Exploring "Ideological Correction" in Digital News Updates of Portland Protests & Police Violence

Abstract

This paper critically examines 48 digital news updates to six *New York Times* online articles collected through 181 captures via the Internet Archive's Wayback Machine, a web scraping tool, pertaining to federal military and local police responses to Portland protests published in headlines, sources, quotes, hyperlinks, the order of information presented, and articles' main thrusts of meaning, we call for the notion of "ideological correction" to represent shifts in news explanations of single articles that altered the articles' focus related to and characterizations of law enforcement and protesters – sometimes even under the same, original headline.

Keywords: critical textual analysis; digital journalism; epistemology, ideology; news narratives; protest; updates; Wayback Machine

Introduction

Six days after a Black Lives Matter protester was shot in the head by police[i] forces in the U.S. state of Portland, Oregon, *The New York Times* posted its first online story about the law enforcement presence in the city (Olmos, Baker, & Kanno-Youngs, 2020a). Over the course of a day the article – including its headline and lede – saw a massive shift in explaining the role of police in the city. The headline no longer suggested federal officers were in the city to "quell unrest," nor did its opening paragraph state they were there to "subdue a persistent group of protesters by shooting tear gas canisters and making arrests. The headline now read that federal agents were there to "Unleash [a] Militarized Crackdown" and included a quote in its lede that the agents were exercising a "blatant abuse of power" against demonstrators. All told, based on data captured by the Internet Archive's Wayback Machine (WBM), the same article underwent least 14 updates in 24 hours, with the addition and removal of hyperlinks, quotes, and other content that altered the main thrust of the reporting. The only noticeable indication that something had changed was in updated timestamps that appeared near the byline.

Certainly, news changes, and journalists are expected to update pertinent information as it becomes available. And while news has long undergone various forms of processing updates often in the form of news articles posted the same or next day, breaking news alerts on TV and radio, and push notifications from the days of shipping news to rewrite desks and from telegrams to the telefax (eg. Burgess, 1985), today's process of updating the news leaves digital footprints that not only assist in understanding the practical aspects of how news changes in real-time but reveals ideological movements of the news as it is made (and remade) as it "develops." Indeed, since journalism's adoption of the internet's publishing platforms, scholarship has examined the characteristics of digital news updates in terms of what aspects of a news story changes, the temporalities of updating online news, and the additions to or corrections of information originally posted (Deuze, 2008; Saltzis, 2012; Usher, 2018; Widholm,

2016). Our project extends that work to explore the ideological and meaning-making aspects of the aspects of digital news updates beyond the content that is a "correction" or merely the update of new information such as a moment of breaking news within a single article and URL.

To do so, we conduct a critical textual analysis (Parks, 2021) of 48 digital news updates to six *New York Times* online articles collected through 181 captures via the WBM, a web scraping tool, pertaining to federal military and local police responses to Portland protests published between July 17 and July 21, 2020. At its core, we hope to contribute to understandings of the layered meanings of digital news through analysis of updates that make a digital news article a type of palimpsest – a patchworked artifact marked, erased, and reworked (Shumow & Gutsche, 2016, p. 44). We will argue this type of palimpsest is imbued with issues of articles' temporality, positionality, and power surrounding the fast-paced creation of news content and the replacement of content with new explanations and information that appeared in previous article versions. As its major contribution, we use this analysis to introduce the notion of "ideological correction"to represent shifts in news explanations after publication that alter post-published journalism beyond what scholars and readers might expect, particularly the ideological aspects of digital news updates in terms of the reproduction of dominant narratives of explanation (Lule, 2001) over time and the intersection of updated information and perspectives with original and lasting text and ideas.

Our paper begins with an overview of journalism as a cultural force related to ideological power dynamics in the process of newswork and the challenges and opportunities for journalism in a fast-paced digital world of updating. Following our discussion of our methodology, including using the WMB to capture data and our approach to conducting a "deep reading" (Handley & Rutigliano, 2012) through a critical textual and micro-longitudinal analysis (Kutz & Herring, 2005) of digital news updates. The article concludes with suggested future work based on our findings and contribution.

The Power of News Explanations: A Conceptual Framework
In this section, we discuss two major areas of scholarship that are related to this paper – the explanatory function of journalism and its relationship with time and production – to foreground our interpretive analysis that showcases the minute-by-minute updates to news, not just in terms of "facts," but explanation.

Journalism as Cultural Connector
Before entering too far into the study, it is important to note that journalism is a complicated social and cultural force that is ripe for examination related to its epistemological forms, its forms of production, dissemination, and interactions amid sources, fellow reporters and social institutions, and audiences (for review, see Berkowitz, 1997). We also subscribe to notions that one of journalism's main characteristics is its cultural position in relaying explanations for what is covered as "news" and journalistic commitment to dominant interpretations issued by structures of power that serves as journalism's foundation as a social and cultural product (Gutsche, 2015; Hall, 1986; Sigal, 1973). Ettema (2005), for instance, describes the explanatory

function of journalism that relays descriptions of daily news events through expressions that are salient and resonant for audiences as holding an "imaginative power" thatelevates information shared into cultural messages. Here, the explanatory power of journalism through language, vantage point, source use, and other traits represents the crux of how journalism establishes its initial explanations of news events and issues (Lule, 2001). Embedded in these messages are ideologies, or "meanings in the service of power" (Thompson, 1990, p. 7), that reveal how journalism operates amid ideological spheres of influence that shape content alongside other normative forces of time, finances, and the cooperation and approval of fellow institutions (Berkowitz, 2011; Gutsche, 2015; Reese & Shoemaker, 2016).

