Ubiquitous News Experienced Alone: Interviews with Americans and their Devices

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Scholars, journalists, and other commentators argue that many parts of the world, including the US, are suffering a social-epistemological crisis, sometimes called "post-truth," and that this crisis is related to the fragmentation of newsmedia. The conventional media effects research explanation for this relationship between news and "post-truth" is framed in terms of messages and information—especially misinformation—as the mechanism by which communication effects change. Analysing the results of a large (n = 164) interview study on mobile and other digital news audiencehood, this article presents an alternative, complementary explanation focused on ritual functions of communication. The primary method of affinity analysis of interview data identified a number of recurring themes: people's preferences, methods, and patterns of news consumption exhibit wild diversity beyond easy summary, but they share the experience of news as nearly ubiquitous, and often as excessive and therefore in need of management. Strategies for managing news broadly fell into categories of news avoidance and active research. Perhaps the most consistent observation across participants' accounts, however, is a conspicuous absence of other people, with news managed and confronted alone. Those findings are interpreted through James Carey's ritual theory of communication, which argues that meaning emerges not only through transmission of messages and information, but also through people's shared experiences of participating in the ritual processes of communication. This work makes a parallel argument that media fragmentation has been implicated in social-epistemological breakdown not only through the mechanism of messages and (mis)information, but also through the transformation and, in certain cases, loss of shared news rituals. The combination of large-scale interview research with media ritual analysis led to these insights about the cultural relevance and collective implications of people's experiences of ubiquitous news and the avoidance thereof.

CCS Concepts: • **Human-centered computing → Empirical studies in HCI**; **Human computer interaction (HCI)**; • **General and reference → Empirical studies**.

Additional Key Words and Phrases: Newsmedia; Media Rituals; Mobile News; Digital News; News Avoidance

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> There is more than a verbal tie between the words common, community, and communication. Men live in a community in virtue of the things which they have in common; and communication is the way in which they come to possess things in common. What they must have in common... are aims, beliefs, aspirations, knowledge—a common understanding—likemindedness as sociologists say. Such things cannot be passed physically from one to another like bricks; they cannot be shared as persons would share a pie by dividing it into physical pieces... Consensus demands communication.
>
> – John Dewey (p.5 [32])

1 INTRODUCTION

Digital media, like earlier communication systems, have the potential to bring people together by supporting shared experiences that contribute to common ground. US communication theorist James Carey builds on Dewey to contrast two concepts of communication: a) as transmission of information and b) as ritual. Communication rituals, like repeated practices in religious services, serve to maintain and reinforce a shared cultural worldview through, e.g., "sharing," "participation," "association," "fellowship," and "the possession of a common faith" (p.15 [25]). Carey described the newspaper as a canonical example of a media ritual. Reading news was a "ritual act" (p.16 [25]) because news was "a presentation of reality that gives life an overall form, order, and tone" (p. 17 [25]) not just in the information it imparts, but in the collective experience of its daily drama. Scholars have recently applied this theory to understand audiences for digital misinformation as communities forming through familiar rituals of consumption, reinterpretation, and sharing [56, 99]. Our project considers the ramifications of a ritual theory of news for more general audiences at a time when media and rituals thereof are changing.

Many people now engage with news primarily through their smartphones [21], which are part of a complex media landscape including radio, television, and printed newspapers [33, 64]. Engagement with news is both direct and indirect: Americans increasingly engage with news through social media [41], and some of that exposure is incidental [2, 20]. People 'graze' and 'snack' on digital news [64] in 'niches of time and space' [33].

Today's experiences of news are situated within a "polarized era"—an intensified political climate after the 2016 election [53]—as well as an era of intensely emotional, viral news [18] with continuous up-to-the-minute updates. Concerns about bias and so-called "fake news" [48, 63] provide critical context for today's news experiences. Emerging research indicates news habits influence perceptions of bias [50]. Amid the current proliferation of news options, we ask: what are Americans' felt experiences of news, in today's context of bias and technological options for engagement, and what do these experiences reveal about American cultural worldviews?

To answer these questions, we conducted semi-structured interviews (n = 164) across 22 cities which we qualitatively analyze using affinity diagrams and the lens of media rituals [25]. This work offers three main contributions.

(1) We provide a comprehensive overview of news experiences by empirically identifying 45 themes along three major dimensions: engagement, affect and trust.

(2) We identified that news felt ubiquitous and even excessive, driving some to avoid it. Those who do not actively seek news are nonetheless incidentally exposed to news. Because of this, those who desire less news must actively and strategically avoid it. One main reason for avoiding news was reaching a turning point related to intense negativity.
(3) People almost exclusively described news as an individual experience. We discuss how the design of mobile digital news delivery and consumption support individualised experiences centered on personal feelings, personal responsibility for detecting bias, and personal agency for managing immersion. Individualistic design mechanisms for mobile news engagement and experiences may contribute to a weakening of shared worldviews. We argue that a transformation and, in some cases, a loss of shared news rituals is implicated in these changes.

2 RELATED WORK

This section reviews media ritual analyses of news as well as research on changing news consumption practices and experiences of the rapidly evolving newsmedia and technology landscapes.

2.1 News as Media Rituals

The ritual and transmission views of communication may be incommensurable, but they are not in direct contradiction to each other. The transmission view accounts for meaning encoded in messages and disseminated, or transmitted, to audiences. The ritual view asserts that the shared practices of communicating together generate other, additional forms of meaning beyond what is transmitted in messages. A given example of communication is therefore not to be understood as belonging exclusively to one category or the other. Rather, specific examples may be analyzed in either way, or both, depending on the research question at hand.

"A ritual view of communication is directed not toward the extension of messages in space but toward the maintenance of society in time; not the act of imparting information but the representation of shared beliefs" (p. 15 [25]). Social and cultural worldviews are therefore constituted not only through shared information, but also in shared experiences of communication as "a symbolic process whereby reality is produced, maintained, repaired, and transformed" (p. 19 [25]).

While a given form of communication should not be understood as belonging exclusively to either transmission or ritual, certain technologies and situations may have some bias toward one or the other. The spoken word is the prototypical medium of ritual communication, and mass media such as television are often understood as prototypical transmission media. But messages are transmitted in speech, and television involves many rituals. The newspaper is a convenient example of a mass medium that straddles transmission and ritual aspects, which might include: paying a modest subscription fee; receiving the paper every day, perhaps delivered by a neighborhood kid; reading over breakfast with a regular order of sections; sharing sections with family members; later, having conversations based on a common knowledge base of "daily" news with family at home or peers at work; and repeating these activities on a regular basis. Everyone did not participate in precisely this idealised way, but in Carey's telling, communities nonetheless bonded over widely shared elements of this daily experience.

The incredible flexibility and diversity of digital media offer opportunities for new forms of meaning to be both transmitted across space and created through collective practices over time, building on the media cultures that came before. Watching TV in the evening became a family ritual [60] much as reading in the morning had long been. Television news extended into continuous channels and eventually mixed together with post-television videos including amateur 'user generated content' (UGC) [87] and livestreaming eye-witness accounts of events such as natural disasters and terrorist attacks [27].

News is often encountered through social media, including near-synchronous interactions bringing together a collective voice around stories [40]. On social platforms, news consumption also mixes with other kinds of content and social media ritual functions ranging from family bonding, especially at a distance [1], to the maintenance of more loosely affiliated groups such as fan communities [23]. Certain forms of social media are designed to encourage the regular repetition important to ritual communication. The Snapchat social network provides a convenient example of 'streaks' that measure friendships in consecutive days people have shared with each other. Here the content of the communication isn't notable, but the threat of dropping to zero if a day passes gamifies ritual maintenance. In a related example, two brothers amassed a large online following with an 'experiment' wherein they shared videos on alternating days for one year, talking about entertainment, politics, etc. [7]. Again, the experiment was compelling less for the particular content on any given day than for the pacing and commitment.

News-making practices and routines in the production of newsmedia have also been researched for decades in Journalism Studies (cf. [3]). Recent reflections on news routines have analysed relationships between rituals of news production, including both journalists and sources as active participants [96, 97], as well as rituals of news audiencehood [6].

