routines often develop based on attracting eyeballs in order to attract advertisers and where entertaining formats take precedence over information sharing (Altheide and Snow1979; 1991; Snow 1983; Altheide 2004). When such priorities take precedence, as Bourdieu (1996) described, "information that all citizens ought to have to exercise their democratic rights" (p.18) is shunted aside in order to place emphasis on "headlines" and "empty air" versus "relevant news¹⁵." Falling within the symbolic interactionism paradigm, media logic is useful in terms of analysing media practice due to

¹⁵ As one example of many, as a writer I once got into an argument with a producer over the fact time from the newscast was being given for a sports host to broadcast from a Hooters location where he was acting as a judge in a contest.

its constructivist viewpoint where social interaction forms the basis of meaning (Denzin 2004; LeCompte and Schensul 2010). Within the social setting of the field of the newsroom, a piece of work is considered journalism because more than one person agrees that it is, based on each individual's experience/self-reflection; however, meaning can change due to further self-reflection and social interaction¹⁶.

Altheide and Snow (1979) say, in order to attract an audience, "...the technological and organizational contexts through which 'news events' must pass provide newsworkers with a framework for routinely suiting these events to both visual and temporal parameters" (p.100). These frameworks include a particular grammar and rhythm that shapes both the display and production of news content (Altheide and Snow 1991; Altheide 2004). This media logic can be seen, for example, in the general requirement of a photo in order to put a story in a position of prominence on a website, the omnipresent use of lists in online media (Duffy et al. 2017), or rules surrounding the length of stories for a variety of platforms. Such practice can potentially narrow frames of reference (Pikkert 2007) and limit informed discourse because information is decontextualised through the news process and recontextualised into a "news perspective" (Altheide1976; 2017). Within such constraints, efficiencies of practice are developed to facilitate inexpensive production of content that builds traffic in order to meet advertisers' demands (Cohen 2015). Champagne (2005) sees a major threat to journalism as "the quest for circulation at any price" (pg.58), as do Tandoc and Thomas (2015). Bourdieu (2005) described "audience research" (p.42) and the search for advertisers as being major factors in the loss of journalistic autonomy.

2.3.4 Chasing Traffic

Formulating and judging content based on perceived audience acceptance have long been ingrained in news practice. However, it is the immediacy of the information gathering, dissemination, and decisions made to facilitate those actions that has changed drastically. There is growing evidence of a trend towards creating content deemed popular by the audience based on real-time clicks and other digital feedback (Groves and Brown 2011;

¹⁶ An example is the way blogging has now become a recognised form of journalism within the field (Carlson 2015c).

Tandoc 2014; 2015; Petre 2015; 2018; Welbers et al. 2016; Lee and Tandoc 2017; Duffy et al. 2017; Christin 2018). Although in 2007 MacGregor said that analytics were not "independently producing, enforcing or determining new professional procedures or beliefs," (p.295) they are now. As described by Schlesinger and Doyle (2015),

"The use of Web analytics has started to pose new problems for the exercise of journalistic judgement and conceptions of professionalism. It has broken down beliefs about the need to sequester news values, first, from audience feedback and, second, from technology and commercially driven concerns to enhance the attractiveness of the product" (p.314).

Björkman and Franco (2017) found, "The decision-making and routines for how a news story goes from an idea to a published article have fundamentally changed" (p.45). The companies that design and run analytics systems and the systems themselves are affecting "workflow and how journalists innovate in news production through the use of web analytics" (Belair-Gagnon and Holton 2018, p.13), particularly with regards to chasing traffic.

In 2011 Anderson described journalists and newsroom managers as "obsessed with 'traffic" (p.558) and Groves and Brown (2011) described pageviews as "the primary measure of success" (p.21). A few years later, though, Fischer (2014) declared the pageview to be "passé" and Thompson (2016) described strategies that focus on the chase for clicks and similar metrics as "...actively counter-productive because they damage brand and reputation, and point newsrooms at the wrong audience targets and user experiences" (p.108). However, even amidst the most recent discussions about the importance of growing a loyal reader base the perceived benefit is still to "drive" more pageviews (Willens 2018). Powers (2018) found journalists believed "metrics that measure audience size and social sharing, while important to advertisers, are less appropriate to measure impact than those measuring sustained engagement with news" (p. 463), which, based on my own interviews and observations, is accurate in terms of what journalists believe. However, as traffic metrics are an easy way to gauge some type of impact they are often the focus in practice, as was acknowledged by a journalist in Powers's study.

This documented goal of attracting traffic (Christin 2017; 2018; Cohen 2018; Nelson 2018) rests in ad revenue mechanisms that have evolved to prioritise impressions or clicks on a page (Banerjee 2017; Powers 2018; Wang 2018). A 2017 survey by the International Center for Journalists (ICFJ) found "pageviews is the metric that gets the most attention from

newsrooms." A survey by MetricShift released in 2018 (Alcorn) also found pageviews to be the most tracked metric. As Napoli (2011) asserts, "institutional interests in favor of the status quo can serve to limit the transformative effects that new technologies can potentially facilitate" (p.30). Recognising the prominence of pageviews, even Chartbeat, a company that provides a platform for newsroom analytics and has been a primary force in the development of real-time metrics, publicly works to encourage the use of metrics more geared to engagement (Chartbeat 2016). However, in spite of much discourse that engagement is more important than volume, there is no agreement on how engagement "should be defined and evaluated" (Nelson 2018, p.528). Therefore, even at organisations where pageviews are not tied to revenue, traffic can become central to practice and measuring success.

2.3.5 A Focus on Traffic and the Pressure to Perform

Cherubini and Nielsen (2016) found the practice of displaying metrics on monitors at the public broadcaster BBC put added pressure on journalists, which was also noted by Cohen (2018) in relation to other digital newsrooms. According to Petre (2015),

"It is not uncommon for journalists to become fixated on metrics that rank them or their stories, even if these are not the sole criteria by which they are evaluated. Once rankings have a prominent place on a newsroom wall or website, it can be difficult to limit their influence" (p.4).

Petre found strong traffic counteracted any negative editorial feedback and gave some journalists the perception of more freedom: "This was the case at Gawker, where writers and editors felt free to do 'what they wanted'" (p.35). However, these same Gawker writers also acknowledged they self-selected based on stories they felt would get the most hits. Although they could write "what they wanted," the decision of what to write was highly impacted by their need to attract traffic. This was echoed in the work of Björkman and Franco (2017) who found journalists at three Swedish newspapers were "given the freedom to write about what they want" (p.43), but also admitted poor metrics could mean they would stop writing about certain subjects, and in the work of Cohen (2018) who found journalists put priority on optimising traffic with regards to story selection.

Heinderyckx (2015) described the process of using traffic as a selection criterion as "the triumph of soft news" (p.256). While Hanusch and Tandoc (2017) found traffic metrics significantly impacted editorial priorities and ideals of a journalist's role, which could result in content creation focused on consumerism versus altruism. Ferrer-Conill and Tandoc (2018) found that despite references "to traditional journalistic values such as social impact and dialog with the audience" (p.13), in practice, engagement "in the newsroom is metriccentric, intricately tied to the available tools to measure it." This was seen at the Thomson-Reuters' Nairobi office where there was constant communication regarding which stories were popular, with such communication informing editorial decisions (Bunce 2017). Tandoc and Thomas (2015) believe "... the use of Web analytics has the potential to lock journalism into a race toward the lowest common denominator..." (p.247). Perhaps looking at metrics from a different perspective could change priorities. Hindman (2015) suggests that the focus should be "...on a site's growth rate over time" $(p.7)^{17}$, something supported by the work of Christin (2015) who found that although journalists perceived shorter articles with a focus on sex or scandals to be more popular than longer articles about world issues and politics, that was not the case when looking at an article's pageview success over what Anderson (2004) defined as the long tail. Although not seemingly popular when looking at real-time or short-term metrics, more serious articles can eventually build up more pageviews than salacious ones.

2.3.6 Changing Journalistic Practice within the Gatekeeping Process

Vu (2014) found analytics were changing gatekeeping practices by creating "new tasks" which "…range from changing placement, adding extra editing or analysis, seeking additional web elements to running similar stories to what readers want to read" (p.1106). There are other layers to news judgment impacted by traffic numbers, including how long a story is given a prominent position on a website. "De-selection refers to deciding which among articles that have made it through the gates will be taken out of the homepage to be replaced by a new story" (Tandoc 2014, p.571). De-selection was practiced by participants in my own study, and was also common practice in newsrooms in Singapore studied by Duffy

¹⁷ Banerjee (2017) and Gabielkov (2016) both also suggest looking at the long tail of traffic as opposed to the short term to accurately measure success in terms of pageviews. However, Napoli (2011) questions whether creating revenue via the long tail is an effective strategy because of audience fragmentation, and suggests focus might be better spent in figuring out how to "infiltrate the fat head" (p.66).

et al. (2017). Conversely, Bright and Nicholls (2014) found "strong viewing figures have the potential to reduce the short-term likelihood of an article being removed from the front page by 20–30%" (p.171).

Hanusch (2017) found the use of analytics was leading to "new practices, values and norms which are activated depending on the time of day and the specific platform of distribution" (p.1572). Dayparting, or scheduling content to appear based on an analysis of metrics that show when a particular subject or format of story attracts the most readers, is now common in online journalism (Björkman and Franco 2017; Duffy et al. 2017). As explained by Veglis (2014), dayparting originates in traditional broadcasting and "can be defined as a consecutive block of time on similar days during which the size of the audience is homogeneous as is the characterization of the group using the medium" (p.77). Examining two UK media outlets, *The Financial Times* and *Telegraph*, Schlesinger and Doyle (2015) found that editors were using metrics to determine "when stories are being read, and by whom" and based decisions when to publish them on "when they are likely to achieve the highest readerships" (p.320). This practice was observed at my own sites where dayparting was not contained solely to publishing stories, but also influenced the timing of social media posts to promote those stories, with the aim of garnering more views and engagement.

Due to expanding parameters of reach, the geographic location of the audience is another traditional aspect of editorial decision-making that has been disrupted by the internet and the use of analytics. What is local, or even national, when anyone in the world is a potential member of the audience and, therefore, a potential click? And for outlets with a print publication, should editorial parameters be different for online and print products in order to facilitate building a larger online audience? MacGregor (2007) captured these concerns at *The Guardian*, a UK outlet with a large US audience, and Buchanan (2018) noted that often local websites cover news that is outside their traditional target markets in an effort to build scale to support ad revenue¹⁸.

¹⁸ I will expand on this trend further in Chapters 4, 6, and 7.

2.3.7 Measurable Impact?

As outlined above, there is growing evidence of the impact of analytics on editorial decisionmaking; however, there are also scholarly papers that report no such influence or lesser significance¹⁹ of influence on news practice (Boczkowski and Peer 2011; Lee et al. 2014; Zamith 2015²⁰; 2016; 2018). However, these studies are often based on an analysis of news outlets' homepages comparing stories that were selected for prominent display by "journalists²¹" versus those selected by consumers as seen in the "most viewed" or "most read" sections of news websites. All found a "gap," to varying degrees, between what the audience deemed most important based on views and what "journalists" chose to be most significant based on what was promoted on the homepage. This was interpreted as evidence journalists/newsworkers were not, necessarily, following the lead of the audience or meeting its interests. In the case of Boczkowski and Peer (2011) the researchers acknowledged that they "...did not have access to their respective measurement processes utilised for calculating the most popular stories in the sites studied" (p.869). This is a significant issue as there are no standardised formulas for most views. Each site of study could have been using a completely different measurement, for example pageviews versus uniques, or the same metric measured differently by different analytics services using different timeframes of analysis. The impact regarding the measurement calculation for most views is not, however, the most significant issue.

Although I will explore my findings in this area more fully in Chapters 4, 5, 6, and 7, it is necessary to refer to them, briefly, here in order to highlight issues with the frame of reference of the works that I am citing. Generally, editors responsible for homepage placement are tracking "concurrent" or real-time views. These are the number of "people"

¹⁹ One factor that may have impacted the relevance of studies discussed in the next paragraphs is that when there is rapidly changing practice research can become quickly dated (Carlson and Lewis 2018).

²⁰ Zamith importantly identified that his findings may not be transferable industry wide and noted limitations of his observations to the homepage editor; I would suggest this type of distinction needs to be more pronounced in all gatekeeping analysis in order to ensure observations of a specific role are not used to make general presumptions about the overall proclivity or impact of the use of metrics and analytics, or lack thereof, in newsrooms.

²¹ The term journalist is put in quotations as depending on the roles of newsworkers managing the homepages studied, for example, the amount of curation versus creation, some may not be considered journalists by those within the field, as will be shown throughout this thesis.

currently looking at individual stories on a particular site. A story in the most views section might have 100,000 pageviews in total²²; however, in the moment editorial decisions are being made regarding placement, it may only have 100 concurrent, or real-time, users. Meanwhile, a newer story could have thousands of real-time viewers. Within these parameters, the newer story is the one with the most views; however, that alone does not ensure its eventual progression to the "most views" list. In addition, digital editors often use prominent placement to push newer content based on different types of analytics systems and metrics that show topics or stories that are starting to trend²³ versus those that may have hit their peak. Thus, solely comparing most views to prominent homepage placement in terms of analysis of a gap between editors and readers provides limited information on a multifaceted editorial process (Blanchett Neheli 2018b).

2.3.8 What They Say They Do...versus What They Do

Lowrey and Woo (2010) also expressed doubt over the direct impact of analytics on decisionmaking in their study that used content analysis combined with a survey. But without participant observation or interviews, it can be hard to determine the actual impact analytics have on a variety of editorial decisions or to accurately evaluate what it means when, as their survey found, "editors say audience feedback is not very likely to shape news coverage" (p.48). Hanitzsch and Vos (2017) found a potential flaw in such lines of inquiry, noting survey questions can be answered from the viewpoint of what journalists should do, what they want to do, what they really do, or what they say they do. This weakness in existing literature was also identified by Hanitzsch et al. (2016), who noted there was a lack of distinction in much analysis between "normative ideas (what journalists should do), subjective orientations (what journalists want to do), and perceived performance (what journalists think they do in practice²⁴)" (p.15). Vu (2014) posited that journalists downplay the impact of economics in the use of analytics in gatekeeping due to "occupational pride"

²² If pageviews is the measurement being used to determine its placement as opposed to, for example, unique users.

²³ Frizzera (2018) notes algorithms designed to identify what is trending can be based on personalised user data that make different people assume different events or conversations are more important.

²⁴ This idea of a difference between journalists' values and practice was also identified in an analysis of objectivity by Carpentier and Trioen (2010).

(p.1106). Mellado and Van Dalen (2014) found "a significant gap between journalistic role conceptions and role performance" (p.872), and Welbers et al. (2016) also found editors denied or downplayed the impact of audience clicks on editorial decision-making. To explore how individual journalists negotiate this distance between role conceptions and performance, Hanitzsch and Vos (2017) developed three mechanisms of role negotiation: assimilation (socialisation into a newsroom and its practice), appropriation (adjustment of professional ideals in relation to practice in order to work within a newsroom's constraints), and exit (leaving the field of the newsroom because there is too great a divide between personal expectations and actual practice)²⁵. My findings into the gap between conceptions and performance will be further explored throughout this thesis.

2.4 Journalistic Capital

"...citizens invest their trust in established news brands, look to them and count on them. They just don't want to pay for them" (Greenspon 2017, p.26).

Any media organisation's ability to innovate, for example, using analytics on a deeper level or finding new ways to share important stories, is tied to its ability to bring in enough revenue to support spending time and money on such endeavours. And, particularly in the case of journalism, the ability to create economic capital is directly related to an organisation's social and political capital or perceived worth as judged by the public at large. Decisions made with regard to what to cover based on either factor can have serious repercussions. Feller (2017) believes the Grenfell tragedy in England, where 72 people died in a quickly spreading blaze in a set of buildings residents had complained were not up to standard, would not have occurred if local journalism were still functioning as it had when he was a young reporter²⁶. He says, "Regional newspapers and their websites are still making valiant efforts to report community stories but staffing levels mean that there's little time for patient, revelatory

²⁵ These mechanisms derived from four categories of institutional roles: normative ideas, what journalists should do based on societal expectations of upholding democracy (particular to the Western institutions studied in this thesis); cognitive orientations, what journalists do based on institutional values developed through socialisation in the newsroom or at school; professional practice, how journalists perform and behave in the newsroom; and narrated performance, a journalist's understanding of their practice through reflection (Hanitzsch and Vos 2017).

²⁶ A lack of local coverage was also identified as in issue in Thunder Bay, Canada (Ross 2018).

journalism" (p.18). Newman (2018) also addressed the Grenfell issue saying, "the story had been ignored by a hollowed-out local media and a national one focused on Brexit" (p.9). There are multiple recent reports highlighting the importance of journalism in terms of serving democracy (Drohan 2016; Rimmereid et al. 2016; Greenspon 2017; World Bank 2017; SCCH 2017). What journalists do or do not cover directly impacts discourse in the public sphere, and what journalists cover is now impacted by metrics and analytics.

Habermas's (1991) ideal of a public sphere, where everyone has equal opportunity to partake in democratic debate and shape societal norms, is often used as a measure of the internet's ability to provide a place for free and fair discourse (Fraser 1990; Papacharissi 2002; 2009; Dahlberg 2005; Beers 2006; Benkler 2006; Jenkins, 2006; de Zuniga 2009; Schudson 2009; Curren and Witschge 2010; Rosen 2010; Blanchett Neheli 2011; 2013; Ananny 2012). Although technology makes it easier than ever for anyone to have a voice and share a story (Hartley 2000; Bruns 2003; Benkler 2006; Shirky 2008; Allan 2009; Bruns 2009; Jones 2009; Raeymaeckers et al. 2015; Wallace 2017) and there are examples of diversification of storytellers leading to more varied story coverage and informed public discourse²⁷, in general, this broadening of voices and perspective within the public sphere seems to be more the exception than the rule (Kenix 2009; Rutigliano 2009; Williams et al. 2011; Bell 2017). Referring to a Pew/Knight Foundation (2015) study on local journalism, Greenspon cites that citizen journalism only makes up one per cent of journalistic content; his own research found 7/10 Canadians surveyed got "their online news from traditional media websites" (p.49). Citizen journalists cannot replace the work of those paid to do so (Fuller 2010; Witschge 2012b), often follow the agenda of mainstream ogranisations (Phillips 2012a), and such mainstream organisations predominate news coverage within online news portals (Bui 2010). Mukerjee et al. (2018) also found "legacy media are still the preferred sources of news for online users" (p.17) and, even within the younger demographic, they are more respected (Swasy et al. 2015), which was supported by Preston (2016) who found the majority of the younger demographic's "preferred" sources of news were still traditional media. Such evidence supports Newman et al.'s (2016) contention that "...it is

²⁷ As seen in CBC's relationship with citizen journalists in G-20 coverage (Blanchett Neheli 2011), its affiliation with the science community and use of material written by those within the science academy (Blanchett Neheli 2013), and other noted incidents of participatory journalism with widespread use of user-generated content, including tweets (Hermida 2010), and during terror attacks or uprisings (Witshchge 2012b; Broersma and Graham 2012).

clear that editors still play a considerable role in shaping agendas directly and influencing the stories that emerge in social networks and other aggregators" (p.14); however, despite such influence, media organisations are grappling to have such social capital recognised and, as a result, are struggling to build economic capital.

2.4.1 The Impact of Economics

It is widely recognised that the business of journalism is in flux. Newspapers, particularly, are scrambling to go digital first, yet journalism jobs are being lost by the tens of thousands. Although Zamith (2018) suggests that "there is greater stability" (p.429) in newsrooms today compared to when analytics were first introduced "against the backdrop of deep uncertainty in the profession," there is ample evidence this backdrop still exists (Newman et al. 2018). While there is more positivity in terms of using analytics to better understand the audience and signs that the audience is willing to pay for content (Jenkins and Kleis Nielsen 2018), this is an industry that is still undergoing rapid change and dealing with critical economic uncertainty. For many working in journalism, a quote from a subject in Nelson's (2018) research might sum things up more accurately: "The marinade of the industry right now is one of extreme shit-your-pants fear" (p.539).

This is not just impacting journalism as an institution but journalists as individuals: "...the journalist has lost the economic power of well-paid job security, the bargaining power of collective solidarity, and the cultural power of being socially valued and purposive" (Lee-Wright 2012a, p.38). Phillips and Witschge (2012) credit the demise of the news business model to multiple factors including the loss of revenue from classified ads, Google taking revenue from advertisers, and a loss of control over content that is used by other organisations, such as *Huffington Post* and *Daily Beast*—content aggregators that make use of material without contributing to its production, and then reap the lion's share of advertising profits. Phillips (2012a) says this results in "...undermining the funding base of the very organisations they depend upon for that material" (p.95). Greenspon (2017) calls this a form of "vampire economics" (p.31) and, along with McChesney and Nichols (2016), says journalism's economic model has "collapsed."

2.4.2 Battling Digital Goliaths—The Fight to Retain Economic Capital

As Hindman (2015) noted, "Many of the innovations that were supposed to empower papers have instead left them in thrall to digital goliaths" (p.16). It is widely agreed that the advertising dollars sucked into Facebook and Google are having the biggest impact on journalism's revenue streams (Centre for Innovation Law and Policy 2016; Greenspon 2017). At the same time, news organisations are reliant on Facebook and Google to expand reach of content and boost traffic. Ingram (2018a) called Facebook's industry dominance an "existential threat" to journalism's business models and quoted a prediction from a media investment firm that said in 2018 Facebook would "account for close to 85 percent of the global digital ad market" and would continue to grow while "other players will shrink." Gillmor (2016) says journalists should stop catering to Facebook because "it's outright "suicidal" and should instead share with readers the downsides of relying on Facebook, such as loss of privacy and loss of control of personal data²⁸. The European Commission's investigation into Google's control of the digital marketplace displays that tech company's domination. The Commission ruled "Google's practices have stifled competition" (European Commission 2017) and fined Google over two billion dollars for "abusing its dominance as a search engine." But it was acknowledged this would do little to impact Google's extensive cash flow (Associated Press 2017), and there was no clear idea of what impact there would be on Google's practice in North America.

Not only are Google and Facebook succeeding in getting a lock on the lion's share of online advertising, they also beat out traditional media outlets in terms of brand recognition. Two-thirds of people knew which platform they received their news on, for example Facebook, but less than half could remember what brand/news outlet created the content (Newman et al. 2017). Despite all the hype surrounding Google and Facebook's supremacy, and the success or failure of journalistic digital advertising, for many newspapers, though, it is still print revenue that is largely supporting their businesses (Thurman 2014; Jenkins and Kleis Nielsen 2018). According to Cornia et al. (2016), "93% of global newspaper revenues still come from print" (p.15) but "readership of printed newspapers has declined

²⁸ The issue over personal data came to a head in April of 2018 when Facebook's CEO testified before US Congress because of a massive data breach (Wong 2018).

significantly" (Newman et al. 2017, p.10), with only "one in every four dollars of ad revenue" coming from digital (Mitchell and Holcomb 2016). If engagement is the priority, it appears print also eclipses digital. In a study on 12 UK publications comparing print versus digital engagement, Thurman (2014) found "a minimum of 96.7% of the time spent" (p.1) reading was on print content. In a later study, Thurman and Fletcher (2017) found that time spent reading newspapers, both online and print, dropped 40% between 1999 and 2016, but when looking at 18 to 34 year olds that figure dropped even further, 64%, and those younger readers only paid "fleeting attention" (p.17) to online content. Age demographics show an alarming trend for papers in Canada, too. Looking at Canadian newspaper subscriptions by age group, 43% of readers are over the age of 65, while only 7% are between the ages of 18 and 34 (CILP 2016). And, particularly for the younger audience, relatively few want to pay for news content on a platform where so much is available for free.

2.4.3 Paying for News and the Impact of Media Concentration

In a comprehensive study of digital trends worldwide, Newman et al. (2017) found a "continued reluctance to pay for online news" with 84% of those surveyed stating they had not done so in the past year²⁹. In a later report, Newman et al. (2018) noted "donations may help bridge the gap between paying nothing and an expensive subscription" (p.43) for the younger audience. However, in a study of six European countries, Cornia et al. (2017b) found "that growth in the number of people paying for news is in most cases incremental and that reader revenues, though growing, are rarely making up for declining legacy revenues and a difficult digital advertising market" (p.3). Pew researchers (Mitchell and Holcomb 2016) noted that public broadcasters are often singled out as the reasons why people are not willing to pay for news, but found "whether we look at countries where PSBs have a large online reach, or countries where their reach is small, we see no evidence of any significant negative effect" (p.104). Regardless of why people are reluctant to pay, this combined lack of revenue from advertising and subscriptions is forcing more companies to centralise ownership in a bid to use economies of scale to survive.

²⁹ However, researchers did identify a significant increase in digital subscriptions in the United States, calling it a "Trump bump" and noting that many of these new subscribers were young and/or left-leaning.

A government report in Canada (SCCH 2017) found "the Canadian media industry is the most highly concentrated of any major comparable country in the world" (p.53) with three main groups owning "66% of all daily newspapers and 35% of all community newspapers", and that concentration is growing³⁰. The report also refers to the merger of two major Canadian outlets, Postmedia and Sun Media, as being the cause of "massive layoffs," saying "the diversity of voices and opinions have been greatly diminished and the principle of democracy, challenged" (p.58), and there are a number of studies outlining the dangers of media monopolies in relation to control over the public agenda that gives select individuals more influence over the populace (Lee-Wright 2012b; Deuze 2007; Davies 2008; Tiffen 2015). Recognising this issue, in early 2018, The Council of Europe (2018) released a list of recommendations to create "a pluralist, transparent and participatory media environment" that would "support quality independent and investigative journalism."

2.4.4 The Pressure to Innovate

Projecting who will be able to survive in this new market, Lee-Wright and Phillips (2012) said, "One indisputable fact is that the victors will be those media outfits that emerge with the most clearly distinct propositions" (p.80). Davies (2017) found innovation was having a big impact at *The Times* where subscriptions were up "...200 percent...since it pivoted from publishing on a breaking-news cycle to a digital editions-based publishing strategy" and developed new marketing strategies, including giving the marketing team a more "hands-on' role in editorial meetings" and input into creation of content that "...might best drive things like free registrations...subscriptions, and reader engagement." Thompson (2016) calls for a closer relationship, or "strategic partnership" between the newsroom content and what is commercial messaging...an editorial strategy with no revenue context is a forlorn hope" (p.109). There is some agreement on several other initiatives to counteract journalism's financial and reputational crisis: revisiting tax systems, including what digital

³⁰ After this report was released, TorStar and Postmedia "swapped" more than 40 newspapers, then closed most of them down in order to give the papers left a better chance at succeeding without competition in specific areas (Watson 2017). That transaction was being investigated by Canada's Competition Bureau during the writing of this thesis (Evans 2018).

giants like Facebook and Google have to pay; forcing/encouraging content aggregators to monetarily support content creation; supporting publicly funded journalism; and encouraging cooperation of public/private journalistic initiatives (Greenspon 2017; Phillips and Witschge 2012)—all of which could impact journalistic boundaries.

2.5 Boundary Work

"...notions of who is a journalist, what counts as journalism, and which types of people and practices get to claim journalistic authority have been shaken up in a moment of social, mobile, and interactive media" (Lewis and Usher 2016, p.3).

In a media landscape where the role of journalists and definition of journalism are in constant flux (Carlson 2015b), who does what and what counts as journalism are being renegotiated with the burgeoning use of analytics and metrics in newsrooms. Hanitzsch and Vos (2017) describe journalism as a discursive field and institution, with journalistic roles that are "discursively constituted" (p.116). A growing number of scholars (Lewis 2012; 2015; Carlson 2015c; Singer 2015b; Lewis and Usher 2016; Deuze and Witschge 2017; Bunce 2017; Björkman and Franco 2017) are exploring the changing journalistic boundaries in relation to technology, production practice, ethics, the audience, and digital and traditional journalists. But as Amada and Waisbord (2015) point out, malleable boundaries in journalism are nothing new:

"...journalism has been historically embedded in party-press relationships and commercial pressures from owners, advertisers, and governments constantly hovered on newsrooms, the notion that journalism could be able to delineate and maintain firm boundaries seem hopelessly utopian" (p.52).

Duffy et al. (2017) also noted, "the boundaries between church and state, advertising and editorial, journalism and marketing" (p.15) that are falling during this time of particular economic upheaval "may always have been a normative ideal rather than an empirical reality." Studies with regards to journalistic boundaries derive from Gieryn's (1983) work in relation to boundaries in the science profession, with boundaries being utilised to examine definitions and implementation of professional practice:

"...boundary-work is a likely stylistic resource for ideologists of a profession or occupation: (a) when the goal is expansion of authority or expertise into domains

claimed by other professions or occupations (p.791)...(b) when the goal is monopolization of professional authority and resources, boundary-work excludes rivals from within by defining them as outsiders with labels such as 'pseudo,' 'deviant,' or 'amateur'; (c) when the goal is protection of autonomy over professional activities, boundary-work exempts members from responsibility for consequences of their work by putting the blame on scapegoats from outside" (Gieryn 1983, p.792).

All of these goals are front and centre in journalism today, as journalistic authority and autonomy is challenged both internally and externally by actors including technologists, data analysts, the audience, and analytics providers.

2.5.1 What Is Journalism and Who Is a Journalist?

Working to develop a functional definition for journalism, the Ethics Committee of the Canadian Association of Journalists (Brethour et al. 2012) suggested there were three factors that distinguished professional journalists and journalism. The first was purpose, verified research and evidence aimed at informing communities; the second was creation, some element of original production; and the third was methods, which must include "...*clear evidence of a self-conscious discipline calculated to provide an accurate and fair description of facts.*" The Committee further goes on to say that "...all three criteria must be met in order for an act to qualify as journalism." Shapiro (2014), who was part of that ethics committee, later developed five elements that define journalistic activity, not based on who was doing the work but what was being done:

A. Current or recent events as subject matter.

B. Breadth of audience (which in turn implies a concern for accessible or engaging language and forms).

C. Attempted ascertainment of factual accuracy.

D. Independence (connoting an arms-length interest in publication itself versus direct benefit from the consequences of what is published).

E. Involves original work (as opposed to mere linking or replication) (p.561).

Shapiro stresses that "journalism is not aggregation" (p.560); however, this proviso would exclude many of my participants who believed they were working as journalists in their role as web or social media editors, and many interviewed by Cohen (2018) in a study on digital "journalists."

In a study on three Swedish newspapers Björkman and Franco (2017) found one impact of the use of analytics was "that new roles are forming and old ones are changing" (p.43), with more jobs for data analysts opening up in newsrooms. The growing need to interpret audience data and create new jobs to do so was also found in research by Ferrer-Conill and Tandoc (2018), Weber and Kosterich (2018), and Royal (2017). However, a survey of 2,700 journalists across 130 countries discovered that although two-thirds of newsrooms have social media and audience engagement teams, 82% of jobs in newsrooms are in "established roles" and only one per cent of newsrooms have an analytics editor (ICFJ 2017). Even if the numbers are small, there are a variety of new positions being created in newsrooms to manage changing roles and the changing relationship with the audience, particularly with regards to social media. For example, the creation of a job titled "conversation manager" at one public broadcaster "…reflects the *professionalization* and the *separation* of social media use in the newsroom on a daily basis" (D'heer and Verdegem 2016, p.2301). Germany's Süddeutsche Zeitung (SZ) now has a "text marketing editor" (Lictherman 2017b) who works with the business office and journalists deciding which stories will be shown/promoted on the website and what type of access they will require (free to anyone or only available to subscribers) with a goal "to reach readers and help maintain a sustainable digital business."

However, not everyone is comfortable with shifting norms, as seen in the work of Powers (2018) where local journalists avoided "crossing that weird gray line between being an activist or a journalist" (p.466), even when promoting the impact of their work could help secure revenue³¹. Hansen and Goligoski (2018) state that although it can make journalists "uncomfortable," in order to build an audience-driven newsroom there can be no "clear boundary between newsroom staff and audience members" and cite the need for "two-way engagement" (p.15). As different models and methods are explored, more questions emerge about how to define journalists and journalism. As a result of such shifting practice and definitions, Cohen (2018) suggests that researchers should move towards considering journalists as workers and do research from a "labor process perspective" (p.15). Hovden (2008) believes scientists have to accept that "journalists do not exist" (p.22) as a category for scientific research because they cannot be put into "a meaningful sociological group" (p.28). To assert this premise, he uses the example that freelancers are excluded from the Norwegian Union of Journalists despite doing the same work as "journalists." Hovden says

³¹ The idea of journalism as activism caused controversy after the Parkland shootings, when a student survivor from the high school's newspaper said, "journalism is activism" in a CNN interview. This sparked heated debate on Twitter with some journalists claiming journalism, by definition, cannot be activism (Stelter 2018).

rather than a means of "scientific demarcation" whoever is to be described as a journalist reflects the socially constructed codes of the group; therefore, any study of the journalistic field should start with the premise that the decision as to who is a journalist is a viewpoint, not a rule.

Deuze and Witschge (2017) refer to ever-developing journalistic norms as 'beyond journalism" with "a range of practices by a multitude of actors that in various ways contribute to its social relevance" (p.13). Cornia et al. (2017a) found some private sector media organisations were using the development of new digital projects to "break down walls separating departments or professional roles that previously operated in a more isolated way" (p.36), and other scholars have documented the changing role between actors normally kept separate from journalistic work, such as technologists (Lewis and Usher 2016) and analytics providers who "may be challenging journalistic boundaries and repositioning themselves less as media interlopers and more as key actors in news production" (Belair-Gagnon and Holton 2018, p.3). Carlson (2015c) developed a boundary matrix, based on the work of Gieryn (1983), that includes "...three generic types of boundary work-expansion, expulsion, and protection of autonomy..." (p.9), all of which are evident in the development of new tasks and responsibilities that raise concerns for some over the ability of journalists to retain any element of expertise (Lee-Wright and Phillips 2012). The question for the industry then becomes a matter of re-evaluating what skills are essential and, for individual journalists, how much more they can possibly take on.

2.5.2 Changing Roles, Juggling Responsibilities

For those who have never worked in a newsroom, or who haven't worked in one recently, it could be difficult to imagine the number of responsibilities being juggled by newsworkers who have managed to retain employment in a precarious field. Deuze and Witschge (2017) describe the number of layoffs in journalism as "astounding" (p.6) and say those left behind in newsrooms are struggling to keep up. It is no longer just about reporting or writing, but promoting stories and interacting with the audience via social media (Broersma and Graham 2012; Tandoc and Vos 2015), maximizing content production in drastically reduced newsrooms where fewer journalists specialise in any one subject (Nikunen 2014), tracking

metrics, and sometimes working to quotas or other traffic-based incentives (Petre 2015; Cohen 2015; Hare 2018). As one digital journalist described, "we're all sort of working in an environment that really encourages attention deficit disorder" (Cohen 2018, p.11).

A number of scholars have addressed what Carey (2009) labelled as the "factorylike" conditions of journalism production. Lee-Wright (2102a) says, "Now, highly trained individuals find themselves virtually chained to their desk, not free to go out and source original stories because of the growing demands of productivity, and fearful if they did there would be no desk or job to return to" (p.22). Davies (2008) also makes reference to news factories in his work, describing how mainstays of journalistic practice, including fact-checking³², are sometimes "now the exception rather than the rule" (p.53), noting that journalism is often more "churnalism" (p.59). When it comes to the quality of journalistic work "time matters" (Reich and Godler 2014, p.613). The less time available to create a story equals fewer and less varied sources used, and a heavier reliance on PR material. This is supported by the work of multiple scholars who have documented how the pressure to continually produce content leads to less original reporting (Deuze 2009; Davis 2010; Phillips 2010; Le Cam and Domingo 2015); more reliance on press agencies³³ (Phillips 2012a; Witschge 2012b; Phillips 2015; Raeymaeckers et al. 2015); mimicry (Boczkowski, 2009); and less coverage of former news mainstays, including the courts and all levels of government (Mitchell and Holcomb 2016; Greenspon 2017).

Multiple scholars have also noted how the focus on making a profit in commercialised markets changes boundaries surrounding acceptable quality of content (Hardt 1979; Phillips 2012b; Carlson 2015c) and puts the "emphasis on profits over civic responsibility" (Marwick and Lewis 2017, p.47). Lewis and Westlund (2015) believe "a diverse set of social actors within the organization—from journalists to data analysts to marketers" need to work together and address "questions about how journalistic values are built into algorithmic news products" (p.12). This is critical because the use of metrics and

³² Heinderyckx (2015) also found that "one key component of the original concept of gatekeeping is losing ground dramatically: verification" (p.258). Shapiro et al. (2013) discovered there are no definitive rules surrounding verification. However, Hermida (2015) noted "far from being discarded, verification is being rearticulated and reinterpreted to be in line with a hybrid, open media environment" (p.47) where transparency holds more weight than unfailing accuracy.

³³ This is not to suggest that using news agency material is a new phenomenon—as noted by Phillips (2015), it dates back to the 19th century, and, in a more recent timeframe, was documented in Altheide's (1976) ethnographic study of television newsrooms.

analytics to push "popular" stories, part of routinised industry practice executed in shortstaffed, or even well-served, newsrooms, is contributing to the spread of misinformation in the public sphere.

2.6 Metrics, Analytics, and Amplification

"The emphasis on quantifiable metrics stacks the news cycle with stories most likely to generate the highest level of engagement possible, across as many platforms as possible. Things traveling too far, too fast, with too much emotional urgency, is exactly the point, but these are also the conditions that can create harm" (Phillips 2018, p.7).

The use of metrics and analytics as a strategy to help facilitate the quick turn-around or promotion of content deemed popular can result in news organisations amplifying misinformation. In an extensive study, Marwick and Lewis (2017) found "Internet subcultures" were manipulating news to "set agendas, and propagate ideas," particularly those from the far right, and "the media's dependence on social media, analytics and metrics, sensationalism, novelty over newsworthiness, and clickbait makes them vulnerable to such media manipulation" (p.1). In an effort to cover what is considered popular, or what "people" are talking about, misinformation or ideological agendas can be amplified (Faris et al. 2017; Wardle and Derakhshan (2017). As Altheide (1976) pointed out, news "messages have a far greater impact than the events they claim to reflect" (p.12) and "the amplification process is a consequence of the organization and meaning of news" (p.26).

The reliance on social media as a tool to build traffic can also result in newsrooms amplifying content that is far from newsworthy. As identified by Oxford researcher Neudert, quoted by Ingram (2018b) in an article on Facebook: "The content that is the most misleading or conspiratorial" generates "the most discussion and the most engagement" because "that's what the algorithm is designed to respond to." Searching for the audience via Facebook can lead to unintentional amplification of questionable narratives in newsrooms where content is promoted based on its perceived ability to generate discussion and expand reach on ubiquitous social media.³⁴ Particular attention is paid to SEO for the same reason. Song and

³⁴ For example, in Canada, 94% of people have at least one social media account and 84% use Facebook (Gruzd et al. 2018).

Schwartz (no date) found "together, Google and Facebook refer about 70% of external traffic to publisher sites" and that although "content is more likely to be found via Google search, if it starts gaining traction from Facebook, there's a greater possibility that traffic will skyrocket." In terms of the use of metrics and analytics, a new trend to amplify particular stories to individuals, or, in other words, personalisation of news content, has the potential to augment these issues.

2.6.1 Personalisation of News Content

Analytics and algorithms are being used to personalise content in an attempt to attract an audience in a fractured digital market. Newman (2018) says personalisation is key to "moving customers from the 'anonymous to the known" in order to "develop more loyal relationships" and noted there is an automated service named James that recommends content being developed for The Times and Sunday Times to readers in the UK.³⁵ However, as noted by Carey (2005), "every fundamental change in the system of production, dissemination and preservation of culture simultaneously borders and deborders the world" (p.453). Frizzera (2018) says delivering stories of interest to an individual is different than delivering stories that are in the public interest and personalisation has the potential to undermine "deliberative democracy by limiting contradictory information" (p.48). Heinderyckx (2015) believes making personalised media the norm would result in people becoming "isolated in an 'echo chamber' where they would be excluded from societal and political debates or even diverging points of view" (p.255). Colhoun (2015) identifies possibilities of using personalisation to get more readers, but experts in his article also acknowledge how personalisation of content could impact the role of news in social democracies as more people get different stories on the same subject.

Mahler (2016) compares today's news environment to a buffet where the audience can take whatever they want and "bypass any information that does not suit their predisposition and worldview." Pariser (2011) also uses a food metaphor, suggesting that "just as the factory farming system that produces and delivers our food shapes what we eat, the dynamics of our media shape what information we consume" (p.14). He defines these

³⁵ Hindman (2015) also notes the importance of personalisation.

personalised online environments as "filter bubbles" whose intrinsic design "dramatically amplify confirmation bias" (p.88). Although much of the literature supports the premise of a negative impact regarding news personalisation, there is a growing body of research that disputes this notion. Based on an expansive literature review, Freelon (2017) suggests personalised information environments are not as "slanted" as researchers like Pariser predicted. Dubois and Blank (2018) also found the idea of echo chambers to be overstated, and Newman (2018) points out that some media outlets are using AI that might encourage diversification of audience consumption. However, as Tandoc and Thomas (2015) warn,

"The danger of the growing trend toward news personalization and customization is that it may allow the civic spirit to atrophy, as citizens tailor their information according to preexisting ideological and taste preferences and consequently make decisions with ramifications for civic health based on faulty, incomplete, or subjective data" (p.251).

2.6.2 Different Measures of Success

Acknowledging the need for better measures of an article's value, other than, for example, gauges of volume or shares, efforts are being made to use metrics and analytics to develop more fulsome assessments of content. *Die Welt* in Germany has "developed a tool to calculate and communicate an 'article score'" (Cherubini and Kleis Nielsen 2016, p.27) using metrics such as page impressions, time spent, and bounce. Swedish news start-up Kit is also working to develop new ways of classifying stories. It has created 17 categories of metadata that include 145 different classifications, such as tone and intent, and also collects information on "200 different output data points on every story, including time spent on the page, scroll depth, reach, engagement, and more, depending on the story's format and the platform where it was posted" (Lichterman 2017a). The goal is to create a taxonomy of what makes a story successful³⁶.

³⁶ Another area of development is emotional or impact metrics, like NPR's Carebot. In its early manifestation, the description of Carebot was an analytics tool that would "base its scores on the number of engagements per pageview...a story with 1,000,000 pageviews and 1,000 shares would have a lower Carebot score than a story with 1,000 pageviews and 100 shares" (Mullin 2015). When it was introduced into NPR's newsroom it was described more as a tool to track user engagement, specifically with stories involving graphics (Carebot 2016). At the time of the writing of this thesis it was offered as an open access analytics tool (Github 2017).

With any analytics system used for news, though, the real challenge is how to measure content against journalistic news values. This is because some measures of success, including engagement based on sharing, do not necessarily reflect quality of content or accurately reveal reach. According to Chartbeat (2017) research, few people have read the stories they share ³⁷. In an extensive study on Twitter, Gabielkov et al. (2016) also found a vast discrepancy between what is shared and the number of times URLs within posts get clicked on. Thus, metrics showing how often content is shared can have little relation to the depth of engagement or relevance of information. Quantifying impact is not, necessarily, made easier even with expansive audience data. However, understanding how best to use such data and the burgeoning analytical tools that are becoming part of everyday newsroom practice is paramount to safeguarding journalism's critical function of promoting informed discourse. As noted by Bell (2017),

"...you can try to scale by creating a shallow product that reaches everyone, or you can try to scale by creating different unique products that deeply matter to loyal audiences...Our audience's trust, and our businesses, depend on it" (p.31).

³⁷ In an interview for this project, a Chartbeat representative said they were working to help journalists understand that a sensationalist or out of context headline or story introduction could be the only thing many people read about a given topic, and, as such, there is greater responsibility to ensure accuracy of these story components.

Chapter 3 Methodology

"Ethnography is closely tied to a constructivist perspective of social action, which understands institutions and practices as arrangements that are constantly being consolidated or renegotiated by the social actors involved" (Le Cam and Domingo 2015, p.137).

Research for this thesis was performed using ethnographic fieldwork and findings analysed within a sociological framework using several interrelated and complementary theories, or bricolage, with "methodological practices explicitly based on notions of eclecticism, emergent design, flexibility and plurality" (Rogers 2012, p.1). This was not the intent at the outset of research. However, given the number of areas of practice impacted by audience data and the extent of the boundaries being challenged by the use of metrics and analytics in newsrooms, rather than, in a form of academic media logic, trying to fit the data into a single framework, I used multiple theories specifically selected to best investigate particular components of findings in order to support fulsome discovery.

3.1 Framework of the Bricolage

Boundary-work theory was used to examine the struggles to define journalism and standards within the journalistic field and, more specifically, to explore the inverse relationship between the extension of boundaries of normative practice compared to normative values depending on external factors internalised by the individual journalist, such as revenue shortfalls versus stable funding, analytics priorities based on real-time metrics over a longer view, and relative pressures due to staffing levels. Such analysis was done while heeding Carlson and Lewis's (2018) reminder that when it comes to journalistic practice, "what does not move or shift is as important as what does" (p.4).

In order to identify differences in participant narrative and practice with regards to upholding traditional journalistic norms, or a newsworker's level of acceptance of what Bourdieu and Willig might describe as the changing rules of the game for their particular habitus, I used Hanitzsch and Vos's (2017) three mechanisms of role negotiation: assimilation, appropriation, and exit. These mechanisms were particularly beneficial within the context of the ethnographic work of this project as they provided a tool to easily classify and categorise strategies that newsworkers were using to accommodate differences in ideals versus practice in newsroom routines or, in other words, accept, reject, or become resigned to changing boundaries.

Gatekeeping was used to examine specific functions of metrics and analytics in terms of story selection, development, and promotion. This was particularly important within the context of this study because "news media are facing a major disruption" and "understanding such a major transition is greatly facilitated by using proven, stable frameworks that need to be refreshed but will also allow for comparisons with the past" (Heinderyckx 2015, p.265). With its deep roots, gatekeeping allowed for insightful comparison between current practice and that found in more historic ethnographic works, like that of Altheide (1976), in order to provide what Carlson and Lewis (2018) describe as "temporal reflexivity" in scholarly analysis³⁸.

Field theory was used to help define the parameters, or lack thereof, of the area of study as a whole and to identify the particular struggles and forces within the field that contribute to contention around the use of metrics and analytics with regards to story promotion and development. This was partly in response to Willig's (2013) suggestion that the work of Bourdieu could help fill the "methodological gap" (p.373) of existing newsroom ethnographies that have offered insight into journalistic practice but "have been less convincing when it comes to documenting and analysing the structures that enable and constrain journalistic practice" (p.373), something also noted by Schultz (2007). As Neveu (2005) identified, "Bourdieu's sociology places the accent on relations of forces, on the ways in which the end product of the work of journalists within press organizations flows out of constraints" (p.206). Identifying the existence or non-existence of such constraints was a central tenet of this thesis.

However, as media logic (Altheide and Snow 1979;1991) offers a more practical, process-based framework, it allowed for targeted examination of the naissance of newsroom routines, specific to the use of metrics and analytics, including designated formats, time, space, and promotion for stories. As well, media logic was appropriate as the overarching

³⁸ McGee (2013) also notes that gatekeeping is "...useful for the researcher attempting to understand how people are informed and inspired to action in the Internet age" (p.21).

lens for the bricolage as it is interwoven with concepts mirroring or supporting those found in that of field, gatekeeping, and boundary-work theory, particularly those highlighted by Bourdieu with regards to the impact of the commodification of news on journalistic autonomy and how prescribed formats limit information sharing.

One issue in terms of defining the parameters of the site of study was the external actors outside the physical space of any newsroom who directly impact everyday routines such as story selection, for example the audience via the choices made in consuming data or analytics providers by means of selecting and promoting specific measures of audience behaviour. Burrell (2009) suggests, where appropriate, rather than considering a field of study as a "bounded space" (p.195) it should be perceived as a network with no physical or virtual borders. I found this particularly useful in terms of incorporating the influence of the audience on editorial decision-making, operating in a virtual space, or the virtual space that analytics providers inhabit outside the physical newsroom. Because of my own experience working as a journalist and my current role as a journalism educator, it was also of utmost importance to situate my own "positionality" (LeCompte and Schensul 2010) in relation to my sites of study, which I did regularly in my research journal³⁹.

3.2 Clarification of Terms

Through the process of performing the literature review, data collection, and analysis, I observed the terms analytics and metrics were often used interchangeably; however, they do not mean the same thing. This was also noted by Zamith (2018), who defined analytics as the systems and software that enable collection and sharing of audience data. Based on my own observations, however, in a newsroom, when someone is using analytics they are not referring solely to the system they are getting data from but also to the analysis of data contained therein⁴⁰ and projections of how such data might be used to shape content development. Holton (2017), in an effort to distinguish the difference between metrics and analytics with a simplistic explanation, said, "Analytics are what may happen, metrics are

³⁹ The research journal will be discussed further in section 3.6.

⁴⁰ Zamith (2018) does acknowledge in a footnote that analytics may also be "the process for engaging in" (p.432) tasks like collection, analysis, and reporting related to analytics systems; however, that still does not capture their explicit use in newsrooms or provide clear differentiation between analysis and systems.

what has happened." To provide more clarity in the analysis of data gathered for this thesis, with the input of participants, I developed my own working definitions (Blanchett Neheli 2018b):

Metrics are units of measurement that reflect a specific element of audience behaviour; analytics encompass the analysis of audience data as a means of performance appraisal on existing content and the development of hypotheses to improve audience engagement in the future; analytics systems are platforms specifically designed to aggregate, display, and assist in the reporting and analysis of audience data.

3.3 More Similarities than Differences in "Newsroom" Routines

Based on my own experience and observations at numerous media outlets before and after joining academia, in terms of routine production practice, I frequently observed there were many similarities in newsrooms operating in differing cultural environments or under differing funding models. As an example, when I was working as a television producer in Canada I was charged with showing a group of television professionals from South America the daily practice for a show I produced, as they were going to mimic such production in their home country. At one point during the live-airing of the show one of them leaned in and asked me what I did when we got a caller on the line who was holding a hostage and making demands. I could offer no advice on what to do in that scenario because it was intrinsically alien to the market I worked in. In contrast, due to shared practice, there were no questions about the more hands-on aspects of content development, such as story packaging or editing. At that time, I did not have the academic lens through which to weigh the significance of such differences or commonality; however, for this thesis, in order to make findings widely transferable, I selected sites of study in differing geographic locations. In choosing such sites of study, I had to query whether all might share the same "social space" (Willig et al. 2015, p.3) and as Willig (2013) described, "unspoken, unquestioned, taken-for granted,

understanding of the news game and the basic beliefs guiding journalistic practice" $(p.374)^{41}$, or "doxa," regardless of location.

3.3.1 Acknowledging Media Systems

This process did not include supporting the categorisation of my sites within already identified media systems, but acknowledging the existence of such systems and the impact of external cultures, in order to determine if the sites of study selected, and the newsworkers inhabiting them, could be studied within the context of a unified field of "the newsroom." Although Willig (2013) cautioned that different cultural environments (for example, my multi-national sites of study) dictate a different field, she also noted this does not preclude them from a comparable study, but requires analysis of how different cultures might impact practice. Throughout my data collection, I was cognisant of this counsel and examined critical work on media systems (Hallin and Mancini 2004; 2012; Perusko et al. 2017).

In examination of studies regarding cultural differences in newsrooms based on geography, it became clear that not all analysis of media systems divided the same countries into similar categories⁴²; some organisations worked outside expected cultural norms due to their own funding models and structures (Allen 2013), and that, particularly when comparing Western countries, differences in routines/practice were abating (Hallin and Mancini 2012; Hanitzsch and Mellado 2011; Cohen 2015; ICFJ 2017)⁴³. As a result, I became confident that, through the use of field theory, I could "bridge micro and macro levels of investigation" (Willig 2013, p.376) and examine multiple sites of study that shared a common goal—creating and promoting news stories, with acknowledging the limitations of doing so being an important caveat (to be discussed further in section 3.8.4). Looking at social spaces with both cultural similarities and differences, not just in geography but funding models, provided me with the opportunity for triangulation and contextualisation of diverse data on the use of

⁴¹ Schultz (2007) in a study on Danish newsrooms noted the existence of established journalistic doxa, as did researchers studying non-journalists working at analytics companies (Petre 2018; Belair-Gagnon and Holton 2018).

⁴² For example, compare Hallin and Mancini (2004; 2012) and Mukerjee et al. (2018) with regards to the US and UK, or Hovden's (2008) description of Norway's media compared to that of Hallin and Mancini.

⁴³ Hallin and Mancini (2012) also clearly state their model was not meant as a simple tool of categorisation.

metrics and analytics, increasing the prospects that my findings could be relevant to a wide range of academics and media outlets, as would be ideal for any ethnographic work.

3.4 Where Doxa Divides: Habitus in the Newsroom

Once the area of study was defined, I turned my attention to the potential participants and their roles within their particular social space of each newsroom. Due to personal experience, I was cognisant that newsworkers can have differing opinions on acceptable practice and cannot always live up to journalistic ideals due to a variety of factors, many related to their particular job function⁴⁴ or habitus. Willig (2013) refers to the journalistic habitus as a "specific way of playing the news game" (p.374), something that differs from position to position (reporters compared to editors) and between different levels of seniority (interns compared to seasoned journalists) (Willig 2013; see also Schultz 2007). However, differences in practice do not, necessarily, infringe upon the shared, basic belief in journalistic doxa. As Bourdieu (2005) wrote,

"...the most irreducible adversaries have in common that they accept a certain number of presuppositions that are constitutive of the very functioning of the field. In order to fight one another, people have to agree on the area of disagreement" (p.36).

Differences in habitus "can help to explain seemingly different or even contradictory practices" (Willig, 2013, p.379), or what Wiik (2015) described as "a negotiation of values" (p.131), even within the same newsroom. The goal within the newsroom as the field of study, then, is analysing these similarities or differences by observing and asking what is valued by whom (Willig et al. 2015), and, specific to this study, comparing what is valued by whom in different habitus at the same location and the same (or similar) habitus in different locations in order to determine factors that impact practice and routines in relation to the use of metrics and analytics. This exploration included examining what I define as the spectrum of normative practice, or the comparative, abstract distances between recognised values and actual routines.

As part of this process, as I performed data gathering in newsrooms, I reflected on existing models of forces that impact journalistic routines in general, such as Reese and

⁴⁴ This was also observed by Amada and Waisbord (2015) who found "social conditions may be conducive to, or discourage, professionalism" (p.63).

Shoemaker's (2016) hierarchical model with "five levels of analysis that shape media content" (p.396), including "individual characteristics of specific newsworkers, their routines of work, organizational-level concerns, institutional issues, and larger social systems." The efficacy of a hierarchical model was supported in the research of Hanitzsch et al. (2016), who also noted the importance of funding/ownership structures—private, public or, state—on organisational operations when it comes to practice. Such reflection provided context to my own observations on the more specific forces that influence decision-making directly related to the use of metrics and analytics.

3.5 Ethnographic Design

This project was designed to meet the seven characteristics of ethnography as outlined by LeCompte and Schensul (2010): a natural setting, face-to-face interaction with participants, ensuring perspectives and behaviours of participants were accurately reflected, recursive data collection and strategies of analysis, multiple data sources, sociopolitical and historical context, and the use of a cultural lens, in this case media logic. It builds on the work of multiple studies that have proven the value in the use of ethnography to observe and analyse newsroom practice⁴⁵. After each stage of data gathering I shared my findings with key participants at each site of study in order to promote recursive analysis and further dialogue regarding issues and observations surrounding the use of metrics and analytics in an effort to ensure proper context and fulsome understanding, a form of "reciprocity" (Ryen 2007, p.223), and a method of ensuring the entire research process remained reflective and iterative. Further, I relied significantly on participant quotes to share findings in order to give prominence to participants' viewpoints and voices.

3.4.1 Data Gathering

Rather than a reliance on intense data gathering at one location, I opted to spend time with a carefully selected range of news organisations in order to provide insight into analytics

⁴⁵ Including Altheide 1976; Schultz 2007; Anderson 2011; Groves and Brown 2011; Usher 2013; Tandoc 2014; MacGregor 2007; 2014; Christin 2015; 2017; 2018; Bunce 2017; Duffy et al. 2017; Wolfgang 2018.

practice at a variety of content providers in a rapidly changing media landscape. LeCompte and Schensul (2010) say this type of "compressed" ethnography is effective when an ethnographer is already "familiar with the field setting" speaks "the language of the local people⁴⁶" and the research is "focused on one aspect of the culture"—criteria which are met in this research. Further, Christin (2017) suggests that the more traditional ethnographic research designs that "sacrifice breadth for depth, focusing on a single, well-bounded site for long periods of time" (p.7) are not conducive to studies based on quickly changing technology, whereas multi-sites can be.

In 2000, Cottle said ethnographic studies on the impact of news technologies on both the production and distribution of news content should "be focused on different public service and commercial, national and local news outlets" (p.34). As identified above and detailed in section 3.9, each of the four sites of study in this thesis offered a different cultural context. Although research into the use of analytics and metrics is now a burgeoning area of study, during the timeframe of my research, there were comparatively few comprehensive, multinational ethnographic studies on the use of newsroom metrics and analytics, particularly spanning local newspapers on different continents, such as *The Spectator* and *Echo*. As well there were comparatively few existing studies on how analytics were being used by press agencies, particularly those without a direct audience, such as The Canadian Press, nor on any type of analytics system that used both qualitative and quantitative data, such as Norway's NRK, and none comparing and contrasting all of these environments within the framework of one study.

Research at the four sites of study consisted of a range of components, depending on each participant/media outlet's availability and comfort level. There were 69 participants, with a minimum of 10 from each news organisation and two from external agencies related to the sites of study, more than 43 hours of formal, semi-structured interviews, and 26 newsroom visits for interviews/participant observation, as detailed in the table that follows.

⁴⁶ Specific to NRK, the language of the people being the language of the newsroom versus Norwegian, as expanded upon in the Limitations section.

Sites of Study	Date range of	Number of	Number of formal	Numbers of
	participant	participants	interviews	visits/participant
	interaction			observation
NRK	13-01-2017 to	29	26	10
	18-04-2018			
The Canadian Press	31-01-2017 to	10	9	6
	18-04-2018			
The Hamilton Spectator	17-01-2017 to	18	19	6
-	27-10-2017			
The Bournemouth Daily	04-04-2017 to	10	13	4
Echo	18-01-2018			
External Actors	17-04-2017 to	2	3	0
(from Chartbeat &	16-04-2018			
Metroland)				

Table 1. Parameters of study.

In reference to issues of managing data collection and analysis on multiple sites of study, Burrell (2009) suggests that "when interviews with new people and observations in new locales yield a repetition of themes...the research process has come to a natural conclusion" (p.194). The concept of repetition of themes being a natural end to ethnographic work was also noted by Altheide (1980) in reference to his much earlier ethnographic work on television newsrooms, and was eventually observed in my own research—by the end of data collection there were numerous overlapping and repeating themes at the diverse locations.

3.5.2 Research Questions

My preliminary research question was very basic: Is the use of analytics impacting newsroom practice? Very early on in my literature review and participant observation it became clear the answer to that question was a simple yes; however, the ways in which news practice was being impacted were much more complex and not always recognised by the newsworkers who were being impacted by their use in newsrooms where traditional job structures had seen significant, in some cases drastic, change. Therefore, I further developed my questions and settled on the following:

- 1. How does the use of metrics and analytics impact news practice?
- 2. Do journalists feel their work is impacted by the use of metrics and analytics?
- 3. How are practices developed by the use of metrics and analytics challenging the boundaries of what it means to be a journalist and the definition of journalism?

3.5.3 Participants

All participants were selected based on their use of analytics within a journalistic context to create or curate content that was consumed by the public at large, or because they held a position that may be impacted by the use of metrics and/or analytics. With the assistance of a main collaborator/gatekeeper, a minimum of five participants from each site of study was determined at the outset of data collection; however, there was chain-referral sampling as participants themselves suggested others who could add to the depth of knowledge being collected and through participant observation I determined yet others who could provide information that would build the knowledge base. Participants were chosen from a wide range of roles and departments, including senior managers, reporters, digital editors, sales and marketing representatives, technologists, and data analysts, reflective of the diminishing borders in journalistic work.