Alongside the ideological aspects of news explanation (Bird & Dardenne, 1997), journalistic practice adheres to an "iron core" of newswork that revolves around processes of "bearing witness," "following up," explaining the news, and further investigating it (Jones, 2009, pp. 5-8) to assist in both engaging audiences with (new) information to assist in a sense of public service of providing information, as well as embedding dominant ideology into daily news (Altheide & Snow, 1979; Ellis, 2020; Herman & Chomsky, 1988). Journalism, therefore, operates as an actor of ideology and through a ritual of communication to provide "language that help(s) structure and shape public discussion" (Lule, 1991, p. 76), and this practice can occur over long (and short) periods of time as journalists seek or receive new information and/or explanations (Risley, 2000). Scholarship has found that in times of social protest and unrest similar to events of the Portland protests addressed in this paper, dominant explanations for social conditions in journalism are provided by police and governments so as to maintain a consistent, collective message for the benefit of "calm" and social order (Manning 1997). Simultaneous to the need for accessing and sharing "authoritative" explanations for everyday life and breaking news events (Kilgo & Mourão, 2021), journalists also find they must work quickly to maintain their own authority with audiences in an aged of increased speed to make their news elements beyond explanations, such as headlines, accuracy, timeliness, interactivity (Ekström, Ramsälv, & Westlund, 2021).

Update Journalism: From News Bundling to Breaking News
Updates to journalism are as old as the trade: Bundled news that was shipped across seas bridged continents, altered the sense of time in news, and provided journalists with updated content that required localizing and contextualizing "new" information that arrived locally from afar (Burgess, 1985). Newspapers in the U.S. have long produced "zoned" editions of their print material, with published news products with the earliest information sent to further physical distances in time to reach breakfast tables. Today, journalists are often updating online articles, from corrections to news explanations, operating in "real-time," as digital news has further compressed the notions of time to meet the needs and interests of audiences, advertisers, and news competitors (Harro-Loit & Josephi, 2020). As journalism has reacted to influences of speed, journalists have taken various approaches to meet the interests and needs of audiences who are also demanding more information faster. News updates and the liquidity of news as a notion that articulates the influence and interactions of temporalities and technologies to produce up-to-the-minute content (Deuze, 2008; Widholm, 2016).

Scholars have presented a range of ways to examine the changing nature of digital news under temporal spells (e.g. Kutz & Herring, 2005; Lim, 2021), identifying, as we do in this paper, the increasing prevalence of "incremental news updates" (Usher, 2018). However, much of the work is descriptive in its details of how (and possibly why) news updates appear as they do (e.g. Karlsson, Clerwall, & Nord, 2017) – often absent of critical and cultural understandings of the potential meanings associated with the purposes, practices, and philosophical aspects of news explanations and related ideological dimensions. Such work, then, would contribute further to notions of "layered news," where acts and influences of reporting, contextualization, analysis, and projection build temporal understandings of news coverage over longer periods of time – from decades to minutes (Neiger & Tenenboim-Weinblatt, 2016). Current studies in the updating of news – even those that occur in similar manners to what we address in this study – reinforce normative work that indicate that the increased speed of digital journalism, journalistic interest in correcting inaccuracies, and appearing to operate in "real-time" (Zelizer, 2021).

Based on the above literature, then, we are guided by the following research questions to guide a critical textual and "micro-longitudinal" analysis of news updates of one specific case: First, we ask, "What aspects or characteristics of news texts were updated in *Times* coverage of the militarized response to protests in Portland, and how did digital news updates alter or further develop overarching explanations for police and protesters' behaviors?" Second, we ask, "How can critical explorations of news article updates inform understandings of the explanatory power of news?" We examine these questions following a discussion of our study's method.

Constructing a Deep Reading of Digital News Updates: Method
To explore meanings inherent in today's digital news updates, we selected *The New York Times*' coverage of the Portland protests, as the newspaper and its website are considered by scholars and journalists alike to represent a standard of normative journalistic practices and digital innovation (Creech & Nadler, 2018). To collect the newspaper's online coverage of the protests, we turned to the Internet Archive's Wayback Machine (WBM), which can be found at https://archive.org/web (see also, Alam, Nelson, Van de Sompel, & Rosenthal, 2016). Previous scholarship has used the WBM for its "captured" web pages, including in studies related to digital journalism and to map temporal changes to online content (Litvinenko & Toepfl, 2021). As with other online databases (Deacon, 2007), WBM has historically been criticized for failing to capture a complete picture of internet content, though the web-scraping tool does provide unique access to the development and alteration of web content over time (Karpf, 2012); however, the WBM is particularly helpful for our study, as we are seeking a deep analysis of specific set of articles from the widely read and thus captured from *The New York Times'* website pertaining to a news event over a short period of time. In order to select article URLs to be entered into the WBM, we searched the newspaper's website for the terms "Portland" and/or "federal" and/or "protest" published between July 12, 2020, and July 19, 2020, representing the space of one week of potential coverage. A search conducted in September

2020 yielded eight articles specific to the protest activity in Portland. At the time, six of those articles appeared to have updates captured by the WBM (Table 1).[ii]

Table 1. *The New York Times* online articles and updates analyzed.