2.2 Digital News Practices

News consumption has changed dramatically with the advent of the smartphone. Over the past ten years, there has been a dramatic increase in online sources, a decrease in newspaper use, and a rise in using social media to receive news, with 71% of Americans getting news from social media [81]. These trends have not been limited to younger generations. In 2017, more than half of Americans over the age of 50 reported getting news from social media [80]. While social media has become a popular news source, fewer than one third of Americans say it helps them to understand current events, and nearly one in four says news on social media makes them more confused [81]. Simultaneously, television remains a common way for Americans to get their news [42]. Local television draws a larger audience than cable and network TV, but even for local news, preferences are almost equally split between television and online [26]. Four-fifths of US adults get news from 3 or more platforms (e.g., print, mobile, tablet, PC, TV, radio) at least once per week [64].

News consumption is a highly contextual activity that fluctuates depending on where people are, who they are around, what they are doing, and what device they are on [86, 95]. Mobile news may sometimes be complementary to other forms of consumption, or may replace them; cross-media use is increasing but some users focus on a single medium (e.g., newspaper, desktop or mobile) [101]. Availability of device is a strong determinant of media choice [86], with the preferred device often being laptop or desktop [71].

As recently as 2012, most news items consumed on mobile devices originated from trusted news brands such as newspaper apps or websites, and less than 3% came from news aggregators [95]. Since then, however, there has been a proliferation of natively digital news [85] and recent research finds general preference for algorithmic news selection over story selection by editors [89]. By most measures, the use of smartphones for news continues to grow, but some metrics of mobile news are shrinking, suggesting there is complexity in uptake of mobile news consumption, e.g., falling numbers of minutes spent at top digital news outlets and major publishers pulling their apps from both iOS and Android markets [85].

'Snacking' or 'grazing' on news means engaging with news in many short sessions per day; this is a common way to consume news today, particularly on mobile phones [64]. People use mobile apps and browsers in intricate ways (managing and switching between foreground and background apps) to access the latest news [102]. Grazing on television has been associated with a lack of knowledge and civic engagement [17]. Grazing behaviors can lead news organizations to

prioritize highly shareable news at the expense of high-quality, in-depth news [28]. We've known about incidental digital news exposure for 20 years [88], with these early findings indicating that incidental exposure contributes to awareness of news. There has been a recent resurgence of this concept with social media. More time on social media leads to increased incidental exposure, which is also correlated with receiving information through weak ties [2]. Incidental exposure to news on social media leads to fragmented reading patterns, loss of hierarchy of the news, and coexistence of editorial, algorithmic, and social filtering [20]. Our empirical investigation seeks to learn more about habits including 'grazing' and common experiences of news exposure, incidental and otherwise.

2.3 Avoidance and 'Non-Use' of News

Use and non-use of technology has long been framed by access, but as access expands there is also more choice involved in opting out. Historically, the range of news choices was smaller, with broadcast media such as television and newspapers offering somewhat standardized overviews, which impacted who engaged with news [38]. Some studies indicate people who avoid overviews of news are younger and may be less educated, prefer entertainment, have a low interest in politics, and have a lower sense of civic duty to keep informed [91]. Some young people instead consider news-seeking a recreational activity, focusing on news that they feel is relevant to their studies and their lives [71].

Research on non-use has grown in recent years [11]. Satchell and Dourish [76] argued for the study of non-use on its own terms rather than simply considering non-users as potential users who are not yet using. They explored forms of non-use including lagging adoption, active resistance, disenchantment, disenfranchisement, displacement and disinterest. Baumer et al. [10] studied social media non-use and identified types of non-use such as limiting use, deactivating, and returning, arising from a variety of concerns including privacy and data use. They suggest deproblematising non-use.

As news today is often encountered through social media, non-use of social media may imply less use of news. We've gained better understanding of social media non-use over the last decade, in particular the complex overlap of use and non-use behaviors [68, 78], using a variety of strategies and tools [16, 61]. Those in positive moods and those who report their use in terms of addiction or impression management often revert back from non-use to use, while those in negative moods and who recount use in terms of surveillance are more likely to continue abstaining [14]. Those who have been negatively affected by time spent on Facebook in their work, personal relationships, or other aspects of their lives, are more likely to deactivate and to consider deactivating [15]. Those who are familiar with or who have changed their Facebook privacy settings were also more likely to have deactivated [15]. If people do something that they regret on social media, they are more likely to deactivate their account [45]. Facebook deactivation and consideration thereof are more common among people who are younger, single, or seeking employment, while the likelihood of never having had an account is higher among older people and other demographic groups [13]. People underestimate how much others consider deactivating social media because considerations for non-use are not highly visible [12]. People may stop or reduce use in protest of company practices or policies [57]. Grandhi et al. [43] survey non-use and reversion across a series of social media platforms and find interplay between various platforms as well as support for Satchell and Dourish's [76] types of disengagement.

With mobile devices and news continuously available, availability may no longer be a limiting factor, which may shift the determinants of choices of use and non-use. Our project seeks participants' accounts of how they understand their own experiences of news and avoidance thereof.

2.4 Contexts and Choices of News Experiences

Various determinants of news seeking behaviors have been studied over time. The 'need for cognition' [24, 47], or tendency to enjoy thinking, has long been used to predict degree of engagement with news [31], information [30], and cultural participation [55]. In the 1980s, people high in need for cognition were found more likely to seek out news in newspapers, magazines and other sources, compared to individuals low in need for cognition, who watched more television [38]. Need for cognition has been related to today's ecosystem of news: Muller et al. [65] found that those with low need for cognition felt better informed from Facebook posts compared to those high in need for cognition.

While need for cognition motivates some individuals to seek information, other factors may be more important, especially as media choices multiply. The Uses and Gratifications approach [75] proposes that people actively choose media and have insight into the reasons for those choices. Eveland et al. examined motivations and political knowledge during the campaign in 2000 and found that motivations to keep up with the news (which they termed 'surveillance' motivations) influenced information processing and knowledge [37]. Incollingo compared gratifications of mobile and laptop/desktop use of news subscribers and found mobile users garnered more gratification from 'surveillance' and constant availability [51]. When choosing news stories and other media, many people today place trust in the recommendations of friends [70] and in recommendations from algorithms [66]. Edelman relates a growing distrust of news to distrust of professional journalists amid a more general crisis of confidence in professional expertise [36]. Mitchell et al. [62] found an increasing number of people who have a distrust in the media as being polarized and biased. These phenomena are uneven across the population, with, for example, politically conservative people having lower levels of trust in mainstream newsmedia, which they perceive as biased [9]. Younger readers may trust opinion leaders on social media [19] and algorithms more than professional editors [66], whom they perceive as out of touch.

There are cyclical effects of news influencing emotions, and emotions influencing news consumption decisions. Some effects of political news have been described in terms of cynicism and media malaise [74], blaming newsmedia (historically, television and radio) for sensationalized news and negative impacts on politicians and society. For example, political campaigns framed as a race or a game lead to cynicism whereas issue-framed news increases mobilization [82]. News shared in messaging tends to be for commiserating, while news shared through personal and public profiles is more oriented to maintaining identity and influencing others [58]. Watching negative news elicits contempt and anger [93], with US news on President Trump as a contemporary example [98]. Intensely negative news is more likely to be paid attention to [83] and shared [18]. The concept of "bad news burnout" exists in popular opinion (e.g., [67]) whereas literature has focused on information overload [79] or compassion fatigue [54] (defined as the desensitization and emotional burnout associated with pervasive communication of social problems). High levels of burnout has been reported in young journalism staff [72] and compassion fatigue has been found to play a part in it [35]. Cohen et al. found several participants who felt overwhelmed with news, which they refer to as "news overload" [29].

News habits and exposure impact our ability to identify bias in news. Horne et al. found that those who interact with news often on social media have poor bias recognition whereas those who read news and report high familiarity are more accurate [50]. Torres et al. found that perceptions of one's own social media network, fake news awareness and perceived media credibility and intentions to re-post news impacted fake news verification behaviours and perceptions of news authors [90]. Sterrett et al. found that people are more likely to trust an article if it is shared by a public figure they trust compared to one they do not trust but there was no difference in trust in an

article coming from a fictional news source versus a trustworthy one [84]. Babaei et al. assessed participants' judgments on credibility of stories and found that polarized stories were misjudged more often [8] and Ribiero et al. found that polarized opinions led to credibility misjudgments [73]. Recent work is reconceptualizing trust more broadly to include journalists, audiences, sources, and other "objects of journalism" such as software [94].