3.5.4 Participant Observation

Participant observation was an essential tool in this study as it allowed me to identify "the borders of doxa and...the unwritten rules of the social" (Willig 2013, p.378), as well as differences in journalistic narrative versus practice. At each site, I attended morning editorial meetings and observed the workings of the digital teams; however, there were varying degrees of access. At NRK and *The Bournemouth Daily Echo*, when I was not observing the digital desk or performing interviews, I was given a desk of my own in the middle of each newsroom visited allowing me to act as a fly-on-the-wall⁴⁷, and/or actively ask questions in relation to what was observed around me. At The Canadian Press, I primarily sat with and shadowed members of the digital team, including attending editorial meetings and one with the sales department. At *The Hamilton Spectator*, outside of a shift spent in participant observation with the digital team, in between interviews, I primarily shadowed a participant who focused on editorial.

⁴⁷ The challenges doing so in newsrooms where Norwegian was the primary language spoken is addressed in the Limitations section.

In order to get the best sense of how metrics and analytics were being used across NRK's network, I visited both the main newsroom and two local outlets, Hordaland and Troms. Being able to see how the homepage editors worked and weighed the importance/value of stories being created in the regions before visiting the regions to gather perceptions on the other side of the equation was very enlightening as it allowed for contextualisation of data from multiple perspectives⁴⁸. As well, throughout the duration of my visits to NRK, I was provided unfettered access to the public service broadcaster's inhouse analytics system. The level of transparency and information shared at all sites of study was beyond what I had expected. Often, following participant observation or interviews, details regarding the metrics for a specific story or an analytics report were emailed to me. As I was given access to or given copies of documents that were proprietary in nature, not all of them could be attached as appendices to this thesis. However, in Appendix 8 I have outlined every relevant document received with, at minimum, a limited description of its contents.

3.5.5 Participant Interviews

For this project, interviews were of equal importance to participant observation in terms of both data gathering and contextualisation of such data. As noted by Gerard Forsey (2010), in ethnographic work, what you hear is as important as what you see. Interviews allowed me to unpack much of what I was seeing on the newsroom floor⁴⁹, particularly with regards to contradictions in journalistic narrative reflecting doxa or ideals versus actual practice. Although most interviews were done in person, some, both before and after my visits to the actual sites of study, were done via phone or Skype, including one with an employee at the local outlet where NRK's qualitative analytics system was beta-tested where I did not have the opportunity to visit in person. Formal interview lengths ranged from 12 to 70 minutes and were on average 38 minutes.

⁴⁸ This advantage was also seen, to a lesser degree, at CP and *The Spectator* as *The Spectator* was one of CP's clients.

⁴⁹ LeCompte and Schensul (2010) refer to the process of building on "hunches" and "guesses" based on what is seen/heard throughout the interview and observation process that eventually leads to the recognition of patterns.

As is the norm with discursive, ethnographic study, open-ended questions were asked when appropriate within the framework of the discussion, versus sticking to a script, and, due to the nature of some answers, unexpected tangents were followed or created by me or the participant(s). The most unstructured interviews took place during participant observations, led by the participants' actions or their self-directed descriptions of work-flows which prompted questions⁵⁰. Although not every participant was asked the exact same questions, all interview questions derived from and aimed to inform the research questions. For example, in terms of RQ1, how the use of analytics impacts news production, participants were asked if stories were selected or deselected due to metric analysis or how analytics might shape story selection, promotion, or formatting. In terms of journalists' perception of the impact of analytics on their work (RQ2), participants were asked, for example, about pressure to turn over new content to feed the website/social media and/or how analytics might impact the development or promotion of their content. In terms of the boundaries of journalism and journalistic work (RQ3), participants were asked about the existence of discord or divide between newsworkers developing content for different platforms and/or what constituted an act of journalism, for example, cobbling together information from secondary sources or simply updating a story versus going offsite and doing more traditional style reporting. In keeping with the iterative process of this project, email exchanges and phone calls were also used, where necessary, to clarify particular points of an interview after transcription.

3.6 Analysing the Data

For this project, after transcription and anonymisation, information gleaned from data gathering was colour-coded to represent identified themes and categorised to determine common issues and possible solutions in terms of developing widely transferable best practice for the use of metrics and analytics in newsrooms. Analysis occurred throughout the research process, using the inductive principles of ethnography where there is no firm hypothesis and general principles are drawn from "concrete data" and experience at the site(s)

⁵⁰ Time for these unstructured interviews was not included in the total hours of interviews recorded in this methodology as it was difficult to ascertain an exact duration due to the intermingling of such discussions with tasks being observed.

of investigation (LeCompte and Schensul 2010). Thematic analysis of data was completed using best practice as outlined by Vaismoradi et al. (2013), where "a story" (p.403), reflective of the research questions, is uncovered by concurrently examining trends across individual and sets of interviews, gathering, collating, mapping, and analysing data (both manifest and latent), in a non-linear, recursive, reflective process. I also used a research journal, recommended for both thematic analysis (Vaismoradi et al. 2013) and, in general, for ethnographic research (LeCompte and Schensul 2010). Although my journal was kept for my own contemplation, some of the observations and concerns expressed within it are shared at the end of each chapter in this thesis and in the final reflections in order to ensure transparency that supports the validity of findings.

I also benefited greatly from Altheide's ethnographic work on television newsrooms in the 1970s, as it allowed for the type of "temporal reflexivity" (p.2) suggested by Carlson and Lewis (2018), and Altheide (1994) himself, that allows a researcher to make a "critical judgment about whether some phenomenon is indeed a break from what came before, a continuation of what has existed, or some middle-ground mutation" (p.3). In terms of analysis specific to ethnography, Altheide (1980) noted that the reflexivity inherent in ethnography draws you figuratively back to the newsroom in a continuing cycle as you reexamine what your experience meant in relation to your data, and that keeping in touch with collaborators throughout the course of analysis allows for greater insight, strategies which this research benefited from.

3.6.1 Contextualisation, Content Analysis, and Promoting Conversation

Although this thesis does not focus on an analysis of news content created by its participants, rudimentary content analysis was done, for example, looking at how a story was featured on the website in order to contextualise participant observations or interviews. As well, a rudimentary analysis of analytics data provided by the participating media outlets was also carried out in order to see how such data compared to the information being shared by participants and, particular to NRK, the frequency of use of the Janus qualitative analytics system.

The accessibility of shared findings was also of prime importance to the methodological approach of this research⁵¹. As such, throughout the research process, and in keeping with the iterative process of this project, I shared preliminary findings on my own blog and the media-focused websites to which I am a contributor both as a means of building informed discourse and using reaction to such texts to gain different perspectives with regards to the analysis of such findings.

3.7 Ethics

This research was approved by the Social Science and Humanities Research Ethics Panel at Bournemouth University, England and by the Research Ethics Board at Sheridan College, Canada. The only foreseeable harm to participants is that information shared could be considered critical of their employer/the media outlet for which they work. In order to mitigate this harm, all participants were offered the opportunity to have their data anonymised to ensure, to the best of my ability, that none could be identified based on responses to questions answered/information shared. However, I was cognisant when creating participant agreement forms that within the journalism culture anonymity is not seen as best practice, and offered those who preferred to be identified this option. When I analysed the data, though, it became apparent that identifying some participants would increase the chances of identifying those who wished to remain anonymous. As such, I chose to make most participants anonymous. I also separated coded names of interviewees from their work titles when describing some participant observation. For example, someone identified as a "digital editor" could be identified elsewhere with a coded name, eg. C13. This was done in order to use such titles to give context to practice while mitigating the risk of identification of participants. To the best of my ability, due to the anonymisation strategies described above, there is minimal to no risk for participants in this project.

⁵¹ LeCompte and Schensul (2010) stress ethnographers have an "ethical and social obligation to make the results of their research available to the scientific community." However, I would go further. I am in agreement with Habermas (2008) that scientists, in general, have a responsibility to share and disseminate their findings in ways that are understandable to the public at large in an effort to improve public discourse.

3.7.1 The Benefits of Anonymity

Those researching similar topics in the future may want to consider issues of anonymity in precarious work environments before creating participant agreements. As Kelly (2009) identified, "the default of anonymity...if properly codified, sets researchers free in more ways than it restricts them" (p.14) and helps to seek "understanding" as opposed to "obfuscating it." Despite the benefit of context that location specificity provides, I would consider anonymising both organisations⁵² and participants in future work in order to, at the most basic level, best protect newsworkers from any censure as a result of their candour in sharing details of their work or their opinions on the genuine or perceived shortcomings of their employers.

3.8 Limitations

One of the difficulties in researching areas that are in the midst of rapid change is ensuring that findings will be relevant by the time they are published. As identified by Carlson and Lewis (2018), "Time is a vexing issue for journalism scholars. As we take time to craft our research, and then wait for publication, journalism marches on – and we nervously hope our findings still hold" (p.7). However, this does not infer that studies of journalism practice are ineffectual, rather that temporal context should always be considered. As such, future researchers will need to put data displayed in this thesis into context and be particularly cognisant of any imminent changes in metric evaluation and use and news practice in general since the time of data gathering⁵³.

⁵² Although, this would be of limited practicality with regards to this specific study where referring to a news agency in Canada could only be CP, or a public broadcaster in Norway could only be NRK.

⁵³ For example, even within the timeframe of this project, the look of *The Hamilton Spectator* homepage was revamped, removing a prominent most views or read section, and Facebook made a change to its algorithm with far-reaching effects for news outlets

3.8.1 Speaking Newsroom

In terms of data gathering, the fact I did not speak Norwegian made it more difficult for me to understand dynamics at play in my participants' environments at NRK. Although we would speak English to each other, I was not able to understand all of the conversations taking place around me during observations. However, as I discovered, speaking "newsroom" was helpful. Due to my own work experience, I was often able to accurately interpret the interactions around me. For example, the first thing I did visiting NRK's Troms office was to attend the morning editorial meeting which took place in Norwegian. I took notes regarding what I believed people to be discussing, not specific subject matters but, for example, "reporter shares story update," based on my own experience attending countless similar meetings and seeing the use of things such as an assignment sheet that described stories that could be done and/or who might do them. Although I thought I had the gist of what transpired, afterwards I was somewhat surprised when I asked a participant to give his description of what was said and it almost mirrored my notes exactly, even down to the positions held by some people I had not yet been introduced to who attended the meeting.

3.8.2 Keeping a Pulse on Positionality

Due to my journalistic background, I had to continually stay aware of how falling into familiar routines and inadvertently acting as part of the team could hamper me from being able to stand back and analyse the situation as an observer. For example, at one site of study I was asked to give my opinion on what story might be the appropriate lead at the editorial meetings I attended and, as second nature, gave input, at one point even offering further information to expand a suggested story. On another occasion, while checking the website of a site of study, I noticed a grammatical error in the lead story. I debated whether I should say something or not and ended up emailing a participant to make them aware there was an issue. How I might have crossed the line from researcher to journalist was the subject of a subsequent journal entry in which I continued to reflect on how to best situate myself in the newsrooms I was studying.

Hovden (2008), referencing Bourdieu, says "scientist-journalists" (p.31), because of their involvement in and exposure to the journalistic field, tend to focus on good and bad journalism and try to find solutions to ensure journalism's legitimacy, thereby supporting the dominant ideology of that group, versus an examination of the structures that contribute to practice. Reflection, something "central to ethnography" (Delamont 2007, p.214), as well as to the use of an "interpretive bricolage approach" (Rogers 2012, p.4), allowed me to recognise this tendency within myself. I was encouraged by Cottle's (2000) suggestion that "important insights may yet emerge, for example, from those increasing numbers of academics-turned journalists, and journalists-turned academics that are able to reflect on their own 'reflexivity'" (p.24). Through such reflexivity, instead of looking at issues from a "how do you fix the product?" perspective, I endeavoured to position myself in a manner where I could focus on the social and organisational structures that might encourage new ideas/best practice to surface and how those ideas might lead to content creation that best served a particular community.

3.8.3 The Limits of Ethnography

A criticism of ethnographic fieldwork is that ethnographers can only analyse what they see and, as such, have limited scope of the environments they are studying⁵⁴, which raises concern over the legitimacy of findings. As noted by Shaffir, Stebbins, and Turowetz (1980), "One way to attack the validity problem is to play back one's observations to one's subjects" (p.14), a practice which not only helps validate what has been observed but also builds rapport, as noted earlier in regards to reciprocity. However, this requires an understanding on the part of the researcher that there are ethical issues to be considered, including how using reciprocity might change the power dynamic or relationship of the researcher with their participants (Angrosino 2005), and how personal dynamics, for example, the ability to easily build trust with participants in newsrooms because of speaking the language, might make participants more likely to share information that puts them at risk.

⁵⁴ I would suggest this provides further evidence of the importance of interviews to clarify and unpack observations.

As noted by Angrosino (2005), "Observational research, as it has evolved, is essentially a matter of interpersonal interaction" (p.736). Such "interpersonal interaction" can impact the researcher. Altheide (1980) noted challenges sharing findings because of his "concern" (p.309) some participants would face censure or ridicule at the sites of study if they were identified. While coding my own data, I felt discomfort at the idea some quotes might erode the professional reputation of some participants. These examples illustrate how the act of ethnography itself might impact findings because "the cultures and social realities reported in the course of fieldwork are dependent on the active explorations, and the joint negotiations that the investigator undertakes in conjunction with his or her hosts" (Delamont 2007, p.214), and "there are further acts of interpretation when the scholar acts as author." Therefore, any act of ethnography can be considered as what Delamont describes as a "created and crafted" product⁵⁵. Reflexive ethnography, however, requires the researcher to question her "own authority" and "processes of interpretation" and emphasize "how the researcher thinks she knows" (Olesen 2005, p. 262), which, although not eliminating the inherent limitations of ethnography itself, mitigates the concerns addressed above.

3.8.4 Limits of Comparison of Sites of Study

As will be outlined below, each site of study for this research was selected because it offered the possibility of comparison between differing newsroom cultures with similar goals. However, as noted by Willig (2013), one "must be aware of the very different contexts in which media texts are produced" (p.376) when performing this type of comparison. Although there were many documented similarities in all of the newsrooms studied, it must be stressed that those working at NRK, a well-funded, public broadcaster within a culture with documented respect for publicly-funded journalism and within a country with an extensive system of social benefits, were, contextually, working in a very different environment than those at the two local papers struggling to make ends meet in environments where their value was being negotiated, or at the Canadian Press, where the struggles of such newsrooms that were clients of the agency impacted the ability to generate revenue through subscriptions and

⁵⁵ Although, I would argue, it is just as feasible to "create and craft" with quantitative data as it is with qualitative data, as also noted by data analysts in this research.

maintain standards of coverage in terms of staff and resources. The impact of these environments, as will be discussed in the Conclusion (see p.218), were likely lessened specifically in regards to practice surrounding the use of metrics and analytics due to the impact of shared technology; therefore, a wider extrapolation of findings in this research as they relate to editorial decision-making, in general, should be done with caution and with the understanding there could be significant variances in other areas of news production.

3.9 Sites of Study

Research for this thesis focused on four news organisations in Canada and Europe: two local papers, a news agency, and a public broadcaster. The first site of study selected for the research was NRK due to its willingness to share expansive data and its development of a unique, in-house analytics system that contained a qualitative component that measured the editorial value of stories. There were several criteria in determining the other sites of study. Firstly, as there were a significant number of studies on web-only or digital first publications, and in order to investigate the challenges of changing practice within organisations with more ingrained routines and revenue streams, I chose to examine legacy media transitioning to digital production. However, in order to allow for a broader perspective within that grouping, I looked for sites of study with different primary platforms/delivery mechanisms and funding models than those of my first site of study, the publicly funded broadcaster NRK.

As I live in Canada and was studying in England, I also wanted to have representative sites from both of those locations. Canadian Press was the next site of study selected due to its unique challenge of accessing metrics and analytics without a front-facing website/audience, its keen interest in developing an analytics strategy, and its subscriber-based, agency funding model. I made several attempts at finding a newspaper outlet willing to allow an ethnographic study, originally attempting to make in-roads at much larger newsrooms than the two that participated, where I gained initial access through professional contacts. However, it was fortuitous that *The Spectator* in Canada and *The Echo* in England were willing to be part of the research, as being similarly situated, including being cash-strapped and working under the umbrella of a much larger parent company that owned multiple publications, there were many opportunities for comparison. Together, the four sites

of study provided multiple points of triangulation, increasing the opportunity for findings that would be useful to a wide breadth of academics and news organisations. In order to situate each site of study within this thesis, a brief background is provided.

3.9.1 NRK

NRK, a public broadcaster, was the largest media outlet in Norway with approximately 3,500 employees, three national TV channels, 14 national radio channels, and the website nrk.no, which has subpages for NRK's 15 regional offices as well as departments such as sports, culture, and entertainment (nrk.no no date). NRK was funded by the Norwegian people-96% of its approximately five-billon NOK budget comes from a license fee paid by those who own a television (nrk.no no date). According to its 2016 annual report and as Newman et al. (2017) found, "compared to European counterparts, the Norwegian institution enjoys high legitimacy and broad political support" (p.81). Eighty-six per cent of Norwegians accessed one of NRK's platforms at least once a day (NRK 2017). However, during the time of my research there had been at least 300 recorded job losses⁵⁶ at NRK (Newman et al. 2016) and its funding model was under examination. A 2016 report (Rimmereid et al.) commissioned by the government found secure funding for the broadcaster was essential to ensure informed discourse, but as the license fee was tied to ownership of a television and platforms of media consumption and audience behavior were rapidly changing there were concerns about the future⁵⁷. The working group charged with writing the report, as translated by one participant (N1 personal communication, 3 November 2016), had recommended changing to a technology-neutral, residence-based funding contribution excluded from the state budget⁵⁸ (Rimmereid et al. 2016).

⁵⁶ Employees noted, due to strict labour regulations, those losses were through attrition, not cuts (N1 personal communication, 13 January 2017).

⁵⁷ Newman et al. (2018) noted a point of concern for public broadcasters as the fact their audiences tend to be much larger offline than online. According to one NRK analyst, "you would have to go up to people 50-plus" to find those using the TV as their main source of news in Norway (personal communication N28, 1 September 2017).

⁵⁸ At the time this thesis was being written, changes to the licensing fee had not been implemented.

3.9.2 The Canadian Press

Canada's news agency, The Canadian Press, more commonly called CP, was established in 1917 and served approximately 800 individual news outlets operated by roughly 200 media companies during the time of data gathering (personal communication C1, 31 January 2017). Allen (2013) described it as more important than Canada's national broadcaster, The Canadian Broadcasting Corporation (CBC), in terms of influence because CP's content was relied upon by nearly every media outlet in the country. It is what he described as "the chief vehicle of mediated publicness" (p.16) in Canada.⁵⁹ CP was originally run as a non-profit cooperative, owned by a collective of newspapers from across Canada that shared content for aggregation and distribution⁶⁰. In November of 2010, due to pressures from withdrawing members and the crisis in the newspaper industry, CP became a for-profit news agency, purchased by three organisations in the former cooperative: Torstar Corp., The Globe and *Mail*, and the parent company of *La Presse*, Gesca (personal communication C1, 31 January 2017; Allen 2013). As C1 (personal communication, 31 January 2017) described, representatives from each organisation sit on CP's board, which deals primarily with issues of financing versus issues of journalism. The owners are also clients who, along with all other CP clients, pay a subscription fee based on the types and quantity of content received. As Allen (2013) noted, not only does CP supply content, it also helps shape it at the most basic level. The first CP Stylebook, outlining rules for everything from what words to capitalise to the proper terms to be used to describe a variety of people and places, was published in the 1940s and since the late 1950s best practice described therein has been industry standard across Canadian media⁶¹. From the ground up, CP plays a significant part in both shaping and producing journalism content in Canada.

⁵⁹ As an example of its position within the Canadian media market, a government-funded study (Greenspon 2017) suggested CP be given the mandate to shore up disappearing local news coverage with the subsidised hiring of up to 80 reporters across the country. The government had not acted upon this suggestion at the time of the writing of this thesis.

⁶⁰ All newspapers that joined the cooperative had the same say, "one paper, one vote" which "guaranteed a degree of accountability" (Allen 2013, p. 53) and ensured truly national coverage, shared cost for coverage, and more news from a Canadian perspective.

⁶¹ The stylebook itself is a staple text in Canadian journalism schools, including where I teach. CP has also created an online tool for students called "Style Coach" that was being piloted in one Canadian journalism school and could soon be used in others (C1).

3.9.3 The Hamilton Spectator

The Hamilton Spectator has been a fixture in its community for close to 200 years. It was the most frequently used source of local news in Hamilton on a daily basis, and held two of the top four positions (newspaper second and online site fourth) for a local news source used at least an hour per week (Savage 2014). The Spectator's target market was approximately 750,000 people and, operating with a partial paywall, in the month of February of 2017 it had online pageviews of more than 6.7 million and more than 1.5 million unique users (personal communication S10, 11 April 2017) with a print readership of 260,000 (thespec.com)⁶². However, it was still primarily supported by its print edition, which brought in four dollars of advertising revenue to each one for digital⁶³. The Spectator was operating within a Canadian newspaper market that was faltering, with extensive job losses and closures due to loss of revenue (Greenspon 2017; SCCH 2017). Owned by Torstar, it was one of six dailies, more than 80 community newspapers, and various digital properties run under the umbrella of Metroland (Torstar.com). Metroland's revenue was reported as an operating segment of Torstar and was "down \$23.0 million or 7.8% in the first nine months of 2017" (Torstar 2017)⁶⁴. However, losses, overall, in the first nine months of 2017 were deflected by decreased operating costs, due to decreased print circulation and the centralisation of services⁶⁵.

⁶² Although circulation numbers are available for both *The Spectator* and *The Bournemouth Daily Echo*, I will not be referencing them in this thesis as a comparator due to inconsistencies in the methodology of calculating such figures in the markets studied. It should be noted that "readership" is also an inconsistently defined calculation based on the number of "eyeballs" that see a paper, versus the number who pay for it.

⁶³ That ratio became five to one if including the Classifieds, which still made a healthy contribution to the paper's revenue (personal communication S18, 27 April 2017).

⁶⁴ That includes a 9.7% drop in its largest source of revenue, local advertising, calculated using combined print and digital totals. Overall digital revenue for Metroland saw a 4% drop, but "continued strong growth in local digital advertising" had offset heavier losses from other digital revenue.

⁶⁵ The Spectator's building housed a central copy-editing team responsible for editing all local content for approximately 150, primarily community, Metroland papers and a few dailies, including *The Spectator* (S13 personal communication, 19 April 2017). As well, *The Spectator's* digital team ran its own website, the spec.com, and websites for two other publications, *The Waterloo Region Record* and *Guelph Mercury*. Its press also printed *The Record*, *The London Free Press*, parts of *The Toronto Star*, a number of community weeklies, and acted as a flyer printing and distribution hub. Some of *The Spectator's* second floor was rented by a funding agency for the Ontario provincial government.

3.9.4 The Bournemouth Daily Echo

As in Canada, newspapers in the United Kingdom were struggling to find their feet in a turbulent market⁶⁶. The Bournemouth Daily Echo had been in production since 1900 (The British Newspaper Archive; Bournemouth.com). Its newspaper was published Monday through Saturday with a target population of approximately 500,000 people (Bournemouth Borough Council 2016), and according to its own front page, had more than 120,000 readers "in print and online every day." In March of 2017, The Echo website, which had no paywall, received more than 14 million pageviews and more than a million unique users (see Appendix 8, item W). Like The Spectator, The Echo is part of a larger chain. It operates under the umbrella of Newsquest Media Group which was also centralising services⁶⁷. Newsquest was described on its own website as "one of the largest regional news publishers in the U.K." with more than "165 news brands and over 40 magazines, published in print and online" (Newsquest Media Group no date). Newsquest's parent company was the US based Gannett Inc.'s 2017 annual report said Newsquest brought in 10% of its "publishing segment's total revenue" (Gannett 2018, p. 18), which for all of Gannett was down 4% from 2017 compared to 2016, with decreased demand for print advertising and lower circulation being contributing factors; however, there was no distinction of how Newsquest impacted that overall decline⁶⁹. Newsquest's editorial development director,⁷⁰ E9, said Newsquest's digital audience was growing

⁶⁶ According to Newman et al. (2017), "UK news publishers are pursuing a combination of radical cost saving and increased collaboration in the face of steep declines in print advertising revenues. Overall, print ad spending fell by 13% in 2016, according to Enders Analysis..." (p. 53).

⁶⁷ The managing editor of *The Echo* said there was "a new relationship" between Newsquest papers in the region "as all are short staffed and they're working to share resources" (personal communication, 25 September 2017). As an example, there was no press on site at *The Echo*; it was printed at another local Newsquest publication in Weymouth.

⁶⁸ Gannett Inc. also ran 109 "local media organizations" in the United States plus its flagship national brand USA Today (Gannett.com).

⁶⁹ E9 stressed that there was still a "strong appetite" for print in the UK, which Newsquest was able to take advantage of because it had a successful business model aimed at maintaining its print revenue by using available technology to decrease the cost of production and using such cost savings to launch/buy new and existing local print titles as other news groups folded local papers or turned dailies into weeklies. ⁷⁰ The davalamental director chose to be on the record but Lwill pariodically identify him via his coded.

⁷⁰ The developmental director chose to be on the record but I will periodically identify him via his coded identity, E9, for easier reading.

steadily along with digital revenue, which comprised 30% of the media group's overall earnings⁷¹

⁷¹ That exceeds the average UK newspaper according to Cornia et al. (2016), who found the majority only made 10-20% of revenue from online "even after years of decline in print advertising and circulation and almost 20 years of investment in digital media" (p.7).

Chapter 4 NRK: Analytics from a Public Broadcasting Perspective

"We are not dependent on ads but we are dependent on legitimacy and public opinion" (N15 personal communication, 2 August 2017).

4.1 An Outline of NRK: "The House is on Full Fire"

When I got off the bus to visit NRK for the first time, after heading in what I thought was the right direction through a park, I asked a passerby if I was on the right path. She confirmed I was and assured me I would not be able to miss it. I soon saw what she meant. The main office in Oslo was not just a building, but more a complex, sprawling over an expansive area with a "house" for each platform: radio, television, and digital. The sprawl was a result of a progression of new spaces being constructed over the years to accommodate more people and production. Outside the main entryway there were trees, gardens, and sculptures,⁷² and inside scattered works of art. Walking through the radio house⁷³ felt like going through a time machine, with museum-quality Art Deco furniture sprinkled through hallways and filling rooms⁷⁴. What was most perceptible at NRK, though, was the responsibility felt by its employees to serve the people of Norway, something referred to without fail by participants. NRK employees also frequently referenced the organisation's transparency, were willing to be interviewed at length, and offered to share information beyond what I had anticipated, several describing NRK as "an open book."

My participant observation included three sites: the main office in Mareinlyst, Oslo and two of NRK's local offices, in Bergen and Tromso. The regional offices I visited were tightly knit communities with, as is typical of most local newsrooms I have observed or worked in, a real sense of camaraderie: there was laughing at editorial meetings, a make-shift communal snack table at one location and at another offers of candy throughout the day as classic rock played in the background. The Hordaland office was situated on the west coast,

⁷² See Images 1-4 in picture gallery.

⁷³ The radio house was also significant historically; construction started in 1938 and was continued during the German occupation in World War II when the building was used by Nazi forces as both a military hospital and broadcasting house (nrk.no 2000).

⁷⁴ As an example, see Image 8 in the picture gallery.

in Bergen. At the time of my visit it was located in a building constructed in the television production heyday with cavernous studios that were sitting unused. As a result of changing needs, NRK Hordaland was about to move to smaller headquarters—although, one participant assured me there would be room for the communal ping-pong table kept in the middle of a downstairs hallway.

The Tromso office, located north of the Arctic Circle, was much smaller spatially but responsible for covering a massive geographic area including the entire region of Troms plus the North and South Poles. It was also home to the best workplace cafeteria I have ever encountered, with homemade-style meals so renowned that, according to participants, local truckers stop by the offices to enjoy them. At all three locations, everyone had unlimited access to free coffee and cappuccino, there were couches to sit on, comfortable areas to meet in, and the newsrooms benefited from natural light through big windows. As newsworkers juggled multiple tasks and platforms, however, there was a concern that NRK needed to do more to address the shift away from TV and radio to digital news consumption and, particularly, reach the younger demographic. NRK was in the midst of a digital transformation during the time of my research, with analytics defining the way forward.

NRK's 2016 yearly report stated 86% of Norwegians accessed its services at least once a day; however, tabloid giant VG dominated online⁷⁵ with 55% of the population accessing its site weekly, compared to only 19% of Norwegians accessing NRK's website⁷⁶ (Newman et al. 2017). One area in which NRK was particularly struggling to attain a healthy audience share was that of mobile users. Although NRK data showed incremental progress (see Appendix 1), only 35% of Norwegians accessed NRK content daily via mobile and that number dropped to 15% if not including NRK's weather site yr.no (NRK 2017). The mobile audience was so important because smartphones were the primary device used to consume news in Norway (Newman et al. 2018) and as seen in recent Chartbeat data reported by Fischer (2018), "mobile is driving almost all traffic growth for publishers from platforms,

⁷⁵ As a point of interest, Norwegians are more comfortable paying for online news than anyone else in the world (Newman et al. 2017; 2018).

⁷⁶ One participant, though, said some analysts at NRK did not "recognise" that statistic because the Reuters "survey is a yearly one-off" and the question asked regarding use of websites was "skewed" (N28 personal communication, 16 November 2017). Using data gathered by the Norwegian Internet Panel (NIP) completed by Kantar and comScore, in 2016 NRK reported that 1.1 of approximately 5 million Norwegians accessed its site on an average day (nrk.no no date).

and has been since at least early 2017."⁷⁷ Referring to changes in audience behaviour, and paraphrasing a Norwegian saying, N1 said, "We all understand that the house is on full fire while we discuss this" (personal communication, 14 November 2017).

To deal with the "fire," NRK initiated a project called Digitalløftet or, roughly translated, digital boost, which involved shifting "from a broadcast focused perspective to a digital-first way of working⁷⁸" (N1 personal communication, 14 November 2017). At the time of my visit to Oslo, this digital strategy was evident in the newsroom which was being restructured "to gather and place the breaking units of TV, radio, and web together in one unit" (N4 personal communication, 31 July 2017). In that unit, it was "mobile first" and throughout NRK the importance of multiplatform delivery and using metrics and analytics to evaluate the quality and reach of such content was top of mind.

4.2 Analytics as Public Service

Because it was a well-supported public broadcaster, NRK benefited from stable funding and what Sehl et al. (2016) describe, in reference to other public broadcasters, "a degree of insulation from direct political influence" (p.40). One participant believed because of its unique situation NRK was obligated to take more chances exploring digital innovation. N13 said, "We have a responsibility to take the biggest risks because we can do so without putting people's jobs on the line" (personal communication, 2 August 2017). However, based on interviews and observation, it was clear that there was widespread agreement that innovation and content creation should always put the interests of the Norwegian public first. This was stressed by N24 who said, "We are the national broadcaster and we have to do our job well and make sure that people get value for the money spent" (personal communication, 14 August 2017).

The parameters of what defined value, though, were shifting. As one data analyst noted about the content created, "If the audience didn't find it or like it or engage with it, or if it

⁷⁷ This trend was confirmed by CB1, a Chartbeat analyst interviewed for this study.

⁷⁸ For the initial phase in 2017, the budget was 2 million NOK, 3 million including the cost of personnel. For 2018 the budget increased to 8 million NOK, 10 million including personnel costs (N1 personal communication, 14 November 2017).

was not used, what's the value of it then⁷⁹?" (N7 personal communication, 31 August 2017). Hanusch (2017) noted that "increased pressure on public broadcasters to demonstrate their social relevance" (p.1580) could lead to more use of analytics, and suggested those with comparatively less funding may be more susceptible to "the logic of the click." NRK was admittedly using analytics as a measure of its social relevance and as documented throughout this chapter, despite being well-funded, "clicks" were a priority; however, monitoring pageviews was just one method of utilising analytics in a widespread, resolute manner to reach everyone, or as many as possible, in Norway. Not only did NRK use analytics systems like Chartbeat, LinkPulse, and Google Analytics, it had also created its own in-house system, called ARK. In accordance with its mandate, much time and effort were put forth to ensure ARK united "the metrics that are available with the overall values of a public broadcaster" (N1 personal communication, 31 July 2017). The goal was not just to monitor traffic, but measure quality.

4.3 Development of Systems

The development of ARK started with a directive from executives to examine the way the public broadcaster was taking measurements and KPIs and ended with an analytics system that made information more accessible by "mashing up" data they were already getting from external systems and adding some of their own. ARK was universally popular with everyone I spoke with who used it regularly. I was given a sign-in code to access the system at my leisure for the duration of my visit, spanning three weeks, and found ARK to be very user friendly. Once signed in to the system, after pasting the URL for a specific story in the browser and hitting enter, everything was visible from pageviews, time spent, and social referrals to the type of device used to access that story.

⁷⁹ The language in this quotation nearly mimics that of a journalist quoted by Groves and Brown (2011, p.22) referring to tension at *The Christian Science Monitor* over the value of content that is not read.



For a wider perspective, the main page of ARK compared stories to each other based on metrics like most views (see Appendix 3). As one user pointed out, "It's very easy. It's very intuitive. You don't have to have a three-day course to understand the figures when you open it" (N23 personal communication, 14 August 2017).⁴⁰ The positive response to the system was a surprise to those who developed it. This was because, in years past, the common narrative at NRK was that it was "proud not to be interested in the numbers" (N2 personal communication, 18 April 2017) because "real journalism" was not about getting clicks. This was evidence that there was boundary "expansion" (Carlson 2015c, p.9) required to see the value of analytics and the development of accepted practice in relation to analytics was progressive.

4.3.1 ARK 2.0

At the time of my research, an expanded team was working on ARK 2.0 and more developers had been hired in order to get changes done quickly. One goal for the redevelopment of ARK included a plan to provide more context for metrics:

"What we're doing now is sort of building a database of both stats and metadata that

⁸⁰ Although, as will be discussed later in the chapter, this did not mean that everyone understood the context of the numbers they could easily access.

we can bring together and do more interesting things [with]. One of the lists on ARK is content ordered by pageviews. In the future, we will be able to do content ordered by pageviews but weighted down. A pageview doesn't matter unless you can get someone to spend time on it" (N2 personal communication, 18 April 2017).

At a development meeting I attended on August 3, 2017⁸¹, the fact there was much reporting of numbers on ARK but lack of real-time actionable data, or, in other words, metrics that suggested to journalists how they might improve a story or its reach, was a point of discussion. Four key metrics were identified: frequency, loyalty, time spent, and time saved. Time saved was a new metric being developed that would be a suitable measurement for stories that were meant to, for example, give a quick synopsis of events. As N13 (personal communication, 2 August 2017) described, "In that instance frequency might be more important than time." Or, in other words, more people coming to check a story brief about a breaking news event would be more important than readers wasting time to learn limited information through an article that was longer than it needed to be.

4.3.2 Communicating Change

With any change to a system, a plan is also needed to communicate such changes to its users. The necessity for this at NRK was supported by the demand put on developers at the time of the original launch of ARK. As one described, "I was getting between 10 and 50 emails a day with questions about statistics" (N3 personal communication, 26 July 2017). One way developers hoped to prevent this from happening with the launch of ARK 2.0 was to "aggressively simplify" the information available:

"What we're trying to do now is explain the meaning and the weaknesses of the numbers as much as we're displaying the numbers. There's way too much stuff we put into it [ARK 1.0] without being really good about explaining what it means and how it's measured" (N2 personal communication, 18 April 2017).

At the time of my visit, they were still developing an education strategy for the rollout of ARK 2.0, and analytics in general. As described by one analyst, "Our ambition in terms of data is that everyone in our organisation should be able to get all the data that are available at all times" (N28 personal communication, 1 September 2017); however, they were not sure

⁸¹ This meeting was held in English for my benefit.

how best to implement that goal.

Not having a clear idea of how a goal might be implemented, however, was not seen as prohibitive in moving forward. Based on observation, this was largely due to NRK's unique, stable position and the security of its employees. As a result, it was able to do something that every developer or analytics expert I spoke with throughout the duration of my research agreed upon as key to digital innovation and effective use of analytics: be flexible and pivot. This is because, as N6 (personal communication 31 July 2017) described, there are really no "definitive answers." Long-term tools would always require updating or redeveloping and the information gathered through the use of analytics could require a different interpretation based on innumerable circumstances. As N9 said, "I'm always certain that what I'm certain now is gonna change in a couple of months' time" (personal communication, 2 August 2017). The ability, both economically and in practice, to experiment and innovate was a key factor in the development of the qualitative part of the ARK system, Janus.

4.3.3 Janus: Quantifying Quality

Despite general agreement on the benefits of innovation, many at NRK thought it was impossible to gather qualitative analytics. This is because, as noted by Wallace (2018), "Normative values, such as journalistic quality, are especially hard to reduce to factors" (p.282). However, developers working on the system were determined to find a way:

"You can't say I can't count because it's impossible. You have to say okay let's count then. If you think it's important, if you want and mean that it's important to measure quality then you have to count, just make the counting easier" (N3 personal communication, 26 July 2017).

The first step in developing a way to measure quality took place at a meeting in a farmhouse in Norway where there was at least one person with publishing responsibility from every content-creating department at NRK. Each person invited was asked to bring an example of a "good" article they could present to the group, highlighting specific qualities that determined its worth. From the examples of those articles, after much discussion, five clusters of questions to determine quality were developed. These questions were included in the initial Janus survey, tested in a local newsroom for a year before some adjustments were made, and then Janus was integrated into the ARK system and introduced to other newsrooms. The final survey included questions on the number of sources, the quality of images and writing, and whether the story was engaging (see Appendix 4a and 4b for sample surveys with translation). Individual reporters received individual evaluations on their stories, but overall statistics for each newsroom were created by lumping together every evaluation done on every story in order to provide more holistic data on trends and stats.

4.3.4 Janus Growing Pains

Participants involved in the rollout of Janus acknowledged there could have been more testing and better communication before it was launched. This was evident when some journalists became "really angry" (N27 personal communication, 22 August 2017) as they thought Janus was going to be used for "surveillance." Another issue that arose was that staff changes, developers and/or editors leaving the project, made it more difficult to maintain steady monitoring of usage to ensure enough evaluations were done to make data statistically relevant. Project leads said the issue was exacerbated because they had to "pester" (N1 personal communication, 31 July 2017) people to complete Janus surveys. If there was no one available to do the pestering from the national level, evaluations were not done. N27, who worked in the newsroom where Janus was first tested, said pestering, or what he described as "growling," was also needed at the newsroom level in order to get evaluations completed, even though completing a Janus survey was far from complicated. Data were collected from the survey using an automated system. Those designated as evaluators received an email each day with a link that said, "click here to start your evaluation." This led to a randomised list, and evaluators were instructed to take the top story to avoid subjectivity⁸² (N1 personal communication, 13 January 2017).

As evidenced by an analysis of use of Janus across all NRK news offices⁸³ there was widespread resistance, or apathy, to completing the Janus surveys, which interviews would

⁸² Although, through observation I saw this was not always practice. Editors would, for example, avoid completing surveys on stories they had edited extensively, or choose particular stories where views/engagement were different than anticipated.

⁸³ See Appendix 5—10/16 offices had not completed a survey within the past 30 days as of November 2017.

suggest was largely due to lack of time.⁸⁴ There was some manual counting required on the part of the evaluator to answer questions like the number of sources used, how many sources were women versus men, and assessing the number of typing or grammatical errors. It might only have taken a few minutes, but finding a few minutes can be difficult in a busy newsroom. One editor said he did not often do evaluations because he did not feel that ticking the boxes was enough and he did not have time to provide thoughtful comments (N20 personal communication, 8 August 2017). Another evaluator said, "I know when my reporters have written a good article and also how we could do better so I don't need a system that describes that. I have to prioritise my time" (N24 personal communication, 14 August 2017). However, another evaluator in the same office did see the value of Janus:

"Janus is a great thing because I think we could be much better at evaluating our stories...When I'm a producer I try to evaluate one story a day because I think that it's important to give the journalists feedback. It's important to discuss what is good and what is not so good in this story. And also, a lot of people that work in our newsroom don't have that much experience with [the] internet...so I think it's a good way to give them feedback. I don't think it's because people don't find it useful. I just think that they don't have time for it" (N26 personal communication, 15 August 2017).

The reporters I talked to liked getting the feedback and found it helpful, overall, but not always relevant from a practical perspective. For example, being told you should have used newer photos when there was no time/opportunity to get out and take new photos. This type of regular feedback also took some getting used to:

"When I started working here I felt I had to just defend myself every time [after receiving an evaluation] but now I kind of know what my faults are and I'm not taking it personally. It was kind of hard but I think I became better for it. I think it's valuable to do that sort of thing" (N21 personal communication, 8 August 2017).

I had the opportunity to watch an editor perform Janus evaluations on several occasions. N17 agreed time was an issue with regards to completing surveys; however, he also described Janus as "a very useful tool" to give feedback to reporters and said sometimes he would use cumulative information gleaned from Janus at editorial meeting as "talking points." N27 had used Janus to identify and work on multiple issues at his local office—

⁸⁴ Lack of time also led to employees at a public broadcaster in a study by Powers (2018) to stop tracking the impact of their stories "because the process 'was so time consuming and the tool was so complicated'" (p.463).

including a poor ratio in the number of female sources, creating effective titles/headlines, and developing a good lead into a story. However, due to time constraints and the encouragement needed to get evaluators to complete surveys, N27 did not believe that using Janus every day was a viable strategy. He felt the best way to use the tool was periodically to address specific goals.

One developer noted that people working across all media were "caught up in the production cycle" and "don't have or won't take the time to reflect, go back, and evaluate. It's not prioritised" (N2 personal communication, 31 July 2017). The greatest challenge to the effectiveness of this qualitative data system, therefore, seemed to be getting people to use it. Despite limited engagement, however, those who developed the system still saw it as a success because even if everyone was not completing surveys, more people were talking about what quality meant and how it might be achieved. Janus was less about reach and traffic and more about NRK's responsibility as a public broadcaster to develop informative content⁸⁵. With the development of Janus, NRK ensured its analytics system included a recognition of its inherent duty to the people of Norway. However, a practical strategy for its implementation that would ensure widespread use had yet to be found, and quantitative measurements, like pageviews, garnered much more attention.

4.4 The Fight for the Front Page

Making it to the homepage, or what participants called the front page, at NRK was seen as crucial to the success of any piece of online content in terms of reach and views. This was because, as N2 described (personal communication, 18 April 2017), "In the Norwegian media market it's not at all true that the homepage is dead. It's not even declining if you look at the numbers."⁸⁶ The team that managed the front line of nrk.no worked in the TV house at Marienlyst in a cluster of desks in the middle of the newsroom. Front-page editors performed

⁸⁵ What seemed contrary to NRK's obvious consideration of audience needs was that, while it worked so diligently to create its in-house qualitative analytics system, it did not consult with the audience regarding what it might define as quality content. Carlson (2018) also noted the need for better understanding of the audience experience.

⁸⁶ The importance of the homepage, in general, was being rediscovered at the time of the writing of this thesis as will be discussed further in Chapter 8.

a significant gatekeeping role, receiving approximately 200 articles per day from across NRK and selecting only about one third of those for placement on the homepage. One homepage editor said "the fight⁸⁷" to get on the front-page was so intense because otherwise reporters working in local offices and a variety of departments were basically "writing for the garbage" (N14 personal communication, 3 August 2017). He said getting on the front page was the difference between 300 and 300,000 views. Supporting this statement and echoing multiple, similar statements made by those working in the local offices, N20 said, "Everybody is fighting for the top of the front page" (personal communication, 8 August 2017).

Front-page editors worked to a frenetic pace, receiving approximately 10 stories per hour for perusal, with constant scanning of analytics dashboards, the homepage, and incoming content in two monitors each editor sat in front of⁸⁸. They also ensured stories had links to related articles, which they said were often missing. Poor spelling and grammar were also identified as issues. The primary front-page editors I observed did not take lunch, reasoning there would then be too many articles to look at when they returned. During participant observation one editor said if it were not the slowest time of the year (summer) they would not have had time to talk to me. Although working at such a quick pace, frontpage editors were very conscious of NRK's public service mandate. They professed not to use "clickbait at all" (N14 personal communication, 3 August 2017). To show the difference between private and public editorial strategies, referring to NRK's homepage during participant observation, one editor used the example of a widely-read story about a vicious, male swan that had attacked several people in the Hordaland region and was going to be euthanised, something animal activists were furious about and the local mayor ended up receiving death threats over. It was the main story on the site of their private competitor but in the second spot on NRK's. The editor said the story was only a "talking point" and as such was not worthy of the most prominent position on the public broadcaster's site.

As typical of most websites, what were considered the most important stories were posted on top of "the fold," or above where there was any need to scroll down. Although

⁸⁷ The idea of battling or fighting for the front page may reflect a more widespread vernacular regarding attracting traffic online; the "fight" (p.10) for readers was also seen in a study by Ferrer-Collin and Tandoc (2018).

⁸⁸ See Image 7 in the picture gallery; a third monitor was a television broadcasting output.

having the swan story in the second position may denote a certain amount of editorial restraint, for much of the period of my observation that day, a story about Donald Trump that had nothing to do with Norway was in the top spot⁸⁹. Trump draws clicks in Norway, too. In terms of positioning, for those doing ethnographic work, Schultz (2007) acknowledged the importance of Bourdieu's theoretical conceptualisation of the newsrooms as "hierarchical social spaces." She writes,

"...a news story is never newsworthy in itself or newsworthy only in the eyes of the beholder—rather, the newsworthiness of a story is always a question of positioning. How is the story positioned in relation to other stories in circulation that day? How is the journalist proposing or writing the story positioned in relation to other journalists? How is the media positioned in relation to other media?" (p.203).

This process was easily observed in the negotiations surrounding the positioning of content on the front page at NRK, and evident in overall practice observed at all sites of study in this research. Schultz describes these types of negotiations as the sphere of journalistic judgment. In this sphere, there is a push and pull between doxa, the understood and accepted standards of journalism, what she refers to as the "undiscussed" (p.196), and areas open to "discourse" where editorial decisions are sometimes made in divergence with doxa, similar to incongruities noted by Hanitzsch and Vos (2017). As evident from the comments above, positioning also added to the layers of gatekeeping at NRK's local offices, which will be further explored in section 4.5.

4.4.1 Real-time Rules

As the front-page team was primarily focused on the promotion of content, the real-time analytics system LinkPulse, rather than the in-house system ARK, was seen as the primary tool because as one editor described, "It's more important for me to look at the [real-time] traffic, the quick exit rate, and click ratio" (N14 personal communication, 3 August 2017). However, if front-page editors found the time, they would look at some numbers in ARK, particularly those regarding social media referrals. In order to improve traffic, the front-page team would enhance stories by changing headlines, pictures, the placement of the story on the page, some of the language, or the order of quotes. They were always thinking about

⁸⁹ This editorial decision is the focus of reflection at the end of this chapter.

ways to "tweak the front page" (N15 personal communication, 3 August 2017) based on realtime metrics. One editor described them as "the bible" and "the navigating tool" and said if they could not access them they were "lost" (N8 personal communication, 1 August 2017). Stories were moved around based on what was "doing well," another term in online vernacular that was used by multiple participants at varying sites in my study, primarily, referring to receiving high traffic. This was a term which allowed me to, as Burrell (2009) described, follow "participants through space as well as in language" (p. 196). What was "doing well" at NRK was not entirely based on pageviews, but as the majority of articles front-page editors managed were shorter, news-style stories they did not pay as much attention to time spent and, based on observations, pageviews seemed to be the metric earning the most attention.

4.4.2 Enhancement Strategies

Throughout the day, the front-page team was inundated with contact from journalists and editors asking for enhancement to stories to improve engagement and traffic⁹⁰. However, the amount of attention a story received was most often directly related to its performance in terms of views:

"We care about the whole list [of stories on the front page] relative to other stories. A journalist cares about their story. We're not going to worry about changing the title and picture if the story is in 15th on the list" (N15 personal communication, 3 August 2017).

If enhancements did not lead to a change in traffic, after 10 or 15 minutes editors might move the story from a prominent position to farther down the page, or replace it altogether, what Tandoc (2014) described as "de-selection." However, the idea of constant changes on the homepage in order to ensure the flow of traffic was one that was being challenged by analytics. Referring to metrics that show 60% of mobile users visit NRK's site less than once a week, N2 said one of the most "interesting and important conversations NRK is having is frequency of updating" (personal communication, 31 July 2017). Based on its own data, since 2013, NRK had only seen about 10 really huge peaks in traffic, generally tied to breaking

⁹⁰ Heinderyckx (2015) refers to newsworkers with the job of enhancing web content as "window dressers" (p. 259).

news. N2 was among those who believed there was "a disconnect between peaks and the way we act as if there is a continuous peak. People rarely consume news in the frantic way we create it" (personal communication, 31 July 2017). This was supported by a front-page editor who said that sometimes the front page froze for hours due to technical issues and everyone in the newsroom panicked, expecting a huge impact on traffic, but usually there was not. N14 acknowledged it was not as important to the general public to update stories as frequently as it was for the "news addicts⁹" on the desk. Anecdotally, N14 found if they made too many changes, too often on the homepage clicks actually went down. Another participant said,

"I really wanted to just make one perfect page and let it be for 24 hours, just to get the numbers, because I was certain that the numbers will get better than the way we work with the concept where we take good articles and drop them down the page" (N9 personal communication, 2 August 2017).

That idea, however, did not get traction with his supervisors, and was never tested.

4.4.3 Coaching Long Form

Some of the digital team that sat in the cluster of desks working alongside the front-page editors were described as coaches. They worked with journalists on long-form stories, sometimes from the outset of the original idea all the way to monitoring the final product, in order to improve engagement and views. More emphasis was being placed on long-form because although those articles only represented 1% of production, they made up 7% of reading time of all content (N2 personal communication, 31 July 2017). As one participant acknowledged, though, "It takes a lot more work to engage people in articles than make them click on something" (N9 personal communication, 2 August 2017). This was given as the reason why use of the coaches, which was once mandatory for all long-form content, was made voluntary. It was up to the journalist or editor to approach a coach to get help with a story, a move designed to shift efforts to those who were genuinely interested in strategising and adapting content for online. However, editors said if a journalist did not seek help it would make it more difficult, and even unlikely, for a long-form story to be picked up and promoted by the front-page editors.

⁹¹ Petre (2018) noted the addictive nature of analytics' dashboards, which might amplify those instincts.

Through analysis of successful long-form stories, coaches had created an evolving system of best practice. Based on analytics, editors determined about four or five thousand words was the longest you could generally expect someone to read, but that was only a guideline. If they felt a story needed more words, it could have them—more evidence that despite prescribed formats, decisions were based on the best way to share information, in contrast of typical media logic. Their analysis had also shown that stories that were about the everyday, but told well, often engaged readers. There was also analysis of stories that did not do well. For example, in one case editors were surprised that what they deemed an excellent article kept losing people halfway through. On closer inspection, they saw the third time something was mentioned everyone was dropping out. N9 said, "It was dramatic." However, despite going over the story innumerable times before publication, the issue was only identified post-publication through analytics.

A priority of the coaches was to persuade journalists to work outside the traditional upside-down pyramid style of writing and "think more literature and less journalism" (N9 personal communication, 2 August 2017). Journalists were encouraged to write using chronology with descriptions of tastes, smell, and surroundings in order to get the reader to stay with the content as long as possible. One way of doing this was putting multiple hooks within a story. As one journalist described,

"It's all about building suspense and not giving away everything at the beginning. Right now, I'm writing this big story about safety in the mountains and I write about three friends who went hiking last year and one of them fell 150 meters and died. But I won't tell that in the beginning because I want people to wonder, what happened to that guy?" (N26 personal communication, 15 August 2017).

Another journalist was frequently described to me as having best practice in terms of developing long-form content both before and after his stories were posted. This included, before publication, sending front-page editors an email with 20 to 30 different suggestions for a headline along with multiple pictures so that material was readily available if enhancement was required to boost traffic and/or engagement. He also used Chartbeat once the story was posted to see where he might be losing readers:

"Now I can actually go into the story and see where people fall out of the text. And that's been a tremendous resource for me. For instance, you can always see that if you have a big picture at the end—close to the end—you'll almost always lose your audience. So, now I stopped doing that. Or even putting cliff hangers before the picture, to make people understand that there's more and get interested. I've started

experimenting lately with making minor changes to the text after publication. If you can see 10% are losing interest because of a paragraph then maybe you try to change that paragraph. I've done that a couple of times and it actually worked. The time spent has gone up" (N12 personal communication, 2 August 2017).

N12 worked exclusively on long-form stories and acknowledged he was on a team that had the benefit of ample time to produce and promote content, as much as six weeks dedicated exclusively to one article in one instance. However, getting all journalists to participate in a similar type of preparation for posting an article followed by analysis, reflection, and action after publication was a goal at NRK. As one participant described, "We're trying to teach journalists that your article is not finished when you hit the publish button; it's just getting started" (N5 personal communication, 31 July 2017). That was just one transition required in a new digital reality.

4.5 How to "Rikse" a Story: The Impact of Metrics and Analytics on the Local Level

One strategy based on analytics that seemed to have achieved widespread acceptance at NRK⁹² was that of making online content created in the local offices relevant to the national audience: "We're running a local news page but most of our traffic comes from nrk.no. We choose stories based on whether we think that they have a possible national audience. That's the main goal" (N17 personal communication, 7 August 2017). This was echoed by another who said,

"When choosing a story, we always ask the question, has this story a potential of reaching the front page? If the answer is no, we have to take an extra discussion. Are we really going to make this story?" (N27 personal communication, 22 August 2017).

One office created its own word for the process of nationalising a story, describing it as to "rikse." However, this is not a new concept. Altheide (1976) identified the "nationalising" of local news television stories for a national newscast by couching them in a broader issue "while playing down local particulars" (p.126). This is exactly what happened at NRK, along with the "favorable recognition" of having a local story picked up nationally.

During my participant observation, I was shown an example of a local story with national interest. A local politician was vying to have the government pay for a breast cancer

⁹² With the exception of a few local offices with no other media in their areas, according to participants.

drug that was very expensive and helped few patients. The drug was life-lengthening, not life-saving but made a big difference for those who could access it. Not only did the story have a national angle, stories related to the same subject had been given a prominent spot on the front page and "done well" previously. Editors knew that this would increase the chances of getting this story put on the front page at nrk.no—and it was. This gives support to Welber et al.'s (2016) assumption that once a storyline proves to be popular it is more likely "to be followed up on given that it has already been judged to be worthy of prominent placement" (p.1051), popularity impacts both story promotion and development.

Regardless of the subject matter, reporters and editors were always looking for a national hook. Another story covered at the time of my visit that made it to the front page was that of a stabbing at a local soccer field⁹³ where children had been present, a crime story perceived to be of interest to anyone. I was in the newsroom when the story was being developed but left before it was published. An editor sent me an email describing what happened:

"We sent the story to nrk.no and crossed our fingers. Minutes later we see it topping our numbers list, with really good reader numbers. Then it just kept rising...In this moment it has passed 1,300 actual [real-time] readers. ARK tells me the story has 15,000 readers after under an hour. So, we basically follow the numbers and clap ourselves on the back, calling this a success" (N17 personal communication, 10 August 2017).

4.5.1 The Three Pillars

At one local office, there were an unofficial "three pillars" for deciding what content to cover for the website. The first, as identified above, was whether a story would be picked up by the front page. The second pillar was stories that were so important locally it did not matter if they had a national audience (an example of this was issues at a local hospital that had no interest nationally). The third pillar was social media—did the content have a share value? Would it reach the audience even without the help of the front page?⁹⁴ These pillars were discussed using different descriptors at every local location I had contact with. Local offices

⁹³ See Appendix 6 for a screengrab of this story.

⁹⁴ This supports Harcup and O'Neill's (2017) posit that "shareability" is impacting news selection.

would not, necessarily, create online content for stories on things like local politics⁹⁵ or the local football (soccer) team because stories on those subjects, based on analytics, did not attract a big enough audience online. Stories that were seen as "too local" for the website were often still covered by NRK on the regional television and/or radio news shows, while stories like that of the vicious swan, mentioned previously, received more time and resources because they had the proven ability to attain widespread reach, get lots of pageviews, and reach the front page.

In a study on Norwegian media Hatcher (2015) noted "news organizations where journalists have strong *community ties* may adopt more culturally specific gatekeeping routines" (p.245). This was wholly true for the TV and radio coverage at NRK's local offices, but less so for online coverage in those offices because in order to meet the national broadcaster's goal of creating more online content of national interest the local offices also fell into the category of "news organizations that were less likely to fully embrace community-oriented routines" (p.246).

While the pillars were all acknowledged, each pillar did not have the same priority at each office. For example, at one regional office I visited, while acknowledging the importance of getting stories on the front page, there was less focus on getting *every* story on the front page. They usually created about 10 stories a day with one or two of them having front-page potential, and there was more of a focus on finding stories that might go "viral" on Facebook. However, Facebook was not, necessarily, the answer for the regions if a story did not make it to the front page because not all stories worked well on Facebook[®]. N24 said, "We try not to post that many articles on Facebook, just the best really. The stories where we have ordinary people—that can touch, move the heart[®]" (N24 personal communication, 14 August 2017). There was also competition to be first on social media in order "to get engagement around a story before someone else does" (N17 personal communication, 7 August 2017). Facebook metrics were also tracked and, additionally, it was seen by many as

⁹⁵ Except during an election as it was seen important to NRK's mandate to inform the public.

⁹⁶ Discrepancies on a story's popularity based on the platform it was shared on were also noted by Hanusch (2017).

⁹⁷ These are qualities that would fall under the news value of "shareability" as discussed by Harcup and O'Neill (2017).

an integral spot to find stories. N24 said, "Facebook has become the most important place for me to be. It's the number one tool for me in daily work life³⁸" (personal communication, 15 August 2017).

4.5.2 Local Logic and the Importance of Clicks

In stark contrast to practices for NRK's front page, in the regions little, if any, changes were made to the local offices' subpages once stories were posted and there was little to no enhancement of stories. One participant said that it was not his "biggest concern" keeping the local subpage fresh as so few people used it—their content was mostly accessed via the homepage or social media. However, he thought it was still good practice to update it periodically. Whether a story made it to the front page or not, local editors would send it to anyone else they could think of who might share it, including other local NRK offices who could put the story on their own subpages. The breast cancer story discussed above was also flagged to the Cancer Association so it could be shared with its 200-thousand plus social media followers, along with being shared on internal social media accounts, and with national content aggregators such as the website SOL. Reverting to the battle metaphor, one editor said, "It's a constant fight to get every reader you can, if you have the time, after the story has been published" (N17 personal communication, 10 August 2017).

Although there were no formal quotas for pageviews, one local participant said the goal was to get no "less than a thousand visitors" (N20 personal communication, 8 August 2017) for every story posted. As such, managers at this office periodically looked at stories with fewer than a thousand views and tried to determine what the issue was, for example, if it was poorly written or lacked photos. The ten stories with the fewest reads over the time period being examined were then shared with journalists along with the question, "Why do we even do these stories?" (N20). Editors used such straightforward language because they considered there to be direct consequences to a poorly performing story: loss of resources, time, and audience interest. Although there was discussion regarding time spent and engagement,

⁹⁸ The importance of the platform is supported by an ICFJ (2017) international survey that found threequarters of journalists use Facebook for work and 89% believe social media, in general, benefits their work, which was also reflected in a study by Cohen (2018).

"success" in the regions also seemed to be measured largely by pageviews because even at offices where getting on the front page was the primary goal, the reason they wanted to be there was to attract views, and, via whichever avenue, traffic metrics were top-of mind⁹⁹. Numbers for stories that received a lot of views were shared with the newsroom in emails as examples of success, and, in one case I witnessed, at a morning meeting.