We entered into WBM URLs from the six *Times* articles as they appeared in September and October 2020 to collect screen captures of the related updates. Our search yielded 181 screen captures of updates that were published and captured by WBM within a one-week period following the articles' publication. Of these captures, we identified 48 updates that included changes to the articles. To compare changes reflected by the WBM screen captures, we used the tool's "changes" function, a feature that highlights modifications between two screen captures, highlighting and color-coding additions and removals. In addition to using this feature, we read through each screen capture to verify the accuracy of alterations between updates (for an example of visualizations related to "web changes," see Mabe, et al., 2020.) [iii]

By selecting articles through WBM that show, as best as possible without our own web crawler, incremental alterations to articles as they are updated, we replicate the aims of a micro-longitudinal analysis to highlight updates across spans ranging from minutes to days. To identify common characteristics of updates selected for this study, we applied an inductive approach to read updates, paying particular attention to possible alterations to headlines, articles' text (including leads, sources, quotes, and hyperlinks), the placement and captions of photographs and videos, and the timestamp of updates (Kutz & Herring, 2005). Three of the article's authors then began a "deep reading" (Handley & Rutigliano, 2012) of the changes within the updates captured by WBM to interpret how additions and removals of information or other alterations may have reinforced or subjugated one news explanation of and for the police response to protests in exchange for another. Through this reading, we paid particular attention to alterations in material that changed overarching meaning of a sentence, headline, or article thrust, or that focused or nonmaterial changes that updated characteristics such as spelling and grammar or includes information that did not change the meaning of a sentence, headline, or overarching article meaning.

This approach to a critical textual analysis of news (Parks, 2021), which allows readers to interpret the building blocks of news explanations. Our readings independently and together included note-taking and discussions amongst authors (Berkowitz & Eko, 2007) related to the "explanatory power" of news coverage over time and within those explanations any shifts of power presentations (Thompson, 1990). A critical approach "demystifies ideologies and power" through rigorous and informed readings of a text to and interrogates its layered ideological meanings (Wodak & Meyer, 2009). Our approach to the articles and updates included in this study is informed by previous critical analyses of journalism texts to recognize and highlight issues of power, ideologies, and dominant social and cultural meanings as being hegemonic in their application through news storytelling (ie Lovelock, 2018). In our reading, we also paid particular attention to the "symbolic dimension of journalistic language" (Spurr, 1993, p. 91), such as metaphor, diction, vantage point, and sourcing to identify aspects of power in the

articulation of meaning (Fairclough, 1995), reading texts over a period of time and discussing our interpretation. We take an approach to this paper that borrows from critical examinations of journalism in which we critique the degree to (and means by) which journalism as cultural text connects dominant power structures and ideologies to everyday events, issues, and news. The following portion of our paper helps to identify the ideological function of digital news updates to shape what some users may only see and view as permanent – though we do not -- "final" (and/or merely edited or updated) article.

News Updates as Cultural Text: A Critical Textual Analysis
In this section, we address our first research question, which asks about the elements and characteristics of news texts and how the updates altered or further developed overarching explanations for police and protesters' behaviors. We present this analysis organized around the main characteristics of updates identified for this project – headlines, ledes, and article text – in articles captured by WBM. To be clear, the newspaper may have published more updates to articles we have read, though we have collected and analyzed the minimum number of article updates that WBM provided. Headline changes were found in five updates of two articles; one article (Olmos, Baker & Kanno-Youngs, 2020b) consisted of four of the headline changes and an update that included changes to the subhed/kicker. Of all the 48 updates analyzed for the study, 56% were recorded as having some form of textual additions to ledes and text in the articles' body, including quotes (29%); hyperlinks (40%), and sources (29%). Removals of text included deletions of quotes (9%) and hyperlinks (18%); no sources were removed in updates.

Below, we will argue that news presentations and characterizations of police and protesters that appeared in initial articles consistently changed in article updates in ways that criticized the legitimacy of law enforcement's use of force and justified and made virtuous the presence and behaviors of protesters. Specifically, we will argue that coverage began by assigning military law enforcement the characteristics of "virtuous police" (Manning, 1997) though later – sometimes under the same headline and with portions of the article text altered -- repositioned their presence as being more complicated. Simultaneously, coverage recharacterized protesters as being instigators to acting as virtuous citizens. These shifts complicate the interpretations and explanations of what journalists cover online and what they present as being a static presentation in the form of a completed (or temporarily completed) article or update (for more, see Spurr, 1993). Not only does such an analysis complicate knowledge about digital journalism practice but opens an avenue for understanding means by which journalism changes over time – even in short stints.

Headlines: The Power to Signal Story Meaning
In this study, headlines were perhaps of the most noticeable or recognizable areas of alterations of articulations and characterizations of police and protesters as virtuous or violent. For example, the fourth update to one article's headline six hours after it first appeared, "Federal Officers in Portland Face Rising Opposition on Streets and in Court" (Olmos, Baker & Kanno-Youngs, 2020b) change it to "Federal Officers Deployed in Portland Didn't Have Proper Training, D.H.S. Memo Said," and repositioned the meaning of the article's initial message to users. A

reading of the article with its original headline argued that law enforcement was battling the "largest crowd in weeks," with many of the protesters chanting, calling officers "terrorists," reinforcing the idea in the article's original headline that protesters were "rising" against those trying to calm them. The new headline now presents to users a perspective that delegitimizes law enforcement through stating that they "didn't have proper training," thereby positioning their use of force as a flaw specific to the agents on the ground -- not the larger military institution -- who were "facing" a "growing backlash."