As mobile has become the most common way for US adults to get news [59], it is important to ask: in today's context of intense and biased news, how are individuals in the United States using and experiencing news, with what implications for media rituals?

3 METHODS

To answer our research question, we conducted semi-structured interviews over seven weeks from mid-September to end of October 2017 in 22 cities across the United States (listed in order visited): St. Louis, Missouri; Little Rock, Arkansas; Oxford, Mississippi; Memphis, Tennessee; Birmingham, Alabama; Atlanta, Georgia; Asheville, North Carolina; Charlottesville, Virginia; Charleston, West Virginia; Pittsburgh, Pennsylvania; Akron, Ohio; Detroit, Michigan; Fort Wayne, Indiana; Milwaukee, Wisconsin; Des Moines, Iowa; Kansas City, Kansas; Lincoln, Nebraska; Tucson, Arizona; Albuquerque, New Mexico; Odessa, Texas; Houston, Texas; and New Orleans, Louisiana.

Visits to the cities were part of a coordinated event where we set up in city squares near transit stations or in other public spaces. Participants were recruited as they passed through the area in which the event was held. As a part of the interviews, we asked participants to share their phone screens with us and walk us through how they typically stay current with the news, with prompts for notifications, social media and apps. We also asked how participants perceived bias in what they read online.

Eight researchers collected data, for about two weeks each. Researchers traveled in teams of two. Each week, the outgoing team of researchers debriefed with the incoming team to discuss interview logistics and comments on interviews, including perceived trends. After week 3, several researchers noted that many participants shared their feelings regarding news, including "anxious" and "overwhelmed", which prompted us to add an additional question to the script (appendix "Excerpt from Interview Script," Q7). Sessions lasted approximately 20 minutes. Participants were compensated for their time. Methods for this study, including the collection and indefinite retention of data, were conducted in accordance with Yahoo's processes for research with human participants. Participant consent was obtained electronically.

All interview sessions were audio recorded, and the screen of the participant's mobile phone was video recorded. The videorecorder was mounted to a 'sled' on which the smartphone could be placed, recording the participants' fingers, thumbs and smartphone screens. Each interview was transcribed and the researchers individually reviewed the data from their interviews.

Analysis of the collected data proceeded in two phases: first, an affinity analysis was conducted to identify recurring themes (Detailed list of themes in appendix), and then those themes were explored through a media ritual analysis.

In preparation for the affinity analysis, researchers were instructed "For each interview, extract 5-6 insights of what seems significant/important for that participant" and "include 5-10 insights that reached saturation over the course of your interviews, with details on who/how many people this theme applied." Each researcher compiled their notes from the interviews they conducted and created data cards which consisted of quotes, field notes, and observations. Then, all of the researchers came together and iteratively constructed an affinity diagram [46, 49] where cards were grouped based on researcher-perceived similarities. Researchers engaged in discussion which included reorganization of groups until consensus was reached between researchers over the course of several days. Groups of cards were labeled based on their key similarities. The analysis process

resulted in 69 total groupings which were organized into 11 secondary themes and 5 major themes. The authors then utilised a thematic analysis approach to further refine the findings. The authors reviewed themes for 'keyness' in relation to the research questions [22] and selected a subset of themes that were most relevant to present in this article: 45 tertiary themes, organized into seven secondary themes across three primary themes. Media ritual analyses were conducted at the level of those three primary themes, drawing on relevant interview transcripts.

4 RESULTS

We interviewed 164 participants aged 18 to 75. 47% were women, 52% men, and 1% gender diverse. We discuss primary, secondary and tertiary themes through summaries and illustrative quotes. (See appendix for additional quotes grouped by theme).

Three high-level themes were identified through our qualitative analysis:

(1) Engagement experiences and strategies related to news use and non-use, which included active engagement, passive engagement, and active avoidance. Passive avoidance was difficult due to incidental exposure.
(2) Experiences and strategies related to negativity in the news. We learned about behaviours motivated by experienced ubiquity and negativity in the news, with notable exceptions of those who found news entertaining.
(3) Experiences and strategies related to (dis)trust. We learned about behaviours and sources for seeking truth and identifying bias.

Secondary themes are used as subheadings and tertiary themes are italicized in body text.

To set the context for the affinity themes and ritual analysis, we first share a summary of a collection of notes grouped as *Technology, media and platforms*. The notes included here cover: a) the use of a wide range of technologies for news: smartphones, tablets, laptop/desktop, radio, television, etc. b) preferences and dislikes for formats including audio, video, text, email newsletters, notifications on the smartphone and/or desktop, and tools such as the home or"-1" page (left swipe) of a smartphone, and c) a range of social media and other platforms (Facebook, Reddit, YouTube, Instagram, Snapchat, Twitter), apps and websites. We also noted when participants hadn't discovered features on their phones like the -1 page. These uses related to wide-ranging reasons such as preferences for larger screens, preferences for news on Instagram because they'd rather see photos, preferences for podcasts while commuting, and listening to news in the background while working with their hands. We continued to see opinions for all kinds of news delivery: A participant in Lincoln liked newspapers because they are "tangible, old fashion" and a participant in Kansas City thinks "the newspaper and magazines are boring now." People shared preferred routines for specific times and technologies in which they get news, such as checking multiple sources in the morning, or having a habit of morning and evening TV news.

The smartphone played a significant role in the interviews. The apps and feeds that participants looked at during the interviews (such as social media feeds and browser bookmarks) acted as external cues that shaped how participants told the stories of their experiences. Participants may or may not have made explicit decisions for which strategies they engaged in, but through engaging with their phone during the interview, they made sense of these objects along with their felt experiences. People described experiences of news related to what came to mind and also in response to traces of behaviors, such as apps downloaded, bookmarks, shares and likes.

As interviewers, we were struck by the incredible diversity of newsmedia experiences. Participants differed in their notions of what constitutes news. More active participants appeared to interpret news in a more established way: professional newsmedia from news sources (appendix figure 1), while more passive users shared diverse experiences as news (appendix figure 2) with

several indicating they saw news through the search/trending/discovery features on social media platforms. News apps tend to include editorial curation that features "important" news first. Passive users haphazardly encountering news in social feeds would rarely, if ever, encounter the same set of headlines in a similar order. Next we describe the spectrum of engagement and disengagement.

4.1 Experiences and Strategies of News Engagement

Our analysis identified distinctions between active and passive engagement as a critical dimension to understand how participants experienced and engaged with newsmedia. We begin with experiences and strategies of those who actively engaged with the news.

4.1.1 Highly or Moderately Active Regarding News. Our most active participants were proactive in seeking out and searching for news. They described habits of going to several sources and consuming news in multiple formats. These participants described themselves as being very *"Into news,"* joked about being "news junkies," "obsessed with the news," and consuming news "all the time." An active news user in Lincoln said they preferred "in depth stories, not only highlights." Searching behaviors were characterized as 'active,' with the label: *Searching: see topic passively, then actively dives in.* A participant in Des Moines did in-depth searches to be "accurate."

Our moderately active groups included those who *Liked skimming headlines.* Others were grouped within *Notifications give me news* — many of these participants engaged in active customisation or installing of apps for notifications. A student in Odessa, for example, described that he receives many notifications every day. When he has time throughout the day, he reads through a series of them. He gets about 10 notifications every hour and "taps into" one when he wants to read more. Looking at notifications and skimming headlines focus on short-form content while other habits of engagement focus on longer-form content.

Some participants who actively engaged in news did so with specific interests in mind, which we labeled *Particular topics: actively seeks them, has specialized sources, customizes feeds for them.* Participants customized news apps or found apps specifically aligned to their interests such as sports, finance, and entertainment.

In line with the topics of interest above, some participants called out *Local news: apps, local TV channels, local paper* as important to them and reported that looking at local news was as a daily habit. A participant in Birmingham explains that he checks local news "because it's more relevant." Similarly: "If it's something major, something big that's going on, like if there's a tornado somewhere, or if the president is being accused of something, or, you know, something really big, then I want to know about it, I want to read about it. I want to stay up to date on what's going on with those things, but mostly, I'm really just worrying about what's going on locally" (New Orleans). Interest in local news focused on relevance.