Although the importance of pageviews was widely acknowledged, there were also discussions surrounding "clicks" or views that provided further examples of practiced roles being different than narrative roles (Hanitzsch and Vos 2017). Despite suggestions by some participants that clicks did not matter, in observations and interviews, I heard many comments made related to it being a "good" or "bad" day based on traffic. At one local outlet, the general expectation was to have 25,000 pageviews a day, and on one "bad" day during my participant observation there were fewer than 9,000, partly because a story that was expected to get picked up by the front page did not. In a different instance, metrics for a longform story were considered disappointing because it only had 4,000 views. However, some positive metrics on Facebook for a different story on that same day improved the mood. A video had received 19,055 reach with 19,000 views. The editor described this as being "very rare" and called the reporter over to show him. The reporter said, "That's cool. We've done something right." The editor said the success made him "feel a bit better about yesterday's numbers" (N24 personal communication, 16 August 2017). He also said he hoped that a story that was currently being worked on would be "good." I asked if that meant quality or numbers, he replied "good journalism and a story that many read. That combination I like."

⁹⁹ The metrics of most interest at the local offices often related to how they were doing in relation to each other (see Appendix 8, Item Q). As will be seen in a subsequent chapter on *The Bournemouth Daily Echo*, though, the issue of fairness when ranking locations with much smaller target audiences was raised. There was no differentiation between scales of success comparing a region with 50-thousand or one with 500-thousand people based on the views an article received.

4.6 Fewer but Better

One of the most noticeable effects of the development of NRK's analytics strategy was an institutional mandate to do "fewer but better" stories. As one developer identified, "We've been successful at communicating that NRK creates too much content that nobody reads" (N2 personal communication, 31 July 2017). In late 2017 there were 4,500 stories a month produced by NRK; prior to 2015 there were 6,000 articles a month produced. Production of medium-length articles, the format that was receiving the least amount of views and was thus determined to be disliked by readers, was basically obliterated for news departments¹⁰⁰. News articles were required to fall into two formats: 450 words or shorter or 1,000 words or longer. Such prescribed formats could seem like typical media logic where the need to attract eyeballs and develop practice that streamlined production took precedence over information sharing (Altheide & Snow 1979; 1991). However, as NRK's need for eyeballs was not based on attracting commercials, the goal of engaging and informing the citizens of Norway seemed to take precedence. The size of the article might have been prescribed, but the expectation was that there would be analysis of whether information could best be shared in a longer or shorter piece before the story was written, as mentioned previously, longer form articles had no word limit, and, regardless of size, the story was expected to meet the broadcaster's high standards.

In terms of story production, the rules for formats were followed quite stringently. One developer spoke to the need for precise adherence to the rules and said, "If you don't have strict catalysts to make change, then the change won't happen" (N3 personal communication, 26 July 2017). According to N1 (personal communication, 30 August 2017), the "fewer but better¹⁰¹" mandate resulted in the production of 28% fewer articles at NRK, while increasing pageviews by 22%, and reading time by 45%. After my participant observation, NRK was "still focused on reducing the volume of articles produced and increasing quality of

¹⁰⁰ See Appendix 7 for an NRK graphic displaying the change in story format use. The ineffectuality of "medium-sized" stories was also noted by Hindman (2015), and Groves and Brown (2011) documented the push for stories with fewer than 500 words at *The Christian Science Monitor*.

¹⁰¹ The idea of fewer but better is not unique to NRK. At *The Telegraph*, strategists believe creating "a small cluster of daily stories," more typical of broadcast news, "will carry and define the brand" (Schlesinger and Doyle 2015, p.320). Fewer articles are also being written at *The Christian Science Monitor* (Lichterman 2018a).

storytelling" (N1 personal communication, 14 November 2017) with an underlying goal to better use resources.

4.7 Dayparting

An area in which participants widely agreed development was required in terms of the use of analytics was determining when stories should be published. One analyst said,

"A lot of people are writing their articles with a deadline of 7pm because that's when the big news show on TV is going on, and that's kind of strange because 7pm is one of the worst times to publish a news article online" (N5 personal communication, 31 July 2017).

However, in another sign of differing interpretations of analytics, N14 (personal communication, 3 August 2017) said 7pm was a peak time for traffic. Regardless, as discussed in the literature review, timing the posting of stories online mimics a process traditionally used by television broadcasters to determine the best times to air content, called dayparting (Veglis 2014; Hanusch 2017). Online, dayparting involves pinpointing what types of articles are read the most at what times in terms of both format and subject through examination of audience data. One NRK analyst described it as "easy pickings" (N5 personal communication, 31 July 2017) in terms of actionable metrics.

The need for more of this type of analysis was acknowledged as a necessity during my participant observation with one front-page editor at NRK who said, "We're not good enough at posting to time" (N14 personal communication, 3 August 2017), or in other words posting stories when they were most likely to get the largest reach and audience. Another said, "When you post timing can be almost everything. It's very important to have the right timing and to know when to reach people" (N24 personal communication, 14 August 2017). Reporters were also conscious of the importance of dayparting. During a discussion about which metrics matter most, N25 said, "I think it's relevant to see when people read my story in terms of when the best time is to publish it" (personal communication, 14 August 2017). Although there seemed to be no strictly standardised schedule or strategy for dayparting at NRK, as there was, for example, with the word count for stories, the fact it was widely discussed as best practice was another sign the use of analytics in the creation and sharing of digital content was seeping into the culture.

4.8 Platform-parting

"Platform-parting" (Hanusch 2017, pg.1581), developing content and production practices best suited to the platform on which the content will be presented, particularly recognising that online and mobile content need their own treatment, is becoming routine (Duffy et al. 2017). However, using content developed and produced primarily for one platform on a different platform was easier in theory than in practice at NRK. Referring to stories done with television primarily in mind, N17 said, "Solving it for online can be difficult" (personal communication, 8 August 2017). Multiple participants agreed stories produced for television did not have enough sources for an online article and the quality of still pictures, or lack of pictures entirely (despite the fact the reporter was supposed to ensure they had them), was, as N24 (personal communication, 15 August 2017) described, "something that is always a concern," both for posting to the website and social media. There was acknowledgment that reporters had much work to do in the field, but also some frustration regarding the lack of effort to supply the appropriate material for stories that should be multiplatform, as was the burgeoning expectation for all content.

4.9 A Brutal Awakening and An Age-related Boundary Gap

As discussed in the literature review and found through the data gathering for this research, in journalism, although there has always been interest in reaching the audience for both monetary and reputational gain, there has been a shift in practice in terms of catering content to audience desires. As one NRK analyst described,

"Things have been changing in much of the media industry from back in the day when people who were working in news were not really that interested in the audience and their preferences to the point where absolutely everything is interesting" (N28 personal communication, 1 September 2017).

The process of enlightenment regarding the audience at NRK was a progression, with different employees coming to accept the use of more readily available audience feedback at different times. Best practice was also progressive. Throughout my interviews and observations, many participants referred to a fascination with traffic that negatively impacted

the quality of content when metrics and analytics were first introduced to the newsroom. N20 said,

"In the beginning, it was a lot of chasing after clickbait. Now we are confident or we know that if we write a good story people read it, and we know more about what a good story is" (personal communication, 8 August 2017).

But for some, the transition to constant surveillance of how the audience engaged with content online revealed a harsh reality and, according to my interviews, it was the more seasoned reporters who were most affected:

"For the reporters who have worked here for many years, I think it's been a very brutal meeting with the audience...They are not used to be being measured in that way...We had to be quite hard on people and show them, well, you had your story on the internet. 900 people read it. We can't use time on stories that so few people actually read...I think they were a little sad or unhappy because it's rough having numbers on display like that but we had to do it just to show the reporters how people reading our page behave" (N23 personal communication, 14 August 2017).

C9 (personal communication, 24 April 2017) from The Canadian Press, referring to time spent working at a newspaper, also talked about "the harsh truth" faced by reporters when they started receiving information on the number of people who were reading their stories¹⁰². Referring to the fact that more of the daily reporting that encompassed cultivating conversations and building a network of contacts happened online rather than out in the community, N1 said, "There's a lot of old-school journalists that feel that the focus has gone too much towards technology" (personal communication, 13 January 2017). As Sehl et al. (2016) identified, developing a pro-digital culture "generally comes at least partially at the expense of traditional ways of doing things" and "change without conflict is rare" (p.40).

At NRK there appeared to be an age-divided gap in acceptance regarding the use of analytics to shape content. Issues surrounding age in relation to evolving digital practice, not necessarily regarding technological ability but perceived impact on quality of content and journalistic autonomy, were also seen by Nikunen (2014) in a study on Finnish newsrooms. N4 said some older employees felt that it was "too tabloid" (personal communication, 31 July 2017) to change a story after it was published to improve reading time or get more views. However, he believed taking measures to reach people with your story was not tabloid, but

¹⁰² The difficulty of facing how many readers actually read a journalist's work was also noted in the work of Groves and Brown (2011).

"a good thing" if "all the ethics" were in place and people were not being a "slave" to the analytics. N4 believed analytics should always be used in conjunction with traditional news judgment, which should take priority¹⁰³.

4.10 Pushing the Envelope—the Private versus Public Boundary

In another evident boundary, there were concerns expressed by multiple participants that an influx of new employees coming from the private sector tabloid sites was pushing the envelope too far in terms of prioritising analytics and metrics, particularly pageviews, over traditional journalistic practice. N12 said, "They come in with this pageview way of thinking almost ingrained into them. And most of them haven't done a very good job of just putting that aside" (personal communication, 2 August 2017). This was acknowledged by an editor who came from a tabloid site and said when he first started at NRK he had to "take a step back from the pageview mentality" because at NRK you can be "tabloid" in your visual style, but need to be "really accurate" with your journalism (N14 personal communication, 3 August 2017). Another participant who came from the private sector spoke about how refreshing it was to work at a public broadcaster and get away from creating clickbait, but she also said that some people at NRK needed "to be more tabloid" in their style in order to ensure important information was consumed by more people (N18 personal communication, 7 August 2017). The debate of where to draw the line with tabloid-style and/or the quest for pageviews was illustrated in the coverage of the swan story referred to earlier. One participant said.

"Who really cares about a swan? I don't know if I'm fully agreeing to the extent of the coverage on this one case. I think it's driven by numbers. It's good that the media is taking the audience seriously, but I think it's not that much of a story" (N21 personal communication, 8 August 2017).

This was countered by another participant who described analytics as "fuel" that could be used to justify resources and support editorial decisions for covering certain topics, including

¹⁰³ The idea of using traditional values as a measurement tool is common among journalists, even those at newer organisations (Duffy et al. 2017).

the swan¹⁰⁴. However, N18 stressed that you can't just "follow the analytics" entirely. In terms of overall strategy one analyst said, "We're trying to communicate that it's not about getting the clicks or pageviews from your article, it's to create the best content and optimise it for the online position" (N5 personal communication, 31 July 2017), which based on interviews and observation seemed to be true. However, in the end, optimising content for online ideally led to more pageviews. Further, in contrast to N12's concern about the "pageview way of thinking" noted above, he also acknowledged there was no point in writing content no one read and added that one of his stories just set a record for pageviews. He said "everyone's very excited, myself included," (personal communication, 2 August 2017), providing another example of dissonance in relation to the pageviews metric.

4.11 Changing Borders Between Technical and Editorial

With the focus on using analytics to shape content, at the time of my site visit, a new analytics team had just been hired from the private sector to work in the central newsroom at Marienlyst to help journalists better use and understand metrics and analytics. This team included a journalist/programmer, two data scientists, a full-time programmer, a designer to work on digital only news features, and a social media journalist (N5 personal communication, 31 July 2017). Along with developing better strategies to use analytics and creating digital-first content, part of their job included managing "the whole data journey," from tracking and implementation of tracking code to figuring out how data should be stored and structured and how to make data available in dashboards and default reports so it could be used for analysis (N6 personal communication, 31 July 2017). After a brief time at NRK, this new analytics team felt the ARK technical development team could benefit from a data scientist's perspective in terms of how to best visualise data. Some on the analytics team would also fill the role Ferrer-Conill and Tandoc (2018) described "as a newsworker primarily acting as an intermediary between audience data and the newsroom" (p.2). One of the goals of the new analytics group was to be a crossover or hub between journalists and

¹⁰⁴ As a point of comparison, it was interesting to note disparities in what was considered clickbait from one location of study to another. For example, at NRK the story of a swan that was gripping the online audience but did not, necessarily, have any long-term impact was considered to be veering towards clickbait, whereas, as will be seen in subsequent chapters, at *The Spectator* it was things like celebrity sex lists, and at *The Bournemouth Echo* simply content that was not local.

developers to ensure that the analytics tools being created were effective, something they felt they could facilitate because they spoke "both languages" (N5 personal communication, 31 July 2017), technical and editorial. This issue of linguistics was addressed by a developer who said, "There is a culture barrier between news editorial leaders and developers. They lack a common vocabulary" (N2 personal communication, 31 July 2017).

The communication problem between the technical development and production sides was discussed by several participants and showcased what could be described as Bourdieuan struggles for control of a field and/or the conflict that can surface when boundaries of who does what begin to change in a defined group (Gieryn 1983). Another participant working on the tech side said there was inherent conflict between developers and journalists in the newsroom because "one wants to change all the time and one wants to produce content. We're building products and systems there's no content for and they're producing content that does not fit with what the audience wants" (N13 personal communication, 2 August 2017). He went on to say that when managers do not understand or appreciate other departments goals and initiatives, "apathy for those initiatives leaks down to journalists and developers" and they do not see the importance of what is being done. He felt the real issue was that there needed to be better communication at a "higher level." Another participant said it was sometimes difficult being a technologist and trying to advise journalists who had been doing the job a long time, because they did not value a technologist's advice when it came to principles of storytelling. Journalists, using Carlson's boundary matrix (2015c), were trying to protect their autonomy on a professional level by "keeping out non-journalistic informational actors" and on the level of practice by defining what was "correct" (p.9). With the growing trend of the use of technology and technologists in news work (ICFJ 2017), this will likely continue to be an issue at NRK and elsewhere.

At the time I was conducting my interviews at NRK, the new analytics team was preparing its own investigation into what analytics tools the newsroom required, with a plan to interview journalists and editors to assess their needs and, based on those needs, prototype tools and use machine learning and topic knowledge to better define and classify content. One analyst said there was also a goal to look at "correlation between content consumption and how much time we spend producing articles" (N6 personal communication, 31 July 2017). On the technical level, it seemed there could be a lot of overlap between what some

members of the newsroom analytics team would be doing and work that was already being done by NRK's existing tech developers, something developers did voice apprehension about, one half joking that perhaps they should hire their own journalists. However, as roles and relationships were still being defined at the time of my visit, it was too early to say if this would prove to be a significant issue in terms of inter-departmental relations or wasting resources through duplication of work.

4.12 Use of Panels

Along with data analysts working in individual departments at NRK, there was also a dedicated audience research unit that had 12 staff members, three of whom focused on digital content (N28 personal communication, 13 November 2017). The team delivered monthly reports on usage across NRK, including traffic and census data, with a particular focus on giving a neutral perspective on the numbers:

"We see some cherry picking. You want to pick the numbers that make you or your team look good and then we have to come in and tell the whole story. The media landscape is changing and our audience is changing and it's important that we're all on the same page" (N7 personal communication, 1 August 2017).

The goal of NRK was to reach everyone in Norway; however, with so much information available and so many ways to distribute content it was difficult to determine success regarding that goal:

"How can we combine data, for example, unique users that have visited our web pages with data from Facebook or any other pages or places where we might have that news article? It's about technology and it's about who gives you allowance to read their data and it's about data privacy, combining too many data bases and stuff like that. Trying to determine the total unique reach for an article across any platform on the internet, I think that's a really tough job to do" (N28 personal communication, 1 September 2017).

As mentioned in Chapter 3, in order to gain insight into audience behavior, NRK's audience research team used data collected by Norwegian's Internet Panel. The panel consisted of 3,300 people, 18 years of age and older, who had agreed to have all of their internet usage on their personal computers, tablets, and cell phones measured and reported by means of cookies installed on all of their devices (N28 personal communication, 29 November 2017). The research department believed this "direct" contact with the audience

gave them the most accurate information regarding online demographics. One developer was skeptical about the use of these panels until he worked on the in-house analytics system and observed how numbers can be misinterpreted and skewed: "I came from a place where I thought we had it backwards. Our analytics department was looking into the past, not the future, looking at real people. Now I'm glad we do" (N2 personal communication, 31 July 2017).

As one analyst outlined, the information gleaned from panels can give perspective on what journalists have seen in real-time and help them make better decisions¹⁰⁵:

"Some people might think it's old fashioned, but I still favour trying to have panels that are measuring internet usage from a person level and accumulating up to the population like we do on TV and radio. It's really valuable in terms of understanding the audience" (N28 personal communication, 1 September 2017).

4.13 What Do the Numbers Really Mean?

Monitors showing analytics were part of the environment in all of the newsrooms I visited at NRK. As one reporter described, "It's up on the wall all the time...It gives you a feeling of success if your story has been read very well; but, unfortunately, it isn't always the best journalistic stories that are the best-read stories" (N19 personal communication, 7 August 2017), something perceived at all of my sites of study and supported in the literature review. I observed many discussions surrounding what stories might go "viral" or get the most views and how best to reach the audience. However, there were also clear discrepancies in knowledge and availability of tools. At the same location, one reporter told me how useful it was to see when people had dropped out of a story while another reporter said it "would probably be very useful" if she could see where people dropped out so she could determine

¹⁰⁵ As evidenced by other media outlets, however, there are a variety of ways to get more fulsome understanding of audience data in the analysis of content consumption, including audience surveys (Barber 2017; The Conversation 2015). And as discussed in the literature review, with regards to *The Financial Times* monthly teas that give staff the opportunity to hear directly from the audience about content and its presentation, a "key figure" at the paper said, "[It] helps so much to have that feedback loop and it's absolutely essential to make a success of the digital age, really critical" (Schlesinger and Doyle 2015, p.311). Hansen and Goligoski (2018) suggest consultation with the audience with regards to the development of editorial products also helps build financial stability.

if "something in the story could have been changed" (N25 personal communication, 14 August 2017). This difference in knowledge base was a result of the first reporter having been sent for additional training on analytics and having access to Chartbeat, while the other had not/did not. Due to limited resources, senior managers decided who received such training and Chartbeat was only accessible to selected journalists as access was considered expensive.¹⁰⁶

In terms of story selection, stories were often developed based on subjects or formats that had proven to draw views previously; however, that did not ensure popularity in the future:

"For me it's sometimes really frustrating because I get too hung up on the numbers and at the end of the day the numbers don't always add up to what people want to see. So, I might be sitting down for a whole week or two weeks going through numbers seeing how long people are watching video, how many people are clicking on our posts and everything, telling the journalists and the editors that we should create more content like this, and then we continue creating the same content but then it doesn't get any engagement or clicks or anything. Because at the end of the day I don't know what our followers want to read *this* day" (N11 personal communication, 2 August 2017).

Issues surrounding "knowing" what analytics meant was also evident in the research of Björkman and Franco (2017). The journalists they studied did not fully understand analytics but still believed they could "easily spot what was successful or what went wrong" (p.28) and make decisions based on those observations¹⁰⁷. The difference with newsworkers at NRK was that most seemed cognisant of their and the numbers' shortcomings; however, they still used the data to help make decisions/interpret success. This included practice in relation to the LinkPulse dashboard in the Oslo office.

On the dashboard, there was a flowchart showing traffic on the same day last week compared to the current day. The front-page editors used this to help determine how well they were doing, for example, in terms of views. However, they were not always sure of the significance of changes, less views or more views, and data analysts I spoke with throughout

¹⁰⁶ It seemed a workable strategy to deal with this issue would be having journalists who had more training/expertise share their knowledge with coworkers, something seen at CP that will be discussed in the following chapter.

¹⁰⁷ The idea of having lots of data but far less practical understanding of what the audience wants was also identified by Duffy et al. (2017).

the duration of my project said this type of surface analysis did not, necessarily, provide enough context, whereas a longer scope might—year to year or summer to summer. Using an imagined scenario to demonstrate a common occurrence, one analyst said,

"You'll see a 70% decline in use in the last five minutes and then they don't know that it's always that decline on Saturdays at 9 o'clock...people still blind themselves on the data they see and they don't know the context and then of course react instantly on this number" (N3 personal communication, 26 July 2017).

As Zamith (2018) identified, "Quantified audiences are therefore still abstractions—ones that emphasize behavioral choices that may be misinterpreted (if not manipulated) when attempting to serve community information needs and the public interest more broadly" (p.422). In order to address that issue, N6 said, "You need data scientists who actually look at the bigger picture" (N6 personal communication, 31 July 2017).

Analysts believed looking at the "bigger picture" changed the measures of success. N3 said getting a significant group of people to read about a subject that normally was not talked about should be considered a success "even though that might be the 25th most read article" (N3 personal communication, 27 July 2017). Another analyst believed reaching an underserved demographic was also an indicator of success. N7 said, "5,000 aren't many" unless "it's the right people," which for NRK included 15 to 30 year olds and women with a lower level of education (N7 personal communication, 31 July 2017). The need to improve education on how to interpret analytics was recognised at NRK. For example, even though one editor felt adept at using metrics to make editorial choices in real time, during participant observation N15 said, "We're just given this tool and expected to use it but haven't been shown how to use it." This was an issue because as one developer said, "It's worse to use numbers you really don't understand to make a decision than making no decision at all" (N2 personal communication, 18 April 2017). Issues surrounding interpretation of data were also seen in the narrative surrounding the production of video content at NRK.

4.14 Calculating the Value of Video

In February 2015, a study was completed on how much video was being produced at NRK in comparison to how many actual views each video received¹⁰⁸. At the time of the video study, the internal narrative within NRK was that there had been massive growth in audience use of video, 223% over two years. However, that did not correlate with international research on video use from the Reuters Institute and there was concern the commercial industry's agenda for more video, because of a better margin on video ads, was bleeding into NRK, even though, as a public broadcaster, there was no opportunity to make money from video. There was also an internal hypothesis that more priority was placed on video as a direct result of Facebook providing metrics that made videos look more popular on its platform than when compared to "standard online views" (N29 personal communication, 31 October 2017), which fed Facebook's goal of increasing the posting/use of video.¹⁰⁹ The idea that video could garner more views "impacted news people."

Between 2012 and 2013 video production doubled, and grew again significantly the year after. Analysis done for the report showed that NRK was producing 77 video items per day (clips published as part of text articles) and 75% of these were news items. Although on the surface it appeared there was a 223% increase in views, if you factored in the increased production, it was a 30% increase in views per video. As N29 explained, "So, if you spew out more content you will get higher numbers but you will also pay a price in high production." However, perhaps more significantly, within the 12 weeks in each of the two years studied, 2.6% of the videos delivered 50% of the traffic and 69% of videos produced had no measurable traffic. This led analysts to surmise that "displaying a few single videos that worked meant more for traffic than all of the other videos added together" (N29 personal communication, 31 October 2017) and the data collected made it easy to see what videos did

¹⁰⁸ Three different sources were used to gather data. Two were internal: NRK's video publishing system and text publishing system were scraped for all video URLs in the relevant periods. These data were used to identify the contexts videos were published in, to define publishing periods, to connect article and video statistics, and to separate actually used and referenced video from test publishings and mistakes. The third and external system used to gather data was SCORES, which was described as the official web stats system of Norwegian media.

¹⁰⁹ A closer look at the Facebook numbers showed completion rates were often close to zero and the sound for videos was usually not turned on. However, based on evidence shared by Duffy et al. (2017) watching videos without sound is becoming the norm on some platforms.

work, for example watchable moments that were significantly better to see than read versus talking heads.

Further analysis showed a negative correlation between length of video and the number of views, with a large dip around 90 seconds, which is the length of a typical television news story. However, the average number of views went up again at five or six minutes. Although "the sampling was much smaller" (N29), because of the number of long videos created versus short, it was posited that watching a video in its entirety may be more about quality than length because more production value was put into a six-minute piece. Summing up the research, N29 said it was a better use of resources to make one video with four thousand views than four videos with a thousand views.

In 2016 Cornia et al. found private sector news organisations were investing in online video production because "video advertising yields are growing fast and are already higher than display advertising yields" (p.47). However, by 2018 there appeared to be a growing understanding about the limits of investing in video. As Newman (2018) wrote, "Video production is expensive, logistically difficult, and hard to scale. Even basic news production will need re-evaluating" (p.22). Based on a survey of journalists who work with analytics Alcorn (2018) predicted video would "remain a priority for outlets who are heavily invested, but widespread investment in video may be slowing." This survey was released almost at the same time that VoxMedia made sweeping cuts to its video division, claiming video was not a viable audience or revenue generator (Reinstein 2018). Newman et al. (2018) also found "an overwhelming preference towards reading rather than watching" (p.28) online, with both younger and older audience members in Western markets reporting they wanted fewer news videos. At the time of the writing of this thesis, there was little to no evidence that in Western markets a pivot to video production made a significantly positive difference in revenue or engagement on news sites. However, at NRK, despite growing evidence challenging the value of video, documented evidence there was a low conversion rate for videos in its articles, and additional training as a result of its internal report advising how best/when to use video, N7 said there was still "video hype" (personal communication, 31 July 2017). Another participant said creating more video was still discussed as a strategy in some areas (N2 personal communication, 31 July 2017) and believed this was evidence that department goals and/or influence from those who might see a benefit in more video production was in some instances outweighing quantifiable data.

4.15 Social Media

Besides the impact on video production identified above, and social media being a "pillar" of story selection, there was additional evidence the use of social media was contributing to changing practice at NRK, as is reflective of the industry in general. As one journalist described,

"When I started, and I'm not old, we didn't care about social media. Now we take pictures for Snapchat, Instagram, Facebook. We think about videos when we meet a star or something. It's a lot more work but it's a lot more fun, I think" (N10 personal communication, 2 August 2017).

Different departments at NRK had different social media ratings: A, B, or C. In basic terms, the rating was determined by the amount of content a department was capable of producing and was tied to a quota that dictated the number of stories that had to be posted to Facebook each day, as well as benchmarks for reach and followers under the age of 35 (N11 personal communication, 2 August 2017). Because it produced a lot of content, Sports, for example, had an A rating and was required to post eight stories a day to Facebook. However, those working in the Sports department said it was not best practice to post everything to Facebook because not all stories "do well" there. Because of the quota, though, sometimes stories were posted to Facebook even though editors knew they were not suited for social media. This appeared to be one area where media logic—in terms of content being shared within rigid formats regardless of the fact that it had no commercial pressures.

4.16 Measuring the Use of Analytics

The use of analytics was having a profound impact on practice at NRK, affecting everything from story selection to story formats. The nationalising of local stories echoed Altheide's (1976) observations of television newsrooms in the 1970s where when it came to news coverage, "the event occurs in a particular time and place, but journalistic analysis can diminish geographical and temporal parameters" (p.128) and where "…events are seldom

examined in their own right, but are understood and pursued within the practical boundaries of organisational and presentational concerns." Getting stories on nrk.no was the primary goal for those working in the regions as there was a perceived, and documented, guarantee of results in terms of pageviews and engagement if a story made it to the front page. Because of this, the most resources went into stories that might do well nationally. This is not, necessarily, a problem if local stories are still being covered with a broader focus—which at the time of my visit I believed to be the case. However, there was a clear reliance on TV and radio to cover stories that were "too local." If NRK's mandate is to reach everyone and the audience under 50 is getting its information online, there is potential that a large portion of the population in local communities could be unaware of relevant information.

NRK was fortunate to have the time and space not only to develop analytics strategies and systems, but to create content that met its high standards. Analytics analysis led to online news stories being held to tightly prescribed formats and fewer stories being produced. However, based on interviews and observations, it appeared those efforts were designed and implemented in a way to ensure the quality of content. For example, the use of long-form coaches aligned with its public broadcasting ethos-despite the fact its streamlined production practices could make it easier to fall into media logic traps like clickbait and decontextualised content. Another important observation about the change in boundaries of professionalism and practice at NRK is that although based on the evidence I have provided there was obvious conflict regarding the use of metrics and analytics, the shift to digital, and the development of technology, everyone interviewed asserted that, overall, they felt NRK was upholding its standards and mission, and felt comfortable saying exactly what they thought about the process. Stability in funding and job security provided freedom for employees to participate in dialogue surrounding practice and encouraged broader innovation and change. Zamith (2018) asked, "What do ethical uses of audience analytics and metrics look like?" (p.431). Based on this research, I would suggest NRK offers a good example.

4.17 NRK Reflection

The decision of the front-page editor to leave the story of Donald Trump in the top spot on the NRK site for much of my participant observation was cause for reflection. On the surface, this seemed a clear example of a story garnering traffic beating out more relevant content; however, when I considered this choice further, through my lens as a former news producer who decided which stories would go in a broadcast, I realised the placement could have been more centred on journalistic judgment versus pageviews. When I took into account that Trump was a major world leader behaving in a very atypical fashion, that this was a national site, and that there were no major news stories in Norway that day, the decision did not seem without merit. In the end, regardless of why the choice was made, it provided an example of the fact that when it comes to editorial decision-making, things are never as clear cut as one would like and numbers might help sway the positioning of news content.

Chapter 5 "Working Blind"—The Quest for Analytics at The Canadian Press

"We may be doing things that are not of huge interest to people that given our limited resources we might decide to stop doing and do other things that we think could be of more value, but it's difficult to make those kinds of decisions without having an idea of how your clients are actually using the content, and they don't always tell us. Sometimes they don't want to tell us" (C8 personal communication, 20 April 2017).

5.1 An Outline of CP: Serving a Struggling Field

The Canadian Press's headquarters is located in the hurried downtown of Canada's largest city, Toronto, which has a population of close to three million people (Statistics Canada 2016). There are officially two street addresses for the news agency that is most often referred to as CP. Although accessible through the same entrance¹¹⁰ and interconnected in what feels like one building when you are inside, in a purposeful demonstration of "church-state separation" (C1 personal communication, 31 January 2017), at the time of my research, 36 King Street was where news production took place and 34 King Street was the address of the advertising and sales departments and those working on custom content created specifically for particular clients, both news and non-news oriented, including website, video, and editing services. Each "side" had its own management and revenue structure.

In contrast to the newspapers which are sites of study in this thesis, the biggest bucket of revenue at The Canadian Press came from digital content (C1 personal communication, 31 January 2017). Even traditional print companies were spending more of their CP budgets in the "digital sphere," though their primary interest was in digital text. Digital content was delivered through RSS feeds and "inhaled" into clients' website and mobile platforms. However, CP's client-base, traditionally made up of news organisations, was changing. Both the sales and editorial departments were cognisant of the fact that news subscribers, despite often needing more content because of staff cuts, had less money to pay for CP services due to revenue shortfalls. As a result, CP was actively looking for different types of clients. CP was selling content to "brands," such as banks that might pay to subscribe to the news agency

¹¹⁰ See Image 18 in picture gallery.

in order to, for example, run the business feed on monitors in their branches or use CP stories on their websites. It was also selling content to public relations firms that could sign up for CP news feeds in real time. As C3 (personal communication, 31 January 2017) described,

"What we say is that you're going to know the stories that we're working on at the same time that we're sending it to newspapers and radio and TV stations. So, if they decide to publish it in the newspaper the next day, you've seen it ahead of time. So that gives you the ability to prepare spokespeople. You have the opportunity to reach out to our newsroom if there is a quote if you want to provide extra information, clarification. I mean in this day and age, a lot of our stories on the wire show up on our client's websites almost within minutes. So, the window of opportunity for a PR professional to add to the story or clarify something is very small but it's still a heads-up and, sometimes, if it's a big crisis or avoiding a potential crisis, it still could be of value."

On my initial visit, CP's newsroom, particularly as compared to the two local papers described in subsequent chapters, seemed thriving—dozens of journalists sat at desks in rows and groupings filled to capacity and actively worked on stories, doing phone interviews and calling out information or questions to editors, while muted television news played in monitors hanging from the ceiling. C1 (personal communication 8 February 2018) said there were about 200 journalists working nationwide for CP, 60 of them at its Toronto office. CP staff had, however, been impacted by wider industry issues as it relied on subscriptions from media outlets that were struggling with revenue or, in some cases, closing down. CP no longer had an overseas bureau, the size of bureaus in some areas was smaller than it once was, stringers were used in places like Winnipeg and Saskatchewan where there were no longer full-time staff, and despite increasing demand for more video, there were budget constraints preventing them from hiring more video editors (C1 personal communication, 31 January 2017).

All of my participants acknowledged how important it was for CP, as Canada's news agency, to take journalism very seriously. This translated into a tangible air of gravitas on the newsroom floor, where most journalists worked head down the vast majority of the time. However, there were also moments when the familiar sense of newsroom camaraderie and sharp-witted humour surfaced. On one occasion, following yet another story breaking about Donald Trump, "It's going to be YUGE [Donald Trump's pronunciation of huge]" could be heard called out over the desks. At a morning editorial meeting, in a discussion related to creating a graphic for a weekend story, a member of the digital team said, "Sunday being

where graphics go to die" (based on metrics), before suggesting Monday might be a better day to share such content.

These morning meetings, though, required a level of formality due to their complexity. They were led by the managing editor who would in turn ask each regional or department editor to give an update of planned treatment for stories. There were about ten editors who attended in person as well as editors from across the country who participated via phone conference. The meetings took place at a large table in a glassed-walled room adjoining the newsroom. In between very serious conversations about how to coordinate sweeping national coverage of everything from the legalisation of marijuana to oilsands emissions there was also laughter. Although there were discussions about which stories would be "hot," there were few direct references to metrics and analytics during the morning meetings I attended. However, even though access to metrics and analytics was sparse in comparison to NRK, as will be detailed in this chapter, there was much evidence throughout the duration of my observation that the use of analytics was having an impact on practice at CP.

5.2 The Analytics Conundrum

With the advent of analytics, CP found itself in a unique position compared to most news outlets, including those at my other three sites of study. It created content that was used in a wide variety of publications, broadcasts, and websites, but had limited data on how that content was used or received by the audience. As it was not a front-facing journalism institution with its own website, as described by multiple participants at the agency with regards to analytics, it was "working blind" as it, generally, had little or no access to any metrics. CP wanted such data to better determine where best to expend limited resources and to create content based on services used (C8 personal communication 20 April 2017); however, its subscribers were not keen on sharing such data.

Multiple participants suggested clients were likely hesitant to share how they were using CP content because it could impact contract negotiations. If CP had access to a clients' metrics, it would also have finite data regarding how much CP content was being used. Gaining leverage in negotiations was of particular importance because as C1 noted, they were working in a market where "flat is the new up," with many clients trying to cut costs. During the timeline of my research, CP was exploring the use of a third-party analytics service to acquire more detailed metrics, but as of Spring 2018 the only option being offered was a rudimentary data feed that those working at CP did not have the time to analyse or aggregate. They wanted the more familiar dashboard style analytics available to front-facing newsrooms. In order to fill the analytics gaps, CP used multiple strategies to determine how content was faring or might fare with the wider audience, including the manual tracking of stories that appeared in their clients' publications. Details of how this was done as a matter of routine, as well as the methodology of a more comprehensive study performed in October of 2017, will be provided later in this chapter.

5.3 The History of CP and Journalism in Canada

As it supplies content to so many other journalistic outlets, CP's impact on Canadian media and society is far-reaching. Therefore, before analysing current practice, it is essential to contextualise its role historically. In order to do so, I rely primarily on an extensive study on the agency done by Allen (2013) that chronicles the evolution of CP and the ways in which it helped shape Canadian journalism and the country's ongoing narrative. According to Allen, the cooperative model of CP led to the development of editorial framing from a "neutral" viewpoint as that was "the only way to serve newspapers of different political affiliations" (p.70). Allen found that at CP "...the *attempt* to be objective...to take account impartially of conflicting perspectives...and to stress verifiable factual information over personal evaluation—is strongly established in journalistic practice..." (p.267). This was reflected in my own interviews and observations. As explained by C1,

"Integrity, balance is everything for us. We don't carry columnists. We don't have opinion pieces. We hear from our clients often that they value that, that they trust that we're giving them as much of the unvarnished truth as possible without any kind of spin or favouritism to one side or one vested interest¹¹¹" (personal communication, 31 January 2017).

¹¹¹ As noted by Duval (2005), "...economic and journalistic logics are not always at odds. Editorial independence is frequently a selling point" (p.138).

Accuracy was not just a point of pride, but a key selling-feature. The value in accuracy was increasing because, as C1 described, there was so much "wrong" content being created and distributed, not just by "teenagers in Macedonia flooding the zone with fake news" but by "real outlets" (personal communication, 31 January 2017). Multiple participants noted, though, that with the speed information was now being shared, they were under growing pressure to release stories faster. As C7 said,

"Our standards are really, really high, and maintaining those standards can be a bit of a balancing act, explaining it to our clients who want information as soon as they see it on social media. If we make a mistake it's very hard for us to pull it back. We can make a correction. We can kill a story. But it's out there somewhere. We always have that in mind with that fear that wrong information can embarrass us" (personal communication, 20 April 2017)¹¹².

C7 asserted that they would risk "looking slow" to maintain their reputation.

5.3.1 The Parallel Evolution of Technology and Editorial

Something clearly illustrated via the evolution of CP is that many "modern" issues related to journalism widely and CP specifically are part of a long-standing narrative that has moved through temporal boundaries and alongside technological change. The introduction of the telegraph resulted in news production becoming more factory-like (Allen 2013; Carey 2009), a trend which continues with streamlined routines in today's short-staffed digital newsrooms. In the 1920s, although evolving practice led editors within the collective to express concerns over quality of content, they also wanted "more coverage of lighter stories...and less about politics and international affairs" (Allen 2013, p.80), something discussed by multiple participants at CP in relation to present-day production. With the advent of radio, reminiscent of a familiar argument used by newsrooms now in terms of content aggregators like the *Huffington Post*, there were concerns over commercial stations "simply appropriating news that appeared in local newspapers..." (p.115). The introduction of teletypesetting in the '50s

¹¹² A Poynter analysis found errors made by the news agencies AP and Reuters, despite corrections, lived "on across the web" (Solomon 2018) even on mainstream sites like CBS News and *The Chicago Tribune*. The obvious solution to the problem was identified as an investment in more staff and fact-checking, but Solomon noted a more practical one might be embedding or partially embedding stories in client sites to allow for automated updates by agencies. However, that idea may not be accepted by news agency clients who want control over their sites and a wide variety of CMSs operated by those clients could be another barrier.

increased uniformity in news across the country and, as a result, the role of local editors became "limited to deciding where articles were to be displayed, and at what length, rather than querying or altering their content" (Allen 2013, p.203), as is the practice of many digital curators in modern newsrooms. In the 1970s when the telegraph was replaced with multiplexed telephone lines making it cheaper to transfer more content there was greater demand for more diversified stories including sports and lifestyle coverage (Allen 2013)— creating more lifestyle coverage was a point of discussion at the time of my observations at CP.

Such developments and debates reflect Altheide and Snow's (1979; 1991) theory of media logic where newsroom practicalities and routines designed around attracting a larger audience that can be marketed to advertisers—or in this case subscribers who want to attract advertisers/build scale—add value to stories that might be considered more entertaining or easily understood/accepted by a wider audience. CP has consistently had to balance this media logic against editorial integrity, as editorial practice directly impacts its social capital and relevance. Allen quotes T.E. Nichols of *The Hamilton Spectator* warning the CP board in 1968 about "a mounting hostility to the press—a feeling that the press is glib and irresponsible, stressing activist groups and giving a false picture of situations and events" (p.236). Although there was much historically based discourse on many contemporary issues, throughout my interviews and participant observation, it was also clear there were concerns at CP unique to journalism's developing digital landscape—namely, a perceived vulnerability due to lack of knowledge on how the audience was using content in a market growing more reliant on meeting audience demands through analytics.

5.4 The Digital Desk in a News Agency

The digital team at CP, sitting at desks with multiple monitors, juggled the same multitude of tasks as digital editors seen at the other sites of this thesis. However, unlike those described in other chapters who had to interact with the external audience, CP digital editors supplied customer service to CP clients and other CP employees. On one morning of my participant observation one editor was trying to figure out why the CP byline was not appearing in a story, an issue that ended up being a problem with the client's CMS; simultaneously online

chatting with someone from Montreal, Quebec asking for access to photos; using TweetDeck to monitor, post, and retweet from a variety of CP accounts (eg. news and arts); managing the AP advisory to make sure all the stories were going out to clients with proper ranking; and searching for longer versions of stories to send to online clients. Another editor spent the first part of her morning working on a photo gallery she created daily to be displayed in shopping mall news monitors. Two people in the department were capable of creating graphics, which were primarily used for big features, stories with lots of statistics and hard data, and/or that were easy to illustrate visually. If a story broke in their off-hours they could work from home, or even, in one example I was given, at a child's dance competition.¹¹³One challenge with everything they created was the wide variety of client CMSs that required the adjustment of content for myriad types of pages. C4 (personal communication, 13 April 2017) said they had to be "everything for everyone"—something she described as a tough job, but one she felt they succeeded at. However, as with other sites of study in terms of the workflow for digital departments, at CP, there was significant curation versus creation.

When I first visited in the winter of 2017, a significant part of the daily routine was focused on the use of Facebook Instant Articles to showcase CP content. This was done by copying and pasting a CP text story into WordPress and adding any photos, graphics, video, or audio. The link to the story was then posted in Facebook with a short intro, allowing them to "display a smooth Instant Article version of that story with the embedded media when viewed through Facebook on mobile" (C4 personal communication, 25 February 2018). For regular Facebook posts, they just pasted in a link to a particular story from a client site and crafted a short introduction of one to three lines. During one observation, one editor curated a story from the CP feed that focused on safety concerns over wire-enforced windows. She pulled out the quote "The blood was unreal" to use in the introduction to the story as she felt it would draw attention and get hits on Facebook. To post stories on Twitter, she would use the headline from a story in CP's news-wire feed to search for a client who had used the headline on its website. Once she found such a story she copied the link and created a shortened URL, using bit.ly, and posted it on the CP Twitter feed, ideally with a picture. As at all of my other sites of study, posting a picture to accompany any story on social media was seen as essential in terms of reach.

¹¹³ This idea of a loss of temporal and physical barriers to journalistic work was also noted by Cohen (2018).

As also seen at my other sites of study, dayparting, or choosing the best time to share a story, was top of mind at CP. As an example of how that impacted practice, social media posts were created for the weekend to promote content that could have been published much earlier in the week, particularly for more feature or lighter news style stories as, based on available metrics, that is when they were most read. There was a strategy to determine the most effective timing of such posts:

"Sometimes what we'll do is for the same story, we'll take a link from one paper and then I'll take one from [another] paper then I'll tweet them at different times of the day and see which one did better, which one got the most traffic. Was it a time of day thing, was it a wording thing or hashtag use that made one better than the other?" (C2 personal communication, 31 January 2017).

When promoting stories on social media, though, C2 had to be careful she chose content from a variety of subscribers otherwise she would receive complaints. Having CP share content on its social media feeds was seen by clients as a better opportunity to widen reach and, as a result, get more hits on the clients' sites.

Keeping up with social media best practice, in general, was in itself a significant task. One editor kept current largely "from her couch at home" reading, for example, articles from the Poynter Institute, and said doing so helped her to "craft posts" in a way in which they were most likely to be seen. She was also often asked for social media support from reporters, which she was happy to give because she had, for example, seen instances of "fake news" being retweeted. The digital team also held lunch and learns, in-person in Toronto and broadcast online internally to other locations, on topics such as social media or how to use Excel. C9 (personal communication, 20 April 2017) said the lessons were very well received. However, as in all newsrooms, finding the time to train people was an issue.

5.5 Why Social Media?

As CP is not a front-facing journalism outlet, I initially found it surprising how much time was spent working on social media and shared this with some participants. C1 said social media was mostly used by CP as a brand promotional tool. Twitter was used to display CP's relevance because that was where conversations were happening and they needed to show they were on the important stories. As identified above, it also allowed them to promote how

clients were using content. As well, social media tools such as Way-In, which identified the most popular search terms in a trending story, allowed them to keep on top of stories that were breaking on social media. Way-In also allowed them to geo-net a certain area, or, in other words, isolate conversations in a particular location, and permitted them to search only for tweets from verified accounts or groups of people, such as politicians, when a story was breaking.

In terms of Facebook, C1 said revenue from Instant Articles earned them "tens of dollars a month" and he could "literally make more money from a lemonade stand" (personal communication, 24 April 2017). However, he said the goal was not really to use it as a revenue maker but to showcase all the content being produced around a particular story, including pictures, text, and video. CP subscribers may only use a portion of the assets created for an individual story and they really had no other place to display the fulsome work they did. Facebook gave them a platform to experiment with creating stories in a CMS as a full package. He described Facebook as a good "playground" and said it allowed them to have their content in the public sphere, without an intermediating outlet, at no cost¹¹⁴. Eventually, with help from what they learned "playing" in Facebook, they hoped rather than giving outlets content piecemeal that they might be able to develop a distribution system that provided a full package. This would make it easier for clients to use multiplatform content as it could be "a big lift" for them to put it together themselves. C2 felt it was also important to use social media because "the general public doesn't necessarily know who we are" (personal communication, 31 January 2017) and social media gave the organisation the "face" that it was missing. She also thought it allowed journalists to speak "directly to people" and "see their responses right away." She said this was valuable because people's reactions could shine light on good or bad reporting and "can help you be a better journalist."

Because of the reliance on social media, though, practice had to be fluid for CP's digital team. An algorithm change in early 2018, at the time of my last visit, meant fewer Facebook Instant Articles were being created and, instead, more videos using a tool called Wibbitz, which will be described further later in this chapter. Also, during that same timeframe, Twitter had locked down its API stats and made them proprietary so Way-In, the tool used to find out what search terms were being used on trending content, no longer had

¹¹⁴ However, there was a cost in resources, time spent by staff to create content/post to social media.

access to the data that made the tool useful to CP. They were trying to figure out Way-In's new system while looking for alternative tools.

5.6 The Analytics Workaround

As outlined above, the lack of analytics at The Canadian Press was considered a problem and, during my research, staff used measures, both low- and high-tech, to work around the perceived shortage of typical analytics data in order to assess how CP content was being used. There were, however, significant impediments. With some exceptions, they could not use invisible markers, such as tracking codes tied to analytics systems, in most content because of the way stand-alone material was distributed, ingested, and then posted on the sites of hundreds of clients with wide-ranging systems and platforms. Some clients were still cutting and pasting word text into their sites and some with a more modern CMS were "actively opposed" to using "alien content" (C1 personal communication, 31 January 2017) because they considered external tracking tools invasive. One place CP could trace analytics was in its digital interactive content, such as interactive graphics that were kept on the CP server and inserted into external sites with embed codes tied to Google Analytics. Metrics from these embeds gave some insight into which graphics were most popular and who was using the content, but the data had significant limitations. As C8 described,

"Someone might see a story on the wire and decide to post that, but won't necessarily be aware or won't take the time to find out whether there's a graphic or something that goes with it. So, except for direct outreach to clients and asking them in the form of surveys and so on, looking at the day-to-day usage doesn't necessarily tell you whether that is a good graphic that we did or whether our execution of it was good, or it was the right subject matter or whatever, because we don't really know the reason why somebody chooses to use it or doesn't use it¹¹⁵. Even though you have access to somewhat more data it's inexact as a science and, to be honest, we have relatively few clients who subscribe to our [graphics]" (personal communication, 20 April 2017).

The issue of context in the selection of graphics was not the only concern. The data accessed via Google Analytics had further limitations. As C9 explained,

"When we're trying to parse out per client, it gets a little bit hairy because it's sample data so we can't get exact numbers. It would say 24 million hits or whatever or pageviews

¹¹⁵ This issue of "knowing" was noted at all other sites of study, but in direct relation to the audience versus subscribers supplying the audience.

and then when you click on an individual thing it would say, 'This is based on a sample of 3% of the data.'"

Another strategy to get data was through the embed code in stories they created using the social media curation tool Storify¹¹⁶, which allowed them to see the number of pages where a story was embedded, but not much else. For visuals that did not have an embed code, such as static graphics, there was a manual tracking system. They used a Google image search to find jpg or png files of CP content being used by clients, and then saved the URLs that linked to the static graphic/picture in the chat app Slack. Data from the chat were eventually copied into an Excel spreadsheet, including the URL and a description of the graphic¹¹⁷. In the largely French-speaking province of Quebec, where there were a smaller number of clients, a strategy to track content involved RSS feeds. A CP employee sent himself the RSS feed of stories going out to clients, then he Google-searched those stories to see where content was being used. This provided rudimentary data, but was not a practical strategy for the English market as there were so many more clients (C1 personal communication, 31 January 2017). As another strategy to get data, when stories were promoted on CP's Facebook and Twitter accounts, the shortened URLs created using bit.ly provided metrics on how many people clicked on such URLs embedded in posts.

5.6.1 Social Media Analytics

Social media analytics from CP's own Facebook and Twitter feeds also provided some basic insight. However, while I was observing the digital team at work, C2 (personal communication, 31 January 2017) pointed out the metrics accessible through social media were of limited value. Referring to Facebook she said, "It's really subjective. All these posts did well because the post on Facebook got 10,000 views—but did it get any clicks?" Referring to Twitter's impressions metric C2 said,

"I don't necessarily think that's a good measure because it might have appeared in a thousand people's Twitter feeds but maybe they weren't looking at the screen at the time, right? So, to me, that doesn't mean that your post did well. That means that it showed up in somebody's feed but maybe nobody saw it."

¹¹⁶ Storify stopped offering its social media curation platform in May of 2018.

¹¹⁷ See Appendix 8, item B.

Further, as identified at all of my other sites of study, a story's success on social media, particularly Facebook, was tied to attaining the best reach or as C2 described it, "catching the algorithm." However, as discussed at NRK, only certain stories did well on certain social media platforms. At CP, they used the term "talkers" and "buzzy" in reference to stories that would have the biggest uptake on social¹¹⁸, but that excluded a lot of the more serious reporting done at the news agency. While sitting with one editor, I was told in order to draw more attention to those stories that might be deemed important by journalists, but not social media algorithms, she would strategically increase the number of posts to try and boost reach.

She said she used different types of news judgment depending on the platform but there was no real relation between what she posted and the analytics reports available to her—analytics were used more as a way to understand what "hit" and how the algorithms worked. She said this was partly because it was difficult for her to look at the analytics in real time and often it took Facebook stories up to three days to hit their social media peak, while Twitter posts generally trended the same day. She only checked Facebook metrics about once a week, again more as a method to determine what its algorithm liked. For example, she found Facebook favoured anything that mentioned Donald Trump or Justin Trudeau so she made sure in any story involving them to reference them in the introduction. Whereas a story with "Netflix" in the introduction would basically be buried, so instead she would write "streaming service."

5.6.2 A Dearth of Data for Digital Video

Getting metrics for videos was also a struggle. Video was delivered to clients as a stand-alone file and then uploaded to client sites so that it could be monetised. As a result, there was no way to automatically track which videos were used or access such videos' completion rates. However, CP was able to get an idea of a video's popularity through its own YouTube channel, where it posted some of the videos cut by the editing team. From YouTube analytics, editors could get a sense of a video's popularity and how much of it the audience was watching. This was complicated, though, by multiple factors. For example, the numbers could be "skewed" by traffic spikes from older videos. During participant observation, I was

¹¹⁸ More evidence of Harcup and O'Neill's (2017) "shareability."

shown stats for a video that resurfaced when one or more clients used an archive video from an ongoing news story¹¹⁹. Or, a traffic spike could be caused by a video resurfacing on social media. During one observation, a months-old video of a toddler in a wheelchair was the best viewed video because, as described by CP5, it "keeps getting new life on Facebook and keeps getting shared" (personal communication, 13 April 2017). This was not a viral video when it was originally posted—the long tail made it the most popular of all CP videos created, more evidence, along with that in the literature review and subsequent chapters, that stories no longer have a finite finish in terms of audience consumption.

At the time of my initial participant observation in the winter/spring of 2017, CP was experimenting with a new video platform called Wibbitz, where photos were easily dropped in and text was added for the type of videos commonly seen on social media that do not require sound and work well on mobile. In a trial run, embed codes for Wibbitz videos were given to clients at no cost and, because of the embed code, usage could be tracked. However, the analytics only showed total overall views and completion rates of Wibbitz videos with no metrics for individual stories. At another visit in February of 2018, the trial was over and the contract with Wibbitz had been shaped for CP's needs. There were, however, major differences with practice concerning Wibbitz since my previous visits.

The first was that although the original plan had been to teach everyone how to cut Wibbitz videos as a way to increase video production, through trial and error, they discovered this was not as simple a prospect as imagined. Although the digital team and those used to editing found Wibbitz easy to use, many others did not and reporters and other editorial staff did not have the time available to add this task to the work they were already doing. As a result, particularly because they could do it more quickly, the digital editors took over production of the videos, which were created for "buzzier" (C4 personal communication, 8 February 2018) topics and things the video editors were not already cutting. The second change was that Wibbitz videos were no longer being distributed through an embed code but rather as separate files like all other video. This allowed clients to control what ads were used and where they were used; however, as there was no embed code to track, analytics on the videos were not easily available to those working in the newsroom. The sales department was receiving data on which clients were downloading particular videos; however, there was

¹¹⁹ The story was the case of the controversial shooting of a 22-year-old Indigenous man in Saskatchewan.

no information on if/where they had been used or completion rates. The digital team believed the Wibbitz videos were popular with clients because they had received requests from newsrooms asking if Wibbitz videos would be created for certain topics. Although, as a general rule, they did not create content on demand, they were happy to hear what clients wanted because it gave them an idea of the types of videos that might be used.

Some clients supplied limited analytics information on video use, but, again, there were issues with this data. As C5 (personal communication, 13 April 2017) noted, the biggest was there were "too many variables for it to be that useful." For example, where there was a huge peak, what were the contributing factors? Was the video highly promoted or given a place of prominence on the site? They also received very different information from different clients. One told them the percentage of videos used that were watched, for example 25 or 50 percent. Another gave them a list of most popular videos but no information on how many times they were viewed, the time of day people watched them, or how long they were watched. Yet another only gave them information on completion rates. Even this, though, was not straightforward as there is no agreed industry methodology as to what completed means. If a client reported an 80% completion rate, "complete" could be calculated as 75% of the video being watched, while a different client or analytics service might have a different formula.

5.7 Reluctance to Share

There were clients who provided some other types of analytics information, but the reluctance to share robust data even extended to the media outlets that owned CP, where CP was focusing its efforts in terms of accessing client metrics. It was getting minimal data from some but there were hopes of working towards a "more broad-based share" (C1 personal communication, 8 February 2018). One client-owner with a proprietary analytics system was making CP a dashboard to access metrics on CP content, including pageviews, unique users, bounce rates, and pathways. Another client provided a pageviews report, but the data had no context and was given in a PDF so they could not easily "re-crunch" the data for their purposes. The diversified, inconsistently reported data available to CP were a particular issue in terms of extrapolating information for future editorial or resource decisions because its

content was designed to fit all. As a result, many things were observable on a micro level, while few were actionable at a macro level. For example, metrics during the lead-up to the 2015 Canadian election showed that videos of then Conservative Prime Minister Stephen Harper did very well on the site of one more right-leaning client, while videos of his opponent, then Liberal leader Justin Trudeau, did really well on the site of a more left-leaning client. C5 (personal communication, 13 April 2017) noted this was interesting but irrelevant as they needed to cut video that could run on the website of any media outlet regardless of the outlet's particular ideology, and would not cut material to suit the needs of an individual client.

5.8 Analytics and Sales

Analytics, of a sort, were also used by the sales department as a tool to show potential clients how many news stories in a given category might be available for them to use week-to-week, how many times during a day those stories might be updated, and what percentage of stories came with a photo (C3 personal communication, 31 January 2017). The IT department was developing a program to track such information automatically, but at the time of my research it was a manual job-someone in the news department counted out the stories created over a period of time and the information was extrapolated to give an approximation of the amount and types of content that might be delivered. In January of 2017 they were using data gathered "two or three years ago." C3 said popularity of the use of CP content could be both a negative and positive in terms of selling subscriptions: if content was widely available clients may not see it as worthwhile as it did nothing to differentiate their site from others. On the other hand, it might have value because if it was widely used a potential news client might be afraid of missing out on stories that everyone else had, concerns that are reflected in news organisations' struggles with prioritising content that builds fly-by traffic or differentiating from other sites with unique content that attracts a targeted audience. The other benefit to the sales department of having analytics information was, as discussed previously, knowing what clients were using during contract negotiations.

The importance of analytics to the sales team was in evidence at a meeting I attended between the sales and digital departments. One of the subjects of discussion was Wibbitz videos, and during this discussion I wrote in my notes, "You can almost feel the sales department getting giddy." This was because video was thought to be a big revenue generator and was being requested more frequently by CP clients, despite the fact, as discussed in the literature review and previous chapter, that the percentage of videos watched on news sites is, generally, very low. However, Wibbitz videos were seen as particularly good for mobile and social media feeds where there is theoretically more time spent watching video. There was much animated discussion over the potential of Wibbitz, with one employee from the sales department describing it as "amazing" (C10 personal communication, 13 April 2017) and a good, new revenue stream as long as clients could be given more control of the advertisements¹²⁰, which were at the time controlled by Wibbitz. C10 asked what analytics were available through the videos and invoked the frequent terminology of being "blind" without such data. C3 said Wibbitiz videos would also be a good service to offer to "brand" customers. Conversation then moved on to a new Canadian exclusive contract with Storyful, a user generated curation site that buys the rights to viral videos. C3 asked if clients could be given metrics for Storyful content and if there would be advisories that alerted clients to the top performing videos, a question which could not be answered at the time of the meeting. One person at the meeting joked that Storyful was "full of cats and Kardashians" and, showing a video of a horse attacking an alligator, another said, "Don't you want to see that?" To which everyone in the room responded affirmatively.

5.9 The Content Survey

In October of 2017, in order to address issues concerning lack of metrics and analytics, CP decided to undergo an expansive, manual count of its content appearing on 18 Canadian news websites and, in a companion study, the digital editions of eight Canadian newspapers. C1 (personal communication 24 October 2017; 8 February 2018) said that at the outset they knew it was going to be an "imperfect study" from a methodological point of view because it was very difficult to complete a comprehensive study doing a manual survey or make "an apples-to-apples comparison" with a variety of websites and content. Regardless, they hired three college students who for the last two weeks in October of 2017 each monitored six sites

¹²⁰ This is one of the reasons clients were later given the videos as files rather than via embed codes.

of CP subscribers for 14 straight days. A variety of sites were chosen from large to small news outlets and a variety of primary platforms, eg. web, newspaper, or radio. The goal was to track the existence of The Canadian Press content on the homepage of the sites and have a data analyst crunch the numbers. Ideally, this information would then be used to help determine resources such as the dedication of graphics, writers, and cameras to specific topics, and would be given to the sales department for use during contract negotiations. Using only the homepage as the place to gather data was decided upon for two reasons. Firstly, due to manual curation, it was impossible to go through every page on every site and, secondly, as C1 described,

"Most homepages are still in some way manually curated. These are editors selecting relevant stories and placing them on there. There's more of an active interest in our content that would be reflected in its presence on those pages rather than an auto feed" (personal communication, 8 February 2018).

To illustrate this point, C1 shared that before coming to CP he worked at an organisation whose Sports section was auto-fed by CP, "We never touched it and we didn't have to. We knew fresh stuff would flow in." But, again, using sports as an example, C1 said "this is where it [the analytics study] starts to be imperfect" because sports content rarely showed up on the homepage of a news site, but that did not mean it was not popular or that CP sports content was not being used.

The students monitored the sites, scanning the homepage, or the homepage of the news section for sites that were not solely news oriented, for CP content. They tracked the content during a timeframe that fell into what was described as "digital primetime," starting between 8am and 10am and going for six hours straight. The scan of each homepage took approximately two or three minutes. Once they had been through their assigned six websites, the students would cycle back to the first site, refresh the page, and note if things had been updated or not. They would then repeat the process until their six-hour shift was done. Over the course of two weeks the students generated a lot of data; however, as was expected, there was concern that the data was not as rigorous as you might find in, for example, an Omniture report. As well, as they were only looking at content on the homepage and categorisation of content (eg. local, politics, national) proved too complicated, they did not get any data that could help shape editorial in terms of the types of stories they might choose or not choose to cover based on client use.

The print companion study was easier because the digital editions of the eight newspapers were finite; the students could record things like the exact number of pages and an aggregate of the number of words and they could also search for the CP byline. As a result, they were better able to get accurate information. Regardless of any issues with methodology, C1 (personal communication, 8 February 2018) said both studies showed that CP content was an integral part of Canadian news, comprising a "significant amount of the overall front homepage content" and in some cases "more than half of the content in a given newspaper." The study also showed CP played a larger role in the smaller, regional papers, which was expected as they have smaller editorial staff.