An earlier update to this same article, published more than two hours after the original article appeared, also changed a single word in its subhead that initially read, "Rather than tamping down persistent protests in Portland, Ore., a militarized presence from federal officers seems to have reignited them." In this case, the word "reignite" positions officers as being unwittingly responsible for fueling the flames of discontent and casting those who have been "ignited" as operating without agency, merely as a result of the others' presence. Suggesting that protesters were "re-ignited," on the other hand, focuses on the active power/agency of protesters themselves to organize. The headline to another article was changed in an update eleven hours after it was initially published from "Feds Vowed to Quell Unrest in Portland. Local Leaders Are Telling Them to Leave" to "Federal Agents Unleash Militarized Crackdown on Portland" (Olmos, Baker & Kanno-Youngs, 2020a), which we discuss in this paper's introduction. The language and vantage points altered here shifts the signal of what the story is about from a stance that sympathizes with the police who have "vowed" to "quell" an unruly lot to "unleash[ing]" in some form of barbaric and primitive manner their "militarized crackdown." Even though the initial headline indicated "local leaders" were "telling [federal agents] to leave," the original perspective of the headline was that agents were there to do their duty and focused on a conflict between national and local institutions on how to approach protests. In the second headline, the agents has taken action "on Portland" positioned them as imposing themselves upon a community. Lastly, the initial reference of "Feds" rather than naming them as "Federal Agents," as the updated headline does, employs the problematic tool of abbreviation and moniker that signals a familiarity and virtuousness, whereas spelling out the term "Federal Agents" indicates a more authoritative and "named" intruder or entity.

Though these alterations could be considered to some as "minor," our reading suggests that such changes to language – particularly in headlines that provide users with concise and direct signals for interpreting an article's focus and positionality on a news event or issue and that tell audiences what a story is "about" (Huxford, 2001) -- contribute to sizable shifts in the articulation and characterization of police and protesters in this case. Of specific interest is how these changes represent the role of emotion through active and passive voice and the use of monikers and vantage point frequent to protest coverage (Araiza, Sturm, Istek & Bock, 2016; Harlow, Kilgo, Salaverría & Gacrïa-Perdomo, 2020) and in changes over short periods of time that direct users to particular ideological interpretations of language (van Dijk, 2006).

Ledes: Presenting Ideological Position(s)
We found that alterations to article ledes through updates also recast coverage over time in terms of the virtuousness of both the presence of law enforcement and protesters behaviors.

One example (Olmos, Baker & Kannos-Youngs, 2020b) appeared in he *Times'* second day of coverage. Published at 10:34 a.m., the article originally began:

> An aggressive federal campaign to suppress unrest in Portland appears to have instead rejuvenated the city's movement, as protesters gathered by the hundreds late Friday and into Saturday morning – the largest crowd in weeks.

In the article's fourth update at 5:50 p.m. -- about seven hours after the article was first published -- the articles new lede read:

> The heavily armed federal agents facing a growing backlash for their militarized approach to weeks of unrest in Portland were not specifically trained in riot control or mass demonstrations, an internal Department of Homeland Security memo warned this week.

Within this update change, based upon a government document published two days before the *Times'* original article appeared online, we see that "[a]n aggressive federal campaign" becomes more specific, the actors are identified as "heavily armed federal agents," and readers are provided with an overarching hint of what to expect throughout the article related to debate about law enforcement's legitimacy and, therefore, their activities that may not have been as virtuous as initially presented. Another example of changes to article ledes through updates that altered the article's position on the "virtuousness" of police and protesters appeared even earlier than the example above -- in the *Times'* first story (Olmos, Baker & Kanno-Youngs, 2020a) where its lede read: "For weeks police officers on the streets of Portland have tried to subdue a persistent group of protesters by shooting tear gas canisters and making arrests — each by the dozens." The article goes on to distinguish between the presence of local police officers and the arrival of federal officers and how the military response evoked response from protesters.

In the article's second update four hours later, the lede moved detail about what the agents were wearing and some of their activities that appeared lower in the original article to have the new lede read:

> Federal agents dressed in camouflage and tactical gear have taken to the streets of Portland in unmarked vans, seizing and detaining protesters and unleashing tear gas in what Gov. Kate Brown of Oregon has called "a blatant abuse of power."

The changes to this lede articulate the physical power (and threat) of the authorities that is reinforced by the partial quote of a state official who characterizes their presence as an "abuse of power." "Purportedly" there to "tamp down" "unrest" positions the article to cast a sympathetic position to law enforcement, which is wiped clean in the update and its new lede. The phrasing of agents "dressed in camouflage and tactical gear" sets a scene of an aggressive character, while the mention of driving the streets in "unmarked vans" hints to a sinister motive and act, mirrored in the description of them "seizing" and "detaining" citizens, and "unleashing

tear gas." The changes became more graphic in the article's fourth update, which added to the lede that agents were not only using tear gas but were also "bloodying protesters and pulling some people into unmarked vans."

As ledes in journalism are designed to guide readers to the perspective(s) they can expect to read in an article, they also can serve -- alongside headlines and other elements discussed in this paper -- to form notions of an article's overarching, ideological vantage point (Johnston & Graham, 2012; Qian, et al, 2019). In ledes across updates, language consistently highlighted philosophical and physical conflict surrounding law enforcement. Ledes focused on detail and descriptions of attire and actions, and rationale or explanation for events and issues to reveal patterns of changing journalistic interpretation and explanation specific to the righteousness of police and protesters. These ledes contributed, then, to emotional storytelling about protests, rooted in conventional and divergent takes on the influence the common good by protesters and police alike (Richardson, 2008).