Active behaviors included downloading news apps and intentionally looking at *Known personalities/anchors.* These participants knew reporters or news anchors by name and reputation and sought them out. Participants expressed preferences, akin to others' stated preferences for specific topics like sports or local news. Other participants described this type of behavior as related to trust. Lastly, active use included those who used *Aggregators for news because they're customizable.* For example, a participant in Albuquerque preferred to use social media and aggregating news apps to get a customized feed instead of "going to news sources and having to filter through" content not of interest.

4.1.2 Passive Regarding News. We encountered examples of passive news engagement: seeing news while scrolling through social media feeds, having notifications sent to mobile devices from pre-installed default apps, hearing about news from other people (either word of mouth or shared stories), or listening to the radio for music but hearing a DJ share some headlines. Participants in

this group felt satisfied and informed about the news but did not actively look for news content or intentionally seek out news. Participants in this group described incidental exposure on social media (label: *Goes to social media, also see news*) and were satisfied with this experience. Some felt that *Social media "has all the news"*—those in this group felt well-informed with their incidental exposure. Having all of the content they want to look at in one place was a major reason social media met their needs. We grouped statements about satisfaction with passive news consumption on social media under *"News comes to me."* A man in Albuquerque noted how he sees news on the TVs at the gym and feels like he "gets everything." Another theme in passive consumption is *Uses what's default*; participants in this theme used what was pre-installed on their devices and did not customize apps or engage actively with apps. They regarded pre-installed apps as places where they can skim headlines, look at a widget or "-1 page" or look through notifications. For these participants, passive skimming provided enough news—they didn't feel the need to dive into long-form content to feel informed.

4.1.3 Disengaged with News and/or Actively Avoiding. This section groups notes from participants who were passively or actively disengaged with news. Some felt *Too busy for news* and stated they lacked time which is why they disengaged. Others disengaged with particular kinds of news, such as those within the group *Doesn't pay attention to local news*. A participant from Kansas city contrasted their disengagement with local news with their engagement in national news.

Our sample included participants within a group labeled *Doesn't have/use news app(s)*. A woman in Akron shared: "I would say I almost intentionally avoid national news. I know that sounds really ignorant but I don't read a daily newsfeed other than my Facebook feed." A person from Charlottesville said that their phone was out of storage space so could not fit any news apps. Some were simply *Not interested in news*. A woman in Houston looked on her phone for a news app that she thought was there however could not find it and stated that she must have deleted it. Participants described their reactions in response to incidental exposure on social media. One person said "I gave up Facebook and deleted it, because it's all news now." (Kansas City) Another described an experience of forceful incidental exposure: "The only news that I come across is stuff that literally gets pushed across my plate." (Detroit)

Some participants were content with their choice to disengage with news while some expressed *Guilt about not keeping up with news*. A student in Charlottesville stated, "I'm actually pretty bad at following the news. I actually need to get better at it."

The primary theme on the spectrum of engagement covered active engagement strategies, habits of passive engagement, and experiences around disengagement and non-use.

4.1.4 News Ubiquity Makes Passive Non-Use Difficult. Our project identified that incidental exposure can have a strong salience to participants and may be associated to perceptions of newsmedia "ubiquity," where participants felt surrounded by news, so unable to passively avoid it. The felt experience of ubiquity in our participants could be due to an increase in incidental exposure or an increase in channels where incidental exposure can occur, or both. Another possibility is the ability to multitask on a smartphone means that news is open 'in the background' given a sense of constant presence. Ubiquity may also be understood through ritual, which we discuss next.

4.1.5 Media Ritual Analysis of News Seeking and Avoidance. Research about the range of forms of engagement discussed here, including news seeking, passive exposure, and avoidance, might be conducted from a "transmission" standpoint. In that case, the focus might be on what kinds of messages people sought, were incidentally exposed to, or avoided, with what effects. The present paper instead focuses on what ritual meaning might emerge from these forms of engagement and disengagement. Because rituals are generally understood in terms of activity rather than content,

one might expect analyses of news audiencehood as ritual to be strongest for people who actively seek news. But participants' narratives of passive exposure and avoidance may also be analysed in terms of ritual.

A participant from Fort Wayne described the specific sequence of their daily ritual: "I go to journalgazette.net, which is our local news. Then I go to sports because I need my outlet. So ESPN and SI. And then I go to CNN to read the news." Other active news seekers' accounts go beyond news as something they consume, or even actions they perform, to parts of their identity. This is often presented in apparently negative terms, e.g., of being a news "junkie" or having a news "obsession." While we do not equate habitual use with ritual function, this language is nonetheless telling of patterns of behaviour that impart meaning beyond the particular news of the day. Notably, multiple participants associated their "daily habit" specifically with local news, even if they also mentioned reading news from further afield. It was unclear to what extent this might reflect a special meaning associated with local news, or whether it might arise from more mechanical factors, e.g., some local news still publishes on a more or less daily rhythm, unlike the continuous churn of national and international news.

Even passive exposure, divorced from the deliberate news-seeking activities described above, may nonetheless generate meaning beyond specific content. This is especially clear when news exposure is embedded in other rituals that have specific and regular patterns. Consider, e.g., the Albuquerque participant who did not actively seek news because he always "gets everything" from news playing on televisions during his regular sessions at the gym. In this case although the news exposure appears to be passive, it is embedded into a ritual activity that structures people's lives.

Active avoidance also generates ritual meaning. It is important here to distinguish news avoidance from a mere absence of news. Our participants report avoidance as a response to news ubiquity. Total avoidance would be difficult or impossible, so we may understand avoidance, in part, as a way of structuring or constraining news consumption. Such constraints may carve out space for activities unrelated to news, but they may also create opportunities for selective engagement and contemplation of news [4, 5]. Further, the very rituals of avoidance generate meaning in their enactment. This has been documented, e.g., in various forms of media resistance as "conspicuous non-consumption" that is often performed for others with implications for identity and social relations [69]. As above, some common examples are embedded in existing rituals, e.g., families that identify as a social "type" to abjure phones nightly at the dinner table.

4.2 Experiences and Strategies Related to Negativity of News

The perceived negativity of news was a salient part of participants' experiences, and prompted strategies to manage the emotional fallout. In several instances, participants talked about how their perceived lack of control over news events fed into feelings of negativity. A man from Odessa commented: "I gotta focus on what I can control." Online news comments also felt negative. One participant from Lincoln said news-related comments were "the most disgusting place on the internet." Another from Lincoln said "news needs to take control of comments." The themes in this section skewed toward experiences of negativity with a few notable examples that were more positive. Some participants reported that they had passed a turning point related to exposure to negative news, in particular in response to political and violent news, but also due to general feelings of lack of control. We were able to learn about their strategies to mitigate further exposure.

4.2.1 Strategies for Managing Negativity of News. Our affinity analysis identified five strategies related to decreasing exposure to negativity related to news and a general fatigue related to news: *Stopped notifications for news, Stopped looking at news, Ignored news, Reduced news, and Controlled*

timing around consuming news. All strategies consisted of active avoidance techniques, with participants taking actions to intentionally decrease exposure to the news or attempt to disengage completely. We also saw disengagement behaviors related to general disinterest in or aversion to news, which are grouped under the primary theme related to engagement. Disengagement behaviors were grouped in this section when participants expressed a clear and direct connection between disengagement and perceived negativity of news.

A set of participants focused on how they would manage when to look at news, within the theme *Controlled timing around consuming news*. Patterns included avoiding news in the evening to "unplug," avoiding "nonsense" and avoiding "things that get me to feel upset about things." (Pittsburgh) Other strategies related to news negativity were *Seeks positive/entertaining news, Seeks positive activities* and *Shares positive news.* Participants described such strategies to offset and combat negative affect around news. Several participants liked the ability to skip over negative news stories within social media. Participants in Detroit and Charleston talked about how they liked to finish their news routine by looking at light-hearted or celebrity news; the participant from Detroit describes it as "lifting her mood" and the participant from Charleston describes this type of content as "the sugar to my salt." A related strategy was to seek out local news because they felt *Empowered by local news*. Participants emphasized the connection to feelings of control and being able to affect outcomes.