Along with reinforcing that CP was an important part of the news day, the lack of firm data from the digital study also reinforced CP's need to come up with a technical, broad-based solution for what they saw as their analytics problem. As mentioned above, they were working with outside parties to develop a unique system, and they were also continuing to try and convince their clients that sharing analytics would be in everyone's best interest. However, this was described as a "frustrating process" because there was a "real proprietary sentiment about data." CP had offered to sign non-disclosure agreements, assured clients they only wanted data on CP content, and that the goal was to create the best content possible. As if talking to one such client, one participant said,

"We need that data too so we can give you a better product. If you're paying us [redacted] a year for content, don't you want it to be the best, most relevant content? And don't you want it to be adaptable to changing readership and circumstances? If we don't have the data we can't do it, just like if you didn't have the data you couldn't do it."

Another participant discussed how more data would allow for better use of resources in terms of when it might be best to deliver content, for example, were different types of content, such as print versus video, accessed more at different times of day?

One indisputable finding from the internal content study was that few clients were using assets like interactives and maps—efforts to create unique, digital-first content were largely being ignored by CP's client base. It was more of a surprise to those outside of the digital team, but "a kick in the teeth" to those on the team. The numbers were stark; most of the graphics they were creating were not being used at all. There were multiple reasons given for this usage pattern. According to participants, because graphic embeds were emailed to media outlets who subscribed to graphics, as opposed to being part of the regular feed, they were not always seen. Often, when they contacted clients they discovered the emails were being missed or not received, sometimes because of a wrong address, or the contact person having left for another job. The idea that most clients were still "enmeshed in a print culture or broadest culture" was also seen as a reason for lack of use, along with the fact clients needed to get content out quickly due to time constraints caused by lack of resources, and the perceived need to keep websites fresh with new content overshadowed the concern for the user experience. When I asked if they could do more graphics by request, ensuring content would be used, C1 said "it goes against our model of create once serve many" and that there was an issue of scale. There were so many clients there would be the danger of getting an "avalanche of requests" that they could not meet.

5.9.1 Impact of the Study

Due to data that showed the limited use of graphics that take significant time and resources to create, after its internal analytics study the digital team started concentrating efforts on developing products that could be used in its own newsroom and creating graphics mostly for big projects like the Olympics, which they were preparing for at the time of my last visit. On one of my previous visits the digital team was focused on graphics for Canada's 150th anniversary celebrations. C4 (personal communication, 8 February 2018) said there was better use of graphics during that timeframe compared to that of their in-house study; however, there was also "a lot of outreach and handholding" required as many subscribing outlets had issues such as ensuring the size of the graphic was correct. C1 also identified issues with digital teams at media outlets not being able to easily manage what I would describe as fairly basic web work, for example, cutting and pasting an embed code into the back end of a website. When I voiced my surprise at the lack of digital know-how, C1 said cuts to digital departments, in general, were one reason. For some subscribers, there was no actual person to cut and paste an embed code anymore; content was automated to feed into websites. At the other end of the scale, some client websites ran on antiquated systems making it difficult to embed.

In order to make better use of resources based on the client content study, some resources formerly used to generate graphics were, as mentioned above, used to create products that could be used in the CP newsroom. One example was a bot to write junior hockey league stories. A reporter used to have to comb through statistics from the three leagues in Canada, with dozens of teams, going to each league site to get information on scores and standings. Even though "a very perfunctory story" (C1 personal communication, 8 February 2018) was created to capture what happened, it was time consuming work, sometimes three or four hours in one night. A member of the digital team suggested he could create a program that could "scrape that data and pour it into the different buckets," such as shots on goal or scores, with a script that had a set number of words to describe, for example, a win or a loss. This meant the hockey editor just had to run the program and it created the stories, which appeared with a tag saying "powered by Artificial Intelligence¹²¹." C1 said the program was more accurate than a person and left more time for doing things like feature-length pieces¹²².

The plan was to use this bot's model on anything with suitable stats, such as the release of the Canadian census or election coverage, where they could easily extrapolate the formula to create AI stories on candidates running in each riding or share election results. C1 said there were two "elements of entry" to use the bot: "a massive amount of data that needs to be analysed quickly and a thirst for bespoke coverage." There was also hope they could create another revenue stream by selling products like the bot to new or existing clients. This was seen as a way of not only generating new types of content, but protecting digital team jobs (even though there was still much support from higher-ups for the idea of a digital future) if evidence continued to show that the truly digital work, such as maps and other interactives, was not being picked up by clients.

¹²¹ The Press Association in the UK is also using bots to customise national content to local clients (Newman 2018).

¹²² Although this seems an effective strategy, I am not sure if it would be replicated at outlets that are more precarious economically, for example *The Echo*, as any savings of time might lead to job cuts or reorganisation. As seen in a study by Cohen (2015), standardised formats that allow automation make it easier to replace journalists, and any cost savings can be folded back into regular production.

5.10 The Impact of Audience Data on Gatekeeping

Outside of a change in practice regarding graphics, there were multiple examples given, and observed, of different ways the use of analytics was impacting editorial decision making at CP. They included the cancellation of a "photos of the week" package after Google Analytics revealed it was receiving little traffic/not being embedded. At the time of my first visit they had also decreased the production of Storify stories based on consistently low traffic metrics. After a quiz created for the Junos, the Canadian music awards, was not used the decision was made to eliminate it the following year. They also stopped doing some weekly videos, such as one called "Pet Pointers," because clients said they were not getting much traction from them. When asked if analytics impacted editorial decision-making C5 said, "Not directly-ish." She expanded on this by noting there were general themes and stories they knew did well and as such created more content about them:

"A marijuana story for example will do well across everything. It'll do well on YouTube, it'll do well on client sites. It'll do well everywhere. So, if we're doing one marijuana story, we might look at doing a sidebar as well to go with it so that there is more content for people to use. But overall, I try to balance out our analytical information with editorial policies and our editorial direction" (personal communication, 13 April 2017).

C5 said analytics also helped them to prioritise what needed to be completed when. For example, they knew that for one client, peak viewing times were 7am, 10am, and 7 pm, so content would need to be prepared for that client in order for it to arrive before 10am to catch that "first morning rush." As a result, in another example of dayparting, a certain story might be put "higher in the queue" or a reporter might file video or audio of a story before the text version based on what might be used most at what time of day.

5.10.1 The Stand-up Meeting

The impact of metrics and analytics on CP's editorial decision making could perhaps most easily be seen at the daily scheduled "stand-up" meeting. Editors, literally, stood around in the middle of the newsroom at around 2pm each afternoon to discuss what stories were being worked on. These meetings helped the managing editor of news determine what would be in the afternoon advisory and in what order those stories would appear. A big focus of this meeting was sharing what was trending on social media and how that might impact the day's coverage. To prepare for the meeting, one digital editor used a trending analysis tool called Spike¹²³ to determine which stories were "hot." On the first day I observed her doing this, the burgeoning trend was the legalisation of pot, or as the editor described in terms of what she was seeing online "It's all marijuana, all the time today." She also noted, disbelievingly, that Katy Perry had been trending for four days because she got her hair cut. The editor also checked what was trending directly on Twitter before we headed to the meeting in the middle of the newsroom.

The stand-up meeting was quite short in duration, less than 10 minutes on average. At the meeting, the managing editor of news read out what stories she had lined up for the advisory, the digital team editor discussed what was trending, and the other approximately five to six editors in attendance shared what they were working on (there was no real consistency in the order of this in the four meetings I attended). During one meeting, the managing editor decided to add a story to the advisory about a pit bull ban in Quebec as the subject was trending¹²⁴. At this particular meeting, there was also discussion on the success of a story written the previous day on the opening of Cheesecake Factory restaurants in Canada, a subject that was still trending.

After the meeting, C6 (personal communication, 13 April 2017) said he was "kind of dismissive" when someone first brought his attention to the Cheesecake Factory story because he thought it was not a big deal and they should be focusing their attention and resources elsewhere. However, during the stand-up meeting when people started talking about it he realised it might be worth covering because "one of the biggest things with journalism is relevance." He said because the character Penny from the Big Bang Theory worked at a Cheesecake Factory it meant even people like his parents living in a rural community would know about the restaurant. As such, they decided to do a small story. He said "it shot to the top" of reads which he proved by showing me its bit.ly metrics. The story did not involve a big investment of time; it was turned around in 15 or 20 minutes. C6 said it was a perfect example of a story that was "pretty fluffy" and "pretty light" but there was

¹²³ Spike showed graphs depicting upward lines for stories starting to garner attention on social media, see Appendix 9 for a screenshot of this tool.

¹²⁴ See advisory, Appendix 10.

an appetite for it online. As he described, perhaps unknowingly, echoing Pariser's (2011) food metaphor,

"This is a weird analogy to be using with a Cheesecake story, but I was looking at it like a buffet of what we serve our readership. You're going to have the Cheesecake story. That's quite literally dessert. But then you do the, sort of, the bread-and-butter, core spot coverage or enterprise coverage that goes with it¹²⁵."

C6 also shared the example of a recent story on the rewards program Air Miles that had angered customers by cancelling points. A reporter did a small story on it in the morning; however, in the stand-up meeting C2 announced that it was really trending. When the managing editor said they already had that story, C6 suggested they go deeper and it was assigned to a reporter in western Canada who found three people angrily responding to the issue on Twitter. The reporter reached out to them and arranged interviews. The fact so many people were talking about the issue online was C6's cue that people were not just "upset" they were "quite upset" and that merited CP being responsive to the situation and providing more coverage. C6 said he may not have pursued the story if not for the stand-up meeting and it was a good use of resources because the end result was a much a stronger piece.

One digital editor said trending topics may not, necessarily, be added into an advisory or made the subject of a story based on the fact they were trending; however, if there was a question, for example, regarding which one should go in front of another in an advisory the response might be "Oh, it's trending, so put it higher." Sometimes the managing editor would ask for more information on a trending story before the decision would be made to add it in to the advisory, as was done during one meeting when more details were required on the story of a fentanyl overdose. The digital editor felt the meeting was a good idea to make sure everyone was on the same page and to adjust some content to reflect what people were talking about. The decision to use what was trending as a tool to help determine CP's editorial direction in some matters was not, however, without controversy.

¹²⁵ Food metaphors seem a common parlance with regards to a mixed "menu" of stories. One of Cohen's (2018) subjects referred to having "to serve the broccoli with the chocolate" (p.10).

5.11 The Boundaries of Acceptable Journalism

Reflecting Carlson's (2015c) boundary matrix there was both expansion, with some seeing the use of tools such as Spike and more audience-driven content as "acceptable journalism" (p.9), as well as expulsion, others trying to expel "deviant forms and values," and protection of autonomy in the form of trying to preserve editorial decision-making as the right of editors, not the potential audience or a tool that tracked what the audience was talking about. As C7 (personal communication, 20 April 2017) described,

"We actually had a managers' meeting recently where it was quite a topic of conversation. I think they had concerns that it was going to take away from exclusive news. So, we had to say look if you have someone who's working on a scoop or an exclusive story, of course we want them to keep working on that. But if you have someone who hasn't come to work with an idea and is maybe looking for something to do, then what's the harm of getting them to jump on a story that people are talking about that we don't have?"

The idea of expanding coverage to include a wider purview was touched on by multiple participants, from sales to editorial, often using a food metaphor, as captured in the quote below:

"I don't think there's a problem in giving people what they want as long as we're not cutting our Parliament Hill staff in half or deciding we're not going to cover the oil patch, or shuttering our BC bureau. That's not part of the equation here. We're just adding to our news menu" (C1 personal communication, 24 April 2017).

The debate over changing coverage reflects the Bourdieuian struggle in the field or the discursive nature of journalistic roles identified by Hanitzsch & Vos (2017). C7, among others at CP, was contributing "to destabilization of hegemonic journalistic norms" (Hanitzsch and Vos 2017, p.128) practised at the agency, but understood that the idea of covering topics that were not serious news was difficult for many in the building. She said doing social media stories "was very tricky" for CP because they had very high standards, which she wanted to maintain, including the use of "authoritative sources." However, when she looked at how her son consumed news she thought that in order for CP to survive it had to listen to what people were saying. When I asked if there were any examples of stories she thought they had missed due to differences of opinion on whether they should be covered, C7 used the example of Starbuck's unicorn frappuccino, a story that was trending the day before our interview: "There was literally like a 10-minute conversation about, you know, the [position removed] had tried it, she knew what the flavours were, someone else commented on the sugar content in it, someone else rolled their eyes and said it's just Starbucks wanting us to write about them. And so there I was kind of thinking, guys, if we've been talking about it for ten minutes, *The New York Times* has a story, you know, is there something that we should be doing? I don't know, it's such a balancing act. AP had a little story so we were covered, but I have to say that I sat at home last night, looking at *The New York Times* story, looking at another outlet that had found a Canadian angle and thought probably we should've had something on it. And I think there were ways to do it in a smart way. I think that's the other message that I'm trying to get across to people" (personal communication, 20 April 2017).

Examples of doing "fluffy" (C7) or social media stories in a "smart way" included the story of tennis champion Serena Williams competing when she was pregnant. It was worked in to an original piece about a runner from New Brunswick who ran the Boston Marathon when she was eight months pregnant. C4 and C1 both referred to the story of the viral video of a doctor being thrown off a United Airlines flight. That story was originally passed over by some CP editors because they did not think that viral video was newsworthy. Then the digital team pointed out there were many factors to that story that could impact Canadian airline passengers, including what to do if that happened while flying in the US and whether it could happen on a Canadian flight.

The idea of doing these stories in a "smart way" or adjusting stories in the advisory based on popularity may have been more easily accepted by some because of their experience outside of CP, working in front-facing newsrooms. As C8 said,

"I came from the [name removed] before this and our web people were constantly monitoring how well or poorly stories were doing in terms of traffic and we'd make decisions around the play that they would get on the homepage based, at least to some extent, on what was actually popular. If they got the sense that a story that was down page was getting traction, they would move it up so that it would get even more because it would become more visible. So just like our stand-up meeting, we might chase something now because we have an idea that it is either just breaking or because it's just something that people are very interested in that in the past you might have just ignored. We're trying to meet our clients' needs. I mean, you could see it in sort of a derogatory way and say they're just chasing clicks or you could say that they're trying to give their audience content that they actually want, that they enjoy. You're not going to let that displace your own editorial judgment that you're going to make about what's important, but I think it probably is affecting decisions that our people are making about the types of news coverage that they do" (personal communication, 20 April 2017).

C7 said no matter what their popularity there were some stories they would not pick up regardless if they were trending. I saw an example of this in one stand-up meeting where social media was buzzing over Jason Mamoa, the actor best known for his roles in Game of Thrones and Aquaman, visiting Newfoundland to site check for an upcoming project. Despite the fact everyone was talking about it on social media and in the stand-up meeting, including those attending and those sitting nearby who pitched in more information, the story was not added to the advisory¹²⁶.

5.12 Who is a Journalist?

As mentioned above, many participants from CP had worked at other media outlets, and in discussions regarding different treatment of those performing digital newswork, or what types of digital work qualified as journalism, some would refer to both their current and past positions. In terms of less respect for digital journalists, one (personal communication, 4 April 2017) said, "We face that a fair bit." She said people who were coders first, regardless of whether they were data journalists and could dig into spreadsheets and find all sorts of stories in numbers or even if they had gone to journalism school, did not get the same respect as those in more traditional editorial roles, particularly from more senior editors who looked at every story from a "print standpoint." In another example, she said that the fact that someone worked with video did not mean that they were not a journalist as they were still "storytellers;" however, she believed things were slowly starting to shift and there had been improvement, or what Carlson would describe as "expansion," of both who is considered a journalist and what practice constitutes as journalism¹²⁷.

While trying to describe his feelings, another digital journalist said although "disrespect" was not the right word in terms of how he felt other journalists viewed him, he did feel like an outsider:

"I never really felt like I fit in and I think that's sort of how it goes for a lot of digital people. CP's pretty good, but at a print newspaper, they're about the print product and the people who go there love to see their name in print. I guess that's cool because anybody can put something on the internet, but, at the same time, there's still a whole lot of denial there about what's exactly happening with print media. If you look at the

¹²⁶ See Appendix 11 for that day's news advisory.

¹²⁷ Wang (2018) described these types of negotiation as an "identity war" or "presentation of habitus" (p.483).

companies, let's take [name removed] for example, they've got an octogenarian running that company and when they redesigned all their papers they hired this 'world famous newspaper designer' and they had him design the website and it failed spectacularly because people don't do information the same way online, but they're still stuck in that" (personal communication, 24 April 2017).

C1 described what he felt was a "silicon ceiling" (personal communication, 31 January 2017) where journalists with a digital background never rose above a certain level of editorial leadership within most traditional news organisations and expressed frustration that more print organisations had not made a more proactive effort to change revenue structures and to develop strategies for a digital future when they had the opportunity to do so. However, C1 also said he left one digital-only outlet because people working there were "slaves to analytics:"

"What do you need my journalism experience for if all I'm really doing is reading the Omniture report or watching the Chartbeat meter go up and down and making my responses according to that? You could get a drone to do that."

In a discussion on whether digital curation and different types of digital work, such as being a social media editor, was journalism, C2 said,

"I think it's journalism because you still need journalism skills. You need the SEO skills. You need to still explain things to people in a simple way that they understand. I mean, with Twitter, you're cramming an entire story down into 140 characters. So, I think you need the journalism skills to be able to take up a large amount of information and shrink it down into something legible and informative and the same with Facebook. You need to know what to exclude and what to not include. I find writing for social media is kind of like writing for broadcast. Keep things very short. Whether other journalists see it as journalism? I don't know. It's funny because most of my interactions are with journalists who use it so I think they see it as journalism" (personal communication, 31 January 2017).

It was clear from observations and interviews at CP that although there was movement in traditional boundaries of professionalism and practice, there was still much negotiation on the newsroom floor and boundaries could be quite different from one journalist to the next within the same newsroom. In terms of analytics, as C5 noted, the issue was not only their value in conjunction with editorial judgment, but also a question of changed practice and increased workload. She said there was no real delineation of whose responsibility it was to keep track of the available analytics, which could be a very time-consuming process.

5.13 The Future of Analytics at CP

Within the year of my first and last visit to CP, C1 said "the tide was turning" (personal communication, 24 October 2017) on how analytics were viewed, with more people seeing their worth to help shape editorial decisions and manage resources. However, a prevailing theme that surfaced in conversations and observed practice at CP throughout the duration of my study was that metrics and analytics should be used in conjunction with editorial judgment and some stories had to be told regardless of popularity—expansion of use rested on traditional journalistic norms taking precedence. As C7 described,

"We hire people who know what a good story is and so you kind of have to go with your gut, too. I don't think you can totally be sucked in by analytics. There are just important stories that we have to tell. One of the projects that I'm most proud of this year is we did a series on aboriginal sex abuse that's been nominated for all these awards and that's one that, you know we wondered why there were suicides. And we had a very senior editor who'd covered aboriginal affairs and said I've heard that there's this issue, and so we did a lot of digging on that. I don't know how those stories did from a metrics perspective but that's one of the most important projects that I've ever worked on. And I'm really proud of that. We got a lot of aboriginal leaders lauding us and speaking out about the problem. And if we chased nothing but analytics that would never have happened" (personal communication, 20 April 2017).

Due to the strong ethos of editorial autonomy and enterprise journalism, it is hard to predict how getting more audience data might shift or expand practice further at CP. For example, although C1 felt their Ottawa coverage was "bulletproof" in terms of any changes that might result from more access to analytics C3 said, from the perspective of selling content to clients,

"We're Canada's national news agency so we've got to cover political news stories and we do a great job at it. But I've always wondered if there is a disconnect between how much politics content audiences actually want in comparison to soft news or lifestyle and entertainment content. I don't feel like it's one or the other type of shift. I feel like let's say you're doing politics at a 10 because that's what we've been known for and we put all-in to politics, maybe you can dial it back to an 8 if the audience and the analytics show that people just aren't consuming politics information the way that they used to" (personal communication, 31 January 2017).

This idea of dialing back political coverage sparked a debate online after the *Columbia Journalism Review (CJR)* published an article describing how the *Texas Monthly*, a magazine renowned for public interest reporting, was going to "pull back from the kind of longform and political coverage that gave the title a national profile to focus instead on lifestyle coverage" (Lenz 2017). After a social media tsunami, *CJR* posted a response letter from the *Texas Monthly's* editor who assured those concerned that the magazine would continue to cover politics. However, he also wrote,

"...on the web, where we already dedicate significant time and energy to news and politics, there is much more that the magazine can do that will make us more interesting to more Texans. Texans care about politics, yes, but they also want to know about barbecue. And energy. And music. And football" (Taliaferro 2017).

Based on evidence and observations from my research, the above quote suggests that the *Texas Monthly* was looking for a bigger audience and, as a result, more traffic. The editor's response was required because loyal readers were outraged that a publication they had certain expectations of, and felt a vested interest in, was veering off course. For CP, the balancing act is a bit different, and not just because of geographical location. It is not the audience CP needs to directly engage, appease, or attract, but hundreds of clients with varying needs. If an established outlet like the *Texas Monthly* is looking for more lifestyle news, who is to say pressure from a variety of outlets looking for ways to grow traffic in an increasingly fraught battle to secure online revenue will not, in turn, force CP's hand to veer more off its traditional course? This would impact journalism across Canada. As Allen (2013) wrote,

"CP remains the backbone of the Canadian domestic-news system. It is an honest, independent organization with strong traditions: seriousness of purpose, accuracy, timeliness, and accountability. In recent years it has been a leader in journalistic innovation, integrating print, broadcast, and online media effectively. Anyone with an interest in the health of the Canadian public sphere can only hope it continues to thrive for many years to come" (p.308).

I agree with Allen's summation above in relation to CP's importance to informed discourse; however, the precarious state of the media in Canada is what puts CP most at risk. CP's journalistic integrity was shaped by economics. Its values are a commodity. It relies on subscriptions. The fact that it is broadening coverage to include less serious news is not, necessarily, or in my opinion, an issue. However, if Canadian media continue to struggle, CP might find itself having to make more compromises to meet the needs of its clients, in order to sustain its ability to support the resources required for its high standards of reporting, particularly as its owners are part of that struggling media. Shoemaker and Vos (2009) refer to Adam's organisational boundary approach which "suggests that news services transmit items in patterns of selection congruent with their perception of what the newspapers wish to

receive." If news agency clients are not interested in cutting-edge graphics and political content, how can CP meet their needs without further changing practice? And if agency clients end up including more "brand" customers courted to make up for losses on the news side, the scales of coverage could tip further. If you start making more money selling to banks than news bureaus, whose priorities will you put first? In Bourdieuean terms, the struggles for control of the field of the newsroom are part of an ongoing debate and negotiation at CP.

5.14 CP Reflection

One aspect of reflection prompted by practice at CP was quality control for articles being promoted/displayed via social media. At first, I found it very surprising that digital editors would post stories to Facebook Instant Articles or promote them on social media accounts without a thorough evaluation of the story's content (for example, grammar/spelling or accuracy). However, my notions were challenged as research progressed. During the same time period I was visiting CP, I was gathering data at *The Spectator*. One participant there said that due to shrinking revenue and staff, traditional editing practices needed to be modified in order to find efficiencies. S13 said one way of doing this was letting go of the idea that multiple people had "to craft and pore over content before moving it on" (personal communication, 13 April 2017). This made me rethink practice at CP. Perhaps it was trust in CP's editing process that facilitated more time for more work specific to the skillset of the digital editors. However, what if CP promoted an article posted by a client and the story had, for example, been changed or shortened to alter context or accuracy, inadvertently or otherwise? Compartmentalising who is responsible for what can lead to sensible efficiencies, but also might increase the opportunity to amplify errors or, even, misinformation.

Chapter 6 "Static is Death": The Push for Pageviews at *The Hamilton Spectator*

"The business model for our site is to produce more and more content so that we are able to serve more and more ads" (S6 personal communication, 11 April 2017).

6.1 An Outline of The Spectator: "A Diminishing Newsroom"

When you drive into Hamilton, *The Spectator* building sits like a sentry atop the highway. Although moved from its original, downtown location in 1976 (Wells 2016), its current perch, located in an industrial area, still speaks to the paper's long-standing importance to the community. Its near 200-year history was palpable in its hallways and main lobby, with artifacts, photos, and front pages on display¹²⁸. However, walking into the newsroom I was struck by the many empty desks and offices. One employee described it as a "diminishing newsroom" (S6 personal communication, 11 April 2017) and almost every person I spoke with, particularly those who had been with the paper the longest, commented on deep cuts. However, there were also frequent expressions of pride in relation to the quality of content *The Spectator* was able to produce given its lack of resources. At the time of my research, there were about 50 full- and some part-time staff¹²⁹ with approximately 30 to 35 of those being "content producers" (S1 personal communication, 17 January 2017).

Although many participants expressed unease about the fact that there was no clear plan for *The Spectator's* future in terms of solving the revenue dilemma or a definitive plan for the future of its print product, several employees did speak to its umbrella company's ability to maneuver and stay afloat in a tight market. This was supported by a journalist from another Metroland outlet¹³⁰, interviewed for this study, who told me the company was "still very successful" (ML1 personal communication, 2 May 2017) in terms of bringing in revenue and maintaining its "editorial integrity" and "footprint" in the communities it served, due to strategies such as centralising services and amalgamating locations¹³¹. The Metroland copy-

¹²⁸ See images 20 and 21 in picture gallery.

¹²⁹ Exact numbers of *Spectator* staff were asked for but not provided.

¹³⁰ For an explanation of *The Spectator's* management structure see section 3.9, p.72.

¹³¹ Although, the word "successful" is perhaps a comparative descriptor when looking at the struggling Canadian media market "faced with changing consumption habits and declining advertising revenues" (Brin 2016).

editing team was an example of such centralised services. Seven editors and five proof readers (between five and nine working at one time), worked in a huddle of desks at the far end of *The Spectator* newsroom, on a busy day making it through as much as 1,200 pieces of content (S13 personal communication, 19 April 2017).

6.2 The Morning Meeting

On my first day of observation at *The Spectator*, I met with the managing editor of print¹³² before attending the morning meeting. He had an office but normally sat at a desk in the middle of the newsroom because it allowed him to hear what was going on, "put out fires," listen in to reporter interviews, and be a "bridge between online and print" (personal communication, 11 April 2017). The morning meetings took place at a large, paper-strewn desk in the middle of the newsroom. A combination of the managing editor of print, the managing editor of online, chief editor, city editor, a number of section editors, and a columnist were in attendance at the meetings I observed. There were no general or specialised reporters sitting at the table during my observations, but it seemed routine for questions about their stories to be yelled across the newsroom and, if necessary, the reporter would come and give an update, or just shout back the answer. Emergency services', airport, and public works' scanners were audible in the area where the table was located and there were often multiple, simultaneous conversations going on at the table. At one meeting, there was a discussion of graphic photos used of a senior beaten to death in his nursing home-photos that the family had requested be used to show the severity of his beating. When someone mentioned that *The Spec* had taken "a lot of heat" from people who thought it was horribly disrespectful, one editor replied that he was not worried about "the Twitter crowd."

As an example of the impact of limited resources, at one meeting, editors had to choose between two high-profile court stories, as there was not enough staff to cover both. There was also discussion regarding what the reporter covering city hall would have for the web on a big local story regarding LRTs, and when he would have it. However, someone from the digital team said, "Right now we wouldn't break into the line-up we've got because it's doing

¹³² At the time this thesis was being written, the managing editor of print left *The Spectator* to work at another Metroland publication.

really well." As I will explore throughout this chapter, "doing well" in terms of online at *The Spectator* meant getting lots of pageviews. To clarify the previous quote, the LRT story was not one perceived to be able to get more traffic than other stories already in a prominent spot on the website, so, at that time, they did not want to replace or push any of the existing stories from their current position to make room for the one on LRTs¹³³.

As is typical in these types of morning meetings, from my experience, discussion veered from serious news topics to those of a personal nature, like which staff members' magnolia trees were blooming. There was also a lot of joking and laughter amongst those at the table, some of whom had worked together for decades. At the first morning meeting I attended, a group of local high school students who ran their school paper was also visiting. During this meeting, there was a moment when the journalists at the table all seemed to be discouraging the young, would-be journalists from going into the field due to its precarious nature. The managing editor of print was the only one to defend it as a profession. His love for his job and the industry itself was tangible.

6.3 Building Community

I was able to tag along with the students on a tour of the building and before letting us into the press room the managing editor of print said, "When you get in there, close your eyes and breathe deep. It's the sound and smell of freedom. It's the most beautiful thing in the world and few people get to see it." Once inside, we were shown a press that used to belong to the *Washington Post*¹³⁴ and had printed parts of the Watergate story. This was not only interesting from an historical perspective, but provided contrast when the managing editor talked about how he believed the *Washington Post* was currently eroding its brand by using clickbait to fund serious journalism. As an example, he used a *Washington Post* story on a beating in Hamilton that the *Post* covered as a hate crime¹³⁵. However, the only source that it was a hate crime was the victim's family. It turned out it was not. The editor had not seen

¹³³ The other conversations/comments directly related to analytics that were made at the morning meetings I attended were related to video, which I will discuss more in section 6.15.

¹³⁴ See picture gallery, Image 24.

¹³⁵ For a screengrab of this story see Appendix 12—one note, the managing editor print, based on his recollection, believed this headline had been changed since it was first posted to be less sensationalist than the original version.

the *Washington Post* provide a correction to its version of the story and he spoke of the harm and discord this type of coverage can cause within a community.

Being part of the community was central to The Spectator's ethos and brand. As such, it regularly held community events in its auditorium. On the day of the high school tour, a specialist in how the teenage brain works was scheduled to speak in the evening, with the managing editor of print acting as moderator. He said they held these types of meetings fairly frequently to fulfill their mandate to be community builders¹³⁶ and that previous events included mayoral debates, forums on public transit, authors' series, and one where a reporter with an interest in history, who was also a musician, performed songs he had written about Hamilton. He described all of these events as "standard community engagement stuff." However, these events, generally, were not streamed on the website or recorded for viewing afterwards. Although there was a prominent community events listing on the website, there was no commenting on stories or any way for the online audience to interact with the newsroom, outside Facebook comments, which, on peripheral scans, Spectator staff did not regularly contribute to, if at all. S15 (personal communication, 24 April 2017), a retired reporter and former member of the digital team, said a major issue for *The Spectator* was that "they treat their community on their website and on Facebook as a problem, not a resource," whereas the value for a local paper historically is "in creating that vital sense of community that every community needs" where they can see and talk about themselves and "create common narratives¹³⁷."

6.4 Lapsing Innovation

The lack of online community was somewhat surprising given *The Spectator* was once on the cutting edge of digital innovation. It was part of the Knight Foundation Learning Newsroom, an initiative¹³⁸ that ran from February of 2004 to March of 2007 where "928 journalists in 10 newsrooms representing a cross-section of sizes, ownership groups and

¹³⁶ This type of reciprocity has proven to build trust and "sustainable spaces for community interaction"

⁽Lewis et al. 2014) that can lead to more participatory relationships between journalists and the audience.

¹³⁷ As discussed in the next chapter, the idea of "cultivating community" online proved to work at *The Bournemouth Daily Echo*.

¹³⁸ As part of this initiative *The Spectator* was awarded an approximately \$5 million grant (S15 personal communication, 24 April 2017).

markets, tested a model to help journalists become more nimble at change" (Williams 2007, p.3). During this period, analytics had little relevancy at *The Spectator* because, as S15 said, they were more concerned about making sure they had a web system that worked than they were about the numbers; the main goal was to flatten the hierarchy and bring digital knowledge deep into news organisations. Several employees described this as an invigorating and optimistic period to work at *The Spectator*. Asked why the changes and innovations from the Knight Lab did not carry forward, one editor said in the time frame the Knight grant was secured and the plan implemented, they lost people, had several different editors-inchief¹³⁹with differing agendas and levels of commitment to change, and then the funding ran out. He said the lack of continuity during the process made it impossible to sustain innovation and change the culture. This was supported by ML1 who said training supplied during this period of innovation "needed to be a regular commitment to staffers" (personal communication, 2 May 2017), but it was not. Signs that implementation of change was precarious were evident back in 2007 when the final report evaluating the project was released and Spectator staff were "finding it increasingly difficult to keep alive the newsroom's commitment to the hard work of openness and consultation that lie at the heart of the Learning Newsroom initiative" (Williams 2007, p.65). Regardless, when time was up for the project there was more change to come, including the development of a new CMS.

6.4.1 Feeding the Machine

A team worked for three years to develop the system that Torstar's largest daily, *The Toronto Star*, opted out of because of conflicts with the design of the CMS¹⁴⁰. Some *Spectator* employees expressed concern that the "Metroland machine" would not be able to serve the needs of local readers, but to no avail. S15 described the entire process as a "God awful experience" (personal communication, 24 April 2017). During my own observations and interviews there were many concerns expressed by multiple employees regarding lack of control of the shared CMS as well as issues of being able to showcase local, Hamilton content

¹³⁹ Three different people held this role from the period the Knight initiative started until the time of the writing of this chapter.

¹⁴⁰ Hindman (2015) notes issues with multiple news organisations being "shoehorned" (p.27) into one web template.

or access quality, evergreen content (such as an award-winning series on the impact of poverty on health care) that was either hopelessly buried or housed on supplemental sites. As S15 explained, and as was touched on by CP employees in reference to digital media innovation in general,

"I think a big problem was that in the early days both at *The Spectator* and at Metroland, the people who were in charge of the web were not people who lived on the web...I think those people, if they're still around, understand their way better now because they have been immersed in it but a lot of the decisions that I think have set them on the wrong course were made by people who were not part of the web and did not understand that culture" (personal communication, 24 April 2017).

And, according to S15, once the site was up and running, the web team focused directly on metrics with a goal of quickly getting more hits. Based on my observations and interviews, that strategy seemed unchanged, or, perhaps, even more intensified.

6.5 Targeting Pageviews

The Spectator's digital staff put priority on pageviews because there were yearly pageview website targets that were determined by its corporate office and divided into monthly goals, all of which were tied to impressions-based revenue. S2 said,

"At its most base level, a pageview is an advertising impression. That is why pageviews are as important as they are. A lot of people would say they're too important. I might agree that they are considered to be too important, but when the company says this is how we measure your success...[S2 pauses and stops talking]" (personal communication, 17 January 2017).

As Nelson (2018) identified, "Journalism's current market information regime privileges measures of audience size, so newsrooms face economic incentives to pursue audience growth (which they can measure) rather than audience engagement (which they can't)" (p.529). Pageview targets were an informal, and internalised measure of performance for digital editors on the newsroom floor. This is because, as noted by Cohen (2018), journalists "feel individually responsible for the profitability of their company" (p.13). When asked if she felt pressure to get numbers S17 (personal communication, 26 April 2017) said,

"You do because on a bad day you feel really bad. It's like, what else can we do to get back where we want to be? It can be really easy to fall into what people call

clickbait and promoting that faster because you want the numbers, but...you don't want to become the *National Enquirer*¹⁴¹."

The similarities between the practice of digital journalists now and television journalists in Altheide's 1970s ethnography were striking. Altheide (1976) identified that because their positions were more precarious, local television news outlets that were operating "in the red" or "barely" breaking even were more susceptible to news ratings that estimated "the size and composition of the viewing audience" (p.15), which was the case at *The Spectator*.

6.6 The Boundaries of Acceptable Practice

S16 described how posting one particularly salacious story on a celebrity sex list still made her "cringe" (personal communication, 26 April 2017) and feel "shame," but also said the story got a lot of pageviews and that was the goal. She said, to a lesser degree, this happened every day because she had to juggle journalistic sensibility with what the audience "wants," which at *The Spectator* was determined by what drew pageviews¹⁴². As noted above by S16, and as noted by Altheide (1976), although journalists recognise the importance of journalistic doxa, in other words the ideal journalistic standards, "they also realize that other considerations—such as commercialism and presentation strategies—influence news coverage" (p.20). S16's dissonance also demonstrates the appropriation mechanism in Hanitzsch and Vos's (2017) role negotiation, where journalists adjust "their professional aspirations in a way that brings the journalists' cognitive roles into consistency with—actual or narrated—practice" (p.129). As noted by Bourdieu (1996),

"...'serious' journalists and newspapers are also losing their cachet as they suffer under the pressure to make concessions to the market, to the marketing tactics introduced by commercial television, and to the new principle of legitimacy based on ratings and 'visibility.' These things, marketing and media visibility, become the

¹⁴¹ In reference to how far newsworkers are willing to adjust professional norms, Christin (2018) noted journalists use "analogies with prostitution" (p.1400) when referring to the use of popular articles. In a quote from Malloy referenced by Altheide (1976), a 1970's television journalist, referring to the importance of drawing in the largest audience in order to get commercial sponsors, said, "You've got to give the audience what they want, but you don't want to prostitute yourself" (p.20).

¹⁴² This negotiation between ideals and practice is not unique to S16; Welber et al. (2016) found sometimes "what journalists are economically encouraged to do, and what they are normatively inclined to do, are in conflict with each other" (p.1050).

seemingly more democratic substitute for the internal standards by which specialized fields once judged cultural and even political products and their producers" (p.73).

6.7 The Digital Desk at The Spectator

At the time of my observation, *The Spectator's* site, thespec.com, was staffed starting at 5am until about 10 or 11pm. There were two early morning editors, two more arrived at around 10am and 11am, and the last for the evening shift¹⁴³. Between them all they managed three Metroland websites¹⁴⁴, with who does what being "situational and organic" (S2 personal communication, 17 January 2017). Content for the *Spectator* site was created by its own reporters, and curated from other Metroland outlets, news agencies such as The Canadian Press and Associated Press, and other media outlets *The Spectator* had agreements with, such as *The Washington Post*. The morning editor who arrived first set the "tone" for the news day by deciding how much of the line-up created the night before needed to change based on what was currently happening in the news and which stories were garnering traffic. This could involve simply "tweaking" the line-up or "blowing it up."

I arrived for my observation of the digital desk at 6am in order to get an idea of the workflow. At that time, a member of the digital team was using a Twitter app called Buffer to promote *Spectator* stories from multiple accounts, as the local television station, CHCH, was blaring in the background so it could be monitored for coverage. The digital editors were responsible for curating stories, choosing their placement on the web site, creating headlines and descriptions for stories that were posted on the site and promoted on social media, and using metrics to make editorial decisions. At its root, the work of these digital editors was more about curation and aggregation with minimal content creation.

6.7.1 Directing Traffic

The pace of the digital team's work at *The Spectator* was frenetic. One editor's hands were never still and she said she was "usually doing three things at once." This was no

¹⁴³ S2 (personal communication, 17 January 2017) said, "If something huge happens in the middle of the night all the work can be done remotely, but that, generally, only happens in the case of, for example, a major terror attack, not for a B-grade story."

¹⁴⁴ thespec.com, and the sites for *The Waterloo Region Record* and *Guelph Mercury*.

exaggeration. Her mouse was always moving, her eyeballs bouncing back and forth between multiple monitors as she leaned into the screens, including the dashboard for Chartbeat, which she checked continually. Her job was like that of a busy traffic cop or air traffic controller, but instead of planes or cars she was dealing with a constant flow of information. Referencing Datchary, Le Cam and Domingo (2015) called this manner of extreme multi-tasking "instantaneous dispersion" (p.131) and noted it impacts journalistic standards like verification. However, it also impacts the journalists, as noted by Cohen (2018) in her study. Because of the seemingly impossible pace, at the end of the day one editor said sometimes her brain felt like "mashed potatoes." However, she mentioned multiple times how much she enjoyed her work:

"It's a thrill. It's a different kind of adrenaline than you get when you're reporting. Getting that audience. Making the right call. We are numbers driven, right? So that is on the back burner of your mind, but I think it's more of the rush that comes from presenting a top-notch website and knowing that your audience is growing" (personal communication, 26 April 2017).

In terms of placement of content, one editor said what was on the website reflected "the order of what's most popular," according to Chartbeat, and stories that she felt would connect well with a social media audience were "pinned" to the top of the Facebook page. She considered the most viewed/read area of the website more archival, but there were situations where she would take a story from the most reads and put it back in a line-up.

An example of this was the "saga" of a YouTube family¹⁴⁵ from the US that "did well" (meaning it received lots of traffic) on a Sunday and was not time sensitive. It was put back into the latest news line-up on the Monday morning. As I used to create line-ups for a local television newscast, and still teach students how to do so, it is difficult for me not to look at newsroom decisions from an editorial perspective. I thought it was debatable whether a days-old story about parents pulling horrible pranks on their children to get YouTube views was "news," particularly, the "latest" news, the category the story was posted to. However, it was put in a prime spot on *The Spectator* website to get views—and it did. It was one of the best performing stories on *thespec.com* throughout much of the day, and on *The Re*cord's website (one of the other sites the digital team manages for a local paper located in a town about 45 minutes away).

¹⁴⁵ See Appendix 13 for a screenshot of this story.

I was also surprised when I first arrived at *The Spectator* that there was no mention on the site of a Canadian soldier being killed, and three others injured, during a routine exercise, something that was the lead story on the local Toronto, all-news radio station that I listened to on my drive into Hamilton and was the top story on the local Hamilton TV station. I asked one of the digital editors whether the morning team ever created new content or developed breaking stories and she said if there was something like a homicide she would write the initial story, but she always had to ask herself, "What can I do with my immediate time? What's the best use of my resources?" Because of the pressure to curate on the website and push social to boost pageviews, she was more likely just to flag stories to non-digital editors to follow up when they came in. A second morning digital editor worked primarily on the site for *The Record*. However, first thing, she usually created a commuter post on traffic for *The Spectator*. This post was locked-in from 6am to 9am daily and was updated with pictures as required. As will also be seen in the next chapter on *The Echo*, traffic stories drew a lot of viewers to the site.

6.7.2 Enhancement Strategies

Enhancement of web stories at *The Spectator* included changing headlines, locking a story into a line-up or putting a locked story higher in a line-up, changing the picture, and promoting the story on social media. The best use of time and resources was also a factor in deciding the level of enhancement a story would receive¹⁴⁶. S16 said it was sometimes difficult to predict what the audience wanted on any given day, as identified at NRK, because you think you have an understanding of what will or won't work and then a story "goes completely nuts and you're like, why are people interested in that?" She said her minimal enhancement would be to change the photo and a simple thing like changing the headline could make a big difference in traffic. However, in general, S16 only enhanced stories that were already doing well or showing signs they could pick up traction online. She said she had to "focus energies" on where the best opportunity was to get more pageviews and she came to that viewpoint after spending a great deal of time enhancing stories that did not "go anywhere." If stories in a line-up were not "doing well," they were unlocked, or unpinned on

¹⁴⁶ As also noted at NRK.

Facebook, usually within 20 minutes to half an hour, more evidence of Tandoc's (2014) "de-selection."

The "major real estate" (S16 personal communication, 26 April 2017) area of the site was considered to be the top left window above the fold¹⁴⁷, which is consistent with every other news organisation I've visited. In terms of social media sharing, stories were tweeted multiple times but there was only one Facebook post created, which could be edited if necessary. Keeping things moving on the site was seen as integral to meeting pageview targets. As S2 described,

"Even really good material can't stay around too long because static is death. And, so, then you're adding things, you're enhancing, you're writing a better SEO headline, you're doing this, you're doing that and then at some point you kind of say 'I don't think there's much more I can do with this. It's really enhanced as well as I can do so.' And then maybe it's run its course and it's time for it to move. But it's a real balancing act" (personal communication, 17 January 2017).

6.7.3 Riding the Wave

The morning of my digital desk observation, a story about a woman stuck on a crane in Toronto¹⁴⁸ was "charting" (getting significant concurrent readers according to Chartbeat) and was put on both *The Record* and *Spectator* websites, in the most prominent position on *The Spectator* site. A picture of the incident was also selected to be the cover photo on *The Spectator*'s Facebook page and the post of the story was pinned to the top of that page. One editor said, "I see it doing well on social media; we want a piece of that." There was a lot of talk back and forth between the morning editors as they tried to keep track of all of the information coming in and what stories were doing "well" or "charting" in terms of number of readers, and/or doing well on social media. At one point, another story that was added into *The Spectator* line-up, prime minister Justin Trudeau talking about marijuana, also started to "chart." An editor said she was "going to act on it," putting it in second position under the crane story. As soon as the Trudeau story had more concurrent readers than the crane story,

¹⁴⁷ Above the fold is a newspaper term meaning the top of the paper, literally, above where it is folded. Online, above the fold is placement anywhere on the screen that is visible without having to scroll down.

¹⁴⁸ For a screengrab of the crane story see Appendix 14.

information gleaned from Chartbeat, Trudeau was switched to the number one spot and the crane story was pushed down to the number two spot.

Explaining this, the editor said, "We react pretty quickly just to try and keep up the momentum. The quicker you can react the more likelihood you can capitalise on the change." Another editor added, "It's like surfing; you've gotta stay with the wave¹⁴⁹." The change in position for Trudeau made an immediate difference in numbers, with one editor saying, "It's taking off" after the number of concurrent readers more than doubled within minutes. Practice at *The Spectator* supported Vu's (2014) findings that "journalists in digital newsrooms are increasingly exercising their gatekeeping selection-based [on] audience interests" (p.1106).

However, the long-term effectiveness of the type of curation practiced at The Spectator is up for debate. Chartbeat analytics expert CB1 said (personal communication, 9 November 2017) that media organisations "over curate" and the frantic updating of content does not have the positive impact people might expect over the long run. This is because chasing traffic does not retain loyal readers and, as seen with challenges at Buzzfeed (Marshall 2017; Thompson 2017; Newman 2018), even on a large scale does not guarantee revenue. CB1 believes "commodity news puts you into competition with too many outlets" and "dilutes the brand." Referring to a *Columbia Journalism Review* report on how local news can thrive, she said a better strategy is to "cover the unique local news you can't get anywhere else" and concentrate on retention as much, if not more, than growth. Breiner (2018) also stressed the importance of attracting loyal readers versus strategies aimed at increasing traffic. Nicholls et al. (2017), in a study on digital-first organisations, found "the audience built through heavy reliance on search engine optimisation and various forms of social media promotion and publishing is sometimes a mile wide and an inch deep" (p.17). This was supported by S2 who considered social media to be "the beauty and the beast" (personal communication, 17 January 2017) because they generated more people coming in to the site, but people coming in to the site via social media consumed little content.

¹⁴⁹ Similar language was used by the head of analytics at a newspaper in a Swedish study who said, "If an article becomes a 'click rocket' we have a checklist for what to do in order to ride the wave" (Björkman and Franco 2017, p.37) and journalists in Groves and Brown's (2011) study who talked about "riding the Google wave" (p.29).

6.7.4 A Picture Sells the Story

As with other digital editors I spoke with, those I observed and interviewed at *The Spectator* talked about the importance of a strong image to accompany any online story, or to accompany a link to a story posted in social media, in order to get traffic as well as social shares and engagement. One editor said because of this, she tried to create photo galleries for as many stories as possible, more evidence of Altheide and Snow's (1979) media logic where entertaining formats are used to attract eyeballs and advertisers. However, the digital team struggled to get those on the print side to supply enough photos for web optimisation. Another editor said Spectator staff frequently neglected to upload appropriate photos because "a lot of people still think in terms of print." Often local stories did not have a picture uploaded to accompany them, or only had one picture uploaded, and this could make it difficult to post them in a prominent spot online. An example of this occurred when one digital editor wanted to enhance a story about a visit to a *Record* community by the prime minister. However, she could not change the feature picture because only one picture had been uploaded. She said issues with lack of photos meant sometimes she had to "put the weaker story higher" or, in other words, in a more prominent spot on the homepage or subpage, another example of media logic at work. On the morning of my observation, a story on a court case involving a homeless man started "charting" on The Record site but there was no picture uploaded so she had to look for a stock photo. She ended up using one of a silhouetted man sitting by the water, a photo that had no bearing whatsoever to the story. The need to look for pictures for a site that served a community different from the one the digital editors were working in led to other issues. A digital editor described how once she had posted a picture of the wrong building to go with a story as she was unfamiliar with the area.

6.7.5 Gut versus Numbers

A few hours into the digital shift I observed, the editors learned that the dead Canadian soldier mentioned above was from Kitchener, a community served by one of the websites they managed, *The Record*. An hour after that information was discovered, the YouTube family saga story was still number one for concurrent views on *The Record* site, and the story about

the prime minister's visit from the day before was still in the most prominent position on the homepage because it was still "trending well." I asked if they would ever move a story that was not trending well into the prominent position on the website for editorial reasons. One editor said they would. After a few minutes, even though the soldier story was not "charting well" and did not have a good picture to accompany it, she said, "I'm going to make an executive decision and change it" and she moved it into the most prominent spot on *The Record's* site¹⁵⁰. When asked, she said she regularly considered other metrics, besides concurrents or views, in the placement of stories, such as the length of time people were reading. She also said that what is of importance to the community being served had to be considered when making changes.

As soon as the soldier story was moved to a more prominent position it started to get more views¹⁵¹. Regardless, even after several hours in the prime spot on *The Record* site, the dead soldier story was still getting far fewer views than the story about the YouTube family. The story of the soldier offers evidence that although change to a more prominent position on the website likely improves reach and, therefore, views, the fact an editor deems it to be more important than a trending story does not mean the audience will agree. However, it would be interesting to see how the soldier story did in the long tail and what percentage of the audience clicking on the story about the soldier was made up of loyal readers, compared to the percentage of loyal readers clicking on the YouTube family story, because, as identified at NRK, success can be measured in many different ways.

6.8 The Water Cooler Strategy

Multiple employees referred to the fact that the eclectic content on the homepage of *thespec.com* was by design because the site was a "water cooler" where people could stop by to learn about a variety of topics. This actually caused tension within the newsroom, though; the reporters I spoke with widely voiced concern that their local, original stories were often

¹⁵⁰ See Appendix 15 for screengrab of this story in the primary position.

¹⁵¹ More specific data would be needed to confirm there were not other factors besides the placement change. For example, could the increase in readership have been caused by *The Record's* community becoming more aware of the story and sharing it via social media?

pushed off the homepage for content that was not as editorially strong or important to the community¹⁵². S16 addressed this issue saying,

"We've had conversations in the newsroom where people will say, you know, our homepage is full of stories about world stories or, you know, A&E stories and where's my story. And it's just that—it's just understanding that conversation that has to be had about how the homepage operates and how the website operates and what dictates what stories go where" (personal communication, 26 April 2017).

As already discussed, what dictated what stories went where on *The Spectator* website was metrics, primarily pageviews, not, necessarily, local relevance. As Altheide (1976) identified in relation to 1970s television journalists, the commercialisation of content and subsequent changes to practice "set the criteria for importance" (p.112), which in the case of *The Spectator* was reflected in the placement and positioning of content on the website. However, many participants described the "eclectic content" as clickbait, and it was the most oft cited point of contention.

S3 (personal communication, 28 March 2017) said, "Our newspaper is hyper local...but then you go on our website and the top story is about some man killing his daughter in Southern Alabama. And, I mean, it's clickbait, right?" Many other participants raised this issue¹⁵³, as reflected in the comment below:

"I find sometimes my stories are kicked off the page for stories that I would consider to be more clickbait. So, you know a story about some small town in the States where some horrific thing has happened like a mother was found pushing a dead baby in a swing. That has nothing to do with Hamilton" (S14 personal communication, 19 April 2017).

S6 said they needed to post "viral stories" to meet the demands of their "corporate masters" (personal communication, 11 April 2017). However, he did not feel such viral stories were clickbait. S2 agreed, saying,

"It's not clickbait. I think clickbait is when you're trying to trick people into doing things or sort of draw them in with something sensational or lurid or whatever which we don't tend to do unless the content justifies that" (S2 personal communication, 17 January 2017).

¹⁵² This is contrary to Hanusch's (2017) finding that "more entrenched journalistic cultures in legacy media seem to mediate the importance of basic clicks" (p.1583).

¹⁵³ See Appendix 16 for example of *thespec.com* homepage versus *The Spectator's* front page on January 17, 2017.

However, multiple participants felt readers were being misled because international stories were not clearly identified as such on the website and social media feeds:

"Like, some horrible tragedy happened, but there's nothing in the context of the headline that makes it clear that that was in Georgia and not in Hamilton and so you click on it thinking, 'Oh my God, this happened here' and, 'Oh no, it didn't happen here'" (S12 personal communication, 9 April 2017).

In contrast to *The Spectator¹⁵⁴, The Record* had what one editor described as "heavy local" on its website's homepage. One digital editor said they were "trying to wean them" from this to draw more readers from elsewhere as that "greatly" improved the number of pageviews. When asked how successful sites were that focused on local content S6 said, "They do poorly, to be blunt, in the sense of a corporation seeking, requiring, demanding growth" (personal communication, 11 April 2017), growth being the ability to serve more ads by cycling page impressions. However, S13 (personal communication, 19 April 2017) said,

"There are different philosophies about what we should be doing online. There's the obvious one that they want traffic; they want hits. But, I think that there's more to it than that...I think there's only so much value that the Facebook murderer has to readers in our area."

However, he also acknowledged that *The Spectator* did not have the staff to keep the website as "lively" as it should be. This supports Cohen's (2015) assertion that digital technology has led to a transformation of media work because of "the need for content production on a mass scale" (p.99). Christin (2018) also observed the need to accelerate the pace of stories published in order to garner readers and, therefore, revenue in a digital market. There was conflict, however, over the digital team's strategy to broaden the target audience on *The Record*.

Readers within that community complained when they did not see a local connection to stories and accused editors of using clickbait¹⁵⁵. In turn, staff at *The Record* demanded that *The Spectator* editors change what was on the site or went in and changed it themselves, which sometimes led to *The Spectator* staff changing it back because they were "focused on the metrics" (personal communication, 26 April 2017). The need to attract a broader audience was an example of media seeking "audiences across subcultural boundaries" (Hallin 2005,

¹⁵⁴ But similar to *The Bournemouth Daily Echo* as will be outlined in the next chapter.

¹⁵⁵ Non-local stories being considered clickbait was also seen at *The Echo*.

p.233) which disrupted "older patterns of association between media and social groups." One digital-born media executive described this type of strategy as "vanity reach" that offered "limited opportunities for meaningful monetization to ensure a reasonable return on investment" (Nicholls et al. 2017, p.15); however, it was the prevalent tactic at *The Spectator*.

6.9 The Long Tail of Success

Despite the acceptance of digital editors to target traffic with non-local, sensational stories, according to *The Spectator's* own analytics local stories were far more popular in a longer view. S18 (personal communication, 26 April 2017) said she had never seen any of those "lurid" stories make it to the top five of the month based on Omniture data. This was supported by data I was given¹⁵⁶ that showed for all of 2016 only one international story of a "lurid" nature—a presumed dead wife showing up at her funeral—cracked the top 20 in terms of pageviews, and in the first four months of 2017, none had. This echoes Christin's (2015) findings, discussed in the literature review, where a longer view of data can better show audience interest. Even those most comfortable with the "water cooler" strategy agreed no one could compare to The Spectator in terms of its connection to the community and the fact local coverage was its strength. But again, the need to meet targets prevailed. S6 said 60-75% of *The Spectator's* traffic was "local-ish," (personal communication, 11 April 2017) meaning coming from Southern Ontario, but "if we have a good day we're receiving traffic from North America and around the world" and "a celebrity story spiking" added to the overall numbers. In response to this type of strategy S15 said, "First they ceded control of their product to the chain and now they're ceding control of their product to an amorphous audience which is what pageviews gives you" (personal communication, 24 April 2017).

There were also concerns about the long-term impact of the water cooler strategy in light of the fact the future of the printed product was not guaranteed. Asked how much longer they would print an actual paper or print a paper daily, one senior manager said that varied depending on the profits of a specific quarter: "Two bad quarters [and] that timeline changes incredibly" (personal communication, 27 March 2017). He had heard different projections ranging from eight to 15 years. In terms of the newsrooms future, S8 said, "We certainly live

¹⁵⁶ See list of proprietary documents, Appendix 8, items F and G.

in fear every day of what's going to happen" (personal communication, 11 April 2017). S16 (personal communication, 26 April 2017) said, "If *The Spectator* no longer put out a print edition, our local news online would be stronger than ever." However, when discussing the possible loss of the newspaper, others felt if the current "water cooler" strategy was followed on the website, comprehensive local news coverage would be at risk because "some of the less sexy stories" currently being covered "might not be valued anymore" (S11 personal communication, 19 April 2017), and it would be too late to turn back to a hyper-local focus because the existing audience would be established (S3 personal communication, 28 March 2017).

There was also frustration over working to supply updated content to the web, to the extent of sacrificing a trip to the bathroom, and then seeing that content had not been put up after several hours, or until the next day, or, in the case of stories that were not locked into a line-up, being bumped from the page too quickly:

"I'll write a story and then I'll get back here and my story's been bumped 10 places down and what's in the top spot is a press release. It's one of those things where I actually really do complain to the web team because it makes me insane" (S3 personal communication, 28 March 2017).

S6 said the reason reporter stories got "bumped" was that the digital team was "not gatekeeping" all of the pages because "there's no net benefit for us to do manual work to change a story that's doing okay" (personal communication, 11 April 2017). Or, in other words, if a story was not perceived to be one that would attract a high volume of readers it was not, necessarily, worth locking it into a line-up or spending time monitoring its progress, regardless of whether it was an original *Spectator* story versus a press release, story from a wire service, or story from another Metroland outlet. He said resulting conflict in the newsroom was more about reporter expectations that clash with the online reality:

"If you're a reporter, how does that fit into your sense of value to the organisation or what you've been sort of led to believe your whole working life that your content is the most valuable—and on any given day it might not be?"

6.10 The Oversold Death of the Homepage

Multiple participants pointed to the fact that as all of the local reporter stories at *The Spectator* were put on the website¹⁵⁷ it did not, necessarily, matter if they did not receive the same promotion on the homepage. However, S3 said placement on the homepage was "hugely important" in terms of generating traffic at *The Spectator*, and both S16 and S17 felt putting a story up front made a great difference in the number of views an article would receive. As well, if stories were not locked on to the homepage and flowed into the stream of content being posted on the website they were very difficult to find. This was largely because of the high volume of stories flowing through the site in an effort to cycle through ad impressions. As well, participants acknowledged *The Spectator*'s search function did not work well. One reporter had a hard time showing me an example of the type of investigative work still being done at *The Spectator* because she could not find the example she was looking for on the website.

During my visits to *The Spectator* I was told that the website was being redesigned with a focus on removing "stuff that isn't getting traffic" and making "every article page...do the job that the homepage does" (S2 personal communication, 17 January 2017). S2 said every article needed to provide opportunities to click through to other areas of the site because of the "death of the homepage evolution," while acknowledging that evolution had not really hit the Hamilton market yet—and it may never. Recent Chartbeat research, as discussed in Chapter 4, shows the homepage is alive and well everywhere because it is a key access point for direct and loyal readers (CB1 personal communication, 9 November 2017; Blanchett Neheli 2018a).

¹⁵⁷ It's worth noting, however, that these stories were the same as the print version and, as will be seen in the next chapter on *The Echo* and was seen in the previous chapter on NRK, putting every story online, particularly if it is not optimised for the web, may not be the best strategy.

6.11 Analytics Awareness

At *The Spectator*, the benefits to reporters of using analytics in ways that might enhance story development or engage the audience were negated by the perception, which was often reflected in the practice of the digital team, that metrics were only useful for counting clicks and had nothing to do with building a connection to the audience or community. As S12 said,

"You can tailor a story in a certain way that makes it generate more pageviews. I don't want to go down that path. I think that I should be looking to get the most balanced truthful story told in a compelling way" (personal communication, 19 April 2017).

The way information was shared, or, perhaps more accurately, not shared, about metrics and analytics at *The Spectator* could have been contributing to a lack of understanding about the potential benefits of collected data.