Additions and Removals to Article Text: Altering the Tale
While the above sections discussed alterations to headlines and ledes, here we identify the influence additions and removals of elements throughout the articles themselves that contributed to shifts (or reinforcements) of an original article's storytelling (Bird & Dardenne, 1997) occurred across the coverage analyzed. As we have mentioned above, here we focus on aspects of diction/language, dialogue and source quotes, descriptions of social actors and institutions that appear in the article, and news narratives and evidence that legitimizes these news depictions, which form journalism's "imaginative power" (Ettema, 2005) in presenting authoritative tales of meaning.

Perhaps the most striking of changes to storytelling in this coverage occurred in one article (Olmos, Rojas & Baker, 2020) that saw four paragraphs (and a hyperlink) added in its second update one hour after the original story published that challenged earlier articulations of law enforcement's virtuousness and transformed protestors to a more virtuous state. These additions focused around a protester (and U.S. military veteran) who had been beaten by law enforcement while wearing a Navy sweatshirt. (The article also included details such as him being "a 6-foot-2, 280-pound former Navy varsity wrestler.") This personalized story around Christopher David -- who the *Times* initially referred to as a "Navy veteran" and then in the second update as "a former Navy civil engineering corps officer"-- provided the article with a personal perspective. Yet the *Times* updates changed the verbs describing David's actions before being assaulted. The original article highlighted how David approached officers, feeling "the need to *confront*" (emphasis added) them about why they were "violating their oath to the Constitution?" while the second update indicated that David "felt the need to *ask*" (emphasis added). Other changes about David's violent interaction with officers changed from the *Times* writing that "a federal officer dressed in camouflage fatigues began *hitting him* with his baton before another doused him in pepper spray" (emphasis added) to David finding "himself *being beaten with a baton* by a federal officer dressed in camouflage fatigues as another doused him with pepper spray" (emphasis added).

Journalism that includes personal or "human interest" stories, as in this case, centers storytelling around the emotion and individual influences of an issue or event on members of society that influences an article's ideological and moral tale/telling (Lule, 2001). Hyperlinks – which both provide users with further information and reveal how digital journalists make meaning by including links and the types of content they tend to link to -- also contributed to the *Times*' digital storytelling in ways that provided (or challenged) the authority and actions of police and protesters. For example, one update alone added two hyperlinks to an article (Kanno-Youngs, 2020a) to provide explanation and evidence related to sources' legitimization of their authority and actions. When discussing the U.S. government's rationalization for sending troops to Portland that officials claimed was housed within "U.S. Code 1315," the *Times* hyperlinked the term "U.S. Code 1315," connecting the text to the code's language on a Cornell University Law School website.

Elsewhere in the same article update, the newspaper linked a portion of the article's original text that stated that the American Civil Liberties Union Foundation of Oregon had sued the U.S. government over its Department of Homeland Security's decision to mobilize troops, connecting story text to the actual complaint hosted on the website of Oregon's ACLU. As with many -- if not all -- of the updated changes identified throughout this paper, journalists likely had their reasons to alter content; however, a critical reading of the published work provides perspective for consideration as to the layered meanings of power embedded in the text. In the case of adding these hyperlinks, for instance, the news text becomes interactive and, some might say, more insightful by providing users with additional content and explanation. However, we consider that these additions (and what they are linked to) serve as a further form of articulation in the sense that it relinquishes the journalists themselves from clarifying the source's position but in effect awards those positions greater, "objective" autonomy and authority. Indeed, journalists didn't just add hyperlinks, but removed them throughout updates in ways that revised an article's storytelling.[iv] Such was the case in an article about how officers "shot one protester in the head with an apparent impact munition, leaving the man with severe head injuries and producing the image of blood dripping on Portland's streets" (Olmos, Baker & Kanno-Youngs, 2020a). The link to a citizen's Twitter account[v] was used as attribution for the incident's description and was removed in the article's second update, four hours after the article was initially published and more than three hours after its first update.

Unifying the Ideological (and Corrective) Elements of Article Updates
In this section we address our second research question, which asks, "How can critical explorations of news article updates inform understandings of epistemologies of journalism and the explanatory power of news?" We do this by presenting here a discussion on how the update elements discussed above unified to influence a reshaping of individual articles' thrust or focus (Grantham & Vieira, 2014) over time and via updating, which ultimately shaped (and revised over updates) the *Times*' presentation of protesters and police virtuousness, articulating institutional perceptions of legitimacy in terms of law enforcement and demonstrators. We came to understand an article's "thrust" or focus through multiple readings where we honed-in

on article elements and alterations examined in the analyses above to understand how they may have operated independently -- such as the adding of a quote or the removal of hyperlink in different areas of the same article update -- but coalesced in changing the overarching meaning of the article. We illustrate these changes to thrust in Table 2, providing examples of changes to language about the characterizations and explanations of law enforcement and protesters.

Table 2. Examples of news characterizations of law enforcement and protesters articles across updates.