4.2.2 Other Responses to Negativity. Others perceived negativity but found it non-problematic. Some were *Not overwhelmed*, others felt that *News is entertaining* and in particular *Late night news is entertaining*. Some looked at news for entertainment when they had a few minutes or were bored, making explicit reference to humorous and satirical news. Several referred to news and news-adjacent shows as "entertaining." In these cases participants do not explicitly distinguish between news, satire, and parody (e.g., [52]).

4.2.3 Media Ritual Analysis of Negativity of News. Research about the negativity and ubiquity of news coming from a "transmission" standpoint might, for example, analyse stories' negativity and measure their frequency to help determine effects on individual consumers. The present paper does not consider the content or quantity of messages per se. We make no claims about news itself being more negative today than at other times. The themes of negativity and ubiquity were identified in participants' descriptions of their own experiences of news. A ritual view of communication allows a different kind of analysis of these experiences of negativity and ubiquity, and a particular relationship between the two.

Some negativity is inherent to the news and its rituals. Unpleasant consumption is common to rituals broadly, e.g., bitter herbs eaten at Passover as a reminder of the bitterness of slavery. Similarly, when we consume negative news, the ritual overcoming of suffering is a kind of social participation, bearing witness on a brief "sojourn in hell" (e.g., Peters, 2005) that is essentially the same every day, even as the stories' details change. In this way, the negativity of news helps imbue news rituals with meaning, and reciprocally the ritual acts as a container for that suffering, to prevent it from overtaking our individual and collective lives. Participants' experiences of news as overwhelmingly negative might, then, be understood in part as reflecting a kind of dysfunction of news rituals wherein, amid media ubiquity, ritual consumption no longer serves to contain the negativity of news. Reciprocally, news rituals may lose some of their meaning, as the ritualized moments of daily "sojourn through hell" lose their special quality when expanded to fill the day.

Participants described various strategies for containing or delineating negative news. Regular patterns of avoidance, such as disengaging from news past a certain point in the evening every day, are implemented to contain this negativity. Likewise participants who end their news consumption

sessions with a "palate cleanser" dose of entertainment may be understood as delineating negative news from what comes next.

4.3 Experiences and Strategies Related to (Dis)trust

Feelings of distrust were also salient to news experiences. Participants perceived news as either missing information or including misinformation or bias. Participants often discussed this as a motivating factor for active forms of engagement including fact-checking. A few participants also cited distrust as a reason for disengaging with the news. For example a participant in Little Rock disengaged with local news because it was "owned by large corporations" and "filtered." Our results on distrust in the newsmedia relate to skepticism in media sources. Distrust led to some participants disengaging while others increased their engagement through searching and finding multiple sources and seeking primary sources.

4.3.1 Strategies for Seeking Truth. Some participants expressed their need to go deeper for truth by contrasting it with the practice of getting news through social media, which we labeled *Needs 'more' than social media*. Participants pointed to social media as inadequate because it could not be trusted to give a full picture of the news. Three other strategies for seeking the truth included actively checking *Other sources/searching stories, Multiple sources to get different perspectives* and *Multiple sources to get all the facts*. These strategies were habits for participants. Participants discussed going to multiple sources in order to get additional information in order to make them feel more confident in the trustworthiness of news. Going to multiple sources helped people feel like they were getting the facts, the entirety of a story, and were able to get multiple perspectives on a story to give them a holistic picture. "Fox news app, CNN app, MSNBC... I go to all of them, I like them all. I like to see the personalities, one is saying this and another one is saying this. In this one we praise the president, in this one we hate the president." (Milwaukee)

Some participants preferred not just going to multiple apps they had downloaded, but doing additional in-depth searches as well, which we labeled *Checks credibility of site, stats, reporter, interviewee*. These participants exhibited a direct approach to investigation. For example, a male in his twenties in Odessa recounted how he saw that Trump tweeted "NYT is blatantly lying and losing subscribers" and he wondered, is the *New York Times* lying? Are they losing subscribers? He explained what he did next: "I followed them [NYT] on Twitter and noted the number of followers. Then I checked back a month later and they were gaining subscribers." While this participant may have interpreted 'subscribers' in a different way than Trump intended, the relevant aspect of the story is how the participant took action to look for evidence to assess the claim. Another set of strategies related to truth-seeking were labeled *Trusts in name brand news sources and personalities, Follows known personalities, anchors, reporters,* and *Has paid subscriptions*.

4.3.2 Strategies to Identify Bias. While some people had proactive methods of assessing the truth in news articles, others approached the problem by identifying bias or slant. Within the group *News has a polarized strong slant*, we found participants avoided news with a particular slant, and other participants were upfront that they sought out a particular slant. We found participants across a spectrum: some sought out news outlets that matched their beliefs and others sought cross-cutting views.

In the group *Wants first hand accounts / data*, participants described fact-checking activities they used to identify whether sources are biased. They wanted primary documents, such as a bill, first-hand personal accounts, or original video footage. Some participants became politically engaged in order to get first-hand accounts. Another strategy to evaluate whether bias was present was finding first-person accounts in social media, labeled as *Social media and comments help me vet what's true*. Participants sought out comments from people local to news events on social media.

Another strategy to combat bias is reflected in the group *Uses international sources*. Many active news consumers used international sources to mitigate a lack of perspective.

Three themes centered around participants' perceptions of being able to identify biased and fake news: *Suspicion for bias / biased sources, "I can tell what is fake news"* and *News is too opinionated, I just want "the facts."* In some cases, participants related their perception of biased reporting to the reputation of the media outlet. Some participants felt they could distinguish what news was trustworthy or not. Many discussed feeling that media outlets laced the news with opinion and sensationalism instead of just reporting on the facts. These experiences include an innate role of assessing bias.

4.3.3 Media Ritual Analysis of News (Dis)trust. Research about distrust and related phenomena such as misinformation, fact checking, etc., coming from a "transmission" standpoint might include analyses of the truthfulness of news at different scales, the varying effects of specific truths and falsehoods on news consumers, or the efficacy of different fact-checking techniques available to members of the public with respect to specific kinds of falsehoods. The present paper does not consider the truth or falsehood of messages per se. Nor do we make any claims about the efficacy of fact-checking for the purpose of determining the truth or falsehood of any particular content. Trustworthiness is instead understood here as a quality of participants' experience, and fact-checking as a related practice that may produce meaning not only by clarifying information being transmitted, but also through fact-checking as a kind of ritual practice, irrespective of the particular content or questions of efficacy as normally understood.

Communication need not be based on factual truths to generate ritual meaning for participants. Convenient examples outside of news, such as improv theatre and rap battles, demonstrate that people meaningfully commune with untrue messages. But it would seem that rituals typically assume some kind of 'good faith' of participants in order for them to commune. As such, even setting aside questions of truthfulness of messages, participants' feeling of distrust could in itself corrode—or in any case change—the ritual functions of communication. From this distrust, however, we can identify new rituals emerging, which in turn create new kinds of meaning. Participants who regularly engage in fact-checking described it as part of their identity. This sense of identity, ritually practiced through fact-checking, may bind communities—in particular "counterpublics" [100]—in new and different ways depending on, among other things, their level of distrust. One group might see themselves as guardians of a fourth estate under siege, and therefore bond through the rituals of fact-checking in a particular way. A more radical counterpublic might instead position themselves as unmasking mainstream conspiracies through their fact-checking rituals. Whether these different groups' fact-checking rituals actually bring them closer to empirical truth is, in some sense, beside the point of the present argument. Rather, we argue that new kinds of media rituals generate different kinds of communities, and that in an environment of general distrust, these rituals may serve to fragment people into smaller counterpublics, with their own versions of "good faith" engagement, rather than bringing the larger group together.

5 DISCUSSION

We interviewed more than one hundred participants across 22 US cities about newsmedia experiences while discussing and looking at their mobile devices.

We found incredible diversity of newsmedia experiences across three broad dimensions: engagement (passive, active, or avoidant); experiences of negativity of news; and trust, where participants' news practices were constantly framed by determining credibility. Participants described diverse news consumption habits across many formats. While our sample skewed toward perceptions of

news as negative and overwhelming, some interviewees nonetheless found news entertaining. Some participants found sources they trusted, and others constantly sought corroboration.