I was told the digital team was "as transparent as possible" and anyone who wanted to could have access to audience data¹⁵⁸. Metrics were available on a monitor showing Chartbeat in the centre of the newsroom and revealed data for the three sites that were managed by *The Spectator*.¹⁵⁹ As well, the managing editor of online produced a very brief daily overview of how the three sites had done, and another editor in the digital department, when time allowed, produced an emailed report of what was "hot" on the websites at noon and a "deeper dive" into the previous day's number. There were also fulsome weekly and monthly¹⁶⁰ reports that looked at everything from browser usage to the top stories in terms of pageviews, time spent, and what was popular on Facebook and Twitter (S6 personal communication, 11 April 2017; S2 personal communication, 9 June 2017). However, this information was not sent to everyone in the newsroom, including reporters. S6 said this was because they did not "want people's eyes to glaze over" with information they were not interested in or did not have the time to read. Most of the reporters I spoke with acknowledged they never looked at metrics or analytics, unless they happened to look up and catch what was on the newsroom monitor or there was a particular story they wanted to see reaction to,

¹⁵⁸ Only select people in newsrooms accessing analytics data on a regular basis was also found to be the case in the ICFJ's (2017) international survey.

¹⁵⁹ This allowed the digital team to see if a story that was "hot" on one site could be made use of on all three sites managed by the digital team (S6 personal communication, 11 April 2017), as was seen at NRK when local editors would post/share content from different regions.

¹⁶⁰ See Appendix 8, item I.

and that no one really spoke to them about metrics or analytics except for the occasional, casual comment.

However, several participants expressed concern they did not understand the value of metrics and would like to know more about how they were interpreted, for example, what mattered most to get the best reach for content, and how metrics could be utilised to make better use of time¹⁶¹. Although *Spectator* managers said they had made efforts to educate employees about analytics and digital practices concerning the site, it appeared there was a communication breakdown in this area:

"We have the screen attached to that pillar which gives us a sense of what stories are doing well, but no one's ever really explained exactly how to read that so it's kind of just a guessing game really. I think that would be valuable to know because it would probably help us get a better sense of what our readers are really interested in and maybe the story formats they're clicking on, video or audio, that kind of stuff" (S11 personal communication, 19 April 2017).

In lieu of shared *Spectator* data, some reporters were using their own social media analytics or comments from Twitter and other social media feeds to assess the success of their work.

Differing knowledge regarding why content was posted at certain times, or dayparting¹⁶², was also evident. S16 said,

"The food story, or an A&E piece, may do really well around lunch time but there's not really usefulness for it in the morning. People want to know traffic, top news stories, what's going to impact their day but then at lunch time and in the afternoon, you've got some of that leeway for fun features or something like that...because people have a minute to read it" (personal communication, 26 April 2017).

On *thespec.com* the "bulk" of traffic was Monday to Friday from 9am to 5pm (S6 personal communication, 11 April 2017). Content was posted based on audience behaviour determined by analytics, but reporters did not seem aware of why they were asked to give content at certain times of the day:

"You know if you're in early in the morning you'll have something on-the-go, they would like something right away, and certainly I feel like it is usually around between 2:00 and 4:00 in the afternoon that they like something, and interestingly enough they seem genuinely less interested after that time (laughs)." (S9 personal communication, 11 April 2017).

¹⁶¹ The issue of proper contextualisation of metric data in order to make employees understand its value was noted on by Usher (2013) in a study on Al-Jazeera English.

¹⁶² ML1 confirmed dayparting was part of normal practice within the Metroland chain saying analytics were being used to decipher what time of day was "best to put an asset [story] up" that is not breaking news (personal communication, 2 May 2017).

S9 also noted that having more information would allow for more strategic use of resources, versus "trying to do a little bit of everything in the hopes that something will turn out well" and was one of the few reporters who did make the effort to check metrics and analytics occasionally. A bad response to a story, meaning few readers, was incentive, for example, to try and simplify complicated issues in the future. S9 was also one of the participants who felt that metrics and analytics were influencing editorial judgment in terms of what types of stories were covered, and felt this directly related to the loss of staff across the paper. S4 agreed analytics were shaping some editorial decisions in certain departments; however, this was, again, largely based on volume metrics: "We're looking at the traffic and deciding where to use our resources. We're trying to decide what stories to do and not do" (personal communication, 3 April 2017).

6.12 The Digital Divide

Excerpts of a conversation with the chief editor¹⁶³, prefaced by a discussion on the importance/prevalence of metrics and analytics in his newsroom, captured the ambivalent, and sometimes even contradictory attitude towards the relevance of metrics and, within one conversation, an example of differences in what Hanitzsch and Vos (2017) described as narrated performance and professional practice. The different editorial goals and expectations of the print and digital¹⁶⁴ versions of *The Spectator's* products were also highlighted:

- 2:49: Do you feel there are more discussions now surrounding numbers and what stories are popular online?"You know, actually there isn't."
- 3:46: *Is it a bit different, though, with the website?* "Yes, absolutely. The website is trying to get as many readers as it possibly can every day so they are mixing it up and including material...that would not be deemed really acceptable or useful in the print product¹⁶⁵. It would just be too inconsequential."
- 7:36: Would you say, particularly for the website, that analytics in any way shape editorial decision-making?

¹⁶³ The times listed connote the progression within the interview the statements were made, with the interview starting at 00:00.

¹⁶⁴ Heinderyckx (2015) also noted the disparity in editorial standards required for digital content.

¹⁶⁵ Differing editorial standards for print and digital content were also noted by Groves and Brown (2011).

"They certainly do on the web, yup. I cannot think of an example of one that has affected the way we put together the print product, but I would be a fool not to realise that it does have an effect...It simply does. This is a matter of fact."

Whether working primarily for print or digital, based on interviews and observation, *Spectator* staff were very supportive of each other and most were quick to refute any suggestion there was any type of discord between the groups, outside of normal newsroom rivalry over resources or open debates about differing ideas. A variety of examples of the digital team working outside their usual roles to pitch in to help on a story or those primarily working on print helping out the digital team were provided. As one reporter said, "I don't see a separation between the web team and the…there's not a print team; we're all *Spectator*… there's a lot of crossover there and I do think that we're a pretty cooperative newsroom" (S12 personal communication, 19 April 2017). However, as outlined above, there was conflict concerning the promotion of local content on the website and a seeming lack of understanding of the digital team's goals. One participant (S8 personal communication, 11 April 2017) said the web team was "a bit of a mystery" to her. The chief editor said despite the fact the web team was physically located next to everyone else in the newsroom, it was still a case of "us and them" when it came to the digital and print teams¹⁶⁶:

"I still think most people think of themselves as newspaper reporters...We remind people that they need to file video...I mean, we have the equipment. It's never been easier. However, I would say it's an uphill battle...the web team could do a better job than just acquiring information that they expect others to get for them and the reporting staff could help the web team to organise, arrange, and post material in a more timely and efficient and accessible manner" (personal communication, 11 April 2017).

As Schlesinger and Doyle (2015) found, "traditional routines and values associated with print production continue to exert a strong sway" (p.321). Making it to the front page of the paper was often seen as the best judgment of whether a story was successful versus any metrics, while, conversely, there was concern that *The Spectator* was too tied to its print origins. S3 said,

"To be quite honest with you, I really feel like we're sort of all on the print team still which is a bit...I don't want to say scary, but...I still think really most of what we do

¹⁶⁶ A divide between print and digital teams was also noted by MacGregor (2014).

here is guided by print deadlines. I still don't know if I would consider us a web first publication" (personal communication, 28 March 2017).

These sentiments were echoed by S4 who said, "I think the sooner *The Spectator* stops thinking about itself as a newspaper, the better off it will be" (personal communication, 3 April 2017). When I asked the managing editor of print if he thought staff believed there was one common goal in the newsroom, he said, "Yes, but different people understand goals differently." He said everyone knew their job was to produce the best information possible but there were "a lot of divergent paths" on how to do that. This was also found by Altheide (1976) in television newsrooms where "there are different goals to be fulfilled by various parties to the news process" and "these interests sometimes conflict" (p.61), particularly when some newsworkers "are forced to compromise their criteria of excellence and competence, with commercialism" (p.62), as was seen with digital editors at *The Spectator*.

6.13 When is Content Original and What Qualifies as Journalism?

A difference of interpretation was also seen in the idea of what type of work digital editors were doing. S2 (personal communication, 17 January 2017) said 10 to 25% of work done by the digital team was original reporting "if you're willing to include the odd phone call or grabbing something out of the archives to insert it. I mean, it's still original content generation." However, these activities would likely fall short of Shapiro's essential elements of a journalistic activity (2014) and there was obvious dissention on the extent to which the web team practiced "journalism." S9 (personal communication, 19 April 2017) believed some members of the web team were "just as much as curators as writers or researchers." S1 said,

"The people that are using analytics and enhancing, this is rough and it's a sore point, I don't mean it to denigrate anybody, I don't see them as journalists. What they're doing is not journalism in my description. I see them as technicians¹⁶⁷" (personal communication, 17 January 2017).

¹⁶⁷ Greater context can be given to S1's comment above by considering that he seemed in support of using analytics to make broader reader discoveries that could improve content and tell reporters how they might develop stories, for example, seeing where someone might be dropping out or using data analysis to help predict elements of a topic that could be further explored; it was the simplistic use of metrics and analytics to blindly promote popular content he found ineffectual.

While S3 (personal communication, 28 March 2017) shared,

"I think it's all journalism. I think everything falls on a long spectrum somewhere in there. Is it journalism when we grab a press release and post it verbatim on our website? I think that that would probably be where I draw the line."

6.14 Making More with Less

As referred to above, *The Spectator* was using far fewer people and resources to produce content for multiple platforms. Almost every reporter I spoke with mentioned the extensive loss of staff. One said the number of reporters was about a third of what it was when she started—and she had only started six years ago. S15 said he left, or "exited" the newsroom, because there were "no time and space" (personal communication, 24 April 2017) to work and not "a lot of opportunities to do great journalism, or not nearly as many." Lay-offs had included the paper's graphic designer and video editors, putting the onus on reporters to learn how to do more technical work, particularly if they wanted to cater content for the web. But the writing and production of all content was impacted by the shortages:

"We have fewer bodies to produce content. So, even when you are given the time to do more of the analytical pieces, you're juggling those with writing stories for the next day's paper so it's more difficult to fully sink yourself into them" (S11 personal communication, 19 April 2017).

It was not just reporters who were multi-tasking; one employee worked curating and managing content on the digital desk. However, she was technically an editorial assistant, helped populate the daily news file, was responsible for newsroom scheduling, did part of the payroll, put together a weekend planner of events that ran every Saturday in the paper outlining things to do in the community (something she used to be paid as freelance), and answered the newsroom phone. The digital component to her job was one she actually reached out for herself as she found the work so interesting, but as a result some of the other parts of her job were "more challenging." S13 said the creation of the copy-editing centre was part of a years-long adjustment of learning to "do more with less" (personal communication, 19 April 2017) and a broader goal of taking "production out of the hands of people who don't need to be in production so they could devote more time to creating content"—the opposite of the strategy in place at *The Echo*, to be discussed in the next chapter. However, he also said, "It hasn't quite worked out that way…largely due to the

reluctance of people to change the way they do things," referring to the refusal of some to give up editorial control wielded during the production process.

They also did not have enough people to spare to allow a body to sit in a school board meeting or courthouse unless they knew for certain there was a significant story to cover. The chief editor said, "We're not simply stenographers of those events" (personal communication, 11 April 2017) but would instead try to put them in "more perspective." If something came up at one of these locations/events in their absence, they would cover it after the fact and provide context. Due to staff shortages, he said they might soon have to do this with city hall. This could amplify what Greenspon (2017) defined as "a deficit" in "civic-function journalism," where democracy is put at risk because of lack of coverage on "elected officials and public institutions," such as city halls and school boards, which impacts "the ability of communities to know themselves for civic purposes" (p.95). However, the chief editor felt in some cases they were doing a better job of local coverage—though always at a cost:

"We did a series last week on how fires tend to start in homes and destroy homes in poorer neighbourhoods. Well, it's not exactly a sexy story, but it's an important story...and we're committed to doing stories about inequity and poverty in our community. I would say that the story couldn't have been done any better. We put a lot of resources into it. Does that mean we didn't put resources into something else? Yes, it does" (personal communication, 11 April 2017).

6.15 Social Reporting

On an individual level, reporters also spoke to drastic changes with their daily routines, primarily more pressure to produce more content in a variety of media, submitting more frequently throughout the day in order to provide web updates, and providing live coverage of events using Twitter, which was simultaneously used for note taking. Reporters were also encouraged to use their own social media presence to build traction on a story, which would then get better placement on the homepage. S8 said she would promote her stories from her own Twitter account and then her tweet might get retweeted from *The Spectator* account: "Once it starts to generate some interest on Twitter, and in particular if there's lots of heated discussions, that's when it moves into a better spot on the web" (personal communication, 11April 2017). As identified by Tandoc (2017), "In order to maintain their position in the

field, which locates them in the struggle to either transform or preserve the journalistic field, journalists as agents also need to amass different forms of capital" (p.5). Reporters amassed social capital using social media, thereby retaining or procuring positions of prominence on *The Spectator* site. Despite any added stress, all of the reporters understood the importance of providing coverage throughout the day as the audience expected it.

6.16 The Value of Video

As at many media outlets, *The Spectator* was working to produce more video;¹⁶⁸ however, there did not appear to be a well thought out or shared methodology. One reporter devised personal strategies using analytics from work that had been self-published on YouTube or Podbean. This included cutting far fewer videos because there was not a significant rate of return based on the amount of work required to cut them: "You see only a hundred people have clicked on it; for me anyway, if I only have eight hours in a day, it doesn't seem worthwhile to spend six cutting a video" (personal communication, 28 March 2017). At one editorial meeting I attended, a participant was asked to shoot video of a book she was writing about, just for the sake of having a video to post. As she said later,

"I don't know why we need a video of a book. The book's not going anywhere. It's not moving around. It's not talking. So, videos are one of those things that we like to have for our numbers, I think. I get the business reasons for doing it. I don't always get the journalism reasons for doing it" (S8 personal communication, 11 April 2017).

In what could be perceived as a more strategic editorial decision, however, a reporter created a well thought-out, video editorial explaining why it was not appropriate for a local councillor to mark International Women's Day by handing out roses to female passers-by. The idea was sparked after she saw a number of tweets on her feed, and in a "very animated and very agitated" manner started speaking aloud in the newsroom about how handing out roses was a gesture of affection rather than respect and a "tone deaf" and "patronising" way to mark International Women's Day. This generated a discussion with, primarily, men in the

¹⁶⁸ Although, as discussed in Chapter 5 and identified by other researchers (Newman et al. 2017), minimal videos are viewed on news websites, which was supported by internal data from *The Spectator* (Item I, Appendix 8) that also reflected N29's assertion (see p.103) that few videos receive a high concentration of views.

newsroom who questioned why this made her so angry and, eventually, the managing editor of print said, 'We need to do something about this.'

Within a few minutes, S14 was in the video studio with a photographer who shot her off-the-cuff editorial on an iPhone. Within a couple of hours, the video was up on the website. S14 said although she was not "used to editorialising" and was "taught not to do so" (personal communication, 19 April 2017) she thought it was a creative approach on to how to handle this issue and that video was the best medium. She also said that although, at first, she was "terrified" at the idea of doing the editorial she was ultimately "proud" and the majority of comments (on Twitter) were positive and supportive. In a separate conversation, the managing editor of print said a few years before he would not have approved this video as, on the whole, it would have compromised the reporter's position as a journalist in the community—another example of changing boundaries within journalism. S14 said she had also been encouraged by the chief editor to do more video¹⁶⁹ as he would like her to be "more of a 'brand" or "recognisable face."

6.17 Perception versus Evidence

There was evidence of shifting boundaries at *The Spectator*; however, the extent of the shift differed widely according to habitus. Although newsworkers did not want to perceive themselves as divided along the lines of digital and print, there was significant evidence that they were, particularly surrounding issues of editorial focus and the use of metrics and analytics. Hanusch (2017) identified that "organizational context plays an important role in the way in which analytics are accessed, used, interpreted and applied," and that a "consumer-oriented" newsroom was "more likely to be driven by data" (p.1580), at least on the digital side, that was true at *The Spectator*. Those working primarily in print had little use for data because, as Usher (2013) found, "the relevant social group that would be likely to create a traffic-focused meaning for metrics is the managers" and if that is not done in a "considered way" journalists have no "relevant context to understand the new metrics technology as measurement for quantifying and selecting news" (p.19). Reporters, compared to digital

¹⁶⁹ This was in stark contrast to when S14 first started at *The Spectator*, when the union stepped in to prevent her from shooting video as it was the job of photographers.

editors working directly under a different supervisor, were hearing a different message regarding the value of the way metrics and analytics were being used and, as a result, their usefulness. This, combined with a fixation on traffic metrics versus analytics on the digital side, resulted in little investigation of diagnostically based strategies, using metrics and analytics, to develop content. Referring to Carlson's (2015c) boundary matrix, at *The Spectator* different groups of newsworkers were at different stages of acceptance with prescribed digital practice. While one group had expanded norms surrounding targeting the audience and the type of news promoted, others did not accept it as professional. And even within the group that had outwardly accepted new norms, there was still internal struggle based on accepted journalistic ideals that everyone seemed to support, and that the newsroom wanted to be recognised for.

One effort to protect the idea that journalistic norms took precedence at *The Spectator* was the narrative surrounding targets. This was evident during the writing of this thesis, when I published a blog post on why academics and analytics experts should stop downplaying the value of pageviews in newsrooms when there is ample evidence they still play an important role (Blanchett Neheli 2017; 2018b). In a conversation with one of my *Spectator* participants, I was told some in *The Spectator* newsroom took issue with the piece because those working on the digital team did not have targets. The narrative was that the "website" had targets. When I explained I had multiple direct quotes from participants talking about targets in relation to practice and as measures of their performance, I was told the issue was that they were not a "formal" measure of performance. I emailed one of the participants I had a direct quote from to confirm there were still pageview targets; there were. This participant also shared that since the time of my observations, due to "an evolving view at the corporate level," they had become less focused on pageviews and engagement was "emerging as equally, or perhaps more, important," with the development of a paywall strategy¹⁷⁰ that was more "subscriber based¹⁷¹".

The new strategy seemed to be in progression during the time of the writing of this thesis. When I initially went to the website, upon hearing of the change, to see if it had

¹⁷⁰ This change in strategy could be reflective of one supported by 62% of digital leaders surveyed by Newman (2018) who felt advertising was becoming "less important" (p.22) because new platforms were making display ads "irrelevant," and "big tech platforms" garnered the majority of digital advertising revenue. ¹⁷¹ This supports Hanusch's (2017) assertion that "organizations with a paywall are more likely to be interested in generating paying customers for their product than purely clicks" (p.1580).

impacted the type of content posted, the top stories included one centred in Saudi Arabia, a crime story from The Washington Post that had nothing to do with the local community, and a celebrity sex assault story; however, in subsequent months the focus seemed much more local.¹⁷² Overall, analysis of website curation practice at *The Spectator* suggests, regardless of whether traffic based metrics are the best measure of success and/or whether they have a positive or negative impact on editorial functions, when there is a clear purpose defined for garnering clicks¹⁷³, in this case revenue generation in the form of the cycling of ad impressions under the pretext of audience building, newsworkers whose jobs are directly related to such practice are more likely to buy into the strategy. When they do, overall goals outweigh individual ideals of journalistic standards; however, such acceptance can differ from desk-to-desk in the same newsroom because it is directly tied to an individual's habitus and the influence of their immediate supervisor.

6.18 Reflections on The Spectator

Data gathering at *The Spectator* reminded me that I had to be careful of how I worded my questions so as not to interfere with or impact editorial decisions. Partly because I was so surprised from an editorial perspective about the lack of interest in the story of the killed soldier, I asked many questions about the treatment of the story. When the editor ended up changing its placement, I wondered if I had influenced that decision with such questions. In order to abate the possibility of further influence, however, I did not ask if that was the case. I did, though, carry this incident internally as another example of the need to approach participant observation as a researcher, not a newsworker, while still appreciating the benefit my experience allowed in putting newsroom observations into my own temporal context. I use the term temporal context because although a good story and placement of a story is theoretically judged within the same basic parameters as it was when I was working in a newsroom, drastic changes in the news environment have changed practical manipulation of such stories.

¹⁷² See Appendix 17 for a screengrab of sample homepages. It is important, however, to acknowledge that a rigorous content survey would be required to fully measure such impact.¹⁷³ This was also seen at NRK in terms of proof they were reaching the audience.

Chapter 7 Making Metrics Count: Analytics Practice at *The Bournemouth Daily Echo*

"I wish I had more time to really look at them [metrics] and be able to analyse what we should be doing more and how we can use stats from a really good story to make other stories better. But because of the day to day nitty-gritty stuff we have to get done, it's just impossible really" (E2 personal communication, September 26, 2017).

7.1 An Outline of The Echo: The Heart of Bournemouth

The Bournemouth Daily Echo is located in the heart of a seaside town in England, just a short walk from the beach, through Bournemouth's well-manicured public gardens and the hustle and bustle of the town square, sitting surrounded by restaurants and shops on the steep Richmond Hill. Its headquarters was completed in 1934 and is a "notable example of Art Deco offices" (Historic England no date¹⁷⁴)—with rounded corners, centre tower with a strip of chevroned-windows, and The Echo flag flying atop. Inside, its tiled, open-well staircase, with tubular lights strung from the ceiling, seemed more functional artwork than a means to get from one place to another¹⁷⁵. The importance of *The Echo* in terms of its place in Bournemouth, both physically and historically, is essential to understanding the functioning of the paper itself. Working on the doorstep of those they serve, *The Echo's* staff spoke frequently of their duty to the community. The paper's long-standing, physical presence in the centre of town, in an age when many media outlets have moved to cheaper real estate as a cost efficiency, was a constant reminder of its high-profile position and responsibility to the citizens of Bournemouth, but also of the diminished capabilities of struggling local news outlets. The large clock on the exterior of *The Echo* did not work at the time of my participant observation, symbolically stuck in better times.

In 1960, due to the demands of increased production, *The Echo's* headquarters had to expand to include what was the New Royal Theatre next door (Slade 2014; Bournemouth.com). However, at the time of my visit, modern technology and staff cuts meant less room was required and, as at *The Spectator*, use of the building was diversified: a trade magazine rented space adjacent to the newsroom on the second floor and other parts of

¹⁷⁴ See Images 27 and 28 in picture gallery.

¹⁷⁵ See Image 31 in picture gallery.

the building that were not being used by *The Echo* were rented out as flexible office space (E1 personal communication, 12 January 2018). And there were more changes afoot. The building, still underutilised, had been acquired by a new company with plans for refurbishment and mixed-use development (Grassby 2017). At the time this chapter was written, planning applications were yet to be approved; however, *The Echo* offices were expected to remain at the current location.

At the time of my visit to *The Echo*, there were also changes within the newsroom. A plan was being implemented to eliminate production staff and have reporters take over production duties using tools such as page templates. E9, the Newsquest manager supervising *The Echo*, said an ideal mix of staff would be 75% reporters and 25% "news desk management," which would keep "the business sustainable" (personal communication, 27 September 2017). Many in *The Echo* newsroom voiced concern over this plan, as had local managing editors from multiple papers who were worried about the impact losing production people would have on editorial content. However, E9 believed following this course would carry Newsquest through until "that bridge is built properly between digital and print," and the use of analytics was an important tool for that bridge building.

7.2 The Analytics Pilot

The culture at the *Bournemouth Daily Echo* in 2017 differed dramatically from that observed by MacGregor in 2011 at another local Newsquest outlet, *The Northern Echo*. He found analytics playing little part in editorial decisions, content being held back from the web in order to "preserve print sales" (p.28), and a "rivalry" (p.30) between print and digital platforms. Conversely, in January of 2017, every reporter at *The Daily Echo* delivered to both platforms and it was the site of a pilot programme for Newsquest using analytics to improve story development for both the print and online versions of the paper.¹⁷⁶ The initiative, called the "data driven newsroom," was aimed at getting reporters to use metrics to adapt their coverage to "what readers want to read" (E9 personal communication, 27 September 2017). The first part of the pilot included taking all the audience data from October, November, and

¹⁷⁶ Contrary to Duffy et al.'s (2017) study where analytics were not being used in terms of future story selection.

December of 2016 and analysing it to determine what stories were and were not performing well online. The second part of the pilot involved sitting down with each of the reporters for an hour to an hour and a half to give them a breakdown that showed their work in order from "the best performing stories to the least" (personal communication, 4 April 2017).¹⁷⁷

After the initial reporter meetings, analysis of each reporter's stories was to be done once a month, but every morning analytics from the previous day's stories were to be emailed to reporters and used to develop story ideas that would be discussed in pitch meetings. E9 said the idea was to use data "intelligently" to build traffic and audience, prevent reporters from wasting time writing stories that had low readership, and determine why some stories were not successful:

"We need those kind of meetings with the reporters where we can actually guide them and say these are the stories that are doing well that you need to write more of, these are the stories that underperformed. But did they underperform because it was a poor headline on it or that you didn't put it on Facebook or that people aren't interested in it?" (personal communication, 27 September 2017).

Back in April of 2017, a few months into the pilot project, E1 felt the examination of online content was improving overall content, including print. Going back to stories they knew were performing well and from those stories planning "better stories" and finding "better issues," instead of reworking press releases, was separating the information they offered from what might be available, for example, on the local Council website. E1 believed analytics were helping reporters do journalism instead of "churnalism."

However, in my second set of interactions in August of 2017, participants were unsure *The Echo* would still be a good site of study as the loss of three reporters meant they no longer had the time to use analytics in the same involved manner, which I stressed in itself would be of interest. And, later, I discovered another point of interest: the gulf between upper management's perception, or narrative, of what was happening in the newsroom versus the reality of practice. The developmental director stressed because he had come up in a newsroom and used to be the news editor at *The Echo*, it was less of a challenge to "change hearts and minds" (E9 personal communication, 27 September 2017). He said, "I think that the difference for me is that they see me as one of them because I've done it myself." He also

¹⁷⁷ When I was visiting *The Echo*, I was given a copy of one such report which showed the articles ranked by pageviews, with two other columns showing Facebook and Twitter referral data, see item O, Appendix 8.

believed because he did not work "in an ivory tower" and spent time across multiple newsrooms he was able to determine what was possible. However, other participants at *The Echo* stressed that because of budget cuts and editorial staff having to take on more production duties there simply was not the time for analytics meetings and in-depth analysis as expected by E9, with one saying some in Newsquest management were "completely detached from reality about what's possible in a newsroom that's getting smaller and smaller with growing production¹⁷⁸" (personal communication, 25 September 2017).

Despite evidence critical analysis of audience data led to better storytelling, those on the newsroom floor could not wedge such analysis into a day crowded with other tasks. Referencing the use of analytics, E3 (personal communication, September 25 September 2017) said, "When you're in a busy newsroom those slightly more strategic approaches to anything are the first casualty of business." Champagne (2005) noted that "the major contradiction within the operation of the journalistic field lies in the fact that journalistic practices that best conform to journalists' ethical codes are very often simply not profitable" (p.51)—and my participant observation and interviews at *The Echo* showed a possible divergence between doing what was perceived as best for the business of journalism and doing the best journalism.

7.3 Another Diminishing Newsroom

The Echo's newsroom¹⁷⁹ was smaller than *The Spectator's*, but harboured the same sense of diminishment, with empty desks scattered here and there and one whole section which appeared not to be in use. Although the managing editor also had an office, he and up to three members of his production team/editors usually sat at the central news desk in a raised work station in the middle of the room. The managing editor's office was in another raised but windowed area at the front of the newsroom and doubled as a meeting space. My access to the daily workings of *The Echo* was unencumbered. I was given a desk in the centre of the newsroom near the digital team and news desk, surrounded by a handful of reporters, where I could easily hear discussions related to the development of stories and production, and

¹⁷⁸ This was evidence that, as noted by Christin (2017), "managerial discourses and workers' practices do not always match" (p.3), something she described as "decoupling" (p.9). ¹⁷⁹ See Image 32 in picture gallery.

general newsroom chatter. On my first visit, after a brief introduction to some of the staff, I attended my first editorial meeting.

The meeting was with a reporter and the managing editor. The two had a brief chat going over stories the reporter was supposed to cover over the next few days, everything from a dispute over parking between two local councillors, bed bugs in local council units, and, the priority that day, cyclists going at high speeds on bicycles with no brakes down Richmond Hill towards the town square. The next meeting was with the business editor. At the outset, the managing editor said they had "reshaped" their business coverage because analytics showed that no one was reading anything that was being written. During this meeting, the managing editor also said by the end of the year he expected 50-70% of his time would be spent on the production of a variety of publications being done out of *The Echo* office and that in order to help with the workload he would need the business section down to one page on Tuesdays to lighten Monday's workload.¹⁸⁰ This information had not been shared before this meeting and was typical of the type of transparency—in terms of allowing me to observe newsroom practice—that I experienced at *The Echo*.

The next meeting was with another reporter to discuss prior coverage of an important local issue¹⁸¹. The managing editor asked what the analytics were for a previously published story. The reporter had not had a chance to check yet, but had seen it in the top three of "the board." The board was a monitor in *The Echo* newsroom that showed a variety of metrics rotating between *The Echo's* top pageviews, social referrals, and a list of overall top Newsquest stories. The managing editor asked E4 to "dig out the figures" and praised the reporter's work. When the reporter left the room, he told me how integral the reporter was to the newsroom. Minutes later the reporter resigned. In a later interview, E4 blamed the resignation on the "relentless" pace of newswork:

"You know, it can just feel tough. For, example last week, when I had this big meeting to go to, it was an hour's drive to the meeting and then I was sort of live tweeting and wrote a story for the website, and then drove an hour back to the newsroom and I had five stories to write for the next day's paper to fill a double page spread, but then later in the afternoon, they said, 'Oh, actually, you're going to need to put those onto the page, and sort of write the headlines and pull in the pictures and captions.' It's

¹⁸⁰ However, a few months later, the business editor's role had been revised again to include more general reporting versus production work to make up for the loss of more reporters.

¹⁸¹ In order to protect the identity of the reporter I have purposely excluded the topic of the story.

definitely getting increasingly difficult with more redundancies being made in newsrooms. So, rather than fall out of love with journalism, I just wanted to take the opportunity to sort of leave at a good, positive time" (personal communication, 25 September 2017).

E4's experience exemplifies the exit mechanism of role negotiation as identified by Hanitzsch and Vos (2017), when "journalists may come to conclude that their journalistic aspirations are fundamentally incompatible with existing practice and, thus, decide to leave the field of journalism" (p.129). The relentless pace that led to E4's exit will be explored further in section 7.18.

7.4 Changing Practice

The use of analytics was changing practice in *The Echo* newsroom. At one point in my observations, a reporter leaned across the desk to ask one of the digital editors about the analytics on one of his stories, assuring me that he was not asking for my benefit but because he really needed the information. The topic of the story, a regularly scheduled event, had previously only received about 500 pageviews. He was trying to figure out if it was worth going out on a Thursday night to do it again, or if it could be covered by a freelance photographer. I asked him what would make it "worth it." He replied that the general rule of thumb at *The Echo* was that if a story received less than 2,500 hits reporters were supposed to think about whether it was worth doing or if it could be done in a different way to get more pageviews; he said 500 hits is "looking a little weak." In a later interview, though, he said, "There is a danger if you just look at it on the statistics that you'll miss out on doing some things that are important and add to the paper's credibility in a slightly more intangible way" and gave the following example:

"I've had a couple of people who were organising events and have told me, 'Oh yeah, when that appeared we got a noticeable spike in interest.' So, it may be that we've got a smallish readership but it is quite engaged and I think there must be a commercial opportunity there if you know that you've got, even if it's only 500 readers, it's 500 readers who are interested in one particular subject¹⁸²" (E3 personal communication, 25 September 2017)

¹⁸² This echoes what was said at NRK regarding the fact that lower traffic metrics could still be interpreted as successful if it was "the right" audience viewing a story or what one editor in a study by Jenkins and Kleis Nielsen (2018) called the "right kind of numbers."

7.4.1 No Time for "Swanning Around"

On the first morning of my observations, I went for a coffee with the managing editor at a local shop just down the street from *The Echo*. He had been the managing editor of the paper for three years, but the news editor for 20. Although the jobs used to be two different fulltime positions, due to cutbacks he did them both. He recognised the need for change, in order to save money, and said gone are the days when the editor is "swanning around" the community (personal communication, 25 September 2017). He said he only left the newsroom if it was "commercially helpful" to do so. Otherwise, he was "rolling up his sleeves" to manage content and production, something I witnessed through participant observation. He sat perched at his desk in the middle of the newsroom reading copy, making editorial decisions, and supplying consistent comic relief; for example, he offered a running diatribe of possible headlines for an escaped gerbil while editing one story, in between answering the newsroom phone, and shouting instructions to a green reporter. His hand seemed to be in every story and he showed ample evidence of being protective of his people; on one occasion when a reporter had been given the run around at the Coroner's office, after expressing his frustration, the managing editor said he would call and follow up with office officials. He also did not shy away from offering criticism, especially in terms of journalistic standards, piping in with direction on decisions that might or might not meet the bar he was fighting to uphold in a newsroom struggling with fewer resources, for example, identifying why a freebie offered to a reporter could be construed as unethical. However, he was not autocratic. In one meeting with a reporter regarding increased production pressures he said, "Any ideas about how we do stuff and who does it are open for discussion."

During my visit, outside of the coffee we shared, he worked non-stop. At the coffee shop, though, he was clearly well known, taking the time to speak with the restaurant owner and then joking with the owner's young son. When we sat down at a table, another patron called over to ask if the editor had a chance to look at some information the patron had shared saying, "You really need to do a paragraph on it." There may be no "swanning around," but the managing editor of *The Echo* appeared to be a well-known, approachable member of the community.

7.4.2 A Template for Journalism

Over coffee, he gave me a brief rundown on operations. In *The Echo* newsroom, they have been using a tool called "write to shape" for the past "two to three years." It is designed to speed up production because it largely eliminates much of the layout process. This is because reporters write into a formatted template. Using air quotes, the managing editor said "it allows" you to approve a story within 10 or 15 minutes and two people now do the job that 15 or 20 people did five years ago. Four years ago, all sub editors (copy editors) were taken out of the newsroom to create a centralised editing team, similar to what was done at *The Spectator* for Metroland. However, Newsquest closed down that centralised unit in June of 2016 but did not bring back any sub editors to *The Echo*, all the while increasing production duties and the volume of production. In January of 2018, *The Echo* staff, 21 full-time and two part-time employees, produced *The Bournemouth Daily Echo*, including all content creation, production/lay-out, and copy-editing, which it also did for four other weekly papers, along with content creation for a monthly, glossy-magazine. Although the managing editor described *The Echo* as a pioneer of data in the newsroom, he felt the demand for faster, more efficient production was impacting the capacity to be innovative.

7.5 Cutting the Ability to Innovate

As outlined earlier, as part of the analytics pilot project, in January of 2017, the managing editor was asked to implement daily chats with reporters to look at their analytics. However, significant budget cuts meant deeper analytics analysis was largely "out the window." Although they still discussed analytics on a general level, he said they no longer had "the luxury of sitting down every morning" because he was too busy with production and was "constantly pressing" reporters for more stories. As a sign of how things had changed, one reporter, who had started in the newsroom after the more in-depth use of analytics had stopped, was unaware of target benchmarks for stories and had never received a daily email with story stats; although, the reporter did access the analytics dashboard to keep an eye on "generalised trends" and/or observed metrics on the newsroom board (personal communication, 25 September 2017). However, E2 believed the initial focus on analytics

"worked" to improve content both online and in print and all staff interviewed and observed at *The Echo* seemed comfortable with the idea of using analytics to grow and serve the audience.

Although they were no longer keeping as close an eye on the numbers, E2 said the homepage stories on the website were much better as a result of the analytics initiative and general trends that were established "changed massively what we do in the paper" (personal communication, 25 September 2017). As an example, she said they did more in-depth coverage on planning applications because analytics showed the audience was interested; although, conversely, stories on Council may be shorter. They were also writing fewer and less involved stories on education because they received limited views online (E8 personal communication, 27 September 2017). E6 (personal communication, 26 September 2017) said although analytics were introduced as a way to avoid wasting time on stories which were not "doing well," he felt they were also useful for more "nuanced" changes:

"We found out that having a picture of the Dorset Police and Crime Commissioner on a story or his name in the title gets almost no views and yet a story about something he said or an initiative without him mentioned goes right the way up the list."

E2 believed if they had a few more reporters, the use of analytics would improve. However, in my four days of participant observation at *The Echo*, two more people were headed out the door. The reporter, mentioned above, who resigned and a production person who was being cut. One participant described himself as "massively disillusioned" (personal communication, 25 September 2017). He readily accepted the business needed to evolve due to loss of revenue but said at some point how cuts to the newsroom were impacting quality journalism had to be considered in order to "keep standards." Otherwise, "it's a downward spiral" and they would no longer be able to hold decision makers in the community to account. E1 said although they tried their best to cover the courts and Council they increasingly relied on press releases—an issue defined as a "particular concern" in terms of local news in the UK "as newspapers scale back coverage of local democratic institutions¹⁸³" (Newman et al., 2017, p.54).

¹⁸³ Concerns over lack of such coverage, as outlined in the literature review, were also addressed by Fuller (2017) in reference to the Grenfell tragedy (see p.35).

7.6 Observations from the Floor

As at *The Spectator*, individual *Echo* employees held multiple roles; for example, the business and technology editor was also responsible for nostalgia stories, the local history section, did general reporting, and, as required, helped run the news desk. Because of the close proximity of staff and the contained space in which they worked, the environment for participant observation was ideal. The pace and volume of work expected from reporters was astonishing. At several times during the day the managing editor would shout out, generally, to anyone who was not doing anything, or, by name, to a variety of individuals that he needed things such as "front-end support"—although everyone always seemed to be working fullout. The white-noise of keyboard clicks was constant, interspersed with the occasional dry joke or sarcastic comment, and, as would be expected in England, the offer of a tea whenever the kettle was put on.

Those helping edit content could look at "well over a hundred stories a day" (E5 personal communication, 25 September 2017). Reporters were supposed to put in all of the information necessary for both the print and online versions of their story, including the thumbnail, headline, creating a link, and creating copies for multiple publications; however, sometimes they did not, either because they did not think the story would be put online or they forgot certain elements because there was so much to remember. Editors and/or digital content managers then had to pick up the slack. Reporters themselves seemed to be in a continual whirlwind of activity. As E2 said, "I don't think anyone has the time they used to to put into a story. People are under a lot more pressure to get the story done and move on to the next one" (personal communication, 26 September 2017). In 2011, MacGregor observed a "drastic decline of staff resources" (p.20) had led to "a general air of crisis" amongst editorial staff at *The Northern Echo*. Although a drastic decline in resources was evident, I did not sense that feeling of crisis at *The Daily Echo*. Years more of cuts seemed to have led to a certain level of resignation regarding perpetual shortages of time and people.

7.7 The Morning Meeting

What would be covered, and where it might be placed in the paper, was the focus of the morning editorial meeting, or "conference," at The Echo. Although there were serious discussions, there was also much laughter and joking amongst those at the table, who included a variety of reporters, editors, and production people. At each of the meetings, the managing editor handed out a list of possible stories to be developed¹⁸⁴ and, after giving a description of each of them, sometimes with input from others at the table, went around the desk asking everyone what they felt should be the top story, including me. During the course of these meetings there were multiple discussions regarding how various stories had performed online, but no comments regarding covering a story because of how it would be received online. At the first meeting I attended, it was announced that E4 had resigned. The managing editor described the reporter's resignation as a "massive blow" to the newsroom but said the reporter would be replaced. However, just days later he told me he would not be able to replace the reporter as he had just found out he had to make even more budget cuts.

7.8 Full-on Digital

There had also been cuts in the digital area, where two digital editors, called audience managers, had the same amount of work but were doing it part-time instead of full-time so that they could perform additional duties. One of them described her job as "full-on." Along with working with all digital content and social media, she simultaneously acted as an assignment editor, looking for stories in emails and press releases and assigning them to reporters or passing them to the managing editor, while regularly answering the newsroom phone. When she first arrived in the morning, she checked for breaking news in emails and on Twitter and Facebook. Emergency services in the region, generally, only used social media to send out statements¹⁸⁵, something that multiple reporters addressed as an issue in terms of getting necessary information for their stories. The editor only had one monitor on her desk compared to most other newsrooms I have visited where the digital editor had at

¹⁸⁴ See Appendix 8, Item R.¹⁸⁵ As was also noted by NRK's N24 in Norway.

least two. Site stats were accessed through a dashboard on the computer and could be grouped in a variety of ways, including individual stories categorised by reporter, as discussed previously, as well as daily or weekly views¹⁸⁶.

The Echo's data were from Omniture, primarily focusing on traffic, with information on time spent and social referrals, but none on where people might be dropping out of a story (E9 personal communication, 27 September 2017). The digital editor used pageviews to judge how "well" a story was doing. If it was doing well, she would do further promotion on Facebook and that might push a story into the top 10 across the Newsquest chain. One morning, responding to the fact one of their stories was at the top of Newsquest stats¹⁸⁷ for most views she said, "It's always nice when you get in and something's already flying." Facebook was also used as a tool to see how they were doing in comparison to other media outlets in the area in terms of reach and engagement (comments, shares, etc.) and was seen as a tool to give "instant reaction" on how some stories might fare with the audience, something also observed at NRK.

7.9 Posting Protocol

Discussing posting a story about the investigation of a local politician, the digital editor I was observing said although people "liked" when they did those types of stories, which they knew because of comments on Twitter and letters to the newsroom, they did not get a lot of clicks on the website, and content of that genre would "bomb" on Facebook. The posting of this story on the website was illustrative of how perceived social and political capital, maintaining the paper's reputation, combined with perceived editorial relevance, could outweigh low traffic metrics. The fact these types of stories were still given high priority on both the website and paper was reinforced by the managing editor when referring to a different story done about the business interests of a local Council leader: "It's the right thing to do because we

¹⁸⁶ As listed in Appendix 8, items L through P.

¹⁸⁷ As at NRK's local offices, the digital desk's primary metric of interest was often how *The Echo* was doing in relation to other Newsquest sites. And as with those working in smaller local offices at NRK, digital editors felt it was "unfair" that they were pitched against "big hitters" like Glasgow and Edinburgh which had "a constant stream of breaking news because of where they are" and a much larger population base for local content.

have to hold these people to account. And irrespective of whether it performed as well on the website, we've got to give it a good show¹⁸⁸." Editors at *The Echo* were working to fulfill their role to support democracy in the public sphere by, as Heinderyckx (2015) described, "maintaining a portion of gatekeeping driven by public interest (what people *should* know) alongside simplistic market logics (what people *want* to hear)" (p.256). However, general practice at *The Echo* showed that "second tier" (Le Cam and Domingo 2015) or less important stories could still receive higher prominence based on "audience popularity" (p.135).

One of the digital editors used a clipboard with a paper template, which she described as her "docket¹⁸⁹," to assign placement to the stories currently in production that would go on the website the next day. She said *The Echo* homepage was "bigger" (able to hold more stories) than that of other Newsquest publications because of the team's proven ability to create content. Stories were all, generally, uploaded at 5am because they experimented with uploading them at different times and found it "didn't make much difference in traffic." Although in another example of different narratives surrounding practice, the editorial development director said stories were regularly scheduled to go up at various times of the day.¹⁹⁰

At the time of my observation, the biggest difference between digital practices at *The Spectator* and those at *The Echo* was that there was far less attention paid to changing the homepage and other landing pages once content was posted at *The Echo*. As editors at NRK expressed in relation to the impact on metrics from constant updating of the homepage, an *Echo* editor said changing the homepage was "mainly for our benefit." So, instead of as little as 20 minutes, the digital editors would give a story till about mid-morning, at least several hours, before considering replacing it on the website. Even if a story were doing really "well," they likely would not move it up the page till mid-day. The digital editor also did not like shifting a story's placement around too much if it was scheduled for a Facebook post that had not yet appeared on Facebook. The only exception was breaking news, which was always

¹⁸⁸ This supports Singer's (2015a) finding "that editors' self-perception as gatekeepers of traditional political information has remained exceptionally resilient in the face of ongoing change" (p.100).

¹⁸⁹ See Appendix 18.

¹⁹⁰ Months after my visit, though, I was told practice at *The Echo* had changed to more match that of E9's description because a new initiative called ACE was being instituted, which will be further discussed in section 7.12.

moved to the top. After the digital team left, the web page basically stayed the same, again with the exception of breaking news, at which point an afternoon reporter was assigned to cover or in the case of a huge story the digital team could work from home. As at *The Spectator*, enhancement to an individual story, for example changing the picture or headline, was seen to "make all the difference" in how many views it received. However, the digital editor found readers thought a mistake had been made if the headline were changed too many times.

7.10 The Long Tail

As discussed in the literature review, and as identified by Gabielkov et al. (2016) in an extensive study on Twitter, social media posts have a long tail and hits on "secondary resources," or shares, can generate more clicks on an item than the original post. As a result, the timespan of generated clicks on shares is hard to predict. One digital editor gave an example of this with a "nostalgia" story, a feature that runs in print and online highlighting *Echo* coverage on a story from the past with photos from its archive. A nostalgia piece done in the summer of 2016 showcasing photos taken on club nights in the 90s received two million pageviews that August and reappeared again as the third most viewed story in August of 2017. The editor felt this was because it popped up as a memory in people's Facebook feeds and was shared again within the social media circles of *Echo* readers. She said this was one of multiple instances where this had happened.

Generally, though, entertainment and leisure stories did not get a lot of hits on the site. Although the digital editor felt, in general, the location of placement on the homepage was not a significant factor in views, after a discussion about why entertainment stories did not get a lot of hits, she wondered aloud if a contributing factor could be that they were usually placed at the bottom of the homepage. As at NRK, video also did not draw a lot of views on *The Echo* site, but the digital editor was not sure if that was because they were posting less of it due to the loss of photographers, the popularity of the format itself, or the fact readers had to sit through a 30-second advertisement before watching the video they were interested in seeing. As with every other site of study, though, there was wide acknowledgment that a good picture was essential in terms of reach and pageviews on social media and the website.

7.11 Target Pressure

The narrative regarding traffic targets at *The Echo* was quite different depending on whom you talked to. In *The Echo* newsroom, there was consistent discussion surrounding efforts to meet an assigned target for yearly growth of unique users and that, as at *The Spectator*, the foundation of the target was to draw ad revenue based on traffic. One digital editor said, "You go through stages where you're absolutely obsessed with the numbers" because you "have to make targets" and the "pressure is on to beat last year" (personal communication, 25 September 2017). When questioned about targets, Newsquest's digital development editor, E9, said they did not exist; although, he said each newspaper's editor in his group had been tasked with "growing their websites¹⁹¹." He also confirmed that at *The Echo* there was a "benchmark" for reporters to reach "2,500 reads per story." Back on the newsroom floor, however, "targets" were adding another layer of pressure to the job, as they had at The Spectator. During my visit, at the end of September 2017, they were still short of the target goal for unique users that month. One digital editor said they were not meeting targets "mainly because we have half the staff¹⁹²." For example, as they were down to one photographer¹⁹³, they were only getting half the image views they did previously. Reporters were trying to get good pictures, but as this editor described, "Their minds are on the story, not the image." One digital editor said the end of the month, when they were running out of time to make their targets, was often the most stressful and having to meet targets, in general, was "very difficult" because in order to do so they were reliant on breaking news, something they could not create. As a result, although she would not post "clickbait" she was more likely to promote something "less newsworthy" if she felt it would get more clicks and help boost the numbers.

¹⁹¹ As at *The Spectator*, the manipulation of narrative around targets seemed to be out of reluctance to admit the importance of targets as it contravened journalistic doxa.

¹⁹² Multiple participants noted growth in unique views on the website was in decline in 2017 but *The Echo* was faring far better than some Newsquest outlets that, according to an internal analytics report (see Appendix 8, item Q), had seen significant negative change—one of the larger publications experienced a more than 40% drop in unique visitors, comparing the first three weeks of September 2016 to the first three of September 2017; although, as outlined in the methodology, the editorial development director had said the digital audience was growing steadily, overall.

¹⁹³ The loss of photographers was another source of conflict between the newsroom and head office. Newsquest management suggested getting rid of all of them¹⁹³. The managing editor kept one because as he said, "In an image-based environment you need someone with that expertise to manage the content."

Schudson (2005) identified journalism's dependence "on the drama of events that neither state nor market nor journalists can fully or even approximately anticipate or control" (p.219) as one of the things that keeps it autonomous. However, with traffic targets, in the face of a slow news cycle there is still pressure to post new content, regardless of its relevance, which in itself erodes a journalist's autonomy. As E5 described, dwindling resources could eventually push the bar from feeling pressure to post stories that were less "newsworthy" to feeling pressure to post clickbait:

"We've had a really good sort of four or five years of really high numbers and they have been increasing every year while the resources have been going down. So, meeting those targets is tougher now. Who's to say over the next couple of years we might fall into that [clickbait] trap a little bit because we need to" (personal communication, 25 September 2017).

7.12 The Local Imperative

A significant difference between practice at *The Spectator* and *Echo* was the imagining of the target audience. Both *The Echo* website and paper were hyperlocal, whereas *The Spectator's* website looked for viral stories from anywhere to boost traffic. That would not work with *The Echo's* loyal readers. As the managing editor described, "We built the web audience on stuff that goes on in our patch and about local people, local issues, local breaking news." *The Echo* would touch on a national story if there was local interest.¹⁹⁴ However, E2 said the audience became "quite fed up" (personal communication, 25 September 27) if they covered too much national or international news. Even when a celebrity died, they would put up a story, for example, from the Press Association with a disclaimer saying something like, "We know she didn't live locally but thought you would like to know" because the audience considered news that was not local "clickbait" and dealing with the response on Facebook could take hours. As opposed to *The Spectator* that counted on viral stories to build views, or NRK's local outlets that had to consider if a story was national enough to post, at *The Echo* they had to consider if it was worth it to post something national.

¹⁹⁴ For example, an Uber story centred on a trial in London that could have local impact.

7.13 Dayparting at The Echo

Dayparting was clearly evident at The Echo. At 7am when one of the digital editor/audience managers started, the first priority was to get any traffic or accident stories up as they were a big online driver for pageviews, similar to The Spectator. She said stronger news stories did better first thing in the morning and in the lunch hour when people had time to get an update. Although website stories, generally, were posted at the same time, social media posts directing readers to different types of stories were scheduled based on analysis of peak viewing periods garnered from analytics, in a bid to maximise the potential for referrals. Lighter fare, such as a story about a restaurant opening, was promoted during off-peak periods. Facebook and Twitter posts were scheduled every half hour between 11:30am and 2pm and 6:30am and 9am and, generally, there were one hour slots the rest of the day. Lighter stories were where *The Echo* saw the best Facebook engagement in the evening and features did better on the weekend. As a result, regardless of when they might run in the paper or be posted on the website, feature stories were often posted/promoted on Facebook on Saturday or Sunday. Tweets were also sent out at specific times in the morning, afternoon, and evening but usually brought in more referrals in relation to more serious topics, such as crime stories¹⁹⁵. Managing Twitter and Facebook posts took up a significant part of the digital editor's morning, and time spent on this had increased because their automatic Twitter feed was dropped, something one audience manager felt impacted Twitter traffic which had decreased in the last 18 months.

As footnoted earlier, in January of 2018 *The Echo* rolled out another initiative, called ACE, an acronym for audience and content editors, focused on growing the digital audience. The idea was to move away from having to rely on breaking news by increasing dayparting on the website—planning when to post stories around traffic spikes determined by existing analytics—and changing up the website at designated times, more often throughout the day (E1 personal communication, 18 January 2018). As an added, and likely unpredicted, benefit, this plan coincided with changes to Facebook's algorithm that put less priority on sharing news content, something that could have seriously impacted the effectiveness of relying on

¹⁹⁵ This difference in social media platform referral success based on subject matter was seen at all sites of study.

dayparting via social media to boost traffic, and also coincided with Newman's (2018) prediction that publishers would pull back from platforms and focus on "building more direct readership" (p.15). With regards to the algorithm change, Lichterman (2018b) pointed out that "Facebook's move provides an opportunity for publishers to step back from blindly pursuing scale and massive audiences and instead develop genuine connections with their communities both on and off Facebook," something *The Echo* had already proven to be adept at. Despite the added pressure of dealing with readers, and others on social media, on a regular basis, digital editors felt best practice was to keep dialogue going.

7.14 Cultivating Community

A big part of the digital team's job at *The Echo* was what one editor described as "cultivating" the Facebook audience," or, as I observed, cultivating the online audience in general. She said the increased chance of complaints was outweighed by opportunities to develop relationships and find original stories, reflecting an ideal of participatory collaboration between the audience and journalists¹⁹⁶, a type of collaboration also identified in a study by Wolfgang (2018). The digital team tried to respond/interact with every comment on Facebook ¹⁹⁷. Hansen and Goligoski (2018) noted the importance of "regular, direct communication" (p.60) with readers via social media in order to deepen interactions and demonstrate openness. Successful efforts to build community via Facebook are not unique to The Echo, The Dallas Morning Times created a Facebook Group to build loyalty with its readers (Lichterman 2018b) and Vox is also using Facebook to build community (Lichterman 2018c), as is *The London Times* (Southern 2017). This was getting harder to do at The *Echo*, however, because of staff shortages. One digital editor said so much attention was paid to Facebook because of its influence in driving traffic to the website and because of that whenever they change the algorithm "we all cry." They could tell the algorithm was altered when they saw a change in the reach of their stories and they relied on Newsquest's central digital team to give them advice on how to deal with changes. This central team also provided

¹⁹⁶ Lewis et al. (2014) define this type of practice as "sustained indirect reciprocity" where journalists and the audience build community with an underlying expectation such efforts will be undertaken with "goodwill and understanding."

¹⁹⁷ The use of Facebook was markedly different than that noted by MacGregor (2014) in research on another Newsquest outlet in the first decade of the 2000s, where it was not a significant part of daily routines.

tips on what stories were trending/might do well and shared them with the local outlets, usually by email. For example, during my observation *The Echo* was advised that stories on upcoming Christmas markets were trending and as such a Christmas story was assigned to a reporter.

Although they have grown the Facebook audience by engaging with it, Facebook was described as a "poison chalice." One digital editor said they found great stories in their newsfeed and interactions therein, but when readers were "unhappy they let you know en masse." She said a lot of website editors would not necessarily care about negative reaction as long as it was boosting traffic; however, she and her digital counterpart believed there was "bad traffic and good traffic." This is because if the idea was to cultivate community and build an audience, alienating readers and potential readers was not the way to do so:

"If people are reading a story because they find it interesting, that's what we want. If they're reading a story and are criticising us for the way we've handled that story, we don't necessarily think that's particularly good traffic. Because they may not return on that basis" (personal communication, 26 September 2017).

Digital editors at *The Echo* tried to downplay the more provocative headlines used in the paper. This strategy was partly derived from an incident dating back to 2014 when a coroner determined a woman died from cannabis poisoning, which was in a headline posted on Facebook. The response was "unbelievable" and they were "bombarded with abuse from procannabis rights groups across the world" both in social media and via email. E2 said,

"That's when we really realised the impact that Facebook could have on people sharing stories and how quickly a story could get shared and become out of control. So, that kind of cemented quite firmly in our minds that we have to be careful how we present stories" (personal communication, 26 September 2017).

This careful presentation of stories was also practiced on the website. For example, the headline in the paper for the story on the cyclist not using brakes was, in all caps, "NO BRAKES, NO BRAINS¹⁹⁸," whereas one digital editor wrote the headline for the website as, "Zero tolerance: 'Shocked' Deliveroo launch investigation into cyclist using illegal bike without brakes through town centre." She described it as "less in your face" and designed it specifically to avoid a "Twitter storm." A later version of the headline read, "Focus on

¹⁹⁸ See Appendix 19 for *Echo* front page versus homepage of cyclist story.

irresponsible behaviour by all road users not just cyclists, urge campaigners after illegal bike used by Deliveroo rider." The editor said she could have just gone for the clicks but wanted to stick to the issues. There was evidence her strategy worked, in terms of building community and the paper's reputation, when a local cycling expert quoted in the cyclist story tweeted that he thought *The Echo* had done a "balanced piece." However, careful use of headlines was not just a short-term strategy. One editor said, "If you lose someone because of a sensationalist headline it's much more difficult to get them back." Whereas if the story has not been "overblown" readers "might have a little bit more tendency to revisit a page and look at another story in the future." As explained by the managing editor:

"We don't use clickbait. It may be a story that everybody wants to click on but actually, they're not going to come back to the website and they're not going to look at the website, and they're not going to be a real audience."

E2 felt national outlets could get away with being more "clickbaity" and "sensationalist" because they're not as closely tied to their communities¹⁹⁹. E3 (personal communication, 25 September 2017) also stressed that those working at *The Echo* wanted "legitimate hits" and avoided clickbait. E10 said, "It's very much driven from the journalism rather than sort of tracking or following numbers" (personal communication, 18 October, 2017). Based on all of my interviews, in terms of promoting stories on the website, there was a clear expectation that prioritising journalistic standards was part of the strategy to retain their loyal readers; *The Echo* was not lobbying for casual clicks. E9 (personal communication, 27 September 2017) said based on ComScores data, Newsquest in general had much higher audience loyalty compared to other news sites, and this was because of efforts to build a "strong, sustainable local audience"—sustainable meaning an audience large enough to support production of the paper and website.

7.15 The Malleable Borders Between Advertising and Editorial

The active relationship with the audience was also evident with regards to the presentation of advertising. At the time of my visit, *The Echo* was receiving a lot of complaints about ads on the website interfering with the audience experience, slowing down movement from one

¹⁹⁹ Something also referred to at *The Spectator* in reference to the *Washington Post's* coverage of a crime in Hamilton that was not hate motivated, as seen in Chapter 6 (see p.142).

page to another, and pop-ups asking for readers not to use ad blockers. The complaints were primarily on Facebook, and one digital editor felt pageviews were being affected because fewer readers were linking to the stories from Facebook posts, preferring to avoid the ads and instead get limited information from the posts themselves. There was an additional issue of sponsored content on the Facebook page that the audience abhorred. The digital team tried to counteract the sponsored content with something they were sure the Facebook crowd would approve of, otherwise reach was "really impacted." Other strategies to deal with this issue included asking the advertising department to post advertorials on the Facebook page during off-peak times and/or editing the Facebook posts created by advertising to adhere to a social media style, shorter text and better photos. In what I found to be an interesting crossover between advertorials and news, during one observation, one editor examined an NHS (National Health Service) supplement that would be running in the paper the next day. She decided as it had "actual information in it" she would promote it on Facebook, as she would a news story. She said promoting advertorials that were "worthy" was common practice, even though they were "entirely" done by an outside party. In this case, "worthy" was defined as providing knowledge that was of benefit to the community²⁰⁰.

There were other examples of blurred lines between the advertising department and the editorial team. During one morning meeting I attended, a reporter came in to say that the advertising "boss" wanted to have a "private chat" with the managing editor regarding a story being developed on a local businessperson. In communications after my visit, the managing editor said the story never ran due to editorial reasons, not pressure from advertising—there were discrepancies in basic details of the story and they could not get a comment from the primary subject. He said there was no more interference now than there had been in the past regarding coverage of, for example, stories regarding subjects who were big local advertisers²⁰¹. Where they did see more pressure from advertising was suggestions to cover events that were not necessarily newsworthy, or requests to take down older web stories, for example, posts created several years ago, which may have been critical of an advertiser. He said the response to this request was always "no" because any published story must remain

²⁰⁰ This could be an example of what Carlson (2015a), in a paper examining the use of "native" or embedded content, described as "new normative underpinnings justifying these practices to the point of redefining what constitutes the field of journalism" (p.862.)

²⁰¹ This was something I experienced in my role as a news producer at a local television station (Blanchett Neheli 2011).

"part of the public archive." On the whole, however, there was evidence the boundaries between advertising and editorial staff were becoming more malleable than traditional standards would sanction.