Article thrusts that we found to cast police as virtuous did more than justify the scenes or depictions of violence that presented police initially as violent, by presenting their behaviors and presence in Portland as a duty for the public good. For example, the first article analyzed (see Table 2) by the *Times* (Olmos, Baker & Kanno-Youngs, 2020a) in which its headline altered from "Feds" being present to "quell unrest" to "unleash[ing] militarized crackdown," operated alongside changing depictions of protesters who were originally "persistent" in their activities, and later were simply referred to as "protestors" or demonstrators. Such simultaneous changes of characterizations that problematized the role of law enforcement and the sympathetic approach to protesters. In other words, as police moved along the spectrum from virtuous to violent throughout article updates, protestors were concurrently moving from positions of being violent to being virtuous. Similarly, the thrust of the fifth article (Olmos, Baker & Kanno-Youngs, 2020b) demonstrated the same shift, first presenting police as virtuous by painting them as victims who "fac[ed] rising opposition" to, three updates later, falling under the newspaper's criticism. for a DHS memo indicating they "didn't have proper training."

Article thrusts that were found to initially present police as "violent" and were later deemed "more violent" after article updates, applied storytelling techniques and language that intensified the degree of violence portrayed. For instance, the sixth article (discussed in the analysis above) originally described how "a federal officer dressed in camouflage fatigues began hitting [a protester] with his baton before another doused him in pepper spray." This description was later updated, changing the perspective, descriptions, and sequence of events to read "[the protestor] found himself being beaten with a baton by a federal officer dressed in camouflage fatigues as another doused him with pepper spray" (Olmos, Rojas & Baker, 2020). This shift allowed for the reader to both empathize with the protester who was now simultaneously being beaten and pepper sprayed, and to view the police as more violent due to the intensification of actions from "hitting" to describing the victim of the police as "having been beaten." Another article, the *Times*' third (Kanno-Youngs, 2020a), was categorized as presenting law enforcement as justifiably violent as it described police behaviors through their legal authority. This was later categorized as simply "violent" after article updates included a quote that introduced a critical perspective to the Department of Homeland Security's "interpretation" of legalities.

To be clear, while this discussion surrounds specific alterations to single articles through updates, we emphasize the complexities of our interpretations and arguments are rooted in the simultaneous functions of update alterations over time. We refer to this process of change to characterizations and explanations that shift the article's ideological thrust as "ideological

correction" to signify active shifts in news explanations after publication that alter post-published journalism beyond what scholars and readers might expect, such as corrections to grammar, spelling, and factual inaccuracies. These processes of piecing together various methods of storytelling and information-sharing host tucked-away spaces for ideological expression and transformation. We briefly discuss the implications from this study below.

Conclusion

This micro-longitudinal analysis of digital news updates, proposes the tracking of news explanations over (short periods of) time reveals underlying journalistic practices that position journalists as instinctively resorting to initial, institutional news narratives and meanings before altering – or updating – them as stories develop. Here, we address our second research question, "How can critical explorations of news article updates inform understandings of the explanatory power of news?" Firstly, we believe it vital to highlight that these "ideological corrections" should not be viewed through the same lens as factual "corrections" with which journalism is most familiar, those related to spelling or inaccuracies. Certainly, articles under study here developed over the course of hours – in some cases, days – and the alterations we identify are wrapped-up in "new information," "factual" clarification, and journalistic style; yet, these changes were related to explanation that dramatically altered the *Times*' coverage within each article/artifact in ways that presented potential ideological and power shifts in the outlet's dominant expressions in ways that audiences would likely not have seen.

Our study, therefore, contributes an ideological and discursive element to analysis of liquid journalism to unveil issues of power in news explanations as coverage developed by-the-minute. Without speaking with journalists and editors for their rationales in news coverage, such initial institutional sourcing, we believe, represents a professional "gut reaction" of journalists to gain immediate information around which to shape an article. However, the micro-longitudinal analysis reveals how quickly journalists added new information and how such information altered explanatory functions of the articles and overarching coverage. Such work leads us to question how, and how frequently, journalists outside of this case initially aligns with institutional explanations, changes the explanation, and never tell users. As discussed above, one expects overarching news narratives to change where the conflict, antagonists, protagonists, peripheral actors, and core explanations may appear differently – perhaps even in terms of their ideological representations – as new and additional articles appear over time. In this case, however, we have seen single news articles become palimpsests over which journalists publish new articles – even when the explanation for police and protester behavior changed.

From our study, future research should also consider what we refer to as "reuse" of "lasting text" – quotes, facts and figures, other reporting, and verbatim language that appeared in original posts as journalistic evidence for reporting that remained untouched in updates – even when the major thrust of an article changed. Furthermore, this study reveals implications for scholars who conduct analysis of online news articles that may be – or may yet be – updated online without clear indications of what has been changed in the article in terms of thrust and news

explanation. The version of what online article is used for analysis for scholars of online news becomes vital, then, to what "version" scholars use in their own research.

we ultimately wish to use this study as an opportunity to argue for – in the spirit of Thompson's (1990) definition of ideology as "meaning in the service of power" – seeing liquid journalism as "updates in the service of power," where alterations construct new meanings that may align with institutional, public, audience, or other expectations of explanation. Certainly, future examinations should seek to understand what influences digital updates, particularly ones that change the explanatory thrust of articles or overarching coverage.

Acknowledgements

References

Araiza, J. A., Sturm, H. A., Istek, P., & Bock, M. A. (2016). Hands up, don't shoot, whose side are you on?: Journalists tweeting the Ferguson protests. *Cultural Studies, Critical Methodologies*, *16*(3), 305-312.