Participants also described distinct sets of strategies to avoid and disengage from news. Previous work on avoidance of social media includes diverse strategies, often focused on account deactivation [13, 15, 45]. Participants did not describe any single such lever for news, making active avoidance difficult and passive avoidance impossible. Participants instead deployed makeshift strategies ranging from ignoring or simply "not watching" news; deleting apps, in some cases using mobile web instead; unsubscribing; limiting and stopping notifications in various ways; and disconnecting at particular times of day, especially in the evening. Similarly, scholarly study of avoidance and non-use has matured beyond a binary or even spectrum of use and non-use to consider methods of developing bespoke typologies of non-use for novel situations [78]. At the time the interviews were conducted in 2017, these patterns of avoidance seemed novel, but only five years later, this snapshot is showing its age: both Apple and Google have introduced digital wellbeing features for tracking and limiting use in their mobile operating systems, essentially "manufacturing" disconnection [16] as a basic part of their product.

Our methodology enabled us to paint a wide-ranging picture with qualitative empirical data, more than is usually possible. This qualitatively rich snapshot overview of US news culture provided an opportunity for media ritual analysis of news experiences. Much audience research, both in industry and in academia, addresses questions about the diversity of news sources, platforms, and experiences from a transmission standpoint, quantifying and mapping the complex newsmedia terrain and studying the overlapping effects of exposure to such heterogeneous messages. We instead focus on the relationship between this great heterogeneity and the ritual functions of news. Ritual functions are largely divorced from the specific content of any given message, but as we saw above with issues such as negativity and distrust, the audience's broad perceptions about content reshape the ways they do and do not engage, which in turn changes the ritual functions of news.

Returning to Carey's prototypical news ritual of the daily paper, we may observe that collective experiences are characterized by both a kind of *differentiation* and a kind of *similarity*; the ritual must be distinguished from the rest of the day, and people must have similar experiences of it. In the case of the morning paper, for example, reading news at the same time every day provides an experience that is *similar* across individuals and *differentiated* from the rest of the day. Subsections below consider digital newsmedia with respect to each of these two characteristics in turn.

5.1 Ubiquity and Differentiation: Are News Experiences Special?

News ubiquity has been explained in terms of smartphones "pushing" news [39] to people, "always on" and consumed "any time, anywhere" [103]. Our work goes beyond the technical affordances of devices, focusing on participants' felt experiences of ubiquity and strategies for the management thereof. One contribution of this paper is to demonstrate how the breakdown of media rituals that once helped contain news to particular times and situations may contribute to participants' experience of news as ubiquitous and overwhelming.

Ritual experiences rely on some differentiation from other activities that fill our days. But when asked about their experiences of news, participants talked about media that would fall outside conventional definitions of news, such as parody news shows, first-person accounts, and other primary documentation mixed together with personal messages and everything else in their algorithmically tailored social media feeds. Participants sometimes did not distinguish between news, entertainment, and other media.

Interviews revealed intense emotions driving much of participants' news activities, especially activities of avoidance. Across all three primary themes of our affinity diagram, participants overwhelmingly explained their (dis)engagement in affective terms, of the "gut" nature of interacting

with digital newsmedia. While some participants described positive feelings of stimulation and enjoyment, the majority emphasized negative feelings such as sadness, anger, exhaustion, and distrust.

We observe that avoidance is typically also occasioned by an experience of news ubiquity, and that this is deeply implicated in perceptions of negativity. The ritual analysis posits that negativity has always served an important role in news rituals, imparting deeper collective meaning to them, and that in turn daily news consumption rituals served to help 'contain' that negativity to particular times of day. Participants' descriptions of their experiences of ubiquitous news, however, suggest that people consuming news intermittently, throughout the day, do not enjoy these reciprocal benefits. The celebration and mourning of news good and bad, which has sometimes held a special, differentiated moment of the day, seems instead to be experienced by many people today as diffuse and overwhelming.

5.2 Diversity and Similarity: Are News Experiences Shared?

Collective experiences of news do not require people to consume exactly the same messages, but they do rely upon some similarity across individuals' experiences. In Carey's telling, the shared experience of reading newspapers every morning would not be overly disturbed by people subscribing to different newspapers. The vast heterogeneity of newsmedia experiences described by our participants, however, went far beyond the differences between one paper or another. News was encountered in diverse times, places, and formats, ranging from long-form text to videos to smartphone notifications. This heterogeneity changes opportunities for collective experience.

Participants described new rituals emerging amid technological change. News avoidance takes on meaningful ritual functions of structuring times and spaces of rest into the rhythm of life, and thereby imparting some structure or limitations to homogeneous 'always on' news content. As these practices of avoidance become more widespread, they enable new ways for people to commune around these shared experiences. Likewise, although distrust in media would largely seem to be corrosive to ritual functions of communication, we identify new media rituals, and therefore new forms of ritual meaning, arising around practices such as fact-checking. It is not the broad public, but rather "counterpublics" and smaller social groups that commune around fact-checking rituals, positioning themselves against dominant narratives, adhering to their own internal standards and expectations of good faith engagement.

Nonetheless it was typical for participants who engaged in active fact-checking to describe the activity more in terms of individualistic vigilance of evaluating news for bias. This is in line with our broader conclusion that participants overwhelmingly experience news as individualistic and personalised, rarely referencing any communal aspects of their experiences. Negative affect likely contributes to this perception of news as a lonely activity, e.g., the distrust that sometimes fuels fact-checking. This may be seen as at odds with accounts of the internet facilitating connection and interaction, e.g., Forlano's description of collective voices in online news [40]. But the apparent buzz of participatory news and social media, accumulating traces of incessant activity, are not necessarily at odds with participants' more solitary accounts, a phenomenon Turkle and others have described as being 'Alone Together' [92].

5.3 Everything, All the Time, on Our Own

In sum, the great heterogeneity of news experiences, as well as a lack of differentiation between news and other forms of media, inevitably change — and perhaps reduce — people's opportunities to be brought together through shared experiences of news. One can identify many examples of online news rituals, some of which bear similarities to print and broadcast news rituals, such as mass viewership of COVID-19 pandemic press conferences at the same time every day [44], while

others seem distinctive to newer technologies. The recent coinage "Doomscrolling," for example, was popularised in 2020 to refer to compulsive scrolling through apparently endless online feeds full of news about COVID-19 and other truly dire events. Twitter was notable as a prime destination not only for this kind of bad-news binge, but also for lamenting and commiserating about this shared compulsion in quarantine. But our interviews identified little such ritual participation. Whether participants avoided the news, which was sometimes accompanied by feelings of inadequacy, or actively researched it, often accompanied by feelings of superiority, those feelings were described as having been experienced alone. Applying the Media Ritual lens to our interview data raises the possibility that changes to our collective news rituals are implicated in social-epistemological breakdown. Carey wrote that "we first produce the world by symbolic work and then take up residence in the world we have produced" (p. 23 [25]). If elements of that work were previously perceived as collective, but are now perceived as individual, our shared world shrinks.

6 LIMITATIONS

Fully understanding Americans' experiences of digital news is impossible in a single study, and semi-structured interviews, including participant walkthroughs on their own devices, lead to rich but idiosyncratic data. Individual interviews also do not capture the full social context that might be observed, e.g., with in situ ethnographic research on households or other spaces of interaction, which would likely reveal ritual functions of digital news that were missed in the present study. Likewise longitudinal studies would be better positioned to make causal claims about changes over time.

We chose an affinity diagram analysis technique because we felt that an inductive process was a better fit to 'give voice' to the contents from all the notes, observations and cards across our 45 themes [22]. Another limitation of this work is the challenge of gaining qualitative insights from a relatively large team of researchers. Repeated themes were noted by individual researchers [77] and then grouped in the affinity analysis (see appendix). If saturation was approached in a different manner, the results may have differed. We recognize that each researcher brings individual positions and perceptions to the project. The authors are from Western nations including the US and Canada, which may have influenced our interpretation.