7.16 Quality Control

Production practices at *The Echo* also exhibited shifting journalistic standards, including what was acceptable for print and digital versions of content. The digital stories were posted by one of the two audience managers; however, participants said the digital versions did not receive the same level of editing as print stories did and audience managers did not have time to give stories a full edit. Theoretically, these stories were supposed to be saved with all of the elements required for posting to the web. However, digital editors felt the story headlines created by reporters were often more print-like, around five words, whereas a website headline needed to be longer and include SEO terms. E5 said the fact the digital content did not get the same level of editing meant there were often more issues such as typos; however, multiple employees brought up the fact the loss of "subs" (copy editors) meant there were also more errors in the paper. Some, though, were not sure it mattered. E6 said,

"Honestly, I don't think the mistakes really bother many readers. It bothers journalists, though, when it is in the paper. But it just seems to me that a lot of stories and websites which are extremely popular are full of terrible grammatical errors, spelling errors, people who just have no idea how to write an article and it doesn't seem to put anyone off anymore, if indeed it ever did" (personal communication, 26 September 2017).

However, others did see it as a concern, and said time constraints were not only impacting the quality of basic writing, but the paper's presentation in general:

"Essentially it's a company that believes it can put out a multitude of print titles without any production staff. The daily paper is not as good as it was 10 years ago when there was a team of very, very experienced and talented production people putting it together. We have a fair few inexperienced reporters out there whose copy is not as good as it will be in several years' time because they are still learning, but equally there's not a team of experienced production people to take them through the process and work with them and make them better and craft their words. The headlines are poorer because, again, time is not there and the experience isn't there. We've got no photographers now—well, we have one photographer. So, clearly, the picture quality is less because we're using more submitted content. If you're looking at the paper from a visual perspective, it's not as strong as it was" (E5 personal communication, 26 September 2017).

7.17 The Digital Divide

Editing practices were not the only difference in terms of digital and print content. Not all stories created for the paper went on the website, only those the editors felt would get a significant amount of views or, as identified earlier, those that were considered editorially important enough regardless of the number of views they would garner. Some examples given of stories that did not do well online at *The Echo* were brief story summations, what they described as "nibs," as well as things such as a 21st birthday concert for a community group, which one digital editor said "would get 40 views," or stories on things like improving road safety, which was somewhat ironic given the popularity of traffic and accident stories. E5 supported the concept of platform specific content, saying "stories that perform well online are not always the same stories that perform well in the paper." He said, the "print and digital audiences are very, very different." E9 believed the main difference in the print audience versus the digital audience was age; however, he said if a "story is going to be of interest to an online audience, it's going to be interesting to a print audience" and, echoing language used at CP, said without analytics they would be "blind":

"While our older audience is dying and newspapers are continuing to decline, we're getting significant growth out of a much younger audience that is engaged with us already and will continue to stay with us year to year. We are having to take a different approach with some of our content but, fundamentally, it's about presentation. It's about presenting it for the print reader in one way and presenting it for the online reader in a different way" (personal communication, 27 September 2017).

Numerous participants also pointed out that the paper could not afford to send out a reporter to cover a substantial, original story that would not be carried on both platforms.

7.18 Relentless Reporting: Something Has to Give

In another boundary shift, reporters were also charged with promoting their work. E9 said, ideally, he wanted reporters to "become almost entrepreneurs and market their own content" (personal communication, 27 September 2017). As well, reporters were, on average, expected to write 50 stories a week, or 10 stories per day, ranging from 50 to 500 words each (E9), far exceeding that of other UK journalists who "typically produce or process ten news items a week," or about 20 per week for those working "exclusively online" (Thurman et al.

2016). When I questioned the capacity of a reporter to manage such output and maintain standards, E9 stressed this was just an average and said sometimes a reporter might only be working on one story if, for example, they were at the courts for the day. During observation, I only saw people working on multiple stories, although E4 mentioned occasionally being given time to work on an investigative piece.

Multiple reporters also spoke to the fact that because of added responsibilities they spent less time outside the office. However, E9 did not feel any changes made had impacted everyday reporter practice or increased demand for output:

"All of the changes that we've done as newsrooms evolved over the last couple of years, and since I've been in this role, we've ringfenced the reporters because we know that content is absolutely key. So, from our point of view, the reporters aren't writing any more than they were writing two years ago or three years ago or four years ago and we still have the same amount of reporters in the business, because what we've been looking at is making the production side of the business much more kind of automated and templated. So, therefore, it means we've made it that more efficient on that side of the business, so we haven't had to touch the reporters at all" (personal communication, 27 September 2017).

E9 said all of the job cuts had come from the production and administration side. Those working in the newsroom agreed there had been no "cuts" to reporters, but said seven reporters had left in the past two years through attrition and only one had been replaced (this did not include the reporter who resigned during my observation and a part-time reporter let go in early 2018). And whether they had been working at *The Echo* for a few years or decades, the majority of reporters talked about a significant increase in their workload.

One reporter said there was an "increasing gap" between the type of journalism she would like to do and the type of journalism she has time to do:

"We have to help in the whole production process of getting the paper out and doing other things, taking pictures, making sure we're doing stuff on social media. It's more satisfying to me to spend time on a story and research it thoroughly and speak to a number of people; unfortunately, due to time pressures here and lack of resources, I don't feel I am always able to invest that time or effort into a story as much as I would like to do on a daily basis. It is obviously important to get a good level of output and sometimes that does mean having to sacrifice an element of journalistic quality and labour" (E7 personal communication, 27 September 2017).

E8 was one of the most senior reporters and also felt the same sense of pressure in terms of developing content and the impact of current practice on the stories and said, "I think we're

not doing enough digging into things like we used to" (personal communication, 27 September 2017). Describing the daily workflow E4 said,

"Occasionally it is a case of churn, churn, churn because there just aren't the same numbers of staff and it's a very different way of operating. It's almost a bit of a relief when you get a press release which is packaged up nicely from an ex-journalist, and you think, right, brilliant, that can go through" (personal communication, 25 September 2017).

Acknowledging that ideally stories do not come from press releases, E6 had developed his own strategies to avoid his work looking like "churn." He said press releases should not be just cut and pasted "into the box" (referring to the write to shape template). It was essential at least to remove "the totally unnecessary spelling errors, the capital letters on random words, the more egregious turns of phrase and the disgraceful use of commented and explained instead of said" (personal communication, 26 September 2017). After that, he felt at least the first four lines had to be rewritten as "they've almost always missed the real angle." Then you had to add in context and background and, finally, you could "shove the quotes." He did not think it was necessary to try and get his own quotes because "that will probably be all you'll get if you ask for new quotes anyway." E6 said this workflow only added "about ten minutes into the process" but made "the paper look a lot more like a proper paper rather than like it's full of those things [press releases]." Adding, "I've done two or three of those today...they're so easy to write."

Developing these types of strategies would be essential in order to keep up with the expected output at *The Echo*, but whether rewriting press releases is an act of journalism would be a matter of perspective—for example, it would not meet Shapiro's (2014) definition—and is emblematic of practices Cohen (2015) found at Journatic, an organisation that provided outsourced, piecemeal news produced in an "assembly-line fashion" (p.99), using "digital technologies and lean business practices to cheapen the costs of news production." Although Cohen posits organisations like Journatic could be used to outsource news production at the expense of quality, observation at *The Echo* shows "assembly-line" strategies can also be used internally by legacy media trying to cut costs.

This is also an example of journalists dealing with external pressures by acting outside of acknowledged, traditional ideals. Contrary to Bourdieu's (1996) assertion that "younger and less established journalists are more inclined to invoke the principles and values of the 'profession' against the more 'realistic,' or more cynical, stipulations of their 'elders'" (p.71), based on interviews and observation at *The Echo*, and at other sites of study, there were two factors in the comfort level regarding self-capitulation of recognised journalistic standards in order to meet output demands: working primarily on a digital platform and/or being young/fairly new to the business. Younger journalists were also the most confident of being able to create quality content under existing pressures to increase volume of output due to the way they had been "assimilated" into the newsroom. E10 said,

"I feel it [volume of stories produced] is a factor at times. It can be. But I think there still is enough time in the day. It's just something that needs to be monitored and is a concern potentially in the future while the numbers [of staff] in newsrooms go down²⁰²" (personal communication, 18 October 2017).

7.19 Effort versus Reward

E3 had been "totting up" how much time he'd been spending on specific tasks, including analytics, and his initial conclusion was that he was spending "a lot more time on not writing than writing." He was doing this self-analysis in an effort to figure out where his time was best spent, spurred by increasing production pressures and the information gleaned by looking at the metrics from his stories. One thing the numbers were leading him to believe was that substantial in-person interviews did not, necessarily, "get the return in terms of pageviews;" therefore, a 15-minute phone interview might be a better use of his time than a one-hour, in-person meeting. He also identified that what drives the numbers often aren't the stories the journalists are most proud of. E3 said,

"A reader sent in this picture about a road accident, I think with an overturned car, which took 10 minutes to turn around and got many more views than anything I did in the other 10 hours in the day. So, it's got a sobering use when you see what the readers' priorities are but I guess that's part of the new world really" (personal communication, 25 September 2017).

That dichotomy between effort, quality, and perceived popularity was also experienced by another reporter who wrote an exceptionally well-read story on a taxi driver who was pulled

²⁰² General trends observed at *The Echo*, including lack of time for research, pressure to do work that is more popular, worries regarding a loss of credibility, and more importance placed on social media skills and technology, were also observed in Thurman et al.'s study (2016) on UK journalists.

over for speeding and told police he was racing to his destination because his passenger had flatulence:

"It took about five minutes to just quickly put up online and then you write a 400word page lead for the paper and that can get probably 300 views all day. So, it does make you think, if I'm putting in a lot of effort into doing something that I think is a quality news story and that's not well-received online, in terms of our business and how analytics are affecting journalism output, I may feel like I shouldn't focus on those kind of more quality stories, but that is what you kind of set out to do rather than just bits that take 10 minutes to put together" (personal communication, 27 September 2017).

Cohen (2018) noted that "analytics can undermine journalistic autonomy" (p.9) and E8 had concerns the drive to create popular content and meet targets could negatively impact editorial decision making:

"Somebody spent a lot of time working on something that I think is quite important in the community or a background to some big crime story or something and then, you get a hamster with two heads, and it wipes the floor with that. I think it does impact editorial decisions although editors, I'm sure, would very much like to say it doesn't. They've also been put under pressure to meet these figures. And you know, you get an email, why are your figures down on last month, whatever. And obviously, inevitably, they're going to look back and say, 'All right. What can we do to get them back up there again?"" (personal communication, 27 September 2017).

However, E4's analytics were showing a different side of the audience:

"I noticed that it's always the off-diary stories, the real sort of traditional journalism that is more of a hit with readers. It is quite reassuring in my particular role that the stories that you do tend to work harder on, you do reap the rewards I suppose, with the figures."

7.20 Constructive Critique or Performance Appraisal?

As mentioned previously, the initial stages of the analytics pilot involved one-on-one meetings with reporters to discuss metrics of their stories. These meetings were not without controversy. As seen at NRK, some reporters believed analytics would be used to grade performance,²⁰³ and that bad metrics would put jobs at risk. E8 said,

"Because of the history of reducing staff relentlessly, people very much thought, well, why are they doing it like this? It must be because they're going to get rid of more

²⁰³ As was seen with the rollout of the Janus system at NRK (see p.80).

people or whatever. And people were told it wasn't. But people have been told lots of things in here over the years" (personal communication, 27 September 2017).

E8 took issue with individual analysis because whether someone did well in terms of analytics one day to the next was often due to chance, for example picking up the phone at the right time, and did not reflect who had done the "most or the best work that day." E4 agreed that discussion around individual reporter's analytics was leading to worries over job security:

"Is this going to be a way for the next person to be made redundant? You know, that their figures aren't quite good enough. I'm sure that does play on some people's minds. It's got to, if their figures aren't very strong. I'm sure of it" (personal communication, 25 September 2017).

Other reporters, though, liked the idea of the meetings. E6 said,

"I think it was good to have that degree of interaction between the reporters and management so that we're on the same page one way or another, whether it's them saying stop writing about this because it's incredibly boring or you saying that story which you told me to do as a piece of support should have been a page lead, look how well it did" (personal communication, 26 September 2017).

7.21 Different Pathways to Accepted Goals

There seemed to be a broader understanding of analytics and a more cohesive team delivering to both digital and print at *The Echo* compared to *The Spectator*. However, E1 said this was not the case in the beginning when there was someone in a digital editor's role who did not have "respect" for the print operation. Although the only one to address this issue, E1 said once that role was taken over by a former print reporter, things improved. This was an example of Carlson's (2015c) evolution of boundaries through expansion, expulsion, and protection of autonomy where non-traditional journalists or acts of journalism are included in journalism production, those that are not seen to fit to journalism norms expelled—even if that is a voluntary change in position—and, eventually, the ability to define correct practices defended.

However, even when there is overall or by habitus cultural acceptance of new routines, as seen at other sites of study, individuals can still have unique perspective on their own or other's roles. After a discussion regarding a participant at *The Spectator* describing aggregation and promotion of content on a website as the work of a "technician," E2 said,

"I don't feel like a journalist working on the website. I feel like, like you said, a technician I guess, like a website operator. And while they're 'my stories' as in *The Echo* stories, they're not stories that I've written. They may be ideas that I've put out to people but they're not my stories. They're not my work" (personal communication, 26 September 2017).

This idea of working in a news environment but not acting as a traditional "journalist" was echoed by subjects in Cohen's (2018) study of digital newsworkers.

Every reporter I spoke with at *The Echo*, though, as well as other members of the editorial team, saw the benefit of analytics in terms of better understanding the audience, and the vast majority had developed strategies to garner more pageviews for the content they created. E4 felt analytics had improved the quality of journalism, "because your audience are dictating the standard of the story and what they want to read." E6 thought, overall, using analytics "was a good idea because journalists are always making assumptions about what stories would be good and what won't" based on their own news sense and although "there's some sort of objective truth to that, it's largely subjective" and analytics are "a good way of finding out what people are interested in reading about." However, E6 also echoed the concerns of other participants at all sites of study regarding finite interpretations of audience data:

"I'm just always a bit sceptical about attempting to use stats and mathematical reasoning to try and predict and work around something which is creative and subjective. Trying to take advantage of what you identify as a trend from looking at the analytical data, well, you could be completely wrong about what people actually think. So, a tool to use with caution" (personal communication, 26 September 2017).

Or, perhaps, analytics are a tool to use in context with qualitative data, requiring communication and discussion with the audience. Regarding the use of analytics, E9 said,

"I would say that it's absolutely the crucial tool going forward because for the first time we know what it is that readers want to read and if we ignore the analytics, you know, anyone who ignores them just will ignore them at their peril because it's basically a live focus group for what's being read and what readers want to read. it's got to be part of their [journalists] makeup now. They've got to be using those analytics and understanding what it is and that can drive their type of journalism" (personal communication, 27 September 2017). Although there was consensus regarding the benefits of analytics at *The Echo*, there was a divide between how senior Newsquest managers thought practice should and/or was being implemented in the newsroom, along with other digital initiatives, compared to what was happening on the front line. Regardless, though, the newsroom team was delivering what senior managers wanted in terms of targets and content production. E9 held *The Echo* up more than once as a newsroom that proved his ideas could be implemented and production could be streamlined and the managing editor said his goal was to successfully implement company strategy. Although, he also said, "I will do it my own way that will work the best in my own newsroom" and that they were "operating right at the limit of what we can achieve." Regardless, *The Echo* provided evidence of how a cohesive message from the top down regarding the importance of analytics, all media platforms, and a singular editorial focus facilitates change, even if the pathways to accepted goals end up being more diverse than anticipated or expected.

7.22 The Echo Reflections

Since being at *The Echo*, I have been consistently reflecting on the demands put on its staff. In my initial write through of findings I used the word "gobsmacked" to describe the level of output expected, with a note to my thesis supervisor that I would eventually land on a more academic sounding term. However, gobsmacked is what I remain. My best personal comparator to what I saw at *The Echo* was one point in my newsroom career when I was responsible for producing, writing, and booking guests for multiple shows in a day, as well as producing stories for a print reporter working at another media outlet who was contributing to our newscast but had no television experience. Outside of what she did oncamera, I was responsible for most of the story prep and packaging. With all of these duties combined, I did not have time to think about what I was doing; I just kept "doing," something I saw reflected in practice at *The Echo*. However, during this time in my career, a confrontation with the news director that was spurred by a suggestion I take on more work resulted in me being assigned an associate producer. I doubt anyone in most newsrooms now would receive this type of lifeline, particularly those at The Echo. Newswork, historically demanding, now seems impossibly unrelenting.

Chapter 8 Discussion/Conclusion

"In the end if you are a reporter and you write a story and it gets a ton of pageviews because your heading was a bit of clickbait and everyone sort of thought 'oh, I better click on that' and you know it's not that great a story then you don't feel any sense of achievement for it. If you do a story which is breaking—a decent investigative bit of journalism and it actually has some impact on the real world beyond people reading it—then you don't actually mind if loads of people don't read it. But if they do, then that's a real feeling of achievement and success and that's also journalism working as it should work in an ideal world" (E6 personal communication, 26 September 2017).

This discussion chapter will identify primary findings from this research and outline the parallels and variances in the use of analytics and metrics among the four sites of study with an analysis of factors that may have impacted their use, and practice in general, within the context of the three research questions.

RQ1 How does the use of analytics impact news practice?

- There are two previously unidentified primary channels of audience-directed participative gatekeeping specifically related to the use of metrics and analytics in newsrooms: promotional, for the type of gatekeeping done on news site homepages that involves real-time tracking of metrics; and developmental, a longer view using analytics to track how the audience consumes information that shapes editorial content. There is also a third more porous channel of experimentation. There are three principal forces impacting decisions in these gatekeeping channels: economic, organisational, and routine, with economic being the primary force. These forces and channels are represented in a new gatekeeping model particular to the use of such audience data.
- In an effort to expand reach and build scale, the use of metrics and analytics is changing and shaping newsroom routines and story formats, and such practice has the potential to impact public discourse in both negative and positive ways, what I describe as typical and positive media logic.
- Differences in gatekeeping and other components of journalistic practice in relation to the use of metrics and analytics are more pronounced from habitus to habitus than they are in different media systems.

8.1 Participative Gatekeeping

The use of audience data at all sites of study provided evidence of a need for more precise descriptions that allow for better analysis of newsroom practice and articulation of the impact of the audience on such practice²⁰⁴. As such, I have identified new gatekeeping channels specific to the use of metrics and analytics. These channels, promotional, developmental, and a third more porous channel of experimentation, have been conceptualised through the analysis of empirical data and are visualised in a new participative gatekeeping model (see Figure 2). Within this model, there are two predominant gates that influence the flow of information within the channels, one controlled by the audience via audience data and one controlled by newsworkers. The audience gate represents the expanded social system that newsworkers operate within, and the force/influence of the audience and analytics-platform providers on decision making, while acknowledging newsworkers still play an integral part in determining what content is most visible to the audience and what types of stories are developed. Forces impacting the newsworkers' gate, specific to metrics and analytics, are divided into three categories: economic, organisational, and routine. These forces impact the flow and use of information from the audience gate and are experienced by individual newsworkers based on a number of elements, as seen in the table below²⁰⁵. Data in this research showed that from what could be described as the "institutional" level, in reference to Reese and Shoemaker's (2016) hierarchical model, economics are by far the most influential force, shaping organisations and the routines of individual newsworkers. The routines of individual workers, particular to the use of metrics and analytics, are moulded from the top down within an organisation and, therefore, influence newsworkers' more directly depending on their habitus. As such, depending on habitus, routines can significantly limit the influence of an individual worker's ability to make editorial decisions based on personal values or professional standards, or may have limited influence²⁰⁶.

²⁰⁴ This includes more careful use of the terms metrics and analytics as outlined in the introduction (see p.52). ²⁰⁵ These elements are not in stasis and can have more or less impact and/or bleed into one another as they contribute to forces impacting individual newsworkers.

²⁰⁶ This is why targets and quotas appear both in the economic and routine columns—a media outlet may have website quotas which are instituted because of revenue models tied to impressions; however, such quotas may have limited direct impact on, for example, a reporter writing feature stories versus continual impact on a digital editor managing the website.

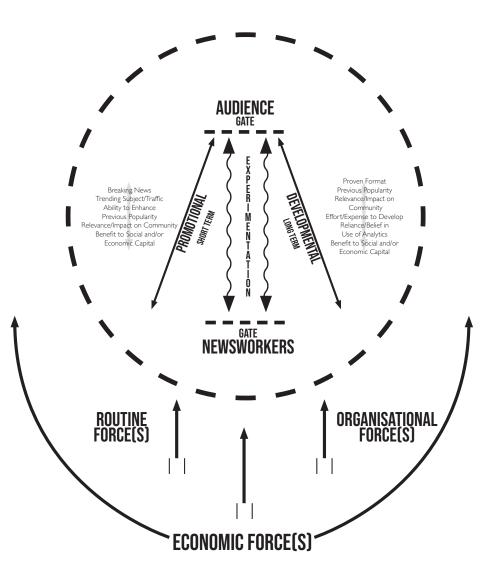
Economic Elements	Organisational Elements	Routine Elements
Stability of funding	Priority of service, eg.	Audience, eg. local versus
	public versus private	water cooler
Number of staff	Social capital/status of	Platforms
	organisation	available/required
Analytics systems available	Habitus of individual	Level of production work
		required
Economic status of	Social capital/status of	Level of output expected
individual	individual	
Targets or quotas	Significance of digital divide	Targets or quotas
	within the newsroom/	
	analytics strategies	

Table 2. Elements of forces impacting the newsworkers' gate.

Within the model (represented graphically on the next page), reflecting the fluidity of observed practice, the above forces, and their influence, are displayed as much as a web as a hierarchy, with the effect of forces, and factors specific to each channel (identified in the model below), in constant motion, the extent of motion having a wide variance due to habitus or, in other words, a newsworker's specific job function within an organisation.

Figure 2. Participative Gatekeeping Model.

THE IMPACT OF METRICS AND ANALYTICS: Participative gatekeeping



Promotional gatekeeping involves the use of real-time metrics, for example, to manage and enhance content on the homepage in order to promote reach and traffic. Factors that influence movement of content in this channel are whether the story is breaking news, if it is a trending subject or a story that is building traffic, the subject's previous popularity, its relevance/impact on the community or to the target audience, the options available to enhance the story, and how much promotion of the story might benefit the social and/or economic capital of the organisation. Newsworkers operating within this channel are those using metrics, for example, as a short-term tool to showcase stories that are "trending" or "charting" and can be those most affected by organisational quotas or targets.

Developmental gatekeeping involves the use of analytics, or the analysis of metrics, in order to determine what types of stories should be covered, in what formats, and how to promote them in order to build audience engagement and traffic in the longer term²⁰⁷. Factors impacting movement in this channel are whether a subject has previously proven to be popular based on analytics, the perceived relevance/impact of a story on the community/target audience, the effort/expense required to develop a story, the benefit to social and/or economic capital, the reliance/belief in the use of analytics at the organisational and habitus levels, and the ability to develop the story in formats/use placement strategies that are proven to engage the audience. Newsworkers operating within this channel are often reporters or editors responsible for determining story selection, and are influenced by data that show the types of formats and stories that have previously "done well" with the audience in terms of both views and engagement.

Some of the factors are the same within each gatekeeping channel, for example, relevance to the community; however, they are weighed differently depending on the channel of consideration and one factor may take precedence over another in the promotion or development of a specific story depending on a variety of circumstances/forces. As an example of movement within the participative gatekeeping channels, in the promotional channel, although there was uniform consensus at all sites of study that breaking news took priority on websites, at *The Spectator* the desire for traffic was more important than the

²⁰⁷ Although Duffy et al. (2017) found that when analytics challenge the "gatekeeper role" in the development of stories they are not valued, there is significant evidence in this study to counteract that claim; however, there is the possibility of a wide variance between specific organisations, departments, and individuals with regards to how much or why that "gatekeeper role" is challenged.

breaking story of a killed soldier, initially, even in the community he was from. In this case, perceived audience preference of other stories, or trending subject/traffic, the ability to enhance, and benefit to economic capital (in the form of cycling of page impressions), took priority, largely due to economic pressures. Conversely, referring back to Shoemaker and Vos's (2009) example in the literature review (see p.27), if considerable time and resources are required to do a story, ensuring it is seen by more people could make the effort and expense to promote it a more important factor than whether or not it involves a trending topic or builds traffic as quickly as other stories, which might limit the audience gatekeeper role in the promotional channel.

In terms of developmental gatekeeping, analytics can be used in the selection of particular stories to be covered, such as the politician vying for universal access to a breast cancer drug at NRK, or the move to do more stories on planning applications at *The Echo*. These decisions were made because of the previous popularity of these subjects, perceived benefit to social/economic capital as a result of their popularity, relevance to the community, and a belief in the use of analytics as a tool in story selection. Or, the importance of the story itself in terms of relevance to the community, and the perceived potential to build informed discourse, could take precedence over other factors in story development, as seen with stories on local politics developed and promoted at *The Echo*.

Developmental gatekeeping leads to longer-term strategies, such as rethinking the production of interactive graphics at CP, the development of strategies to improve engagement in long-form stories at NRK, or strategies around when to post stories (dayparting) as seen at all sites of study, but feeds into and is fed by promotional gatekeeping. Between the developmental and promotional channels, there is a porous channel of experimentation. For example, as seen at all sites of study, if a digital editor sees, and the metrics and analytics support, that a good picture draws more traffic, after experimentation, it eventually becomes practice to include a picture on the website and in social media posts as often as possible. When a positive pattern is established in the channel of experimentation, trial practice becomes routine in the promotional and developmental channels.

There is substantive data collected for this research that show the stability of revenue, or economic forces, impacts an organisation's ability to subscribe to or develop analytics systems and strategies and designate staff for analysis. Therefore, at an organisation like NRK, the site of study of this thesis with the most stable funding, all gatekeeping channels were quite active. There was the time and money for analysis of metrics that impact story development and to develop systems, strategies, and routines for engagement and promotion in long and short terms. Although the use of metrics and analytics at CP was limited due to the information available, it had the resources to invest time and money into manually tracking use of its content, develop promotional gatekeeping strategies on social media to maintain its reputation as a news leader, track real-time trends, and, in terms of developmental gatekeeping, make decisions on the best use of resources for creating graphic content and expanding the types of stories covered based on the analytics information available. At The Echo, although there was promotional gatekeeping, due to financial constraints, there were no full-time digital editors to perform the type of constant curation of the homepage, ²⁰⁸ as seen at *The Spectator* and NRK. There was greater emphasis on everyone contributing to developmental gatekeeping by using analytics to determine future stories; however, developmental gatekeeping was done on a much more surface level than intended because, due to job cuts, there was no longer the time to perform deeper data analysis. In terms of how an individual's economic stability might impact the use or acceptance of metrics and analytics, as The Spectator's S9 described while voicing concern over thespec.com's focus on traffic, as opposed to using analytics in a way that might provide more insight into content development, "If they were finding a way to make it feed me and my family, at the end of the day then I'm not sure I'm having a complaint" (personal communication, 11April 2017). Although it is not unexpected that economics would have a significant impact on the use of metrics and analytics, data in this study revealed that influence to be fundamental to the structure of the organisation itself, the development of routines specific to subfields within an organisation, and any resulting distance between recognised values and actual practice.

²⁰⁸ Although, based on the development of the ACE program after my participant observation, it seemed there could be movement in this area.

8.1.2 How the Use of Metrics and Analytics is Changing and Shaping Newsroom Routines

Although there is much discourse surrounding the idea that traffic metrics like pageviews no longer hold sway over decision-making in newsrooms, volume of traffic clearly plays an important role when it comes to the use of metrics and analytics, most particularly in the promotional channel but also in the developmental channel (Blanchett Neheli 2018b). As seen at all sites of study, perceived audience preference based on real-time clicks directly impacted placement of content on websites, and past popularity of a subject impacted story selection and the time and effort donated to future coverage of stories, as observed at NRK, CP, and *The Echo* and as discussed by some participants at *The Spectator*.

The use of analytics and metrics is having a particular impact on choices regarding story formats and presentation. NRK offered multiple examples of how story formatting could be used to effect what I describe as positive media logic, or, in other words, the use of formats and processes centred on information sharing versus typical media logic where the use of standardised formats is associated with ease of production and the primary goal is attracting "eyeballs" or building scale to attract advertisers. NRK's "fewer but better" strategy that strictly enforced story word counts initially seemed constrictive, similar to the standard minute and 30 seconds given to many television reports. However, one of the key components was that the longer form story had no limits and journalists working on such stories were given comparatively extensive space and time to do so. Is there a negative component to NRK eliminating the medium length story? Perhaps there are instances where that particular format would be ideal; however, if the goal is overall engagement, and no one is reading medium length stories, as many at NRK noted, what is the point of writing them?

The focus on story formats was one illustration of the consistent use of metrics and analytics to promote information sharing through developmental gatekeeping at NRK. Another example was the analysis of data on long-form stories that was used to create easily implementable strategies to ensure engagement²⁰⁹, everything from focusing on a more literature-based narrative to using multiple hooks and adjusting stories after publication if

²⁰⁹ There was more evidence an investment in longer form stories paid off at *The Echo* where E4's feature-length stories about issues that connected with the community garnered the best traffic stats.

obvious issues were impacting time spent, without compromising the original story's integrity. As identified by Altheide and Snow (1979), visual and temporal boundaries in news content impact public discourse; therefore, writing stories in a format that has a fighting chance of being read online is a step towards accommodating more enriched discourse and promotes positive media logic. NRK offers plentiful evidence that using metrics and analytics to interpret and define formats that engage can still prioritise information sharing. Although this media organisation operates in a privileged position in terms of funding, such strategies are still implementable, to varying degrees, at a variety of media outlets willing to experiment with story presentation and production.

However, experimentation with formats and delivery mechanisms should be done in conjunction with critical thinking. There is no point in shooting video of a book, as seen at *The Spectator*, because it adds nothing to a story and will do nothing to draw the audience back to your site. Although CPM rates are higher for video, minimal views do not equate to significant increases in ad revenue. Because viewing of videos on news sites is so limited, in general (Newman et al. 2017; Newman 2018), figuring out what types of video are most valued by the audience, or might best build an organisation's reputation, and then creating fewer videos of better quality is a more practical strategy, even at NRK. As news organisations struggle with resources and reputation, it is vitally important to determine what types of stories engage the audience and better understand how poor use of formats can impinge upon reach and waste resources.

8.1.2.1 Dayparting

Although consistent practice was not always observed in terms of dayparting at any of the sites of study, and was sometimes tied to an individual newsworker's sense of when a story did well, the idea of using analytics to determine when best to post a story to reach the widest audience was understood and discussed at every site of practice, as was the idea that it was essential to get better at such analysis. This provides evidence there is a move towards eliminating the "mismatch" of recognised peak periods for posting versus when publication actually takes place noted by Schlesinger and Doyle (2015, p.321), as well as a move away from the publication of stories to schedules more appropriate to legacy media than digital,

something that was noted as an issue by multiple participants. In 1976 Altheide said, "...if we want news reports to present events in context, complete with uncertainty, then present commitments to commercialism, and organisational and scheduling priorities must be reconsidered" (p.196). This does not necessitate the elimination of organisational and scheduling priorities or, in the case of privately run organisations, ignoring the need to generate revenue, but using metrics and analytics critically to develop practice that best serves and engages the audience.

8.1.2.2 Platform-Parting and The Endless Tail

Although there was obvious platform-parting, to varying degrees, at all sites of study, there were also clear issues with compliance to strategies that would optimise catering content to specific platforms. For example, using quality pictures that capture attention in order to draw readers to content is a proven tactic, as also identified by Harcup and O'Neill (2017), on both websites and in social platforms. If encouraging all staff to follow protocols, such as uploading an appropriate number of still photos for every web story, results in more viewing of content and better engagement, it seems a simple strategy worth the effort of enforcing, as does platform-parting that ensures content designed for print or broadcast is optimised for the web. As seen at *The Echo*, positive media logic can also be used to help keep online dialogue respectful. Rather than going for clicks and turning a potential opportunity for discourse into a series of diatribes in response to an inflammatory headline, more thoughtful word choices cannot ensure but can promote constructive debate.

It is important to use positive forces of media logic at the outset of creation because content does not die on the internet. As seen with the examples of the nostalgia story at *The Echo* or the video of the toddler in the wheelchair from CP, there are no physical or temporal boundaries once content has been posted. There is not just a long tail, but an endless tail. As a result, it is important to have protocols in place that cue the audience to material that is not new, but resurfaced, as suggested by Bradford (2017). This also increases the importance of making sure a story is told well the first time in order to hold audience trust, as demonstrated by the difficulty in pulling incorrect content back from news agencies that continues to sit on a variety of websites. Even when false narratives have surfaced on the web, unintentionally

or otherwise, positive media logic can help obviate their spread. Wardle and Derakhshan (2017) suggest the best way to counteract "dis-information" is not to repeat it but showcase the truth using the same type of powerful narrative formats used to spread dis-information. Thus, metrics and analytics can be used to engage the audience by pinpointing formats that are entertaining and attract high traffic; pull the audience through long-form, informative stories; and reframe narratives lacking factual basis.

8.1.2.3 Media Logic and the Loss of Local

As discussed in the literature review and methodology, typical media logic, particularly choosing to attract eyeballs over information sharing, impacts public discourse not just because of what is shared, but what is not shared. Using *The Spectator* as an example, focusing on international or less relevant stories to the community on its homepage meant those living in the community who did not receive the printed version of the publication were not being exposed in the same way to the same information²¹⁰. Even at local outlets of the public broadcaster NRK, there was a preference to develop and promote stories for the website that had a wider reach in terms of national interest²¹¹, leaving those stories that were "too local" for radio and television to cover. However, as noted by NRK analysts, the younger audience was getting information from the internet. As a result, despite acknowledged efforts to continue to cover and post stories online that were not necessarily popular, like local elections, the loss of stories that were "too local" on the website could eventually impact local discourse.

Issues of local news coverage are more serious in other jurisdictions, though. Discussing the loss of local news coverage in Canada due to massive newsroom cuts, CP's C1 questioned if there had ever "been a better a time to be a corrupt local official" (personal communication, 31 January 2017) because "if you can get around the auditor, you're home free." As seen in the worst-case scenarios of The Grenfell tragedy in London, England, or the dearth of local coverage in Thunder Bay, Canada (see p.37 in the literature review) the loss of focus on local news can have significant consequences to a community, and the use

²¹⁰ Acknowledging that without qualitative data there is no way to quantify what parts of a newspaper the audience is actually reading.

²¹¹ Another commonality with Altheide's television workers in the 1970s who tried to nationalise their stories.

of analytics is impacting coverage of stories on- and off-line. As noted by *The Echo's* E2 with regards to local newspapers in the UK,

"I think that although it's really interesting to see which stories do well I do think that a lot of stories don't get covered by papers because they're not in the best interest of your analytics and I think that the stuff that local newspapers do is unique. So, no one else is going to magistrate's court. No one else is going to go to that council meeting or report on it, but sometimes that's not done because people have got their mind on their analytics" (personal communication, 26 September 2017).

As acknowledged by all participants in this study, an important balance needs to be struck to ensure stories of relevance are still covered regardless of how much traffic they draw, and better measures of worth need to be developed to complement volume metrics. As well, beyond just putting stories on the website as a means of proof that reporters' work is being shared and journalistic values are being upheld, as seen at *The Spectator*, more initiative is required to find ways to tell, format, and showcase stories of import on news websites, particularly to a younger audience, with consulting those younger audience members on what they find engaging being an obvious first step.

8.1.2.4 Social Media Logic

With regards to the impact of social media metrics and analytics on gatekeeping, research from this study suggests editorial decisions are being made based on the "shareability" (Harcup and O'Neill 2017) of content. This was seen with one of NRK's "three pillars" for story selection being whether a story would be shared on social media even if it were not picked up by the homepage, or the shift to more lifestyle content at CP based on what was trending on social media. Facebook referral was given significant importance at all sites of study in terms of reach and building traffic but limited strategies were developed on how to promote the many news stories that were not the right fit or format for social media but important to individual communities. As well, controversies surrounding data shared by Facebook and changing algorithms that were projected to lessen the reach of news outlets in newsfeeds both became prominent issues after I had collected my data²¹². As noted by

²¹² In March of 2018, NRK's N17 (personal communication) shared that in relation to Facebook they saw "engagement overall dropping a lot" and "it felt especially big in the start." They had not changed their

Van Dijck and Poell (2013), "social platforms can hardly be seen as separate forces when it comes to controlling information and communication processes" (p.11).

Although Twitter was used widely by the participants in this study as a tool of promotion, source of information, and to provide live coverage of events, there were signs it was becoming a more prominent partner for news outlets following the period of my data gathering. Referencing a study done by Chartbeat, CB1 (personal communication, 9 November 2017) said that Twitter was the external channel that provided the best opportunity to turn more casual readers into loyal subscribers to a website. Twitter had also started promoting use of video on the platform, with data showing "significant increases in video views" for a number of publishers and that news videos were very popular on the medium, even when cut in almost the same manner as they were for television (Corcoran 2018a)²¹³. At NRK, efforts were also underway to implement Snapchat as a source for news. Regardless of documented concerns, social media continue to be seen as essential tools for the promotion of news content and within newsrooms content is designed to optimise sharing and viewing on these external platforms based on metrics and analytics.

However, it is clear that relying on third party distribution is rife with pitfalls, including ethical concerns regarding inappropriate content or ad placement, algorithm changes, inconsistent methodologies with metric measurements that make it difficult to accurately assess reach and impact, and, for example, in the case of platforms like Storify and Way-In, having to transfer content from a platform that shuts down or having to find new ways to gather information when a platform you rely on changes what information it shares. Monetisation of content on social media is also precarious, as CP's C1 pointed out with his suggestion that he could make more money from a lemonade stand than he could with Facebook Instant Articles. As such, analysis on the amount of effort versus reward in terms of reputation, reach, clicks, audience engagement, or community cultivation needs to be done at individual organisations as social media strategies are developed.

strategy in any "drastic way," at least at this local office, as they believed they were already showing content in the best way possible and there was "little else" they could do. However, Newswhip data from that same month showed mainstream publishers were attaining very positive engagement stats despite the algorithm change (Corcoran 2018b).

²¹³ Acknowledging methodology on what constituted "popular" in terms of being in a feed versus shares versus completion time was not analysed for this research.

8.1.2.5 The Shift to Mobile and the Resurgence of the Homepage

As noted by NRK's N1 with regards to the "house being on full fire" in respect to attracting mobile readers, participants in this study were well aware of shifting means of audience consumption. Although everyone seemed knowledgeable about the growing importance of the mobile audience, something noted by Fischer (2018), there was less consistency in understanding the importance of the homepage. Chartbeat's CB1 (personal communication, 9 November 2017) said that for direct and loyal readers "it's all about the homepage" and those readers are more often coming from desktops. She described the viewing habits of loyal readers as "snacking" and said that, as a result, it is the overall time of their session versus individual time spent on one article that could be the more important metric. CNN's Vice President of digital programming has also discussed the renewed importance of the homepage (Beard 2018) and there is also overwhelming evidence within this study to suggest news organisations should consider the homepage as a key connector to their loyal audience and an important place to profile content of relevance to the communities they serve.

One area, though, where time, and therefore money, might be saved is the continual curation of the homepage with digital editors acting as if all news is breaking, frenetically enhancing and moving stories to get clicks. There is clear evidence in the empirical data of this thesis that enhancement strategies boost traffic and homepage management is valuable work, especially for very busy sites, such as NRK's; however, there also needs to be analysis of the effort versus reward of constant curation. If publishers are in fact moving away from a pageview mentality and anecdotal evidence suggests there is not a significant drop in traffic when constant movement of content is stopped, what would happen if, as N9 from NRK queried, the homepage were allowed to sit with a template of quality stories without constant curation based on pageviews or concurrents? Although *The Echo* appeared to be moving towards more homepage curation, its numbers without constant curation were better than that of The Spectator when comparing stats from March of 2017 to the stats of The Spectator from February of 2017. While taking into consideration *The Spectator* had a partial paywall and there are fewer days in February, The Echo had more than double the pageviews of The Spectator, more time was spent, and there was more click-through, while The Echo's hyperlocal target audience was approximately 500,000 compared to *The Spectator's* potential local

audience of approximately 750,000, which did not include what S15 described as its "amorphous" anyone, anywhere target market.

If the need for constant curation of the homepage were modified, digital teams that are currently practising this type of strategy would have more time for deeper analysis of the numbers from a wider purview, creation of content optimised for an online audience, and/or direct interaction with the audience. However, as seen at NRK with its struggles to implement the use of a qualitative analytics system in busy newsrooms, blocks of time for deeper analysis where a specific goal has been set, such as finding ways to engage the audience longer or promoting click-through with related links, could be more practical than implementing such fulsome analysis daily. Time gained with the use of automation, as seen at CP with the development of bots to write certain, one-dimensional stories could also be used to devote more time to audience interaction and the development of stories with relevance in formats readers/viewers engage with, or, in other words, developing content and informed discourse through positive media logic.

8.1.3 The Impact of Media Systems & News Environments on News Values Related to Gatekeeping

The empirical evidence in this research challenges the impact of geographic influences on Western newsroom routines. The limits of the impact of media systems, specific to the use of metrics and analytics, on a broader scale is also evident by comparing observed practice herein with other studies, for example, de-selection and platform-parting in Singapore documented by Duffy et al. (2017); riding a "wave" of clicks in Sweden (Björkman and Franco 2017) and the US (Groves and Brown 2011); and in dayparting as observed in the previous studies listed, as well as in Greece by Veglis (2014). Similarities in practice are captured on an even broader international scale in the ICFJ survey (2017) that spanned 130 countries. The use of technology required in the creation of digital stories and subsequent collection of metrics might, in itself, be contributing to a mimicry of routines (something also noted in regards to digital production by Cohen 2015; 2018 and in a more latitudinous manner in relation to information technology by Altheide 1994). With news organisations the world over sharing the services of the same analytics' providers and social media, and

all shaping and promoting content to a potential worldwide audience using websites that, no matter their differences, work within the same parameters of available functionality, it is understandable why there is significant evidence that practice, particularly related to the use of audience data, is becoming more uniform.

Despite the fact that my sites of study resided in locations deemed by other scholars as belonging to different media systems, greater variances in understanding or practice related to metrics and analytics were often found within individual newsrooms across different departments, or habitus, than in different news organisations in different countries. Across borders, there was extensive evidence of commonalities in practice in relation to the burgeoning use of metrics and analytics, which was significantly impacting editorial decision-making. For certain types of practice, these commonalities also extended beyond funding models. However, not all commonalities intersected at all sites; there were some significant differences at the locations where practice was expected to be most similar, and significant similarities in those expected to be most different.

In all of the newsrooms in this study, differences, or similarities, in the use of analytics and the routines impacted by their use could be greater or lesser depending on the forces at the micro-level/department/habitus of a newsworker and were particularly influenced by how much senior managers supported the use of metrics and analytics. As noted by Le Cam and Domingo (2015), "Gatekeeping is the result of the socialization of the journalist in the newsroom" (p.127). If discourse from the level of editorial meetings, as seen at Christin's (2018) French site of study²¹⁴ and at NRK, includes discussion of metrics and analytics and if, as seen at NRK and *The Echo*, analytics are used for developmental gatekeeping, or, as at *The Spectator*, if there are traffic quotas that impact daily practice for particular newsworkers, the use of analytics and metrics becomes part of routine, even if only in specific areas of the newsroom. Those routines in turn impact factors in story selection, both negatively and positively, and can shift priorities in the gatekeeping channels.

²¹⁴ As a point of interest, Christin (2018) interpreted the difference in the use of analytics at this French site of study compared to a US site of study being partly because French journalists did not have the same "professional definitions of journalistic value" as their American counterparts to use "as a buffering strategy against these new numerical measures" (p. 1405). However, journalists in my own study operating within the same parameters of doxa as those at her American site did not always use this "buffering strategy." Again, it was more dependent on habitus than geography.

RQ2 Do journalists feel their work is impacted by the use of metrics and analytics?

- Most journalists/newsworkers acknowledge their work is impacted, to varying degrees, by the use of metrics and analytics, whether that be in the way the content they create is promoted or the actual process of story selection and development; however, they sometimes understate the influence of metrics and analytics.
- It takes reflection for journalists/newsworkers to evaluate the influence of metrics and analytics on their work and how they might best use audience data; however, there is little time for such reflection.
- Journalists/newsworkers still use widely agreed upon traditional standards as tools to measure against when discussing the impact of metrics and analytics on their work; however, there is a spectrum of normative practice related to metrics and analytics specific to each newsworker, directly shaped by external factors, particularly economic/organisational: (recognised values) + (economic/organisational factors) = (actual practice).

8.2 The Actual and Perceived Impact of Metrics and Analytics

Individual acceptance or acknowledgment of how metrics and analytics impacted the jobs of journalists and newsworkers was widely differentiated and sometimes contradictory within the confines of this research, sometimes within a single interview, reflecting Hanitzsch and Vos's (2017) findings that when journalists reflect on practice they could be referring to what they should do, what they want to do, what they really do, or what they say they do. As noted by Thurman et al. (2016) in an analysis on UK journalists, there is a "striking" (p.27) difference between "the amount of freedom journalists believe they have in selecting stories and the high level of influence they ascribe to factors such as their supervisors and audience data" (p.27). This could be because on the floor of the newsroom, newsroom managers filter economic influences into practice and "render the original source of influence invisible to individual journalists" (Hanitzsch and Mellado 2011, p.18). For example, the need for constant updating on *The Spectator* site was portrayed as a goal to build the audience but was rooted in cycling ad impressions. Giving the audience what it wanted was the most common justification for catering content to clicks according to the participants in my research, and seemed to be more of an acceptable answer from a professional standpoint than catering to advertisers at privately funded newsrooms, although giving the audience what it wanted was often based on surface-level analysis.

8.2.1 The 'But' Qualifier

After months of interviews and analysis on analytics, a cue was often noted before a participant was about to share contradictory information regarding the use of data—what I have termed the "but" qualifier. Statements like, "pageviews are considered to be too important, but..."; "it's engagement that matters, but..."; "I won't say it shapes our coverage, but..."; "If the type of story is going to be of interest to an online audience, it's going to be interesting to a print audience, but..." As Vu (2014) posited while summarising conflicts in responses within a survey on the use of analytics, "...a possible explanation is that occupational pride might, perhaps, have made it harder for journalists to admit that news content is increasingly becoming more like other products: catered to the tastes of consumers" (p.1106). This occupational pride, which also provides evidence of how deeply ingrained normative values are, was the reason some CP editors and staff did not want to develop stories based on trending content (see p.137). It could also explain, as detailed in chapter 6, the reaction at *The Spectator* to my blog post (see p.174) that included the fact that its digital team worked under website pageview targets. Another commonality was journalists referring to how audience data makes them "feel." Such as the NRK editor feeling better about his office's comparatively low traffic metrics after noting a video had high numbers on Facebook. However, Chartbeat's CB1 said,

"If you're using it [analytics] to feel good you're not getting better. And we are long past the point where you can just say 'we're doing a great job.' It's an industry in crisis. You need to be much more critical about what isn't working or where you have opportunities...to improve" (personal communication, 9 November 2017).

8.2.2 The Need for Reflection and Transparency

When given the time and opportunity to reflect, despite, or perhaps because of, contradictory statements generated through the process, newsworkers were able to provide more clarity with regards to narratives versus actual practice in terms of the impact of metrics and analytics on their work. However, there is rarely, if ever, the time for this type of reflection in busy newsrooms. The primary concern with regards to limited transparency and honest reflection on how metrics and analytics are being used is that opinions are formed on practice

without a full view of such practice. As Hanitzch and Vos (2017) noted, "discursive contestation or reflection" reshapes institutions. "Journalistic roles, particularly normative roles…are essentially stable discursive scripts that have emerged through an interchange among internal and external actors" (p.121). As any journalist would attest to, the accuracy of a script is dependent on access to information and, along with lack of reflection, the difference in importance placed on information sharing with regards to analytics in different habitus was creating different narratives.

Welbers et al. (2016) found that the open display of metrics "stimulates an environment in which monitoring and sharing audience clicks are accepted as a normal routine" (p.1048). I would argue that concept is particular to certain individuals within a newsroom, hinges on transparency of use, and only occurs when importance is placed on those metrics as evidenced by their use in practice. I agree that it is the "top-down management of tools" that most impacts the use of analytics, something also posited by Usher (2013). However, an important distinction is that even in shared physical space there can be different role conceptions that "suppress" or "promote an influence of audience clicks" (Welbers et al. 2016, p.1049).

This was seen at *The Spectator* where, despite a Chartbeat monitor hanging over their heads, reporters, working primarily under the managing editor of print, said that no one talked to them about their metrics and they did not know, and often professed not to care, what they were. They had little interest in modifying work to improve their numbers or get better placement on the homepage, but rather professed those managing the homepage should not be making editorial decisions based on the numbers²¹⁵. Meanwhile, those sitting beside them, working under the managing editor of digital, were laser focused on, as Hanusch and Tandoc (2017) described, keeping the "numbers up" (p.15) which resulted in a "significant" impact on editorial priorities, role conceptions, and market orientation, as predicted by these researchers. This dual focus resulted in varying degrees of acceptance, embarrassment, or judgment regarding the use of metrics and analytics at *The Spectator*, the digital team being privy to more information on analytics than the rest of the newsroom, and some outside of

²¹⁵ As noted by Hanusch (2017), "platform-parting is arguably driving the increasing formation of specialised journalistic sub-cultures within individual newsrooms, depending on journalists' main platform of production and distribution" (p.1583) and this "divergence" can even be seen in one journalist moving between platforms.

the digital team feeling more could be done to explain the analytics strategy.

On the other end of the spectrum, there was NRK, where there were concerted efforts underway to give everyone as much access as possible to analytics and create educational programs so that metrics and analytics could be interpreted correctly. Analytics were being used in a way at NRK that was more in line with journalistic activities identified by Shapiro (2014) because they were not tied directly to revenue. Newsworkers at NRK also seemed more comfortable with open discussions about the use of metrics and analytics, not, necessarily as a means to eradicate them from the newsroom, but in order to develop best practice. Even those admittedly vying for pageviews working to promote content on the front page exemplified Tandoc's (2017) assertion that when journalists "perceive their forms of capital to be stable, they might be more able to stand up to external influences" (p.6). Overall, my evidence suggests, not surprisingly, that best practice is easier in a stable environment where there are the resources to develop analytics systems and strategies, where such strategies are transparent, and where the comfort level in sharing concerns results in open dialogue and reflection about the use of metrics and analytics, which leads back to best practice.

8.2.2.1 Cherry Picking the Numbers

Throughout my research, there were multiple examples of what NRK's N7 described as "cherry picking" of data, or assumptions or blank statements regarding analytics that were not supported by data, such as the continued push by some at NRK for more video despite low consumption rates on the website or the value of those "viral" international stories at *The Spectator* compared to local content more popular in the long term. People using analytics to support their ideas, or ignoring evidence that did not fit with their own or their organisation's agenda, was something technologists and analysts referred to as a great source of frustration. NRK's N2 was one of several who talked about the "gaming" of numbers, suggesting metrics were used to support personal beliefs and revenue strategies. However, misinterpretation was not always due to a hidden or acknowledged agenda. As seen at all sites of study in this thesis, even under the best of circumstances, there was genuine confusion on how best to determine audience preferences.

8.2.2.2 What Do They Want "This Day?"

NRK's N11 talked about not knowing what the audience wanted "this day²¹⁶" (personal communication, 2 August 2017) after she had spent significant time interpreting data only to make the wrong assumption. This dilemma was echoed by digital editors at *The Spectator* and NRK. N15 said he was surprised every week by stories he did or did not expect to do well or how an enhancement strategy, like changing the headline or picture, might improve traction for one story compared to another. He said, "The job is not an exact science" (personal communication, 3 August 2017). As Carlson (2018) described,

"Sophisticated audience measurements have become standard, but scholars need to recognise that what is measured is what is measurable, and what is not measurable is often ignored. Audience metrics and analytics are always partial data, even when they are treated as complete" (p.412).

Although my research fully supports this statement, I would add, though, that in some cases it is not an issue of ignoring what is hard to measure, as proved by the development of NRK's qualitative Janus system, but trying to limit the scope of information or not being able to gather and analyse information due to time constraints. As Napoli (2011) identified, the tendency to look at smaller subsets of data in order to avoid "information overload" (p.161) can "lead to very different (and possibly incorrect) conclusions." It is no surprise that the complexity and shortcomings of analytics and metrics were best understood by data analysts who were participants in this study, largely because they had the time to think about the numbers versus the pressure to act on them.

NRK's N6, in a discussion about challenges with real-time metrics, described how editorial staff can be quite skilled at optimisation and surveilling of content but "are so consumed by what they've done themselves" (personal communication, 31 July 2017) they assume changes in the data are based on their actions when that is not necessarily the case. For example, when there is good traffic one week in the summer compared to another is that because of particular stories or the way they were enhanced or would a deeper analysis of data show there is always a surge in that particular week? Did someone click on the story because a headline was changed? Or did they just happen to see it in a friend's feed just after

²¹⁶ Ferrer-Conill and Tandoc (2018) noted that when "user activity and behavior becomes proxy for the voice of the audience" (p.13), particularly through the use of real-time metrics, it leads to "limited understanding of the audience" and prevents actual dialogue.

the change? There was significant evidence in this thesis to support Duffy et al.'s (2017) finding that when metrics of past stories are positive and support "newsworkers' doxa" they are valued. However, that positive analysis is sometimes due to misinterpretation of data.

At all sites of study, participants made it clear that despite access to analytics, even in a best-case scenario like NRK, interpretations of data did not always translate to accurate predictions of audience demands. However, such data were often perceived to be a concrete tool to imagine or understand the audience. Although catering to the audience is often blamed for the erosion of journalistic standards, perhaps the real issue is misinterpreting metrics and using insufficient measures of what the audience wants, then creating goals through such misinterpretation, such as traffic targets, that might work to boost numbers and support shortsighted ad mechanisms but do not breed better journalism or build a loyal audience. "Viral" content will fill space and promote the cycling of impressions, but does nothing to build community. Publishers need to honestly reflect on how their metric goals impact not only their "numbers" but also subsequent news production and their relationship with the audience.

8.2.3 Normative Practice versus Normative Values

My interviews and observations showed that the gap expands between boundaries of normative practice compared to normative journalistic values in accordance to the economic constraints of the organisation internalised by the individual journalist—factors such as digital strategies based on pageviews for ad impressions versus measuring reach as an opportunity to inform, or relative pressures due to staffing levels and the time available to complete work. Bourdieu (1996) outlined forces that impact the journalistic field that, in turn, impact journalistic autonomy and security in relation to a variety of factors external to the journalist: the revenue source of the organisation, for example public or private; the concentration of ownership in the market, with more concentration resulting in less job security and autonomy; the journalist's status within the organisation, with more stability and security for full-time versus, for example, freelance; and a journalist's position within the organisation, for example, in the case of my study, a digital editor trying to meet quotas versus a reporter covering local politics. Bourdieu suggested that to understand the level of

journalistic autonomy within a field, it was necessary to understand the degree of autonomy of a publication in relation to the state and economy, and to understand the degree of a journalist's autonomy it was necessary to examine that journalist's position or authority in the field. Upon doing so, a researcher would then be able to "establish indices of autonomy" (2005, p.43) that could predict individual behaviour based on external fields and forces.

As seen in the analysis of this research, NRK's stable funding allowed for a focus on serving the public through quality reporting and led to the development of an analytics system to measure such quality. CP's revenue was subscription based; therefore, the creation of quality content stemmed from the need to prove its reliability to subscribing clients and the desire for more analytics was tied not only to ensuring relevancy of content created but also monitoring use of such content by clients for leverage during contract negotiations. In another example, even though practice for the management of the homepage was so similar between *The Spectator* and NRK, the content they were promoting was quite different. NRK digital editors were cognisant of their responsibility as a public broadcaster to promote informative content to the audience. Therefore, the pageviews metric was used as a measure of their ability to reach and inform. On the other hand, *Spectator* editors posted content that made them "cringe" in order to meet pageview targets designed to promote the cycling of ad impressions.

When it comes to the use of metrics and analytics, the ethnographic studies conducted for this thesis, comparing a variety of Western newsrooms, showed economics, at the organisational level, proved to be the greatest force impacting editorial strategies and routines, shaping how a variety of roles were performed. This was because economic factors influenced production and decision-making at every level. However, these factors could vary significantly between individuals in the same organisation, with primary platform(s) of content delivery and the standardised formats or routinised media logic of that particular platform resulting in more or less frequent impact on some roles than others, for example, homepage editor versus reporter, and on some individuals more than others depending on their understanding of the economic stability of the organisation and their specific goals and responsibilities in relation to that understanding. *RQ3* How are practices developed by the use of analytics challenging the boundaries of what it means to be a journalist and the definition of journalism?

- Because of the impact of external actors virtually influencing content production, external boundaries surrounding the field of the newsroom are increasingly porous.
- Discord and differences in relation to the acceptance and implementation of new practice often lies between a variety of subfields within the newsroom, for example digital editors and reporters, technologists and journalists, and also in generations of journalists, older versus younger.
- New roles and increasing tasks that come with changed boundaries are shifting what is considered to be acceptable methods of journalistic practice and who is a journalist.

8.3 The Porous Field of the Newsroom

The influence of the audience and the analytics systems/providers who aggregate audience data on editorial decision-making was a clear area of boundary shifting at my sites of study, creating additional subfields within the increasingly porous borders of the field of the newsroom. As pointed out by Belair-Gagnon and Holton (2018), at the most simplistic level, the widespread use of analytics in newsrooms "represents a paradigmatic shift in the relationship between journalism and web analytics companies from one where the latter were viewed as encroaching outsiders to one of coordinated efforts built through the connective power of news production" (p.9); however, it is worth noting that although symbiotic, as analytics companies need newsrooms to survive, this relationship is predicated on a paid service that analytics companies frame as an essential component of the survival of newsrooms, thus supporting their own revenue streams. The addition of this particular subfield also makes the subfield of sales and advertising, which, theoretically, is meant to sit behind a separate wall, more visible in newsrooms as actors in both subfields use the same data in an effort to shore up revenue, as seen with the available analytics at CP used both to ascertain relevance and negotiate contracts.

Boundaries surrounding advertising were also changing with regards to content. For example, the use of embedded content was so normalized at *The Echo* it was sometimes given the same treatment as news content, as seen when digital editors promoted advertorials like they were news if information contained within was deemed of use to the community and the

use of CP news content by "brands" who were not news organisations. By acknowledging the influence of actors who were once considered external to the newsroom, and how actors working in virtual subfields might impact editorial decisions, newsworkers and researchers alike would be better able to examine how news organisations can serve the audience and turn the use of metrics and analytics from a means of commodification into a means of audience participation, with news organisations benefitting from new perspectives and data that diversify coverage and build reader loyalty.

8.3.2 Technician or Journalist? Discord and Differences in Relation to New Practice

One of the most prevalent areas of boundary contestation in newsrooms I visited was what S1 from *The Spectator* described as those using analytics to work on the website acting more as technicians than journalists because they were not creating content. Many participants in this study took the view of Shapiro (2014) that "journalism is not aggregation" (p.560) and seemed in agreement with his (2014) required activities of an act of journalism, as discussed in the literature review. However, there were also widely disparate notions of what constituted original reporting, for example The Spectator's S2's suggestion that "the odd phone call or grabbing something out of the archives to insert it" was "still original content generation." More prevalently, there seemed wide acceptance of the fact that, for a variety of reasons, traditional standards could not always be met and that newer roles like social media editor were part of what S3 described as a "spectrum" of journalism, despite the fact they were often more about aggregation/curation and promotion than creation. When newsworkers conceptualise what it is to be a journalist, whether in reference to themselves or others, it is a personalised, constructed viewpoint—a viewpoint derived from their own experience that results in a theoretical measurement of what types of practice make one closer to or further away from the signified meaning of the term journalist. Champagne's (2005) observations on individual journalists operating in the field of the newsroom echo my own:

> "Generic discourse on 'the journalist' is in fact a major obstacle to understanding the field of relations within which this actor is situated and thus plays the game. Depending on the outlet and news department, journalists are nearer to or farther from the intellectual pole, they are more or less integrated into the strictly economic necessity of seeking to maximize circulation, they are more or less competent concerning the topics they cover" (p.57).

My research shows that the terms "journalist" and "journalism" are continually being negotiated within the field and amongst its actors, not to mention externally by actors including the audience. Recognising that a variety of newsworkers contribute to creation and produce widely differing content sometimes using widely differing skillsets, even within an individual newsroom, is essential in order to better clarify changes in newsroom practice and roles.