Alam, S., Nelson, M. L., Van de Sompel, H., & Rosenthal, D. S. (2016). Web archive profiling through fulltext search. In *International Conference on Theory and Practice of Digital Libraries* (pp. 121-132). Cham, Switzerland: Springer.

Altheide, D. & Snow, R. (1979). *Media Logic*. Beverly Hills, CA: SAGE.

Berkowitz, D. (2011). *Cultural Meanings of News: A Text Reader*. Thousand Oaks, CA: Sage.

Berkowitz, D. (1997). *Social Meanings of News: A Text Reader*. Thousand Oaks, CA: Sage.

Berkowitz, D. & Eko, L. (2007). Blasphemy as sacred rite/right: "The Mohammed cartoons affair" and maintenance of journalistic ideology. *Journalism Studies, 8*(5), 779-797.

Bird, S. E. & Dardenne, R. W. (1997). Myth, chronicle and story: Exploring the narrative qualities of news. In: Berkowitz, D. (Ed.), *Social Meanings of News* (pp. 333-350). Thousand Oaks, CA: Sage.

Burgess, J. A. (1985). News from nowhere: The press, the riots and the myth of the inner city. In Burgess, J. A. & Gold, J. R. (Eds.), *Geography, the Media and Popular Culture* (pp. 192-229). London & Sydney: Croom Helm.

Creech, B. & Nadler, A. M. (2018). Post-industrial fog: Reconsidering innovation in visions of journalism's future. *Journalism*, *19*(2), 182-199.

Deacon, D. (2007). Yesterday's papers and today's technology: Digital newspaper archives and 'push button' content analysis. *European Journal of Communication, 22*(1), 5-25.

Deuze, M. (2008). The changing context of news work: Liquid journalism for a monitorial citizenry. *International Journal of Communication*, 2(18), 848-865.

Ekström, M., Ramsälv, A., & Westlund, O. (2021). The epistemologies of breaking news. *Journalism Studies*, *22*(2), 174-192.

Ellis, J. R. (2020). More than a trivial pursuit: Public order policing narratives and the "social media test." *Crime, Media, Culture, 17*(2), 185-207.

Ettema, J. S. (2005). Crafting cultural resonance: Imaginative power in everyday journalism. *Journalism*, *6*(2), 131-152.

Fairclough, N. N. (1995). *Media Discourse.* Bloomsbury.

Grantham, S. & Vieira Jr, E. T. (2014). Risk dimensions and political decisions frame environmental communication: A content analysis of seven US newspapers from 1970–2010. *Applied Environmental Education & Communication, 13*(2), 91-98.

Gutsche, Jr., R. E. (2015). *Media control: News as an institution of power and social control.* New York & London: Bloomsbury.

Hall, S. (1986). Gramsci's relevance for the study of race and ethnicity. *Journal of Communication Inquiry*, *10*(2), 5-27.

Handley, R. L. & Rutigliano, L. (2012). Journalistic field wars: Defending and attacking the national narrative in a diversifying journalistic field. *Media, Culture & Society*, *34*(6), 744-760.

Harlow, S., Kilgo, D. K., Salaverría, R., & García-Perdomo, V. (2020). Is the whole world watching?: Building a typology of protest coverage on social media from around the world. *Journalism Studies, 21*(11), 1590-1608.

Harro-Loit, H. & Josephi, B. (2020). Journalists' perception of time pressure: A global perspective. *Journalism Practice, 14*(4), 395-411.

Herman, E. S. & Chomsky, N. (1988). *Manufacturing Consent: The Political Economy of the Mass Media*. New York: Pantheon Books.

Huxford, J. (2001). Beyond the referential: Uses of visual symbolism in the press. *Journalism, 2*(1), 45-71.

Johnston, J. & Graham, C. (2012). The new, old journalism: Narrative writing in contemporary newspapers. *Journalism Studies, 13*(4), 517-533.

Jones, A. S. (2009). *Losing the News: The Future of the News That Feeds Democracy.* Oxford: Oxford University Press.

Kanno-Youngs, Z. (2020a, July 17). Were the Actions of Federal Agents in Portland Legal? *The New York Times*. https://web.archive.org/web/diff/20200718010203/20200720014424/https://www.nytimes.com/2020/07/17/us/politics/federal-agents-portland-arrests.html.

Kanno-Youngs, Z. (2020b, July 17). 50 Nights of Unrest in Portland. *The New York Times*. https://web.archive.org/web/diff/20200718030607/20200721232826/https://www.nytimes.com/2020/07/17/opinion/portland-protests-federal-agents.html.

Karlsson, M., Clerwall, C., & Nord, L. (2017). Do not stand corrected: Transparency and users' attitudes to inaccurate news and corrections in online journalism. *Journalism & Mass Communication Quarterly, 94*(1), 148-167.

Karpf, D. (2012). Social science research methods in Internet time. *Information, Communication & Society, 15*(5), 639-661.

Kilgo, D. K. & Mourão, R. R. (2021). Protest coverage matters: How media framing and visual communication affects support for Black civil rights protests. *Mass Communication and Society*, *24*(4), 576-596.

Kutz, D. O. & Herring, S. C. (2005). Micro-longitudinal analysis of Web news updates. *Proceedings of the 38th Annual Hawaii International Conference on System Sciences.*

Lim, J. (2012). The mythological status of the immediacy of the most important online news: An analysis of top news flows in diverse online media. *Journalism Studies, 13*(1), 71-89.