At the time of the data collection, the interview team was employed by Yahoo! Inc.; this context placed particular demands on the research. The interview 'tour' was meant to be publicized to demonstrate that the company was engaging with a wide swathe of people in the US. Our focus on US cities and convenience sampling within cities inevitably bias this research in various ways. The tour's locations and schedule were arranged with the primary goal of attracting local journalists. Location selection was limited to mid-sized cities with mixed partisanship which were not state capitals. Our research team opted to follow along with the tour but set up our own interviews at each location. Thus, our research team "piggy-backed" along with the tour without any publicity demands. Our internal report was focused on the affinity themes and design implications. Research projects are generally expected to have downstream impacts for the company's digital products and services. The demand for "implications for design" is not unique to our context and has been documented in our academic community [34]. The media ritual analysis was conducted after the primary author changed institutions. By sharing where our work had freedom and where demands were present, we hope to encourage more transparency, especially for CSCW research conducted in industry.

7 CONCLUSION

Conducting interviews across the US enabled us to identify habits and choices that shaped news experiences in a politically charged, complex and ubiquitous newsmedia landscape. We observed

active engagement, passive engagement and active avoidance of news, which participants related to felt negativity and distrust. Passive avoidance was difficult due to incidental exposure. People explained their experiences, behaviours and decisions to engage with or avoid news with reference to personal preferences and feelings, including feelings of control and, often, lack thereof. Although the details of people's news habits and experiences were heterogeneous, they generally experienced media as ubiquitous, requiring vigilance, and causing intense affect. Participants rarely described their relationships to or experiences of news as involving other people in any way. This individualistic perspective was analysed through Carey's theory of communication as ritual, leading us to conclude that although the diversity of personalised digital experiences in a fragmented news landscape may be rich in some ways, the transformation and partial loss of shared news rituals may be implicated in breakdowns of shared worldview.

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9 APPENDIX

Themes for 'Experiences and Strategies of News Engagement' with Illustrative Observations

(1) Highly or Moderately Active Regarding News
  (a) *"Into news"*
  "First off, I'm a news buff. That's my life every day so I usually get my news online. I watch CNN every day. Online, newspaper, on my cell phone, on my computer, that's how I keep track of current events." (Detroit)
  (b) *Liked skimming headlines*
  "I'd skim the articles just to know the basic facts." (Atlanta)
  Likes to skim the headlines very quickly and one "can only do that on a phone." (Birmingham)
  "Usually, I just read the headlines, which is probably not good. I shouldn't be reading it because it's always misleading." (Fort Wayne)
  (c) *Notifications give me news*
  "There's certain things, like when the last healthcare bill was kind of defeated, I just saw it [the notification] and was like, "Yes!" And I didn't bother to read it at that moment, ... but it gave me at least the headline so I got to see that." (Fort Wayne)
  (d) *Searching: see topic passively, then actively dives in*
  "If there's a really big breaking news story... I'll see it on my timelines or feeds first and then I'll go read actual reporting on it." (Milwaukee)
  (e) *Particular topics: actively seeks them, has specialized sources, customizes feeds for them*
  "I go to journalgazette.net, which is our local news. Then I go to sports because I need my outlet. So ESPN and SI. And then I go to CNN to read the news." (Fort Wayne)
  "I like Flipboard a lot because you can pick what you want to learn about, you know. I use that. I got food in here, news, style, entertainment, science. I love science." (Milwaukee)
  (f) *Local news: apps, local TV channels, local paper*
  "I like to find out what's going on in Detroit. (...) I hate to see the tragedies that happen, but I want to see the tragedies that happen. How close to my home are they and ... you know, what's going on now in Detroit." (Detroit)
  (g) *Known personalities/anchors*
  Sticks with certain news channels because likes newscaster/anchor personalities (Houston, Odessa), or has familiarity with reporters (Albuquerque)
  (h) *Aggregators for news because they're customizable*
  "I actually curate what I see, because I think that so much news right now is very depressing, that I consciously try to curate what I'm looking at basically... So when I download an app, I set up my feeds. I'll do friends, or categories, or just spend some time to actually put things together." (Detroit)
(2) Passive Regarding News
  (a) *Goes to social media, also sees news*
  Prefers social media because she is "already in these apps all the time" so she didn't feel the need to have "dedicated news apps" on her phone. (Charleston)
  (b) *Social media "has all the news"*
  "News sites and stuff, they'll have a Snapchat and you can follow them and then they'll keep you posted" (St. Louis)
  "Twitter is huge. Everything is on there." (Odessa)
  "I look at Snapchat for news (...) They cover it all." (Houston)
  (c) *"News comes to me"*
  "News comes to me... I don't look for it." (Albuquerque)
  (d) *Uses what's default*
  Uses the Apple news app with default settings. (Pittsburgh)
(3) Disengaged with News and/or Actively Avoiding
  (a) *Too busy for news*
  "Maybe when school winds down in a few years, I could focus more on news." (Odessa)
  (b) *Doesn't pay attention to local news*
  Local news was a "police blotter", implying this was not sufficiently interesting. (Fort Wayne)
  (c) *Doesn't have/use news app*
  "I have no news apps on my phone. I do not seek it out." (Detroit)
  (d) *Not interested in news*
  "I'm not into a lot of news." (Houston)
  (e) *Guilt about not keeping up with news*
  "I should be more active." (Albuquerque)
  Feels "disconnected" because of her disengagement. (Houston)

Themes for 'Experiences and Strategies Related to Negativity of News' with Illustrative Observations

"[The negativity in the news is] detrimental to my health because there is always bad stuff going on in the world. I want a day with no news." (Akron)

"Crazy to see what's going on today. It's just a lot to take in." (Odessa)

"You can only take so much at one time" and "it gets a little tiring after a while." (Asheville)

(1) Strategies for Managing Negativity of News
   (a) *Stopped notifications for news*
   Had to "turn off" the news because it was "so depressing and scary."(Odessa)
   Discontinued commenting or notifications because of 'too many' alerts. "I like to be left alone (…) [Notifications are] an invasion." (Akron)
   "It gets a little redundant. Because of how it's constantly feeding updates with what the latest thing going on. It's this, it's that." (Fort Wayne)
   (b) *Stopped looking at news*
   "Taken a break" from news because "it was too depressing." (Albuquerque)
   Stopped watching news "because stuff about Trump made me too angry." (Houston)
   (c) *Ignored news*
   "It is just traumatizing, news that I can't do anything about. So no, I don't want details on that." (Fort Wayne)
   Ignores news because he feels disappointed by politicians' false promises (Houston)
   (d) *Reduced news (deleting apps, unsubscribing)*
   Felt overwhelmed after 2016 US election so deleted news apps and social media apps, now uses mobile web. (Pittsburgh)
   (e) *Controlled timing around consuming news (e.g. turned off notifications, don't watch in evening)*
   [I turn off the news if there is a lot of] "bad news at one time" because "you can only take so much at one time" and "it gets a little tiring after a while." (Asheville)
   Avoids news in the evening, to "unplug," avoid "nonsense" and avoid "things that get me to feel upset about things." (Pittsburgh)
   (f) *Seeks positive/entertaining news*
   Uses Facebook and Twitter for positive news. (Kansas city)
   "Facebook is not all negative (…) [uses it for stories that] "make you smile." (Birmingham)
   Follows political, funny and "heart-warming" news on Buzzfeed because"it just makes me feel better about the world." (Charleston)
   (g) *Seeks positive activities*
   Watches cute animal videos. (Des Moines)
   (h) *Shares positive news*
   Shares pictures of funny news stories with family and friends to combat negativity. (Atlanta)
   Sharing positivity makes them feel "less powerless." (Kansas City)
   (i) *Empowered by local news*
   Keeps up with local news because she could "make a difference." (Odessa)

(2) Other Responses to Negativity
   (a) *Not overwhelmed*
   Some who were not overwhelmed still expressed feelings around lack of control."If it's not personally affecting me, I can't control things that take effect in 45 years." (Odessa)
   We understand the reference of 45 years to mean so far in the future that it was not relevant.
   (b) *News is entertaining*
   "I follow Trump on Twitter just to amuse myself. Trump's tweets are slightly amusing, slightly scary." (Odessa)
   (c) *Late night news is entertaining*
   "I would say HBO's Vice News and John Oliver are kind of a nice mix of entertainment and news." (Detroit)

Themes for 'Experiences and Strategies Related to (Dis)trust' with Illustrative Observations