8.3.2.1 Dissonance in Boundaries of Practice

Throughout data gathering it was observed that there were those who held more tightly to traditional norms, or acknowledged their discomfort at breaking them, such as the digital editor from *The Echo* who felt her work was not journalism when she was managing the content of others versus producing her own. Then there were S16 and S17 from *The Spectator*, who, although fully willing to ride "the wave" of metrics to boost pageviews, acknowledged their dissonance about doing so, exemplifying Hanitzsch and Vos's (2017) "appropriation" mechanism of role negotiation where professional ideals are adjusted in order to meet newsroom constraints. At CP, the prospect of using a variety of analytics, particularly in terms of covering "trending" topics had varying responses, with some working towards what Carlson (2015c) described as "expulsion" of new practice in deference to traditional norms while others worked at "expansion." At NRK, there were off expressed concerns of the influence of journalists who came from the private sector having a "pageview mentality" and an effort at "protection of autonomy" within the social space of the public broadcaster. As Willig identified (2013), it is not just the positioning of the journalist or organisation in the field that is relevant, but the position of the work created by the journalist:

"...good journalism' is not perceived of as an essential characteristic of texts or as certain institutionalised methods, but as a relational position in the social space of the journalistic field. 'Good journalism' is only good in relation to 'not so good' or even 'bad' journalism, and what is considered 'good journalism' will change as the different relations in the field change; for instance, when newspapers are bought and sold, when new generations of journalists take over the managerial positions or when new media, such as the internet, challenge the definitions of journalism in the field" (p.383).

As seen throughout this thesis, even within the same organisation there can be a wide range of beliefs on when it is acceptable not to do 'good journalism' and what constitutes 'good journalism' can be markedly different from individual to individual depending on the habitus of his or her particular department within a newsroom. For example, the Newsquest senior manager responsible for *The Echo* professed that implemented changes and job losses had no impact on quality journalism, yet the vast majority who worked in the newsroom perceived a negative impact related to cuts. There were also obvious disparities between younger and older employees in terms of the adoption of the use of analytics, and the digital production they derived from.

8.3.2.2 Age Boundaries

I am not aware of a working definition of at what point a journalist becomes "older." An expansive ICFJ (2017) survey referring to a younger newsroom workforce found the median age of newsroom employees was "30- 35 years old globally" (p.17). Using those parameters, for the purpose of discussion I will categorize younger journalists as <35, older journalists as $>35^{217}$. ICFJ researchers said that the median age of journalists was getting younger because older journalists were being let go to eliminate high salaries or they left of their own accord because of the lack of time to do quality journalism, while younger journalists were more comfortable with increasingly technical roles. My own observations support the first factor but not, necessarily, the second. I would suggest there could be oversimplification of the point that more seasoned journalists are not accepting of technology.

For example, S15 from *The Spectator* was a digital pioneer who left the digital team and then the newsroom because of concerns over quality. Another Metroland employee, ML1, when talking about analytics assured me he was not "old-school" and he had been a technologist from the day he was born. However, he stressed that "nothing beats putting your feet on the ground and talking to people" because "any analytic can be reread by different people coming up to determine different assumptions" (personal communication, 2 May 2017). There was also S1 from *The Spectator* who saw the value in analytics that provided

²¹⁷ Age estimates were based on described work histories and visual cues; in future, having observed the differences in the way each group functions within a newsroom, I would make a point of asking for ages, or at least identify participants within specific age ranges.

deeper analysis of audience behaviour, but disapproved of his organisation's focus on pageviews. Then there was the managing editor of *The Echo* who fully embraced and supported the use of technology in his newsroom and wanted to use analytics on a deeper level; however, he did not have time to do so because, based on my observations, he was handling multiple management roles, plus acting as a copy editor, receptionist, and doing the heavy lifting on a lot of the production work, while his staff could not devote more time to analytics as they were also run ragged.

I did see examples of seasoned journalists who were clearly uncomfortable with using technology and working outside industry norms, as was noted by Nikunen (2014). However, I saw more who were primarily concerned with the use of clickbait versus finding the time to use audience data well, and how increased technological roles for reporters were impacting the time available to do the research and writing required for fulsome reporting²¹⁸, a concern shared by their younger counterparts. As noted by Lee-Wright and Phillips (2012), "It is physically possible to cover all the bases and feed the machine, but time and focus needed to produce original, satisfactory journalism are inevitably diminished" (p.69). Acceptance regarding the use of metrics and analytics was sometimes more pronounced by a boundary of positions as opposed to age. For example, digital proponents in this study were much more likely to see the use of clickbait as acceptable as long as revenue derived from it was being used to support "good journalism." Whereas, those operating more on the print side, like the managing editor of *The Spectator*, felt it damaged a media outlet's brand²¹⁹. The main finding here is that yes, comfort with multiplatform production and the use of analytics is often age-specific, but the reasons for discomfort can be complex.

8.3.2.3 The Next Generation

Younger journalists in this study, in general, seemed more comfortable with and wanted to work on multiple platforms, many noting this was because they had been trained to do so in journalism school. They were also often more comfortable with social media, the idea of writing multiple stories per day, spending limited time outside of the newsroom, and were

²¹⁸ The idea that journalists' valid concerns could be silenced due to presumptions they were "Luddites" was addressed by Lee-Wright (2010).

²¹⁹ As seen in Chapter 6 with the managing editor discussing the story covered as a hate crime.

more likely to feel they could do all of these things while meeting acceptable standards, while noting they may not meet ideals. This was demonstrated by an *Echo* reporter who acknowledged she had to "sacrifice an element of journalistic quality and labour" because it was important to "get a good level of output." As well as E10 who, while acknowledging pressures to complete multiple stories for multiple platforms might impinge on quality, still thought there was time enough in the day to do his job well. However, he also felt it could be a concern in the future as he expected there would be further newsroom cuts but the same amount of content required. This issue of time with regards to quality was also addressed by

S12 from *The Spectator*:

"I don't really care if I'm writing for print or for the website. What I'm concerned about is quality journalism, an investment in quality journalism. And if we're not given the time or the space to do that, that's the problem" (personal communication, 19 April 2017).

Another younger reporter at *The Spectator* said she had chosen the field of journalism knowing she could be let go at any time, something with which she had "come to terms." As she described, "Will I be able to work in journalism for the entirety of my career? Chances are, probably not. But I'm going to give it a good shot and see how long I can make it happen" (S11 personal communication, 19 April 2017).

E10 from *The Echo* was a little more optimistic. Although acknowledging he would likely have to look for a job at another outlet at some point, he felt he "would be able to have a career in the field for a long time" (personal communication, 18 October 2017). At NRK, three young reporters working the shift I observed on the digital desk during the time of my visits to one location were all on contract, filling in for full-timers. The two I spoke with described contract work for younger journalists as the norm, and did not profess to being worried by it, or the idea of having to move around frequently²²⁰. All of these younger journalists were living a different experience than that of their forerunners, including me. My observations led me to believe, as they had never really worked in the type of secure environments enjoyed by some of their more senior counterparts, they had more malleable boundaries of practice largely because there was no means of comparison. All they knew was

²²⁰ Acknowledging Norway's expansive social benefits could have lessened concerns regarding precarious work.

precarious work within short-staffed newsrooms where everyone understood it was increasingly difficult to meet ideals.

8.3.2.4 Influence from the Top Down, Experience and Malleability

Some newsworkers trying to encourage innovation, like the long-form editor at NRK, said in terms of working with journalists to get them to change the style of their writing, "the younger the better" (N9 personal communication, 1 August 2017). He said this was because older journalists were reluctant to take his advice on adjusting formats and text to encourage engagement. The fact younger journalists were more malleable in this case could be seen as a positive; however, it could also act as a negative in terms of being more likely to accept practice that might adversely impact editorial quality. This was reflected by *The Echo's* E6 who seemed entirely comfortable with reformatting and recontextualising press releases into a "news perspective" (Altheide 1976; 2017) in order to make *The Echo* appear to be a "proper paper" (E6). Thurman et al. (2016) also found UK journalists were "willing to justify practices that, under normal circumstances, their professional codes of ethics would prohibit" (pg.55). As stated previously, there is evidence in my research to suggest, however, that for younger journalists it could be less about justification and more about acceptance of newsroom realities.

There is also evidence to suggest, again, that top down values and communication practices can trump any divisions in practice in relation to age. S14 noted a dramatic difference in acceptable tasks for journalists in her eight years at *The Spectator*, for example, going from being told she could not shoot video to being encouraged to do as many videos as possible. However, as the use of metrics and analytics became more prevalent in *The Spectator* newsroom during that same timeframe, she said she did not have to "think about clicks" (personal communication, 19 April 2017), in contrast to reporters at *The Echo²²¹*. This was because her primary supervisor did not make them a priority, which was exacerbated by the fact that information on analytics was primarily shared within the digital team²²².

²²¹ At *The Echo* there was vast progression in the use of analytics according to participants and compared to MacGregor's (2007; 2014) observations of other Newsquest outlets.

²²² Less frequent use of metrics and analytics by those working "predominantly for the print product" (p.1577) was also noted by Hanusch (2017).

However, although this reporter did not feel her work was impacted by the need to get "clicks," in reality the desire for more video was based on building ad revenue and audience and was, therefore, about clicks.

Meanwhile at NRK and *The Echo*, analytics were an accepted part of everyone's routine. Metrics had greater influence because they were more tied to developmental gatekeeping, not just promotional. This was also seen at CP, where although the idea of creating content based on trending topics was still an issue for debate, the use of metrics and analytics was seeping into newsroom culture. Based on my findings, it appeared more open discussion about the use of metrics and analytics leads to a greater understanding of how limited resources might be managed and, as a result, the use of analytics employed at a deeper level versus chasing traffic; however, this hinged on consistent support from all senior managers. As well, consistency in training and information sharing is essential in terms of best practice with regards to analytics, as was evident even at the best-case scenario NRK, where, at the time of data gathering, some reporters had more access to analytics information than others. Clear communication is also essential to breed good will, as seen at NRK and The Echo where the initial launch of some analytics initiatives was seen as an effort to surveil and measure the performance of reporters rather than improve content. Transparency and consistency in the age of digital media is not just important in terms of audience-newsroom relationships, but within media organisations.

8.3.2.5 Platform Boundaries

Platform of delivery was another visible boundary on a number of levels including the treatment of content. This included, for example, clear distinctions between what was acceptable in print versus web content at *The Spectator* and *The Echo*, and at *The Echo* differences in the level of editing done on a print story compared to an online story before publication. There was also a difference in the language used in stories online at *The Echo* in order to avoid a social media comment storm. My research supports Hare's (2016) assertion that there is no longer the same delineation in work practice between what was once defined as old media (legacy/print) and new (digital journalism) as newsrooms from all spectrums do digital work; however, there are still delineations based on who does what and where content

is going. Acknowledging that there is evidence of a shift in the roles and perceived worth of those operating primarily within a digital format or with more digital/data analysis expertise, (see, for example, Weber and Kosterich 2018)²²³, perceived authority, or social capital, based on platform of specialty, or the "silicon ceiling" (C1 personal communication, 17 January 2017), was noted by multiple participants including technologists who said it was difficult to gain the cooperation of journalists because they spoke a "different language." The ease provided by working with someone who speaks your language was seen at *The Echo* where the digital editor with a print background who "understood" the challenges of print reporters working to supply content to multiple platforms resulted in "mutual respect." However, background alone does not eliminate editorial disputes between print and digital teams as seen at *The Spectator* where digital editors with print backgrounds were criticised for promoting clickbait. It is a combination of both mutual respect and consistency of editorial goals that is required to ensure a cohesive work environment.

At *The Spectator*, the blatant delineation of goals between the print and digital teams, from the managing editors downward, played a large part in newsroom conflict. At NRK, as described by N13, it was the lack of agreement on priorities between editorial and technological leaders that may have been the source of friction between the technologists and journalists working at the ground level. At CP, the lack of respect for digital work was perceived to be more prevalent with some senior editors versus reporters. Based on all of these observations, it is clear that a united purpose from the top down is also a key requirement in effective expansion of newsroom boundaries.

8.3.3 Shifting Boundaries of Journalistic Practice: Storytelling, Branding, and Social Media

When asked how the journalist's job had changed in recent years S2 said, in his view, "not that much" because although they might have less time and require a "modified and expanded tool set" their "basic job is still to tell stories" (personal communication, 17 January 2017). Although at a simplistic level that is correct, *The Spectator's* managing editor of print felt it was more complex. He believed there had been a significant change in the role of journalists,

²²³ As also noted by C1 (see p.136), N28 (see p.97), and in the literature review (see p.45/46).

outside those directly related to technology such as multiplatform delivery or use of social media:

"We need journalists today who can understand data theory, who can understand and build Excel sheets, who can challenge governments or private sector entities on the right to information, the right to know. Information is far more available, far more complex. The need for responsibility is far greater. Our information moves quicker. It changes. The idea of writing an inverted pyramid story and getting hold of a source at 5 o'clock, putting a fresh lead in and going home is long gone" (personal communication, 17 January 2017).

Increased responsibilities and new technologies were changing the physical practice of journalists in the newsrooms I visited. Reporters already swamped with the demand to produce content were also expected to brand themselves on social media and interact with the audience in order to expand the reach of their stories. In addition to this, as noted by multiple reporters it was common to use Twitter simultaneously as a tool for notetaking and a live news feed for the audience, and multiple journalists referred to the fact they often received statements from officials via Twitter.

Social media also provided newsworkers with a means of building community and reach, which ideally led to more audience participation and a shifting of boundaries between the journalistic and audience subfields of the newsroom. Powers (2018) also notes the importance of journalists using self-promotion to help publicise "the impact of journalism" (p.456) in order to support social capital and revenue but also identifies that newsrooms need to develop policies and codes of conduct in order to better understand when it is appropriate to do so. I would add that newsrooms need to consider the amount of effort and time it takes to effectively brand or promote oneself on social media including analysing the data that could support best practice. Based on my observations, the time required to leverage social media is highly underestimated and adds to the relentless pace that forces valued journalists, like *The Echo's* E4, to leave, or as Hanitzsch and Vos (2017) describe "exit," the profession.

8.3.3.1 How Do You Measure Value?

At all sites of study in this thesis, pageviews were seen as a marker of success but not necessarily a reflection of quality and to varying degrees, analytics and metrics were impacting the way journalists measured the value of their work. Seeing stories that required

little effort and had no long-term impact, like that of the flatulent taxi passenger at *The Echo*, garner more attention in terms of pageviews than those that required much more thought and labour was leading to reflection on what stories were "worth" doing, something also seen in Altheide's (1976) television ethnography with ratings being used to judge "good" and "bad" content. *The Spectator's* S6 also noted how metrics impacted a reporter's self-value when their stories, based on numbers, were not deemed important enough, in this case important being equated to popular, to receive prime placement or promotion on the website. Analytics and metrics were directly impacting how the value of stories was measured and, as result, decisions on story selection.

However, relating traffic to value was also surfacing discourse leading to consideration of different scales of value in relation to metrics. This was seen, for example, by The Echo reporter wondering how best to measure the impact of 500 readers keenly interested in a topic that resulted in a boost for local business, despite the fact that number did not meet the bar for desired pageviews as designated by head office, or the analyst at NRK who noted that reaching a smaller number of people in a desired or underserved target market was equally if not more important than thousands more in a demographic that was already being reached, or the development of Janus to measure story quality at NRK, and its redevelopment of ARK to take some focus off of pageviews. CP's C9 wanted to see better metrics, outside of pageviews, that could support why it might be worthwhile placing advertising on a specific site. S15 from The Spectator believed that important measures of a publication's success were the health of comments and the frequency of opportunities given for meaningful reader interaction. However, he also believed metrics had not been designed to measure these interactions because analytics companies "don't see money in that" (personal communication, 24 April 2017) and that publishers were too focused on short-term gains.

8.3.3.2 The Connection and Tension Between Economic and Social Capital

Tandoc (2017) noted that "...amassing cultural capital might provide journalists with feelings of self-esteem, while amassing economic capital might provide journalists with feelings of security" (p. 12) and that journalists are "motivated by keeping their capital

accumulation stable." However, my observations showed the type of capital most in need of stabilisation can shift individual priorities and cause discord within newsrooms. For example, the need to amass economic capital via pageviews increased the economic security of the digital editor at *The Spectator*, but the use of questionable content that made her "cringe" resulted in a loss of social capital. The supply of stories required to ensure rapid cycling of ad impressions could not be generated by what The Spectator's S6 described as a "diminishing newsroom," which led to the use and promotion of more outside content that some within the organisation deemed subpar, disagreement on the placement of such content on the website, and the chief editor acknowledging different standards for different platforms. Analytics were not used proactively as a tool to develop original content but only on a surface level, primarily for homepage management²²⁴. Conversely at NRK, the promotion of quality content provided evidence of the appropriate use of taxpayer dollars, which contributed to economic security, and left digital editors filled with pride in the quality of stories being promoted and developed. As Wallace (2017) identified, "gatekeepers are not limited by channels but are instead empowered or disadvantaged by their affiliations with (journalistic) organisations and institutions" (p.280). Even when looking at positive forces, although editorial strength and autonomy created social capital for both NRK and CP, in both instances that hinged on different economic influences and differing reasons for editorial framing and the use of analytics. NRK's goal was to reach and inform to ensure funding, CP's goal was to meet the needs of subscribers from all types of outlets and justify its worth to such subscribers during contract renewal.

Within this research, the underlying editorial and ideological goals of an organisation, which as seen at all sites of study were largely impacted by stable funding or lack thereof, played an important part in determining where journalistic practice was situated within the field of the newsroom. Wang (2018) describes journalistic doxa as "a source of stability" and habitus as "a source of change" (p.487) and says that "the chaos surrounding the adoption of audience metrics is just one element" (p.485) reshaping the journalistic field. Shoemaker and Vos (2009) believe overall organisational structure trumps routine in terms of impact on

²²⁴ This is not to suggest, as previously documented, that everyone at NRK agreed with every editorial strategy, but that overall even those who questioned the importance of the pageviews metric, for example, still felt that NRK was fulfilling its mandate.

gatekeeping as news organisations will change routines based on a "positive externality," for example the ability to save money. A "positive externality" such as saving money can negatively impact journalistic standards and, based on this research, blanket cuts while sticking to old routines and ignoring or misinterpreting audience data are not the solution. As such, media organisations need to carefully consider the long-term impact of decisions made in relation to the use of metrics and analytics that might benefit the bottom line but also might incrementally eat away at their ability to serve their communities and hold audience trust.

8.4 Conclusion: The Goal is the Elucidator

One of the best indicators of the growing importance of analytics in news culture is the fact that one of my sites of study, The Canadian Press, was so eager to have analytics that it was trying to manually count how its content was being used, even though it did not have a direct audience to quantify. This was just one of multiple examples in this research of the use of metrics and analytics challenging the boundaries of journalism in a field where boundaries are in constant flux. Carlson (2018) suggests, "our shared concern should be about how measurable journalism alters the shared imagining of what journalism is and what it ought to do" (p.412). My analysis of data gathered for this research suggests that this imagining of journalism has to include the contributions of newsworkers who sit outside traditional definitions of journalists but do journalistic work, and an audience that is already participating in the news process through participative gatekeeping, but could participate more fully given the chance.

Universalities at all sites of study included the prevalence of social media to promote content; a common digital vernacular, such as the use of the term "doing well" in relation to the amount of pageviews an article received; pageview and other traffic-based metrics being the most used despite acknowledged shortcomings; pressure on reporters to supply content for multiple platforms and have an online presence; and editorial meetings that felt familiar compared to my own newsroom experience, even when taking place in Norwegian. At all sites of study, to varying degrees, the audience influenced the production and promotion of content and the realities of revenue shortfalls were brought right to the desks of digital editors and many reporters, for example, in the form of traffic targets.

NRK's N2 said "turning a metric into a goal…corrupts a number" (personal communication, 18 April 2017). However, identifying how goals are supported by numbers allows for greater insight into the use of metrics and analytics. Analysis of data collected for this thesis showed that any study of the use of metrics and analytics in newsrooms would benefit from three key questions: What goals do the use of metrics and analytics support? What values do the use of metrics and analytics support? How does audience data influence the creation of goals and values? The participative gatekeeping model introduced in this thesis, with developmental and promotional channels, is designed to help future researchers further explore answers to these questions as analytics and metrics become omnipresent in news production and understanding of and working with the audience become key factors in newsroom survival.

My research shows that, perhaps particularly during a time of economic crisis, there is a continual internal negotiation of assumptions in relation to traditional norms, accelerated by rapidly changing practice and the expansion of professional boundaries within the field of the newsroom. As a result, despite a documented tendency to remain stuck in journalistic models which led to the current crisis, doors are opening for those "radicals who want to effect major change" (Klinenberg, 2005, p.185) versus those who have accepted "the rules of the game," although this acceptance is not always by choice but out of desperation. Schudson (2005) feels external actors, like the audience, are necessary for journalism to avoid insularity and remain pluralistic and dynamic because "journalists collectively do very little to challenge their own governing assumptions" (p. 219); rather it is their exposure to the "disappointment and criticism" of both their sources and audience that instigates change. Representative of this study, it might be more appropriate to say that governing assumptions questioned by external and internal actors, and impacted by external and internal forces, are widely challenged in a continual negotiation of traditional norms reflected in the use of metrics and analytics within the porous field of the newsroom.

Chapter 9 Final Reflections

As a former news producer and writer, when visiting newsrooms for observation in my roles as a journalism teacher and/or researcher, I have always felt a sense of familiarity with the processes and people, regardless of location, primary operating medium, or revenue stream. This final chapter of the thesis contains my own reflections and observations that surfaced during data gathering and analysis that fell outside the purview of my research questions; as well as contemplations on areas for future research on metrics and analytics in global newsrooms.

9.1 A Personal Negotiation with the Term "Journalist"

When describing my life before academia, I generally refer to myself as a former journalist. When I was working in a newsroom, though, I rarely, if ever, called myself a journalist, but rather a writer or producer. Even though I was creating original content and performing activities as defined by Shapiro (2014) that inherently made my work "journalism," I was working at a local television station. I thought of journalism as the type of capital "J" journalism that was more appropriately used by those working at critically acclaimed news outlets involved in weighty investigative reports and foreign affairs. Upon reflection, I believe this may have been a result of the larger conversations around me, starting in journalism school, about stories that were worth covering and how they were covered and the fact that the station where I worked operated outside of expected norms.

It had a large audience, but was described as both forward thinking and trashy, as being capable of making news more accessible and/or dumbing it down. Anchors did not read behind a desk, they walked around the newsroom. The reporters reflected the diversity of the city we lived in, were expected to show their "process" in the stories they covered, and we reported live in as many places as possible as often as possible long before it was common practice everywhere else. The first show I produced in the mid 1990s was one of the first on television that invited viewers to call in and share their thoughts on the news of the day and the stories we had covered. The essence of the station was based on interacting with and inviting the audience into the news process. Although, in retrospect, I graduated to a role where I was setting the news agenda with little or no guidance without nearly enough experience to do so and witnessed countless issues that would make anyone with a penchant for journalism ethics squirm, I evolved an innate sense of being aware of the audience and pushing boundaries.

This is possibly why I never thought of myself as a journalist—I was working outside traditional norms of the time, many of which, bad and good, are now commonplace. My own experience, as Hovden (2008) suggested, might have made the significance of defining the term journalist more important than it actually was for the purpose of this research. However, my experience of not thinking of myself as a "Journalist" perhaps made me more aware that the term is no longer useful as a general descriptor of actors in the newsroom—their tasks are too varied and often defined differently. There are still journalists; however, who they are in any newsroom depends on whom you talk to. This nuance in perspective—that the term journalist, for those working in and outside of the newsroom, is more a signifier than a finite job description—evolved with my research and, in the end, I found the struggle to define the roles of journalists in newsrooms and who participates in the news process, what Hanitzsch and Vos (2017) would describe as role negotiation in a "discursive field," to be more relevant than labelling who in the newsroom was a "journalist."

Within newsrooms, a variety of people work in a variety of positions doing a variety of tasks that each may define or label differently; regardless, they are all working together to create or promote content that is being consumed by a shared audience. As well, there is a lack of clarity in using the term journalist to describe anyone or everyone working in a newsroom²²⁵ that could lead to differentiated interpretations of findings, for example, in that gap found by Boczkowski and Peer (2011) between the choices of "journalists" and "consumers" based on homepage content placement. If those selecting placement were digital editors working in the manner as some of those in my observations, the nature of their jobs would not meet Shapiro's (2014) definition of journalistic work, because it was largely aggregation. Neither would it meet the definition of S1 from *The Spectator* who saw this type of work as technical.

²²⁵ This was also noted by Ferrer-Conill and Tandoc (2018) who discussed the need for a more "nuanced understanding" particular to new "editorial roles" (p.1).

For future research, there is a need to establish precision in language with regards to who is being studied in order to establish appropriate parameters of comparison. Changes in boundaries can only be accurately identified when the role of participants in a given study are distinguished, versus discourse surrounding amorphous "journalists²²⁶." Therefore, the value in efforts to create a functional definition of journalism, as in the work of Shapiro (2014), is not, necessarily, in developing a finite conclusion agreed upon by all, but a practical ideal to strive for and a contested measure of comparison within the newsroom and in scholarly literature, similar to the way Habermas's ideal public sphere is used in relation to discourse on the internet²²⁷.

9.2 Avoiding Academic Media Logic

When I was in the depths of my on-going literature review, interviews and site visits, and early stages of coding data, it became evident that particular aspects of certain frameworks and theories were a perfect fit for particular components of the evidence being gathered. Used together, this bricolage reflected the fluidity and complexity of the environments being studied and served to improve understanding and strengthen the legitimacy of observations. However, this method of inquiry was unusual when compared to the vast majority of scholarly literature related to journalism. Although it would have been possible to frame the research in a way to fit a more traditional approach, my inherent pragmatism and penchant to push boundaries superseded any inclination to follow more well-recognized structures for the sake of meeting expectations of uniformity. As noted by (Kincheloe and McLaren 2005) the use of bricolage steps outside the notion of "a standardized agreement as to some reductionist notion of 'the proper interdisciplinary research method'" and requires "awareness of the diverse tools in the researcher's toolbox" (p. 320).

Although bricolage is a proven method of inquiry, "the approach has remained relatively misunderstood, and unpopular" (Rogers 2012, p.1). I anticipated being challenged on my decision and, as such, was clinical in my own evaluation of which theories worked best and why, using "research methods actively rather than passively"

²²⁶ Or, conversely, titles such as audience manager where newsworkers are performing the same tasks as others who are called digital editors.

²²⁷ Acknowledging an ideal public sphere has never been realised while acts of journalism have.

(Kincheloe 2012, p. 324). This thesis supports the premise that using multiple theories, particularly in an ethnographic study of an area experiencing rapid change that might best be observed through multiple sites of study (as also noted by Christin 2017), is not only a valid methodological choice but also one that should be considered by more scholars, as should the idea of giving interviews equal weight to observations in ethnography (as also identified by Gerard Forsey 2010). Consequently, as would be considered best practice for journalists/newsworkers, academics need to take stock of why and how they work within specific format constraints and whether or not it makes sense to do so. Deciding on a methodological approach should not be based on how best to wedge data within an existing framework, but, instead, on how best to reveal the data and, in so doing, building knowledge both in terms of the findings and the methodological design they are housed within.

9.3 Feeling Like Bourdieu

The research and writing for this thesis were done at an interesting, often too interesting, time in terms of journalism, with burgeoning misinformation and strategies to combat it, a US president that absorbed much of the media conversation worldwide while simultaneously attacking the media, actors outside of journalism using news formats to give credence to opinion, and rapidly changing technology. In the province of Ontario, where I live, a candidate running for premier, who ended up winning the race, seemed to be somewhat channeling Trump regarding his relationship with the media, including claims of "fake news" and the airing of political ads cut like reporter packages²²⁸. During the election, I was asked to speak on the use of news formats by those who were not journalists. I knew it was likely that only about 20 seconds of the interview would be used because I used to package such content. In the end, I felt new understanding for Bourdieu's frustration with constrictive news formats.

In Bourdieu's (1996) On Television, he shares his exasperation at the selection of guests who must present viewpoints on complicated subjects in "uncomplicated, clear, and

²²⁸ Perhaps these ads were inspired by Trump's "REAL News" reports (Koerner 2017). The ads run in Ontario were challenged by another party running in the election (CBC News 2018).

striking terms" and "avoid the quagmire of intellectual complexity" (p.3). Referring to the time limits on news segments, Bourdieu (2005) wrote, "...it has happened to me countless times—'Do you want to come on the evening news and talk about the crisis? You'll have three minutes." Although Bourdieu has attracted criticism that his writings surrounding journalism are more opinion-based, with no empirical component, I found much of what he wrote true to my own experience working in television. In pre-interviews, I tested the ability of potential guests to speak in an uncomplicated and clear manner about very complex subjects on the shows I produced. Three minutes was and is a significant amount of time for a guest to be given to explain any issue, no matter its complexity.

Being interviewed about how news formats were being used by a political candidate gave me the opportunity to experience first-hand how difficult it was to be the "expert" on a complex issue in a limited timeframe. When the story ran, the clip that was chosen was one where I referred to the fact that there was no monopoly on news formatting and news media would be better served by thinking of the best ways to share information versus trying to control who was making content look like "news." Despite a wealth of information, I had shared pre-interview regarding how highlighting misinformation amplifies it, a significant chunk of the candidate's "news" story was aired on a real news channel. I understood why: one of the basic tenets of television is to "show" what you are talking about, use of the ad would have made the physical assembly of the story easier, and there was no easy fit for theory within the framework of the story's presentation; however, from an academic standpoint, the story did a great job of amplifying political opinion versus facts, housed in a format that many would not have been able to discern from the other stories on the news that night, particularly if they tuned in after the story's introduction. This made me reflect even more on how what seem like routine choices in the news process can impact public discourse. The incident will leave a lasting impression and was one more transition in my role from journalist, or newsworker, to academic-or, perhaps more accurately, the further establishment of an academic "self" that exists in tandem with my journalistic "self."

9.4 The Business of Journalism

Although I have done my utmost to do so, it is difficult to reflect the fluidity required to work in and develop strategies for success in modern newsrooms that are chronically understaffed and overwhelmed. C1 explained how "models have to be nimble and flexible" and that publishers should be prepared to abandon strategies and pivot because the right thing to do one day could be the wrong thing to do six months down the line. Multiple other participants, particularly technologists, analysts, and digital editors, stressed that because of the need for rapid change analytics could not be seen as a way to make money but as an investment in survival. Developing business strategies was outside the purview of my research; however, incidental data gathered for this study led me to believe that particularly for legacy media, such as the two local papers in this study, it is imperative to be willing to pivot, but it is equally imperative to have a clear design of how to move forward.

Despite a monetary crunch at both *The Spectator* and *Echo*, the sense of floundering felt by many in *The Spectator* newsroom was significantly more tangible. The difference was that, regardless of how everyone felt about planned and implemented strategies at The Echo to increase production and the ridiculous pace of work required to meet such production, there was a plan. Participants seemed more confident of some type of future for *The Echo* newsroom under Newsquest management because of the clear blueprint in place to integrate digital strategies, even with acknowledged concerns this plan might impact the ability to maintain editorial integrity. At The Spectator, lack of a plan was a ubiquitous point of stress, as noted by S4 who said, "If you can get them to express what the business model is from their end, you'd be first because I don't know what it is, honest to God" (personal communication, 3 April 2017) and S11 who described how the editor-in-chief would call them all to the middle of the newsroom every few months and describe how things were "not good" and admit to not knowing the best way forward. S11 did not cast blame for this, though, as she felt it was an industry-wide issue. The discrepancy in the two newsrooms led me to believe that developing what I came to think of as a "wet-concrete strategy"—one designed for the long term but not set, and, as such, having the capacity to be manipulated as desiredwas best practice.

However, one of the issues for many legacy outlets is that they are working within large media conglomerates where decisions are made to the benefit of and easiest implementation at the majority of multiple outlets, as seen with the shared CMS at Metroland. As NRK's N5 identified, it is much harder to turn a "big ship." From my own observations, it seemed following strategies and systems put in place for the good of the much larger collective sometimes seemed completely counterintuitive to providing a public service to a particular set of readers/viewers. Questions to be explored further by future researchers could include where does it make sense to share resources and where might these shared resources inhibit the fluidity required to be successful in the rapidly changing digital sphere? As well, based on the successful efforts of The Spectator and Echo to broaden revenue streams through shared space and production, and CP's broadening of its subscriber base to brands and the possible selling of bots, this study supports that it is beneficial for all types of publications to broaden revenue streams in such a tight market; however, less certain, is how each method used to broaden revenue streams/find cost efficiencies might impact editorial goals and this is also an area for future research. Where is the confluence of diversification, cost efficiencies, and quality?

Lastly, in considering the business of journalism, during the process of my research I attended a conference and presented on a panel with Damian Radcliffe, who repeatedly made an important assertion related to his work studying local newsrooms (Radcliffe and Ali 2017): If researchers and industry experts continually talk about how journalism is dying and there is no future, it will turn into a self-fulfilling prophesy. Just as there is a need for more positive media logic in the production of news content, there is a need for more hopeful rhetoric regarding the future of news, grounded upon efforts to look harder for what is working or what might work versus focusing on what can be the more obvious negatives with regards to journalism and factors impacting journalistic production.

9.5 The Missing Link

In all of the discussions I have had regarding the use of metrics and analytics and what the "audience wants" it was clear that the use of quantitative data alone could not provide a complete answer; however, even as everyone acknowledged this to be the case there seemed

little effort being made to actually engage the audience in a more direct manner. The *Echo's* E2 reminisced about her early days in journalism, working in a district office before it was shut down:

"It's quite old fashioned, but...people used to come in and have a chat and a cup of tea and talk to you and build relationships that way. But now, you know people on Facebook, you know different groups to visit but there's not the trust there so people wouldn't necessarily contact you with information" (personal communication, 26 September 2017).

E2 successfully built community with the audience via Facebook but did not have the same sense of community with the audience she interacted with offline. As seen in the literature review, The Financial Times is bringing back the idea of tea with readers (Schlesinger and Doyle 2015), precisely because of the benefit of building trust and communicating directly with the audience about what it wants. At *The Spectator*, although there were regular, inperson community events that established the newsroom as a part of the community, there were no opportunities afforded to pick readers' brains regarding coverage, and such events were not extended to the online audience. Although NRK's panels offered much more specific data on what was being consumed by the audience, such data did not explain why choices were being made. This led me to believe news organisations' growth strategies should include analysis of where the opportunities might be to open the doors to the community and how those opportunities might evolve both off- and online to give context to quantitative audience data, give the audience a more authentic prospect of contributing to diverse storytelling and, in so doing, promote reader loyalty. As Drohan (2016) said, "real local knowledge and a connection to the community cannot be out-sourced" (p.25). There will always be information for free on the internet; establishing value to a specific audience that feels a connection to the newsroom is what will separate the publishers who survive. The Spectator's managing editor of print supported this when he said,

"If people see what you're doing is valuable, not just likable, but if it's valuable, if it's fulfilling, if it's knowledgeable they will come back to you and they will buy you and they'll stick with you" (personal communication, 17 January 2017).

9.6 The Struggle for Quality with Unrelenting Time Constraints

As stated previously, the goals of this thesis did not include formally measuring the quality of content being created or promoted by participants, but rather an analysis of how definitions of quality can differ and how newsworkers perceived quality to be impacted. However, particularly as a former journalist, it was very difficult not to judge choices being made that might impact content, and not to spend a lot of time thinking about ways to quantify quality. NRK's N3 believed in order to determine quality of an NRK story she needed multiple measurements: reach as a measure of determining how many people had an opportunity to interact with the content; pageviews as a measure of how many people had the opportunity to interact and did so; engagement, including how far someone scrolled down and whether they opened a photo to make it bigger or checked something in a fact box or shared the content; and time spent. N3 said,

"If you see all of them together and you see the content has massive reach you know you're probably on to something and the opposite if you don't. If you notice massive time spent and really low on reach you know you haven't gotten great content out there. And if you take both [those metrics and] the Janus [metrics] then you would get the best base line of something that could tell you about your content" (N3 personal communication, 27 July 2017).

Quantifying quality of content might be a complicated task, as noted by Filloux (2017), but one worth investigating for news outlets exploring how to build trust, reputation, and relevance within the communities they serve. As seen at CP and NRK, more automation and use of analytics does not inherently lead to assembly-line production—audience data can be an impetus for engendering more engaging, unique, and diverse forms of storytelling and viewpoints.

In terms of setting priorities, it is clear that time is the biggest challenge for all actors in the newsroom. As news production has always been deadline driven, this is nothing new. However, deadlines being met by fewer staff supplying content to multiple platforms and publications while expected to brand themselves on social media, connect with the audience, monitor analytics, act as a live news feed, and perform production work *is* new. Despite the revenue demands on newsrooms, if providing quality content catered to the audience is an important economic strategy, time must be carved out for such work, and money needs to be found elsewhere besides the constant cutting of positions, often those of the most experienced newsworkers who might be able to work with younger, more technically-oriented staff to ensure optimisation of content for the web based on both technical and editorial goals.

Christin (2018) noted the need for more research on whether growing reliance on traffic metrics and social media promotion is leading to "a marked impoverishment of the content offered on the web" (p.1411). Although I provide a surface level examination of the impact of news practice in relation to content creation from the perspective of those creating the content, a study which could combine rigorous content analysis in combination with ethnography and surveys in order to triangulate what newsworkers believed to be true about the impact of analytics on news practice and content created combined with an analysis of the content they were referring to would be a productive next step²²⁹. It would be vital, however, to include audience feedback in this type of analysis, so that content was not only being compared to traditional journalistic standards but also to audience understanding of those standards, and a comparison of audience expectations and preferences, in order to acknowledge the audience's role and potential impact on news coverage.

9.7 The Importance of Temporal Analysis

Doctoral work, particularly of a reflective nature, can turn into an isolating process; however, I found that sense of isolation diminished by exploring connections in the work of other scholars, and was surprised that some connections broke what I expected to be temporal boundaries in relevance. This was the case with the ethnographic work of Altheide (1976). Over forty years ago he was documenting similar issues in relation to practice in television newsrooms as I was in modern digital newsrooms,²³⁰ including comparable pressures faced by his 1970s television participants and my 21st century multi-platform newsworkers. However, what was unique in the modern-day newsrooms I visited was the immediacy and volume of information, along with more accessible data, compared to '70s television ratings, that amplified the audience's mediated, participatory role in news production and the influence of advertisers. As Altheide (1994) noted, temporal perspective is crucial when

²²⁹ This type of multidimensional study was also recommended by Hanusch (2017).

²³⁰ Bourdieu (2005) had also noted, "...the model of the most heteronomous sectors of the subfield, that of television, is little by little spreading to the whole field, including its 'purest' regions" (p.42)—the purest regions being newspapers.

examining social activities and routines dependent on technology because "the interaction of activity, information technology and formats define increasingly our symbolic spaces through which the past, present, and especially the future are being forged" (p.682). Regardless of differences, including new economic realities for all news outlets, the significance of similarities in Altheide's work in relation to my own also supported Carlson's (2018) posit on the importance of temporal reflexivity within studies of measurable journalism in order to provide context on the extent of change. Not only was this interesting from a research perspective, but also reassuring from the perspective of a researcher very concerned about the relevance and currency of findings at publication due to rapidly changing technology. Future researchers of metrics and analytics practice will need to put the findings of this thesis into temporal and theoretical context in order to be fully aware of how trends may or may not have changed, something I believe can only be given fulsome treatment with the benefit of spending time in a newsroom, versus theorising on data without such observation.

9.8 The Importance of Analysing Limited Effects of Innovation

The impact of researchers and funding dollars sparked much reflection when I learned of *The Spectator's* previous involvement with a Knight initiative. As noted in Chapter 6, just over 10 years ago *The Spectator* was considered a digital pioneer, and, as such, selected to be part of a project aimed at digital innovation. However, the research spotlight and money that came with that project was fleeting. The loss of funding combined with decreased revenue and changes in leadership led to loss of forward motion, and even regression, in digital innovation. Meanwhile, other media outlets were benefiting from funding similar to that once enjoyed by *The Spectator. The Seattle Times* was moving away from "a pageview mentality" after developing an analytics system designed to promote subscriptions—something made possible through participation in a more recent Knight-Lenfest research initiative (Hare 2018). This is not to suggest it is feasible or best practice to commit to an individual research partner for an indefinite period of time; however, perhaps, a longer-term commitment is required in such studies, not just to monitor successful innovation, but to identify why such development might stagnate or recede once researchers' commitments to the newsroom have

been fulfilled and, with that knowledge, work towards creating practice that supports innovation in the long term.

9.9 Some Things Are Worth Saving...Some Are Not

During the writing of this thesis I saw a PSA created with partners including the Ad Council and the American Diabetes Association that put important facts about risks for prediabetes over a "baby goat disco." The images of baby goats dressed up in costume under a disco ball had absolutely nothing to do with the context of the text being laid overtop; however, it was brilliant. I read every word while watching the goat disco and thinking what an inventive strategy this was to get people to pay attention. I am not suggesting important news topics should be overlaid atop visuals of a goat disco; however, I also would not close the door to the idea entirely. There should be no limits on the exploration of innovative methods and formats to get the audience's attention concerning important information. For journalism and newsrooms to thrive, all boundaries should be challenged.

After much concentrated study on the use of metrics and analytics in newsrooms, though, I also leave this project feeling very strongly that some journalistic values and traditional practices need to be upheld in order to retain the trust of the audience, for example, ensuring certain stories are covered even if they will not generate high traffic or ensuring the accuracy of information in any story. Challenging boundaries does not, and should not, lead to the negation of all hard lines. Some journalistic mainstays are worth saving, others—such as blaming the audience for using clickbait or the use of out of context data for the basis of such presumptions—should be eradicated. In the end, I feel hopeful for journalism's future because regardless of challenging circumstances faced by newsworkers in this study, there was a growing willingness on the part of tenacious and dedicated participants to experiment outside, inside, and around the box, evident in the growing appreciation of the need to understand, utilise, and serve the audience through the use of metrics and analytics.

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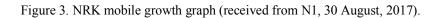
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Appendices





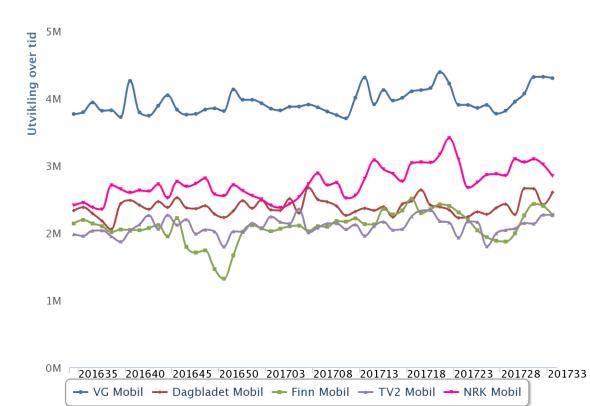


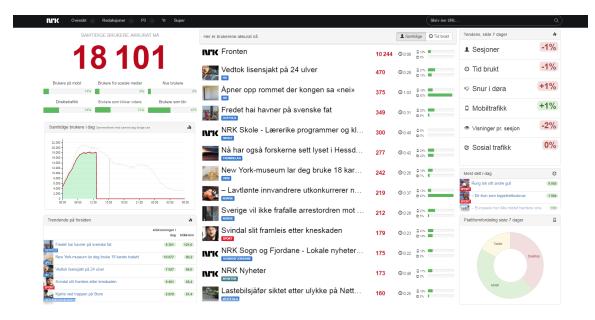
Figure 4. Individual story view of ARK, translated.

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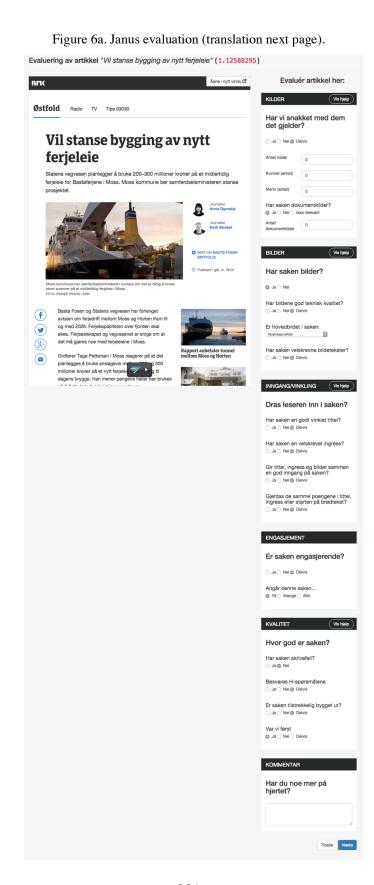
Translation for Individual Story View of ARK

Akkurat nå = Right nowHenvisningstrafikk i dag = Referral traffic todaySamtidige brukere = Concurrent usersFronten = Main front page, NRK.noBrukere på mobil = Mobile users %Bruk etter publiseringsdato = Use after time of publishingBrukere fra sosiale medier = Social users %Gjennomsnittlig tid brukt = Average time spent (Google Analytics)Unike brukere = Unique usersSidevisninger = PageviewsDelemetadata = What is scraped when sharing toFacebook/social

Figure 5. Main page of ARK.



Appendix 4a



Kilder=Sources"Did we talk to the relevant people this story is about?" Yes, No, Partially Antall Kilder – Number of Sources Kvinner (antall) – How many women? Menn (antall) – How many men? Does this story have document sources? Yes, No, Not Relevant

Bilder=Images Does it have images? Yes, No Is it of good technical quality? Yes, No, Partially Is the main image of the story an illustration? [Option to choose archive/current photo] Is the image text/description well written? Yes, No, Partially

Inngang/Vinkling=How did you present the story to the reader?/Is the reader "dragged" into the story? Does it have a good title/headline? Yes, No, Partially Does it have a good story description/introduction? Yes, No, Partially Do the title, picture, and introduction work together to make you want to read on? Yes, No, Partially Does the headline, picture text, and/or introduction seem repetitive? Yes, No, Partially

Engasjement = Engagement Is it engaging? Yes, No, Partially Is the story relevant to few, many, or everyone?

Kvaliet=How good is it? Does it have any typing errors? Yes, No Does it answer the 5 Ws? Yes, No, Partially Is the story sufficiently "built out" (context, covered all the viewpoints)? Yes, No, Partially Were we first with the story? Yes, No, Partially

Kommentar=Comments "Do you have anything else on your heart?"

Appendix 4b

Figure 6b – Screengrab of reporter/editor view of completed Janus survey, with comments (translated in ARK using Google Translate)

Does the case have well-written captions? Captions should not repeat title or entry. The caption should as much as possible explain the content of the image: who, what, where. It's neat to tell when, where and for what reason the image is taken even when using archive images. Remember that video and audio content should also contain captions. Search engines like Google are blind	Yes
Repeat the same points in title, entry or the beginning of body text?	Yes
Is the matter engaging?	Yes
Is this a self-interest or community?	Fellessak
Were we first?	Yes
Is the case well built?	Partial
How well are the H questions answered?	no
This case concerns	Many
Does the case have typing errors?	no
Comments	
** What happened in Berlin? There are some H questions left unanswered, like which race it was and what placement	t the race gave him. ** Could

we focus more on his untrusted leaf + that he entered wildcards? Type entered in the table it was and what placement the table gave him. — Could we focus more on his untrusted leaf + that he entered wildcards? Type entered the last minute, now he has broken many records. ** We reiterate that he is not happy in title and ingress. Ingress could have been shorter when the title is so long. ** Only single case. Could we have one to comment on the record, one from the swimming association etc? It had helped to understand how good this was in a competitive context, compared to competitors etc, for what I think is missing. I wonder this after reading the matter. How good is he really?

Figure 7. Janus usage for each "Distrikt" or office, with number of short and long articles evaluated and total number of articles evaluated. Alle=all, alle med kommentarer=all evaluated with comments. Evalueringer siste 30 dager=all evaluated within past 30 days, followed by all evaluated in past 30 days with comments.

Evoluoring			
Evalueringer			
Alle			
Distrikt Østlandssendingen	Artikler 454	XL-Artikler 4	✓ Total
Rogaland	409	5	414
Sogn og Fjordane	367	4	371
Østfold	314	3	317
Telemark	194	33	227
Hedmark og Oppland	198	17	215
Vestfold	189	11	200
Hordaland	186	0	186
Finnmark	149	9	158
Buskerud	119	1	120
Sørlandet	107	2	109
Nordland	96	0	96
Møre og Romsdal	81	7	88
Trøndelag	58	2	60
Troms	23	0	23
Sápmi	16	0	16
Alle med komme	entarer		
Distrikt	~ Artikler	~ XL-Artikler	Total • •
Østlandssendingen	368	4	372
Sogn og Fjordane	250	3	253
Hedmark og Oppland	171	16	187
Hordaland	180	0	180
Østfold	169	1	170
Vestfold	155	11	166
Telemark	123	12	135
Rogaland	118	3	121
Buskerud	108	1	109
Sørlandet	102	2	104
Finnmark	66	7	73
Trøndelag	53	1	54
Nordland	47	0	47
Møre og Romsdal	43	1	44
Troms	22	0	
			22
Sápmi	siste 30 dage	0	22 14
sápmi Evalueringer	14	0	
Sápmi Evalueringer Alle Distrikt	14 siste 30 dage	0 r XL-Artikler	14 ✓ Total → ✓
Sápmi Evalueringer Alle Distrikt Østlandssendingen	14 siste 30 dage	0 r ∞ XL-Artikler 0	14 * Total * *
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Sápmi Evalueringer Alle Distrikt Østandssendingen Sogn og Fjordane Tielemark Hordaland	14 siste 30 dage V Artikler 17 16 8 4	V V V V V V V V V V V V V V V V V V V	14 Total • • • 17 16 8 4
Sápmi Evalueringer Alle Distrikt Øatandssendingen Sogn og Fjortane Telemark Hordaland Serlandet	14 siste 30 dage V Artikler 17 16 8 4 3	V XL-Artikler 0 0 0 0 0 0 0 0 0 0 0 0	14 Total • • • 17 16 8 4 3
Sapmi Evalueringer Alle Distrikt Østandssendingen Sogn og Fjortane Telemark Hordaland Sortandet Vostfold	14 siste 30 dage Artikler 17 15 8 4 3 3	XL-Artikler 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 V Total V V 17 16 8 4 3 3 3
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Sépmi Evalueringer Alle Ostandasendingen Sogn og Fjordane Telemark Hordaland Sertendet Vestfold Buskenud Finnmark	14 siste 30 dage Artikler 17 16 8 4 3 3 0 0 0	XL-Artikler 0	14 Total • • • 17 16 8 4 3 3 0 0 0
Sapmi Evalueringer Alle Ostandsendingen Sogn og Fjordane Telemark Hordaland Sorlandet Sorlandet Hordaland Buskerud Finnmark Hedmark og Oppland	14 siste 30 dage V Artikler 17 16 8 4 3 3 0 0 0 0 0 0		14 Total • • • 17 18 8 4 3 3 0 0 0 0 0
Sépmi Evalueringer Alle Ostandasendingen Sogn og Fjordane Telemark Hordaland Sertendet Vestfold Buskenud Finnmark	14 siste 30 dage 4 4 3 3 0 0 0 0 0 0 0 0 0	V XL-Artikler 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 Total • • • 17 18 4 3 3 0 0 0 0 0 0 0 0 0 0
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Figure 8. Screengrab Hordaland stabbing story.





Flere barn var på fotballtrening da knivslagsmålet brøt ut

MØHLENPRIS (NRK): Sportsklubben Djerv nedringt av bekymrede foreldre etter masseslagsmålet. Nå vil de ha vakthold på fotballbanen.



Rekordmange vel å gå dei bratte bakkane hit

Stadig fleire går fotturar i fjellet og dei litt meir krevjande turane freistar. For Bergen og Hordaland turlag står Skåla og den nye hytta Skålabu for den største auken.



Sykler Norge på langs – campet i katedralhagen

Bergenseren overnattet natt til onsdag på plenen utenfor Nordlyskatedralen i Alta.



SISTE NYTT

16:31 Lastebil veltet i Norheimsund • En lastebil med møbler ombord veltet i ettermiddag i Norheimsund. Politiet fikk melding om hendelsen klokken 14.45. – Føreren er uskadd, sier operasjonsleder Vibeke Næss. Klokken 16.30 ligger bilen fortsatt ved veien, i påvente av bilberger fra Bergen, men skaper ikke trafikkproblemer, ifølge politiet.



FOTO: 03030-TIPSER

TRAFIKKEN I HORDALAND

15:36 Syklist lettere skadet

 En 39 år gammel kvinne er lettere skadet etter en kollisjon mellom en bil og en sykkel i Nattlandsveien på Landås, opplyser Haukeland universitetssjukehus.

 <u>15:22</u> Betalingsproblemer for Skyss • En sikkerhetsoppdatering av

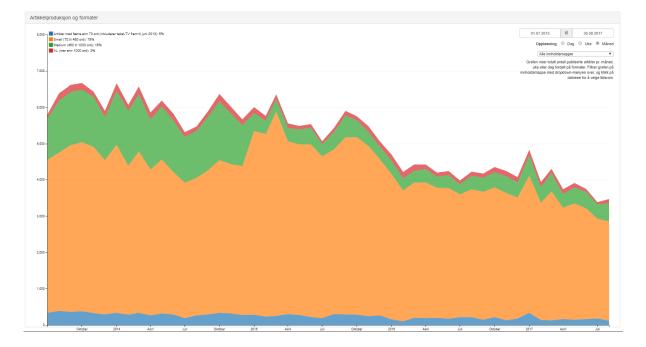


Figure 9. NRK story format production changes (internal document).

			st of proprietary docume	
Item #	Organisation	Date/	Type of	Description
		Delivery	Document/File	
А	СР	2017-04-20	PDF/Email	Bit.ly metrics for March -graph
		Emailed	explaining	with stats highlighting top
			highlights of	performing stories on CP based
			attached	on bit.ly metrics of links clicked
			document	on via social media posts
В	СР	2017-04-20	Google Doc Link	Manually compiled list of CP
		Emailed	- C	flat graphics (with links to
				articles) used on client websites
С	Spectator	2017-04-11	Sales Handout	Statistics for pageviews,
C	Speciator	In Person	Sales Handout	uniques, time spent, referrals,
				top articles, videos on Spectator
				site
D	Spectator	2017-04-11	Sales Handout	Description of "digital
		In Person		execution of print ad" – or how
				print ads are transferred to
				digital on Spectator site
E	Spectator	2017-04-11	Sales Handout	Circulation/demographic
		In Person		information for 2017 to be used
	~			by sales personnel to sell ads
F	Spectator	2017-04-27	Excel Document	List of top 20 stories on
		Emailed	- Asset ID report	Spectator site by pageview for
0	<u> </u>	2017.05.02	F 1 D (2016
G	Spectator	2017-05-03	Excel Document	List of top 20 stories on
		Emailed	– Asset ID report	Spectator site by pageview
TT	G ()	2017 04 11		January-May 2017
Н	Spectator	2017-04-11	PowerPoint –	Description of different types of
		Emailed	Digital	digital ads available for
			Advertising	purchase (eg. impression versus
			Product	control the page) also includes
			Overview	some metrics for Metroland
			× 1 1	papers/spec.com
Ι	Spectator	2017-06-09	In-depth	Analytics report for week of
		Emailed	analytics stats e-	May 27, 2017. Shows ranking
			mail	of 10 Metroland sites (all in
				close regional proximity to
				Spectator) by pageviews on
				sites, key metrics for last week,
				vs 90 day average, vs last year
				(pageviews, visits, unique
				visitors, avg time spent on site,

Table 1-2. List of proprietary documents.

				avg depth, bounce rate, social email shares), device type used to access, traffic source (eg. search engine, bookmarked, social), top 5 stories based on pageviews, social traffic and shares, top 5 stories from social based on pageviews, top authors based on pageviews, top cities and regions (location of users) based on pageviews, return frequency, browser types, browsers used by percentage of pageviews, top sections (eg. sports/news) by pageviews, top videos by pageviews for spec.com and most of above stats for Record and Guelph Mercury
J	Echo	2017-09-27 In Person	Printed email	List of the 100 best read stories on Echo site for August 2017, metrics for website for same period including pageviews, uniques, social media referrals
K	Echo	2017-09-26 In Person	Printed document	List of editorial staff at Echo
L	Echo	2017-09-26 In Person	Printed document	Echo Editorial Dashboard – daily view of Omniture metrics for 2017-09-26
М	Echo	2017-09-25 In Person	Printed document	Echo Editorial Dashboard – daily view of Omniture metrics for 2017-09-24
N	Echo	2017-09-25 In Person	Printed document	Echo Editorial Dashboard – daily view of Omniture metrics 2017-09-25
0	Echo	2017-09-25 In Person	Printed document	Echo analytics for reporter E4, top 50 stories listed in order based on pageviews, identified via headline, with referral metrics for Facebook and Twitter, date range 2017-09-01 to 2017-09-25
Р	Echo	2017-09-25 In Person	Printed document	Echo Editorial Dashboard – weekly view of Omniture metrics 2017-09-18 to 2017-09- 24 all categories ranked first by

				pageviews with key performance indicators also identified: average number of pages consumed per visit, pageviews, visits, average time spent on site, unique visitors. Stats also listed on number of comments left on top 5 articles (including updated versions of those articles)
Q	Echo	2017-09-25 In Person	Printed document	Analytics report showing growth/loss of unique users listed by Newsquest publication
R	Echo	2017-09-25 to 2017-09-28	Printed documents handed out in morning meeting	Printed list of stories being developed for each day of participant observation, most with assigned reporters' initials listed
Q	NRK	2017-08-24	Emailed data	Excel document containing list of local offices with metrics comparing views and sessions
S	NRK	2017-08-16	Emailed data	Facebook stats for Troms— week of Aug. 7- Aug. 13
Т	NRK	2017-08-16	Emailed data	PDF Google Analytics report (pageviews/unique users) for Troms August 15 2017
U	NRK	2017-08-15	Emailed data	PDF Google Analytics report (pageviews/unique users) for Troms August 14 2017
V	NRK	2017-08-11	Emailed	Editors "afternoon log" updating story developments/coverage for Hordaland, each day August 7th-10th
W	Echo	2017-04-11	Emailed	Pageviews, visits, unique browser, time spent stats for The Echo for the month of March 2017

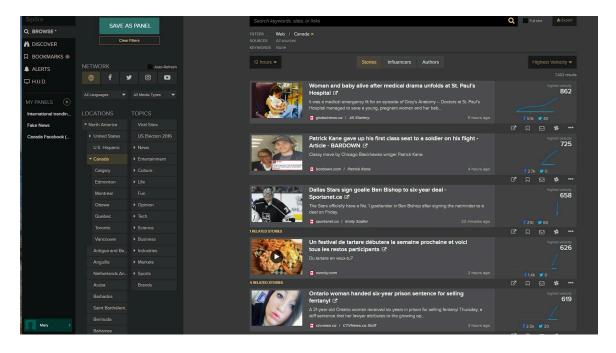


Figure 10. Screenshot of Spike.

Appendix 10 CP Advisory April 13, 2017 (from archive, yellow highlights part of received document)

Top News Advisory for Thursday, **April** 13 (**Top-News-Advisory**) Source: <u>The Canadian Press</u> Apr 13, 2017 16:58

TOP NEWS ADVISORY

Thursday, April 13

Good afternoon from The Canadian Press. We've got all you need to know about the pot legislation: a main story, a business sidebar, a piece on police and pot, a five things, quickquotes and highlights. We're writing about word that skiing legend Nancy Greene Raine is undergoing cancer treatment. We'll have a piece on pitbull legislation in Quebec. And, we continue to keep you updated on the latest developments re: the red-hot GTA housing market. I'd be remiss if I didn't point you to the story about the Easter Bunny lawsuit. We'll also get our first crack at the Raptors today since they found out who they'll face in the playoffs. Watch later for Lori Ewing's take.

Contact the National Desk at 416-507-2150 or mainslots?thecanadianpress.com.

Here are some stories that moved since the last *Top News Advisory* at about 2 p.m.