Litvinenko, A. & Toepfl, F. (2021). The (non-) adoption of participatory newsroom innovations under authoritarian rule: How comment sections diffused in Belarus and Azerbaijan (1998-2017). *Digital Journalism*, 9(4), 384-405.

Lovelock, M. (2018). Sex, death and austerity: resurgent homophobia in the British tabloid press. *Critical Studies in Media Communication, 35*(3), 225-239.

Lule, J. (2001). *Daily News, Eternal Stories: The Mythological Role of Journalism*. New York & London: Guildford Press.

Lule, J. (1991). Roots of the space race: Sputnik and the language of US news in 1957. *Journalism Quarterly, 68*(1-2), 76-86.

Mabe, A., Patel, D., Gunnam, M., Shankar, S., Kellly, M., Alam, S., Nelson, M., L., & Weigle, M. C. (2020). Visualizing webpage change over time. *arXiv* preprint *arXiv*:2006.02487.

Manning, P. K. (1997). *Police Work: The Social Organization of Policing.* Cambridge, MA: MIT Press.

Neiger, M. & Tenenboim-Weinblatt, K. (2016). Understanding journalism through a nuanced deconstruction of temporal layers in news narratives. *Journal of Communication*, *66*(1), 139-160.

Nielsen, R. K. (2010). Participation through letters to the editor: Circulation, considerations, and genres in the letters institution. *Journalism, 11*(1), 21-35.

Olmos, S., Baker, M. & Kanno-Youngs, Z. (2020a, July 17). Federal Agents Unleash Militarized Crackdown on Portland. *The New York Times*. https://web.archive.org/web/diff/20200717142005/20200719210302/https://www.nytimes.com/2020/07/17/us/portland-protests.html.

Olmos, S., Baker, M. & Kanno-Youngs, Z. (2020b, July 18). Federal Officers Deployed In Portland Didn't Have Proper Training, D.H.S. Memo Said. *The New York Times*. https://web.archive.org/web/diff/20200718145006/20200720053330/https://www.nytimes.com/2020/07/18/us/portland-protests.html.

Olmos, S., Rojas, R. & Baker, M. (2020, July 19). From Antifa to Mothers in Helmets, Diverse Elements Fuel Portland Protests. *The New York Times*. https://web.archive.org/web/diff/20200719235042/20200720080812/https://www.nytimes.com/2020/07/19/us/portland-protests.html

Parks, P. (2021). "Down the middle:" CNN 10 and the ideology of objectivity. *Journalism Practice.* doi: 10.1080/17512786.2021.2008812.

Qian, Y., Deng, X., Ye, Q., Ma, B., & Yuan, H. (2019). On detecting business event from the headlines and leads of massive online news articles. *Information Processing & Management, 56(6)*.

Reese, S. D. & Shoemaker, P. J. (2016). A media sociology for the networked public sphere: The hierarchy of influences model. *Mass Communication and Society, 19*(4), 389-410.

Richardson, J. E. (2008). Language and journalism: An expanding research agenda. *Journalism Studies, 9(2)*, 152-160.

Risley, F. (2000). Newspapers and timeliness: The impact of the telegraph and the internet. *American Journalism, 17(4)*, 97-103.

Saltzis, K. (2012). Breaking news online: How news stories are updated and maintained around-the-clock. *Journalism Practice*, *6*(5-6), 702-710.

Shumow, M. & Gutsche, Jr., R. E. (2016). News, neoliberalism, and Miami's fragmented urban space. Lanham, MA: Lexington.

Sigal, L. V. (1973). *Reporters and officials: The organization and politics of newsmaking*. D.C. Heath & Co.

Spurr, D. (1993). *The rhetoric of empire: Colonial discourse in journalism, travel writing, and imperial administration*. Durham, NC & London: Duke University Press.

Thompson, J. (1990). *Ideology and Modern Culture: Critical Social Theory in the Era of Mass Communication.* Stanford, CA: Stanford University Press.

Usher, N. (2017). Breaking news production processes in US metropolitan newspapers: Immediacy and journalistic authority. *Journalism, 19*(1), 21-36.

van Dijk, T. A. (2006). Discourse and manipulation. *Discourse & Society, 17(3)*, 359-383.

Widholm, A. (2016). Tracing online news in motion: Time and duration in the study of liquid journalism. *Digital journalism*, *4*(1), 24-40.

Wodak, R. & Meyer, M. (2009). *Methods of critical discourse analysis*. London: Sage.

Zelizer, B. (2021). Why journalism's default neglect of temporality is a problem. *Media, Culture & Society*. doi: 01634437211015846.

[i] Throughout this study, we refer to "police" and "law enforcement agents" interchangeably, as they serve the same purpose of issuing "order" and forcing "control."

[ii] Five articles that contributed to this study are news articles; one is an opinion column by *Times* staff. We include the opinion article, as news users are exposed to a variety of information published by news outlets that once collated form overarching "coverage" of a news event/issue (Nielsen, 2010).

[iii] For more on using the Wayback Machine, see https://help.archive.org/hc/en-us/articles/360004651732-Using-The-Wayback-Machine.

[iv] Another article (Kanno-Youngs, 2020b) saw the removal and additions of three hyperlinks in its first sentence across updates.

[v] By the time we clicked on the link for the Twitter account, it had been suspended.