No forcing people off planes: Garneau

Cda-Garneau-Airlines

OTTAWA _ Transport Minister Marc Garneau issued a pointed warning Thursday to all airlines operating in Canada: forcibly removing passengers from overbooked airplanes will not be tolerated by the federal government.Garneau issued a letter to the heads of every airline that flies in and out of the country to warn them that an incident like the one that injured an American doctor earlier this week is not to happen in Canada. Will be writethru; moves Business and National, guard against duplication

Sask-Tainted-Water

Tainted water victims get settlement

NORTH BATTLEFORD _ People who were children and got sick from a parasite in a Saskatchewan city's drinking water 16 years ago are getting compensation. A law firm says Saskatchewan Court of Queen's Bench has approved a \$3.3-million settlement for anyone who was younger than 18 during the tainted water scandal in North Battleford.

B.C. NDP promises balanced budgets

ElxnBC

COQUITLAM _ British Columbia's New Democrats are promising three years of balanced budgets while also reining in auto insurance rates and BC Ferry fares if they win the provincial election. The NDP expects to finance its campaign commitments by reversing a Liberal tax cut to the highest income earners, hiking the corporate tax rate and putting a price on housing speculation. Moves National and West Regional. Guard against duplication.

Some drug charges dropped against N.S. doctor

NS-Doctor-Trafficking

BRIDGEWATER _ The trial for a Halifax-area doctor who police accused of trafficking tens of thousands of painkillers took an unexpected turn Thursday with the Crown deciding to withdraw two of the most serious charges.Federal Crown prosecutor Josh Bryson said charges of trafficking oxycodone and possession for the purpose of trafficking in relation to oxycodone aren't going ahead against Dr. Sarah Dawn Jones of Tantallon, N.S. PHOTO.

NEWS NOW:

Liberals introduce legal-pot legislation

Marijuana-Legislation

OTTAWA - Adults 18 and older will be able to legally buy and cultivate small amounts of marijuana for personal use, while selling the drug to a minor will become a serious new criminal offence under the federal Liberal government's proposed new legal-pot regime. A suite of legislation introduced Thursday would, once passed, establish a ``strict legal framework" for the production, sale, distribution and possession of pot, and make it against the law to sell cannabis to youth or use a young person to commit a cannabis-related crime. New penalties would range from a simple police citation to 14 years behind bars. ``If your objective is to protect public health and safety and keep cannabis out of the hands of

minors, and stop the flow of profits to organized crime, then the law as it stands today has been an abject failure," Public Safety Minister Ralph Goodale told a *news* conference. "We simply have to do better." 800 words. By Kristy Kirkup. PHOTO. With QuickQuotes, Highlights, Five-Things. Moves Business and National, guard against duplication.

Legislation would make it easier for police to demand roadside samples

Marijuana-Legislation-Police

OTTAWA - It would be easier for police to make drivers blow into a breathalyzer to detect alcohol as well as test people for drugs under legislation introduced Wednesday. 600 words. By Jim Bronskill. PHOTO.

More details needed, pot producers say

Marijuana-Legislation-Producers

TORONTO _ Marijuana producers called the federal government's proposed legal-pot regime a good first step, but say more details are needed to clarify issues like permissible advertising and distribution. 500 words. By Aleksandra Sagan.

Halifax Herald buys Transcontinental papers

Transcontinental-Atlantic-Canada

HALIFAX _ Canada's oldest independent newspaper has bought the newspaper and publishing assets of Transcontinental Media (TXS:TCL.A) in Atlantic Canada. The Halifax Chronicle Herald said Thursday that a new company, SaltWire Network, will comprise 27 Transcontinental newspapers and the novanewsnow.com website and the Herald's own publications. PHOTO. Will be updated

NewsAlert: Greene Raine undergoing cancer treatment

SKI-Greene-Raine-Cancer

Sen. Nancy Greene Raine, Canada's most decorated ski racer, is undergoing treatment for thyroid cancer.Sun Peaks Resort, where Greene Raine is the director of skiing, says she is

having her thyroid removed today in Kelowna, B.C. Will be updated; Moves National and Sports

Finance minister to hold meeting on GTA housing

Ont-Housing

TORONTO ONTARIO _ The federal finance minister is set to meet with his Ontario counterpart and the mayor of Toronto next week to discuss the hot housing market in the Greater Toronto Area.Finance Minister Bill Morneau's office says the meeting will take place next Tuesday in Toronto.

Calls for Trudeau to answer Yousafzai's challenge

Yousafzai-Education

OTTAWA _ Aid agencies and politicians called Thursday for Prime Minister Justin Trudeau to answer a call by Pakistani activist, Nobel Peace Prize winner and now honorary Canadian Malala Yousafzai for Canada to take the lead in funding and supporting girls' education around the world. Their calls come as questions still remain on whether Canadian aid funding on education in Yousafzai's home region was spent as intended. 650 words. By Stephanie Levitz. PHOTO.

Stronger economic growth to boost feds' bottom line by billions: experts

Growth-Fiscal-Impact

OTTAWA _ If economic growth surges in line with the Bank of Canada's latest predictions, experts say the feds will enjoy a multibillion-dollar bump in their balance sheet. After several months of surprisingly strong economic data, the central bank raised its 2017 growth projection this week to 2.6 per cent, up from its previous call of 2.1 per cent. 450 words. By Andy Blatchford. PHOTO. Moves National and Business; guard against duplication.

BKN-Playoffs-Raptors

Raptors gunning for a long playoff run

TORONTO - The Toronto Raptors are set to begin what they hope is another long postseason run. The Raptors host the young Milwaukee Bucks in Saturday's Game 1 of the opening round. The Raptors beat Milwaukee in three of four matchups this season, but the Bucks enter the playoffs as one of the league's hottest teams. They won a league-best 14 games in March, including a 101-94 win over a Toronto team that was missing Kyle Lowry. 700 words, by Lori Ewing. Expected by 6 p.m. ET.

Easter Bunny to blame, couple claims

Easter-Bunny-Suit

HAMILTON _ A couple is taking the Children's Aid Society of Hamilton to court, arguing it violated their Charter rights by closing their foster home because they refused to say the Easter Bunny is real.Frances and Derek Baars, who describe themselves as Christians with ``a strong religious faith," allege in documents filed with an Ontario court that the CAS violated their freedom of conscience and religion, freedom of expression and right to be free from discrimination. Will be updated.

Leafs almost entirely changed since last playoff game

HKN-Maple-Leafs-Capitals

WASHINGTON _ The Toronto Maple Leafs will play their first playoff game in almost four years Thursday night in Washington. Almost everything about the organization has changed since that momentous day at TD Garden in Boston when the Leafs unravelled in a 5-4 Game 7 overtime loss.Connor Brown was in Dublin watching the game on a laptop in the middle of the night with his family while Toronto-area native Mitch Marner was taking it on TV from home. Will be updated with game

Alberta spending more on wildfire protection

Alta-Wildfire-Prevention

FORT MCMURRAY _ The Alberta government says it will spend \$45 million over the next three years to help protect communities from wildfires. The funding will be available to municipalities that want to set up a FireSmart program that includes clearing trees and brush away from homes and buildings. Will be writethru

Canadian pregnant woman stuck in Gaza

Cda-Woman-Trapped-Gaza

MONTREAL _ The father of a Canadian woman who is eight months pregnant and trapped in Gaza is imploring the federal government to lobby Israel to help her get home.Hadi Eid says his daughter Bissan's pregnancy is high-risk and she needs medical attention that can't be provided in the territory. Will be updated

Family doctors frontline of addiction screening

Overdose-Emergency

VANCOUVER _ A tag hanging from a dead man's left toe says the cause of death was an overdose of fentanyl, ``unknowingly taken with other drugs."The cadaver draped in a white sheet is displayed in transit ads funded by the Vancouver Police Foundation and represents 922 people who died in British Columbia from drug overdoses last year alone. PHOTO. With Overdose-Emergency-History.

Greens aim for historic breakthrough in B.C.

Elxn-BC-Greens

VANCOUVER _ Andrew Weaver, a respected climate scientist and leader of British Columbia's Green party, hopes to have something in common with Rachel Notley, Justin Trudeau and even Donald Trump.All three were dark horse candidates at the outset of elections where they pulled off stunning wins. In the cases of Notley and Trudeau, as well as Yukon Premier Sandy Silver, they were leaders of third parties with only a small fraction of seats. PHOTO.

ALSO IN THE **NEWS**:

Baratov plans to appeal bail denial: lawyer

US-Yahoo-Security-Breach

HAMILTON _ A lawyer for a Canadian man accused in a massive hack of Yahoo emails say he plans to appeal a decision that denied his client bail.Deepak Paradkar, one of the lawyers representing Karim Baratov, says an appeal is in the works but would not say on what grounds.

Chevron considering oilsands sale: report

Chevron-Oilsands

CALGARY _ California-based Chevron Corp. is looking at selling its 20 per cent stake in the Athabasca Oil Sands Project in northern Alberta, according to a media report. The company has discussed with investment banks the idea of selling its stake in the oilsands mine and upgrading project, Reuters is reporting, citing anonymous sources. Moves National and Business; Guard against duplication

2 Canadian universities chosen for self-driving car competition

Self-Driving-Car-Competition

Two Canadian universities have been chosen to participate in a North American competition to develop a self-driving car in three years. The University of Toronto and the University of Waterloo will compete against each other and six American schools with the goal of autonomous driving in an urban setting by 2020.

Couple score almost \$337K at Oilers playoff game

HKN-Oilers-Record-50-50

EDMONTON _ There was an added bonus for one couple who came to watch the Edmonton Oilers in their first NHL playoff game in 11 years on Wednesday night. The enthusiastic sell-out crowd snapped up so many 50-50 tickets that winners David and Tanya Idzan went home with a record jackpot worth almost \$337,000. Moves national and sports. GUARD against duplication

Documents reveal agony of brutal assault

CRIME-Homeless-Woman-Beaten

PRINCE ALBERT _ Court documents reveal that a Saskatchewan woman whose legs were amputated after a man viciously beat and sexually assaulted her before setting her clothes on fire can no longer do anything for herself, including going to the bathroom. The impact of the brutal assault on Marlene Bird is detailed in hundreds of documents released Wednesday in Prince Albert.

Supreme Court won't hear Shafia appeal

Shafia-Appeal

OTTAWA _ The Supreme Court of Canada will not hear the case of a man convicted of murdering his three sisters and another woman.Hamed Shafia had sought leave to appeal to the court, arguing that new evidence showing he was a youth at the time of the deaths should not have been dismissed. PHOTO. ADDS decision; Will be Writethru

Foul play not suspected in N.B. fire deaths

NB-Fire-Deaths

ST. GEORGE _ Foul play is not suspected in the deaths of four people found in the burned remains of a home in southwestern New Brunswick, police said Wednesday as they continued their investigation into the tragedy.RCMP Const. Isabelle Beaulieu said autopsies were ordered after the four bodies were recovered Tuesday from the old home in St. George, a town of 1,500 about 120 kilometres south of Fredericton. PHOTO. Moves Atlantic and National, please guard against duplication

Man charged in officer's death released

Officer-Killed

HALIFAX _ A Nova Scotia man charged in the death of an off-duty police officer has been released again after being accused of breaching his bail conditions. Christopher Garnier appeared in Halifax provincial court Wednesday and is due back in August to face the breach charges.

Victim's family cheers after appeal rejected

Saunders-Homicide-Appeal

HALIFAX _ Nova Scotia's highest court today quickly dismissed a convicted killer's appeal in the death of a young Inuit university student. Victoria Henneberry had asked for a new trial on grounds that she panicked when she pleaded guilty to the second-degree murder of Loretta Saunders of Labrador, her 26-year-old, pregnant roommate. Will be updated

Softwood lumber decision coming *April* 25

Softwood-Lumber-Dispute

MONTREAL _ The U.S. Commerce Department says it will announce on *April* 25 whether it will impose duties on Canadian softwood. A spokesman for the department says any preliminary duties would be applied on imports about a week later. Moves Business and National, please guard against duplication;

EXPECTED LATER TODAY:

CP staffing -- MONTREAL _ An immigration and refugee hearing is held for Sivaloganathan Thanabalasingam, who has just onbtained astayof proceedings after being accused of murdering his wife. (1:15 p.m. at Complexe Guy-Favreau)

CP Montreal will have a story on pitbull legislation

CP staffing -- FORT MCMURRAY - Alberta Forestry Minister Oneil Carlier announces wildfire protection funding. Reporter John Cotter will have a short story.

CP staffing -- EDMONTON - Alberta Premier Rachel Notley outlines her trade mission to China and Japan. We will dial in and file on merit.

CP Vancouver will have a roundup today of all the major campaign events in B.C., with a highlights of what happened on the campaign trail.

CP Vancouver will have a short story on the vote at UBC on a new sexual assault policy, following up a story we did yesterday.

FOR THE WEEKEND:

FRIDAY:

Man sues elevator company over condo mishap

Elevator-Mishap-Lawsuit

TORONTO - A retiree who says he hurt his leg after tumbling from a malfunctioning elevator in his downtown condominium is suing one of the world's largest elevator companies for negligence. In his unproven statement of claim before Ontario Superior

Court, Kenneth Smookler seeks \$25,000 in compensation from Schindler Elevator and his condo corporation for what he alleges was their failure to maintain the device properly.

SUNDAY:

Rural B.C. struggles while cities profit

ElxnBC-Rural-Struggles

VICTORIA - Premier Christy Clark likes to highlight the fact British Columbia has the lowest jobless rate in Canada. But for many people living in rural and remote areas of the province, the jobs picture isn't as positive as communities struggle with downturns in traditional industries. By Dirk Meissner. 600 words. Moves National and Business.

B.C. gas towns see drilling recovery

Natural-Gas-Economy

CALGARY - Increasingly empty industrial yards near the northeastern B.C. city of Fort St. John are a welcome sign for Jennifer Moore. The regional economic development says the return of natural gas drilling rigs and related equipment to the field show a recovery is underway for one of Canada's biggest new energy plays after a grinding two-year slowdown. By Dan Healing.

Housing-Jackpot: Sarah Blakely recalls feeling some trepidation when she shelled out more than \$300,000 for a modest one-and-a-half story house in a less-desirable part of Toronto. Seven years later, she sold for more than \$1 million and now expects to live mortgage-free in a four-bedroom purchase in her hometown of Ottawa. Many homeowners can't resist the temptation to turn their million-dollar paper asset into cash, especially as doomsayers predict an impending crash. But there are already signs the market is cooling, and at least one agent says those jackpot sales could soon be a thing of the past.

AND FROM THE AP:

TOP STORIES

UNITED-PASSENGER REMOVED _ The passenger dragged from a United flight lost two front teeth and suffered a broken nose and a concussion, one of his lawyers says,

accusing the airline industry of having ``bullied" its customers for far too long. By Don Babwin and Sara Burnett. SENT: 800 words. UPCOMING: New version, 650 words, photos, by 3 p.m. Developing from City Council hearing scheduled for 2 p.m. WITH: UNITED-BAD Behaviour EXPOSED _ With smartphones, customers are corporate whistleblowers; UNITED PASSENGER-POLICE RESPONSE _ Experts say police who dragged passenger had other options (both sent).

TRUMP-MODERATE MAKEOVER _ President Donald Trump is abandoning many of his hard-line conservative campaign promises _ evidence of the rising influence of moderate forces in the White House, on-the-job-training and a president's desire to begin notching wins. By Jill Colvin. UPCOMING: 800 words by 5 p.m., photos. WITH: TRUMP-FACT CHECK _ Trump gives skewed accounts of U.S. relations over time with Russia, auto jobs and health care and contradicts himself on how long he's known his right-hand strategist, Steve Bannon. SENT: 1,135 words, photos.

UNITED STATES-AFGHANISTAN _ U.S. forces in Afghanistan struck an Islamic State tunnel complex in Afghanistan with ``the mother of all bombs," the largest non-nuclear weapon every used in combat by the U.S. military. By Robert Burns. SENT: 250 words, photo. UPCOMING: Developing.

SYRIA _ The Syrian government and opposition are to begin a co-ordinated population swap of tens of thousands of people from four besieged towns, the largest such demographic shift in the civil war. The swap, which brings loyalists closer to government strongholds and pushes dissidents out to the margins, ends the siege and starvation of the towns _ but also proves that such controversial tactics can yield results. By Philip Issa. SENT: 800 words, photos. UPCOMING: New approach of 900 words, photos, video by 5 p.m.

BODIES IN PARK _ The bodies of four men, all described as having suffered ``significant trauma," were discovered in a park in a suburban New York neighbourhood that has for years contended with a growing problem of gang violence. By Frank Eltman. SENT: 500 words, photos. UPCOMING: New approach of 500 words by 5 p.m.

UNITED NATIONS-PEACEKEEPERS _ U.S. Ambassador Nikki Haley warns countries that they would lose funding if they fail to hold their peacekeepers accountable for sexual abuse and exploitation, a threat that came after she cited an Associated Press investigation into a child sex ring in Haiti involving Sri Lankan peacekeepers. By Paisley Dodds and Edith Lederer. UPCOMING: 800 words, photos by 3 p.m. WITH: UNITED NATIONS-HAITI _ The Security Council votes unanimously to end the UN peacekeeping mission in Haiti in mid-October after more than 20 years (sent).

OMAN-CARBON MOUNTAINS _ Deep in the jagged red mountains of Oman, geologists are drilling in search of the holy grail of reversing climate change: an efficient and cheap way to remove carbon dioxide from the air and oceans. They are coring samples from one of the world's only exposed sections of the Earth's mantle to uncover how a spontaneous natural process millions of years ago transformed CO2 into limestone and marble. By Sam McNeil. SENT: 890 words, photos, video.

WHAT WE'RE TALKING ABOUT

FAST AND FURIOUS-ARREST _ Mexico arrests suspected shooter of border agent Brian Terry. SENT: 500 words.

VATICAN-HOLY THURSDAY _ On Holy Friday, Pope Francis heads to a maximumsecurity prison to wash the feet of 12 inmates. SENT: 400 words, photos. UPCOMING: Developing.

TV-SURVIVOR _ 'Survivor' contestant outs fellow competitor as transgender. SENT: 500 words, photos.

TODDLER DEATH-VERDICT _ Father convicted of murdering baby son for life insurance. SENT: 500 words, photos.

IDENTITY THEFT-ANCESTRY website _ Ancestry.com helps family of dead boy find man posing as him. SENT: 600 words, photos.

WASHINGTON & POLITICS

TRUMP-DINA POWELL _ A snapshot of President Donald Trump's makeshift situation room at Mar-a-Lago affirmed what White House insiders have sensed for some time _ that national security aide Dina Powell has quietly established herself as a White House power. By Catherine Lucey. UPCOMING: 750 words by 5 p.m., photos.

TAX DAY-PROTESTS _ Democrats and activists are using Tax Day to demand that Trump release his returns with a series of protests on Saturday. By Kevin Freking. UPCOMING: 600 words by 4 p.m.

PRUITT-EPA-COAL MINE _ Environmental Protection Agency Administrator Scott Pruitt talks to coal miners about the president's decision to eliminate numerous restrictions on fossil fuel production. UPCOMING: Developing from noon visit, 500 words by 4 p.m., photos.

IMMIGRATION-VISAS _ While the national discussion on immigration focuses on securing the U.S.-Mexico border with a multibillion dollar wall, travellers who overstay their visits have become the main source of illegal immigration in the United States.: 950 words, photo.

NATIONAL

JUDGE FOUND DEAD - Police say there are no signs of criminality in the death of the first black woman appointed to New York state's highest court whose body was found on the bank of the Hudson River. SENT: 400 words, photos.

ARKANSAS EXECUTIONS-OPPONENTS _ While outrage on social media is growing over Arkansas' unprecedented plan to put seven inmates to death before the end of the month, the protests have been more muted within the conservative Southern state where capital punishment is still favoured by a majority of residents. SENT: 770 words, photos.

OHIO FAMILY KILLED _ Investigators are offering little new information about the unsolved massacre of eight family members in Ohio nearly a year after the still-unsolved killings. SENT: 700 words, photos.

INTERNATIONAL

IRAQ-US MEDICS _ A boy and a woman are delivered to the gates of the clinic by an Iraqi ambulance, bandaged and in pain. They arrive without names, ages and with only the sketchiest details of what had happened to them. Apparently shot by accident outside their house in western Mosul, where fighting continues between Iraqi forces and Islamic State group militants, U.S. medics working in a state-of-the-art field clinic here could only assume they were mother and son. By Mstyslav Chernov and Tomislav Skaro. SENT: 700 words, photos, video.

RUSSIA-GAYS _ International organizations are urging the Russian government to investigate the reported abuse and killings of gay men in Russia's southern republic of Chechnya. SENT: 400 words, photos.

SERBIA-FATIMA'S STORY _ A car crammed with migrants crashes in Serbia, turning a 26-year-old Afghan woman's dream into a nightmare and highlighting the dangers faced by people relying on smugglers to take them through the Balkans to western Europe. Now all Fatima Bakhshi wants is to get to Ireland with her sons. SENT: 900 words, photos.

KOREAS-TENSION _ Prime Minister Shinzo Abe has warned that North Korea may be capable of firing a missile loaded with sarin nerve gas toward Japan. SENT: 750 words, photos.

ISRAEL-50 YEARS LATER-SETTLING JERUSALEM _ For many Israelis, Har Homa is just another neighbourhood in Jerusalem, its quiet streets lined with apartment buildings, pizza shops and supermarkets. But for Palestinians and much of the world, this unassuming neighbourhood is an illegal settlement in east Jerusalem, and in some ways, the most damaging. By Josef Federman and Karin Laub. SENT: 1,760 words, photos, video, graphic. An abridged version of 970 words has also been sent. With PALESTINIANS-POLITICS_ Abbas seeks ``unprecedented" steps to end Palestinian split.

BUSINESS

AUTO SHOW-WHEELS TO WATCH _ Thursday at the New York International Auto Show was a day for automakers that sell to the wealthiest of car buyers to show their high-powered stuff. Prices for these cars range from hundreds of thousands of dollars to the millions. SENT: 380 words.

HEALTH/SCIENCE/TECHNOLOGY

MILLION-DOLLAR LESSONS _Teachers selling lessons to other teachers online has become a booming business. It's a trend driven by higher standards and teachers willing to pay out of their own pockets for classroom-tested material. At least one site, Teachers Pay Teachers, says it's helped make millionaires out of some of its contributors since launching 10 years ago. By Carolyn Thompson. SENT: 980 words, photos. **TOP** VIDEO: _US Million Dollar Lessons (CR HFR) _ Million-dollar teachers: Selling lessons online.

ARTS & ENTERTAINMENT

STAR WARS CELEBRATION-40 YEAR ANNIVERSARY _ Harrison Ford, George Lucas, Mark Hamill and others gathered in Orlando for a 40th celebration of ``Star Wars," which included a special tribute to the late Carrie Fisher that featured her daughter Billie Lourd. By Film Writer Lindsey Bahr. SENT: 130 words, photos. UPCOMING: Developing.

Appendix 11 CP News Advisory 6 February 2017



Here are the latest Top News stories from The Canadian Press. All times are Eastern unless otherwise stated. Coverage plans are included when available. Entries are subject to change as news develops.

NEWS NOW:

North American stocks down in volatile day

Dollar-Markets

TORONTO --- Global stock markets are being roiled by more volatility as investors remain fearful that signs of rising inflation and higher interest rates could bring an end to the bull market that has sent stocks to record high after record high in recent years. Trading was choppy in the early going Tuesday, likely to be one of the most watched days on the markets in years. PHOTO. Will be updated.

Legal pot by July may be unrealistic: Liberals

Marijuana-Bill

OTTAWA — The Trudeau government acknowledged Tuesday that it may not be able to legalize recreational pot by July, as promised. The various cabinet ministers responsible for ushering the legislation into law were bracing for a rough ride Tuesday in the Senate, where the closely watched Cannabis Act is up for debate by an upper chamber that's in no hurry to pass the bill. 500 words. By Joan Bryden. PHOTO. Moves Business and National, guard against duplication.

Pot legalization: Americans express concern about potential border impact

Pot-US-Cda

WASHINGTON — American officials have been quietly expressing concern about whether Canada's marijuana legalization might slow traffic at the border. What they're being told by the Canadian government: there's no reason it should, and that's entirely in your hands. 400 words. By Alexander Panetta. PHOTO.

Breakout R&B singer Jessie Reyez leads Juno nominees

MUSIC-Juno-Nominations

TORONTO - Sultry R&B singer Jessie Reyez emerged as one of the leading nominees at this year's Juno Awards giving the rising star another push towards the mainstream. The Toronto performer has already generated heat on Top 40 radio stations with her breakout "Figures" and "Gatekeeper," a song about sexism in the music industry. She tied with Arcade Fire with four nominations. By David Friend. 600 words. PHOTO. With Five-Things-Jessie-Reyez

New bill to expand protections for fish

Fisheries-LeBlanc

OTTAWA - The federal government will spend \$284 million over the next five years to enforce new laws protecting habitat wherever fish are present, Fisheries Minister Dominic LeBlanc said Tuesday. A number of amendments to the Fisheries Act were introduced in the House of Commons that would expand the reach of a prohibition against anything that alters or impacts fish habitat to all waters where fish exist. Changes to the act made in 2012 meant the protections were enforced only for fish listed in provincial registries as being part of commercial, recreational or Indigenous fisheries. 650 words. By Mia Rabson. PHOTO.

Lululemon urged to come clean on CEO departure

Lululemon-CEO

Shareholder advocates and analysts are calling on Lululemon Athletica for more disclosure surrounding the abrupt departure of its chief executive who "fell short" of the Canadian athleisure company's conduct standards.

Police officers saw teen before she was killed: trial

CRIME-Girl-Killed

WINNIPEG — A former police officer who was one of the last people to see a 15-year-old teenage girl alive says he missed a flag that she had been reported missing from Manitoba Child and Family Services.Craig Houle is one of two former Winnipeg officers testifying at the trial of Raymond Cormier, who is accused of murdering Tina Fontaine in August 2014. PHOTO. Will be writethru

Aide defends keeping Chagger in the dark

Chagger-Staffer-Harassment

OTTAWA — A top aide to Liberal cabinet minister Bardish Chagger said she believed she was doing the right thing when she did not follow up on allegations that a colleague had made sexually suggestive remarks towards a young woman applying for a job."I did what I thought was best," Rachel Bendayan, who was then chief of staff to the small business and tourism minister, said in an interview with The Canadian Press. "There was no further action we could take as an office." According to HuffPost Canada, Myriam Denis told Bendayan in August 2016 that a policy adviser in Chagger's office had contacted her about a job opportunity through an online networking site, then made sexual comments during their meetings to discuss it. 600 words. By Joanna Smith. PHOTO.

NAFTA booster in Trump administration: I think we get a deal by December

Perdue-NAFTA

WASHINGTON - One of the biggest supporters of NAFTA in the Trump administration says he's feeling increasingly optimitic, twice telling a gathering of American lawmakers Tuesday that he foresees a deal by the end of December. 350 words. By Alexander Panetta. Moved.

Lady Doritos might just be a market test: experts

Lady-Doritos

TORONTO -- After PepsiCo's chief executive teased that its Doritos brand would soon be engineering a more dainty corn chip marketed towards women, the brand is far from being in a crunch -- and that's because her comments were likely calculated and meant to test the market, say Canadian experts.

Ontario's chief coroner to probe Indigenous fire deaths

Indigenous-Fires

Ontario's chief coroner has committed to probe fire-related deaths in Indigenous communities across the province, after statistics show a disproportionate number of fatalities compared with the population at large.

Super Bowl ratings slump on Canadian channels

TV-FBN-Super-Bowl-Canada

TORONTO - Fewer football fans caught the Super Bowl on a Canadian channel this year as viewers again had the option to watch a U.S. feed featuring buzzy commercials. Bell Media says it drew an average audience of 4.451 million viewers for the championship NFL game on its channels CTV, CTV Two and TSN2 on Sunday night. That's down slightly from last year, when an average audience of 4.488 million tuned in to catch the Canadian feed.It's a substantial drop from two years ago, when Bell Media says 7.32 million tuned in to a simulcast feed that supplanted U.S. ads with Canadian ones on both Canadian and U.S. channels. Moves Sports, Business and Entertainment, guard against duplication

Defence questioning woman's memory in sex assault trial

Toronto-Police-Sex-Assault

TORONTO - The defence lawyer for a Toronto police officer accused of sexually assaulting a woman 10 years ago is calling the complainant's memory into question. The woman, who cannot be identified, has told court that Const. Vincenzo Bonazza "raped" her in her apartment. Will be updated.

Man pens own obit, lists sole regret

Man-Pens-Obit

COLE HARBOUR - Shannon Leonard Churchill left the world with a single regret: not knowing how Coronation Street will end. The 44-year-old East Coast man makes the quirky claim in an obituary he wrote for himself before dying from cancer "peacefully at home" on Jan. 31. PHOTO. Moves Atlantic and National, please guard against duplication

How Canada lost Maine and got a university

Dalhousie-Spoils-of-War

HALIFAX — It reads like over-the-top historical fiction: Raids by American privateers, an invasion of the United States, tales of war booty and, incredibly, the loss of what could have been Canada's 11th province.But that's just the first chapter of how Halifax's Dalhousie University was founded — 200 years ago Tuesday. PHOTO.

Wickenheiser to donate brain to concussion research

HKO-Wickenheiser-Concussion-Research

BOSTON - Former Canadian women's hockey star Hayley Wickenheiser will donate her brain to concussion research after her death, the Concussion Legacy Foundation announced Tuesday.Wickenheiser, a four-time Olympic gold medallist and seven-time world champion, is one of three female Olympians to recently donate her brain to the Bostonbased organization. American bobsledder Elana Meyers Taylor and Hockey Hall of Famer Angela Ruggiero of the U.S., were also listed in Tuesday's announcement. Moved Sports and National.

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Cdn diplomats more interested in helping mining company than murdered activist: complaint

Mexico-Murder-Diplomats

OTTAWA — Supporters of a murdered Mexican activist who opposed a Calgary mining company are accusing Canadian diplomats of turning a blind eye to human rights violations. Supporters of Mariano Abarca, a father of four who was gunned down in 2009, filed a request this week with the Public Service Integrity Commissioner that alleges Canadian diplomats were more interested in helping the company overcome protests than upholding the values of human rights and good corporate behavior. 700 words. By Mike Blanchfield. PHOTO. Moves Business and National, guard against duplication.

Conservatives-Misconduct

Scheer still wants investigation into Dykstra

OTTAWA — Conservative Leader Andrew Scheer says he still wants to wait for the investigation into how the party handled allegations of sexual misconduct against a former MP before deciding if any further action is necessary. Former prime minister Stephen Harper and his chief of staff Ray Novak say they knew Rick Dykstra was facing accusations dating back to 2014, but could not justify removing him from the ballot in 2015 as no charges had been filed. 450 words. By Stephanie Levitz. PHOTO.

No extra money for change to anthem lyrics

Anthem-Change

OTTAWA — The federal government says it has no plans to set aside extra money to inform Canadians about the imminent change to the lyrics of O Canada, which are expected to become official in the coming days. The anthem's new gender-neutral language will be introduced as part of the normal reprinting of government material, so there will be no additional costs, said David Larose, a spokesman for the Canadian Heritage department. Online materials will be the first to change, and the government will inform "partners and stakeholders" so they can make their own revisions, Larose said. 600 words. By Geordon Ormand. PHOTO.

Trudeau to sell American students on trade

Trudeau-US

OTTAWA — Justin Trudeau's latest effort to keep alive free trade with the United States will force him to make the case to a group of Chicago students skeptical of free trade's benefits. The topic of free trade and the negotiation of a renewed North American free trade pact will be hard to avoid when the prime minister takes the stage Wednesday at the University of Chicago. 600 words. By Jordan Press. PHOTO. Moves National and Business, guard against duplication.

Leafs' Andersen back at practice after hit in head

HKN-Maple-Leafs-Andersen

TORONTO -- Toronto Maple Leafs goaltender Frederik Andersen was back on the ice for practice Tuesday, one day after being struck in the head and leaving a game against Anaheim. Andersen was hit by Ducks forward Corey Perry's left skate during the second period of Monday's 7-4 victory and didn't return. But he was a full participant during team drills at practice the next morning. PHOTO.

Nude photos of ex-NHL player not 'shocking,' court finds

Hockey-Nudes

TORONTO _ A former Toronto Maple Leafs hockey player who lost his promotional gig after nude pictures of himself surfaced on the internet had his breach-of-contract award upheld on Tuesday. In affirming the \$162,500 in damages previously awarded Mike Zigomanis, the Ontario Court of Appeal rejected an attempt by D'Angelo Brands to play the shocked-community card.

Look out, Canada: Donald Trump's trade boogeyman, the U.S. goods deficit, has just grown bigger

US-Trade-Deficit

WASHINGTON - It's the biggest complaint of the Trump administration as it seeks to renegotiate trade arrangements, and it's just gotten bigger: the U.S. trade deficit ballooned to its highest level in a decade in Donald Trump's first year in office. Economists recoil from his line of reasoning, but it's the stated reason for renegotiating NAFTA. 500 words. By Alexander Panetta. PHOTO.

ALSO IN THE NEWS:

Father testifies at woman's murder trial

NL-Athlete-Murder

ST. JOHN'S — The father of a former top Newfoundland athlete charged with first-degree murder returned to the stand Tuesday, a day after giving emotional testimony about his daughter's struggles with mental health issues.Gary Norris was back in Supreme Court in St. John's after describing how his daughter, Anne Norris, went from being a confident, athletic and social child to becoming paranoid about threats and attacks that didn't appear to be real. Moves Atlantic and National, please guard against duplication

Let parents on air evacuations: paediatric society

Que-Air-Ambulance-Children

MONTREAL - Quebec must change its policy that systematically denies parents the right to accompany their children during urgent medical air evacuations, the Canadian and Quebec paediatric societies said Tuesday. The call by the child-advocacy groups follows a similar demand by three physicians who wrote to the Quebec government in December, urging the health minister to reconsider the policy they say disproportionately affects northern Inuit and First Nations communities. By Giuseppe Valiante.

Drones help B.C. researchers study jellyfish

Jellyfish-Populations

VANCOUVER - Technology is allowing researchers in British Columbia to study blooms of jellyfish and their impact on the ocean in a whole new way. University of B.C. oceanography Prof. Brian Hunt and undergraduate student Jessica Schaub have been using drones to get a better picture of the size and composition of clusters of moon jellyfish off B.C.'s central coast. PHOTO. By Gemma Karstens-Smith.

Town watching high water levels after floods

NS-Flood-Concerns

ANTIGONISH — A Nova Scotia town is closely watching water levels after a brook twice overflowed its banks and swamped a commercial area, encasing 23 cars in slushy ice within minutes. Antigonish Mayor Laurie Boucher says a parking lot flooded Monday after 60 millimetre of rain came down in 24 hours. PHOTO.

Jury acquits Quebec businessman accused of breach of trust

CRIME-Accurso

JOLIETTE - The jury in the trial of well-known Quebec construction magnate, Tony Accurso, who was accused of breach of trust, needed less than 24 hours of deliberations to come back with an acquittal Tuesday. Defence lawyer Marc Labelle said in response to the verdict, "the people have spoken." MOVED.

Quebec legislative assembly returns today

Que-Legislature-Returns

MONTREAL - The last legislative session before Quebec's fall provincial election began in earnest Tuesday in Quebec City. Premier Philippe Couillard says his Liberal government's seven remaining months will be focused on the economy, entrepreneurship, innovation and transport, as well as on announcing measures to help families. By Giuseppe Valiante. 400 words.

Condition of boy struck by car improving: Montreal police

Mtl-Mother-Child-Struck

MONTREAL - Montreal police say the condition of a five-year-old boy struck by a vehicle over the weekend is improving. The boy and his mother were struck by a car in the parking lot of a shopping mall in Montreal's Saint-Laurent borough involving a 90-year-old driver. MOVED.

Nutrien says no plans to close mines

Nutrien-Results

CALGARY - Fertilizer giant Nutrien Ltd. says it plans to keep its six potash mines running for now even as it looks to shift production to its most efficient operations. The company, which formed at the start of the year out of the merger of Potash Corp. and Agrium Inc., says it will however look at the end of the year whether it makes sense to close any of its smaller, more costly mines. AUDIO. Will be writethru. By Ian Bickis. 219 words. Moved.

COMING LATER:

Changes coming to B.C.'s public auto insurer

ICBC-Crisis

VICTORIA - The British Columbia government will announce changes today to the province's public auto insurer amid predictions the agency will lose \$1.3 billion by the end of the fiscal year. Insurance Corporation of B.C. chairwoman Joy MacPhail and Attorney General David Eby will hold a news conference in Victoria this morning to detail the changes. Moves National and Business, guard against duplication. Will be writethru. By Dirk Meissner. (PHOTO)

WINNIPEG - Trial continues for Raymond Cormier, accused of killing Tina Fontaine. Reporter Steve Lambert is staffing.

EDMONTON - Reporter Bob Weber will have an embargoed story on the rate of land disappearance in Alberta.

REGINA - We are monitoring a media availability with Saskatchewan Premier Scott Moe and will file on merit.

AND FROM THE AP:

NEW & DEVELOPING

DOCTOR-SEXUAL ASSAULT — Sheriff: Ex-Olympic coach John Geddert facing investigation after complaints filed following Larry Nassar sex abuse case.

TOP STORIES

FINANCIAL MARKETS — After big swings higher and lower, U.S. stocks are up slightly in afternoon trading as investors look for calm after a global sell-off. The swings came one day after the steepest drop in 6 1/2 years. By Marley Jay. SENT: 850 words, photos, video. UPCOMING: 1,000 words by 5 p.m. With FINANCIAL MARKETS-TERMS — The Dow Jones industrial average is in correction territory. Algorithmic trading is partly responsible. Investors watching the stock market's sudden plunge might be hearing terminology they haven't heard in years. A look at what it means. By Michelle Chapman. UPCOMING: 500 words by noon, photos; MARKET PLUNGE-Q&A (sent).

FINANCIAL MARKETS-TRUMP — For months, President Donald Trump boasted that he was steering the U.S. stock market to new heights. Yet the sudden cratering of stocks has served as a reminder that the financial markets pivot on forces that owe more to computerized trading programs and global central banks than a president's policies or force of personality. By Josh Boak. SENT: 760 words, photos, audio.

TRUMP-RUSSIA PROBE — A memo written by Democrats on the House intelligence committee as part of its investigation of Russian election interference is under review at the

White House, where President Donald Trump will decide whether to allow the public to read it. By Mary Clare Jalonick and Chad Day. SENT: 980 words. UPCOMING: 890 words by 5 p.m.

CONGRESS-IMMIGRATION — White House chief of staff John Kelly tries to assure "Dreamer" immigrants that they are not top targets for deportation, but his comment deriding some as too "lazy" to apply for protection prompts criticism from immigration groups. By Alan Fram. SENT: 560 words. UPCOMING: 790 words by 5 p.m., photos. With TRUMP — President Donald Trump keeps up his habit of painting immigrants as criminals, highlighting gang connections, pointing to so-called "chain migration" as a national security threat and tweeting that it's "disgraceful" that a pro football player was killed by someone living in the country illegally. UPCOMING: 800 words by 5 p.m., photos; BC-FBN--COLTS PLAYER KILLED — The immigrant suspected in a drunken-driving crash that killed an NFL player and his Uber driver was living in Indiana illegally after being deported twice and racking up numerous misdemeanour convictions and arrests. SENT: 700 words, photos.

SYRIA — A new wave of unrelenting Syrian and Russian airstrikes has plunged the rebelheld suburbs of Damascus into a spiral of violence and despair, as at least 45 civilians are killed Tuesday in a besieged area just outside of Syria's capital. SENT: 900 words, photos. UPCOMING: Developing. A new approach of 900 words by 3 p.m.

SEXUAL ASSAULT-SPEAKING OUT — In the name of #MeToo, a flood of people has spoken up about being sexually assaulted, a subject long burdened by shame, doubt and an aura of the unspeakable. Women who spoke out before the movement gained steam see the newfound frankness as helpful. But they're also conscious of how risky it feels to come forward, and they caution that #MeToo shouldn't mean everyone has to share. UPCOMING: 900 words, photos by 4 p.m.

WHAT WE'RE TALKING ABOUT

SPACEX-NEW ROCKET - SpaceX's big new rocket is ready to blast off on its first test flight. But high wind will keep it on the launch pad just a little longer. SENT: 300 words, photos. UPCOMING: Developing, launch delayed until 3:05 p.m.

SUPER BOWL-PARADE PLANS — Philadelphia officials are revealing plans for the Super Bowl parade and say fans should expect some dramatic surprises along the route. SENT: 150 words, photos.

OPRAH BOOK CLUB — Oprah Winfrey has chosen Tayari Jones' "An American Marriage" as her next book club pick. By National Writer Hillel Italie. SENT: 680 words, photos.

EGYPT-DINOSAUR — A skeleton has been unearthed in Egypt's Western Desert, whose ancient sands have long helped preserve remains, but unlike most finds this one isn't a mummy - it's a dinosaur. SENT: 830 words, photos.

MISTER ROGERS STAMP — It's a beautiful day in the postal neighbourhood. The U.S. Postal Service plans to issue a new stamp featuring Mister Rogers, the children's television host known for his zip-up cardigan, sneakers and soothing manner. SENT: 115 words, photos.

WASHINGTON & POLITICS

BUDGET BATTLE — The GOP-controlled House is expected to pass a plan to keep the government open for six more weeks while Washington grapples with a potential follow-up budget pact and, perhaps, immigration legislation. By Andrew Taylor. SENT: 760 words. UPCOMING: 840 words by 5 p.m.

PENNSYLVANIA REDISTRICTING-CONGRESS — Democrats looking to retake the U.S. House this year appear to have gotten a boost this week in Pennsylvania, where Republican-drawn congressional districts will be scrapped. The revised political map is almost certain to add some seats favourable to Democrats and put others in play for both parties. UPCOMING: 800 words by 5 p.m., photos.

TRUMP-BIPARTISANSHIP — President Donald Trump's call for a new era of bipartisan co-operation seems like a distant memory as he accuses Democrats of being "un-American" and perhaps "treasonous." SENT: 930 words.

CONGRESS-PESTICIDES — Republicans on the House science panel push to cut U.S. funding for international cancer research after a French-based group raises health concerns about top-selling Monsanto weed-killer Roundup. UPCOMING: 700 words by 4 p.m.

ILLINOIS GOVERNOR-2018 — Newly released FBI wiretaps captured Democratic Illinois governor candidate J.B. Pritzker telling then-Gov. Rod Blagojevich that a state lawmaker was the "least offensive" African American he could appoint to a U.S. Senate seat. Publication of the previously unreleased recording from a 2008 investigation of Blagojevich is roiling the race. SENT: 130 words. UPCOMING: 700 words, photos.

NATIONAL

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TRAIN TERMINAL CRASHES — A lack of required testing for a pernicious sleep disorder was the primary cause of two serious train crashes in New Jersey and New York, federal investigators concluded in a report as they renewed the call for the testing to be mandatory. SENT: 300 words, photos. UPCOMING: 600 words by 4 p.m. With AMTRAK CRASH-PHILADELPHIA — An Amtrak engineer has been ordered to stand trial on criminal charges for a deadly 2015 derailment in Philadelphia (sent).

NYPD SURVEILLANCE-LAWSUITS - New York's highest court will consider whether the New York Police Department can use a Cold War-era legal tactic to conceal information about whether it put Muslims under surveillance. SENT: 450 words. UPCOMING: New approach, 550 words by 4 p.m.

NEWSPAPER REBORN — A librarian in this southern New Hampshire town has started a weekly newspaper, about two years after the community quarterly closed. The response has been overwhelming, with town residents lining up to pick up copies and supporters saying it fills a critical information gap. SENT: 550 words, photos.

INTERNATIONAL

TAIWAN-EARTHQUAKE — Taiwan's premier says two are killed and 144 are injured in an earthquake striking the east coast city of Hualien, and the official news agency says some people may be trapped inside a heavily damaged hotel. SENT: 200 words. UPCOMING: Developing.

MALDIVES-PRISONERS — Three Maldives Supreme Court justices annulled their own order to free a group of imprisoned opposition politicians after two of the court's justices were arrested amid a political crisis in the Indian Ocean archipelago nation. SENT: 800 words, photos.

POLAND-HOLOCAUST LAW — Poland's president signed legislation that outlaws blaming Poland as a nation for Holocaust crimes committed by Nazi Germany, defying both criticism from Israel and a warning from the U.S. SENT: 900 words, photos. With AP EXPLAINS-POLAND-HOLOCAUST LAW (sent).

BRITAIN-ASSANGE -A British judge has upheld a U.K. arrest warrant for the WikiLeaks founder Julian Assange, leaving him still a wanted man in the country where he has spent more than five years inside the Ecuadorean Embassy. SENT: 400 words, photos.

KOREAS-OLYMPICS — A shipload of North Korean musicians, singers and dancers arrives in South Korea to perform at the Pyeongchang Winter Olympics. SENT: 410 words, photos. With NKOREAN-STARS — N. Korea dominates pre-Olympic media coverage at Pyeongchang; NKOREA-OLYMPIC MUSICIANS — A shipload of North Korean

musicians, singers and dancers arrived in South Korea on Tuesday to perform at the Pyeongchang Winter Olympics (sent).

ARTS & ENTERTAINMENT

FILM REVIEW-BLACK PANTHER — As the most earnest and big-budget attempt yet of a black superhero film, "Black Panther" is assured of being an overdue cinematic landmark. But it's also simply ravishing grand-scale filmmaking. By Film Writer Jake Coyle. UPCOMING Tuesday by 12:30 p.m.: 780 words, photos.

NBC-OLYMPICS — Fresh off the Super Bowl, NBC begins more than two weeks of Winter Olympics coverage Thursday with a new host, some new wrinkles and the hope that its business model keeps pace with the different ways people experience events on television and online. By Media Writer David Bauder. SENT: 770 words, photos

KOREAN POP MUSIC — The clothes, the hair, the confidence — the look of Korean pop music can feel like high fashion or just plain quirky. But that's what draws fans to South Korea's most famous musical export. SENT: 750 words, photos.

BUSINESS

THE NEW DISNEY — Disney already owns Pixar, Marvel and Star Wars; now it's adding Fox's TV and movie studios to the mix and preparing to launch two separate streaming services, one for sports and another focusing on entertainment. It's Disney's big bet on what the next generation of entertainment will look like. UPCOMING: 400 words by 5 p.m., 600 words by 6 p.m., photos. Will incorporate BC-US--Earns-Disney.

SPORTS

OLY--IOC MEETINGS — With the Olympics opening in three days, IOC President Thomas Bach faces fierce criticism — and entrenched support — from members over Russian doping. Long-serving IOC member Richard Pound says the IOC is allowing "cheating athletes to prevail against the clean athletes." SENT: 550 words, photos. With OLY--SKI-FROM VONN TO SHIFFRIN — Separated in age by about a decade, Lindsey Vonn and Mikaela Shiffrin head to the Olympics as the past, present and future of ski racing. This is the first and last chance for them to share the spotlight and a starring role at a Winter Games. SENT: 1,000 words, photos.

Figure 11. Screengrab of Washington Post story on Hamilton beating.

Posted in "Morning Mix" on *Washington Post* website, December 1, 2016, by Fred Barbash. Title of story: He 'just kept hitting me with the bat': Canadian Muslim teen brutally beaten by white men. Story includes picture of teen holding award and was identified as "Updated."

Figure 12. Hamilton Spectator "YouTube family" screengrab.

8 hours ago | Vote 👜 0 🛛 🛡 0

The saga of a YouTube family who pulled disturbing pranks on their own kids

WARNING: Story contains graphic language



PARENTS YouTube DaddyOFive Founders issue an apology on YouTube

Figure 13. Screengrab of Hamilton Spectator crane story.

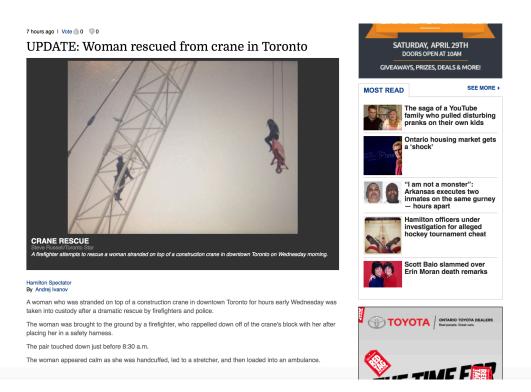


Figure 14. Screengrab of *The Record* homepage with soldier killed in primary position.

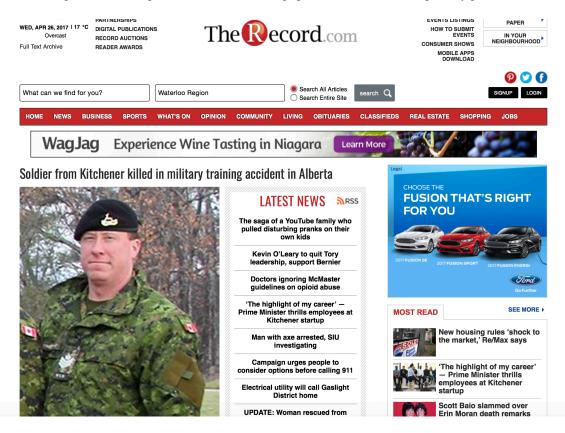
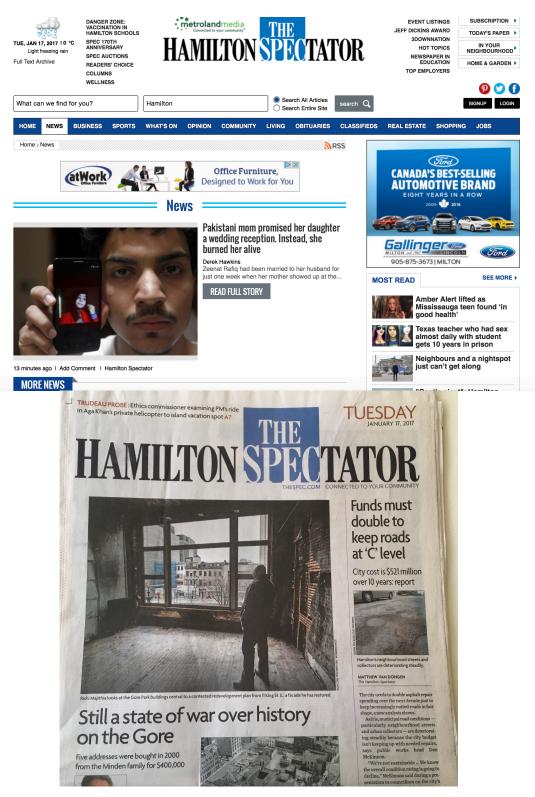


Figure 15 and 16. thespec.com homepage versus The Spectator front page, 17 January 2017.



Appendix 17

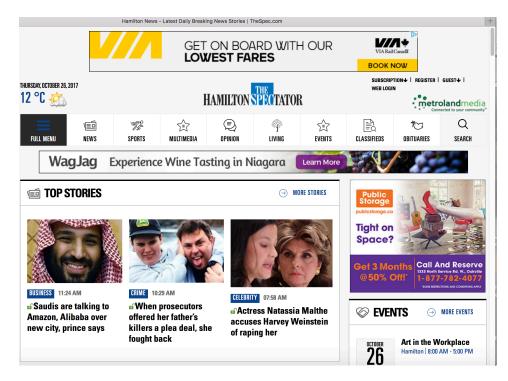
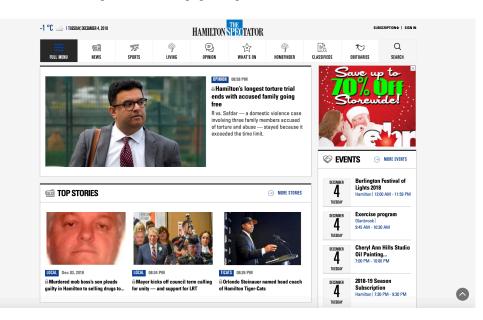
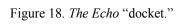


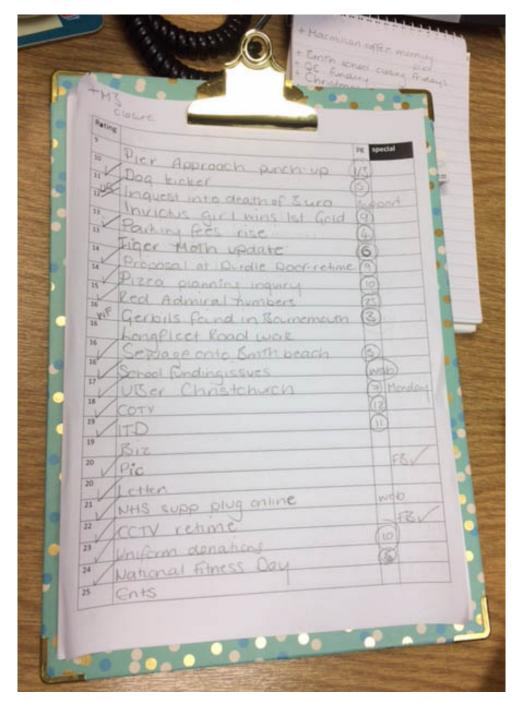
Figure 17a. Homepage of thespec.com with new focus on "engagement" October 2017

Figure 17b. Homepage thespec.com December 2018



Appendix 18





Appendix 19



Figure 19 and 20. Different treatment for Echo stories, paper versus online.



Picture Gallery

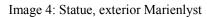
Image 1: NRK Marienlyst, main entrance, Oslo.

Image 2: NRK exterior



Image 3: Marienlyst sign







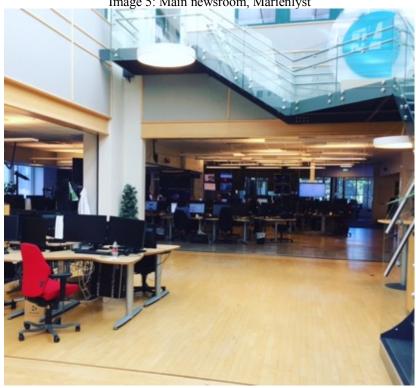


Image 6: Sports department, Marienlyst

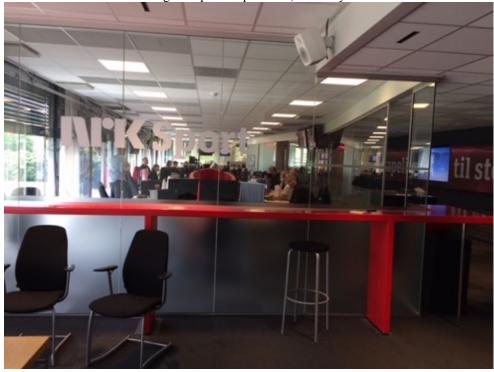


Image 5: Main newsroom, Marienlyst

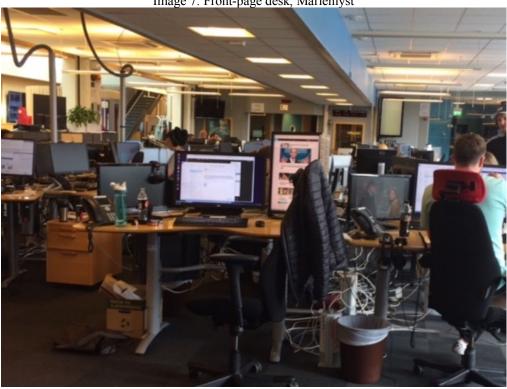


Image 7: Front-page desk, Marienlyst

Image 8: Art Deco room in Radio House, Marienlyst



Image 9: Exterior Hordaland



Image 10: Hordaland newsroom







Image 12: Hordaland Radio Room



Image 13: Hordaland lounge area





Image 15: Troms newsroom



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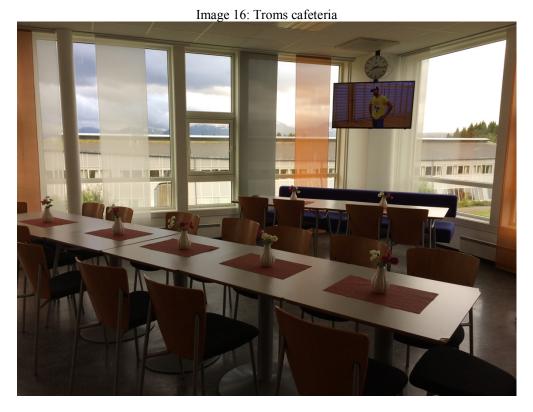
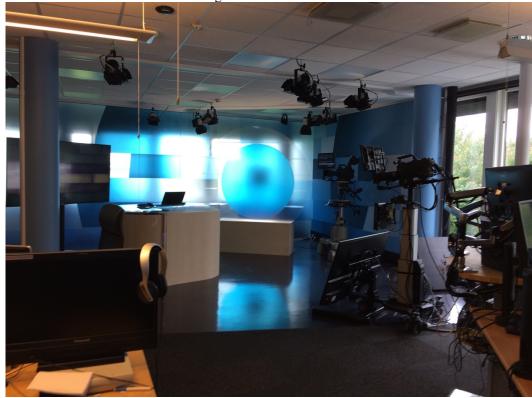


Image 17: Troms TV studio



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Image 19: The Hamilton Spectator, exterior



Image 20: The Spectator lobby





Image 22: Spectator newsroom









Image 25: Publications printed by Spectator press

Image 26: Photos in Spectator hallway





Image 27: The Bournemouth Daily Echo, Art Deco exterior

Image 28: Echo exterior, front view



Image 29 and 30: Echo doorway and front-page banner



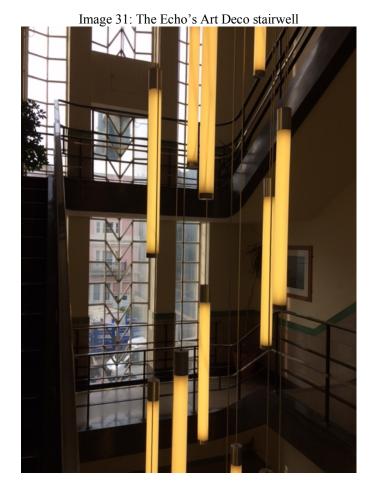


Image 32: The Echo newsroom



Glossary of Terms

AI: Artificial intelligence, or the use of computer programming to engender an advanced level of behaviours within a program, such as learning and reasoning, that are normally associated with humans

Analytics: The encompassment of the analysis of audience data as a means of performance appraisal on existing content and the development of hypotheses to improve audience engagement in the future

Analytics Systems: Platforms specifically designed to aggregate, display, and assist in the reporting and analysis of audience data

Analytics Dashboard: The face of the analytics system where users are able to access data

API: Application program interface—how software programs/components/applications interact/communicate in order to exchange data

Bot: Software applications ideal for performing repetitive tasks that can also imitate humans in various forms of communication

Clickbait: Content created that may have little editorial value but is likely to draw a lot of pageviews, usually of a sensationalistic nature

CMS: Content management system

Concurrents: A Chartbeat term referring to the number of real-time views, or "open windows" on stories (See http://blog.chartbeat.com/2016/06/20/concurrents-deep-dive-balancing-audience-size-and-engagement/)

Dayparting: The practice of scheduling content for the time when it is most likely to be viewed/read

Digital Curation: The practice of gathering digital content from a number of sources to be posted and/or promoted on a particular website

Embed Code: An HTML code that can be copied into a CMS in order to display content, such as a story or graphic, that is housed on an external system

Enhancement: A variety of strategies used in real-time promotion of content, including changing the headline, adding or changing a picture, or changing story placement, in order to, primarily, increase the number of views a story is receiving.

Long tail: The extended period of time where posted content draws views after publication (See also Anderson 2004)

Metrics: Units of measurement that reflect a specific element of audience behaviour

Paywall: A virtual "wall" that blocks access to content for those who have not paid for it

Platform-parting: Formatting/producing/posting content in a manner particular to the platform for which it will be published on, in order for such content to be best received by the audience

SEO – Search engine optimisation, such as the selection of appropriate keywords that leads to content being found through organic searches

TweetDeck – A dashboard management tool to assist with monitoring Twitter accounts/sending tweets from multiple accounts

**For more definitions of terms related to analytics see also <u>https://www.digitalanalyticsassociation.org/Files/PDF_standards/WebAnalyticsDefinitions</u> <u>Vol1.pdf</u>