[I am] "paranoid about political news in general" because the news today is not "trustworthy." (Memphis)
"You have to almost take everything you read with a grain of salt. You just never know what is all true." (Fort Wayne)
"There is so much between myself and the truth that I don't feel like I'd get the truth if I read articles, so I don't." (Akron)
"I don't trust their stories. I'm just using it to find out what happened and then doing my own research to make my own final conclusions about what I think." (Oxford)

(1) Strategies for Seeking Truth
  (a) *Needs more than just social media*
  [News on Facebook is] "not serious," (...) "I go somewhere else to read more." (Memphis)
  (b) *Other sources/searching stories*
  I "jot down names of people interviewed on tv" then will google who else they've talked to and see if their answers are consistent." (Odessa)
  "I mean, I assume all stories are biased. ...if I see something and it looks kinda hokie or like, "Hmm. Is that true?" Then I'll go search. If it's a topic I'm interested in, I want to know more about it I'll search. [For example:] a couple people talked about the natural disasters and how they're manmade." (Milwaukee)
  (c) *Multiple sources to get different perspectives (e.g., holistic overviews)*
  "If I'm skeptical I fact check, or I go to another site just to see if I can get corroborating information. I guess if I find more than one source for it I tend to trust it more." (Detroit)
  (d) *Multiple sources to get all the facts (i.e., the whole story)*
  "Fox news app, CNN app, MSNBC... I go to all of them, I like them all. I like to see the personalities, one is saying this and another one is saying this. In this one we praise the president, in this one we hate the president." (Milwaukee)
  (e) *Checks credibility of site, stats, reporter, interviewee*
  "If something sounds off, chances are it is." "Looks it up" to assess whether a website is credible. (Charleston)
  (f) *Trusts in name brand news sources and personalities*
  NYTimes and Washington Post because "can't get that quality of news anywhere else." (Odessa)
  (g) *Follows known personalities, anchors, reporters*
  "Loyal" to CNN because he "grew up watching it." (Houston)
  (h) *Has paid subscriptions*
  Subscribes to local news Des Moines Register. (Des Moines)
  Subscribes to Economist for "one hundred dollars a year." (Lincoln)

(2) Strategies to identify bias
  (a) *News has a polarized strong slant*
  Used to listen to NPR but switched to podcasts because he wanted "higher production value and stronger liberal voice." (Albuquerque)
  Stopped using Fox News because he felt it had become too liberal. (Houston)
  (b) *Wants first-hand accounts*
  Two leaders of the local Black Lives Matter movement did not feel as though they were getting information from the local government around the aftermath of the race riots, so they began going to council meetings and using social media to live tweet the meetings to the community. (Charlottesville)
  Described subscribing to Trump's tweets as looking at "the source." (Odessa)
  Wants "first hand news not second hand news." (Des Moines)
  (c) *Social media and comments help me vet what's true*
  Trusts "people" in her "Facebook feed" to "vet articles." (Charlottesville)
  (d) *Uses international sources*
  American sources were too biased and she now subscribes to the Guardian as she feels international coverage has a clearer perspective. (Albuquerque)
  "BBC provides an international perspective and less sensationalized viewpoint." (Charleston)
  (e) *Suspicion for bias / biased sources*
  "I know which news organizations I find trustworthy and I find to be unbiased. I know which ones I feel like do have a political leaning. I think just by reputation and my own knowledge and also when you start to read it you can usually tell immediately if they're leaning a certain way or not." Knows his social media feed was biased but that searching "showed all sides." (Albuquerque)
  (f) *I can tell what is fake news*
  Can "easily tell what's real and what's fake" because she had a "good BS filter." (Asheville)
  "I'm a news person. I can tell if it's real or not." (Fort Wayne)
  "Fake news is clear" to her, but "people fall for it all the time." (Charleston)
  (g) *News is too opinionated, I just want "the facts"*
  "I like the plain news. I don't wanna hear opinions."(Lincoln)
  "Hard to find the truth" because of "how opinionated" news is. (Houston)

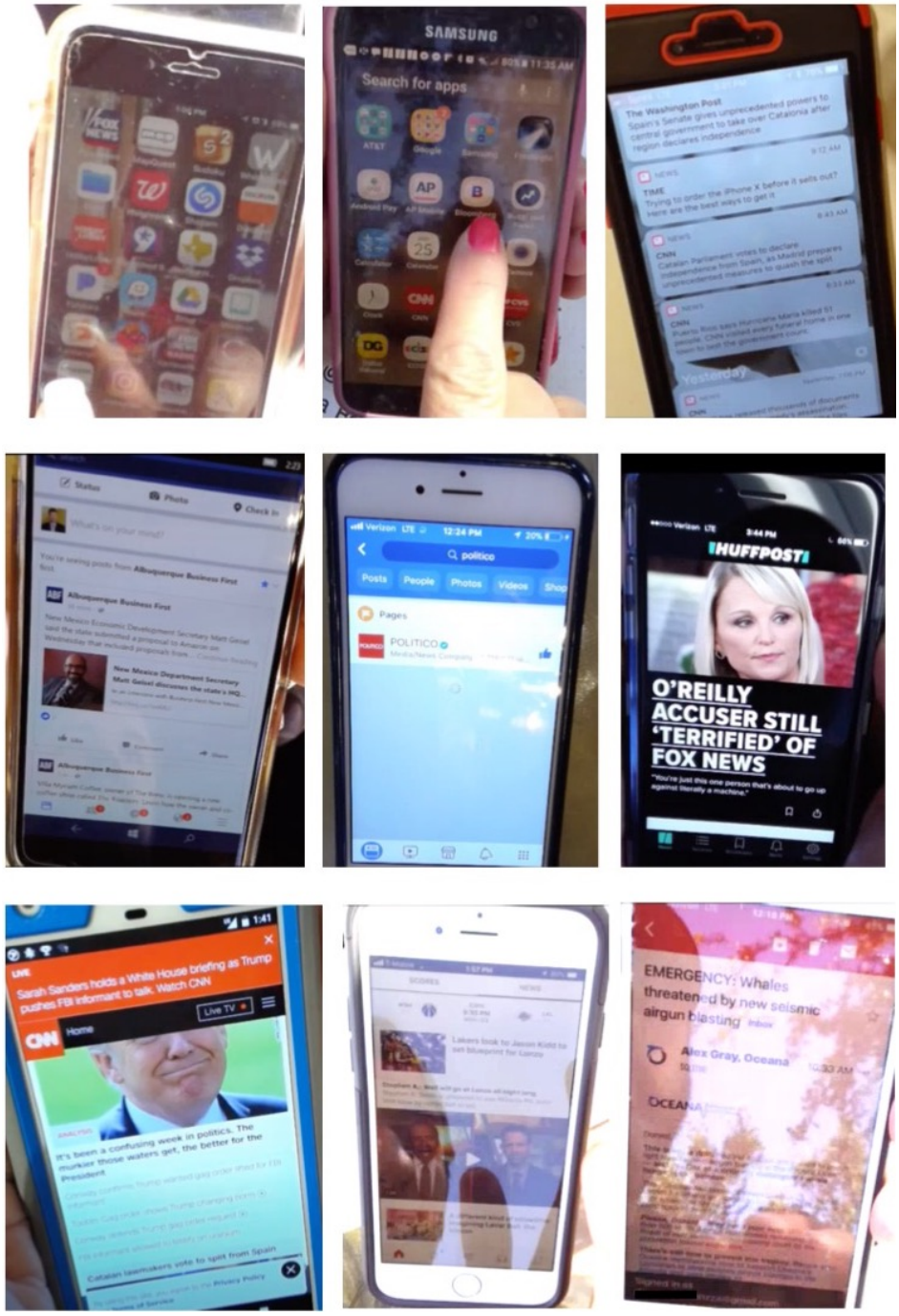

Fig. 1. Diverse experiences of news from more active participants. From upper left: (1) the Fox news app is in the prime "upper left" location for easy access, (2) has several news apps, (3) keeps up with news through notifications, (4) customized their Facebook feed to see certain news "first", (5) has followed a political page on Facebook, (6) has the HuffPost app, (7) has the CNN app and receives a notification during the interview, (8) is very engaged with sports news using the ESPN app, (9) receives news through email.

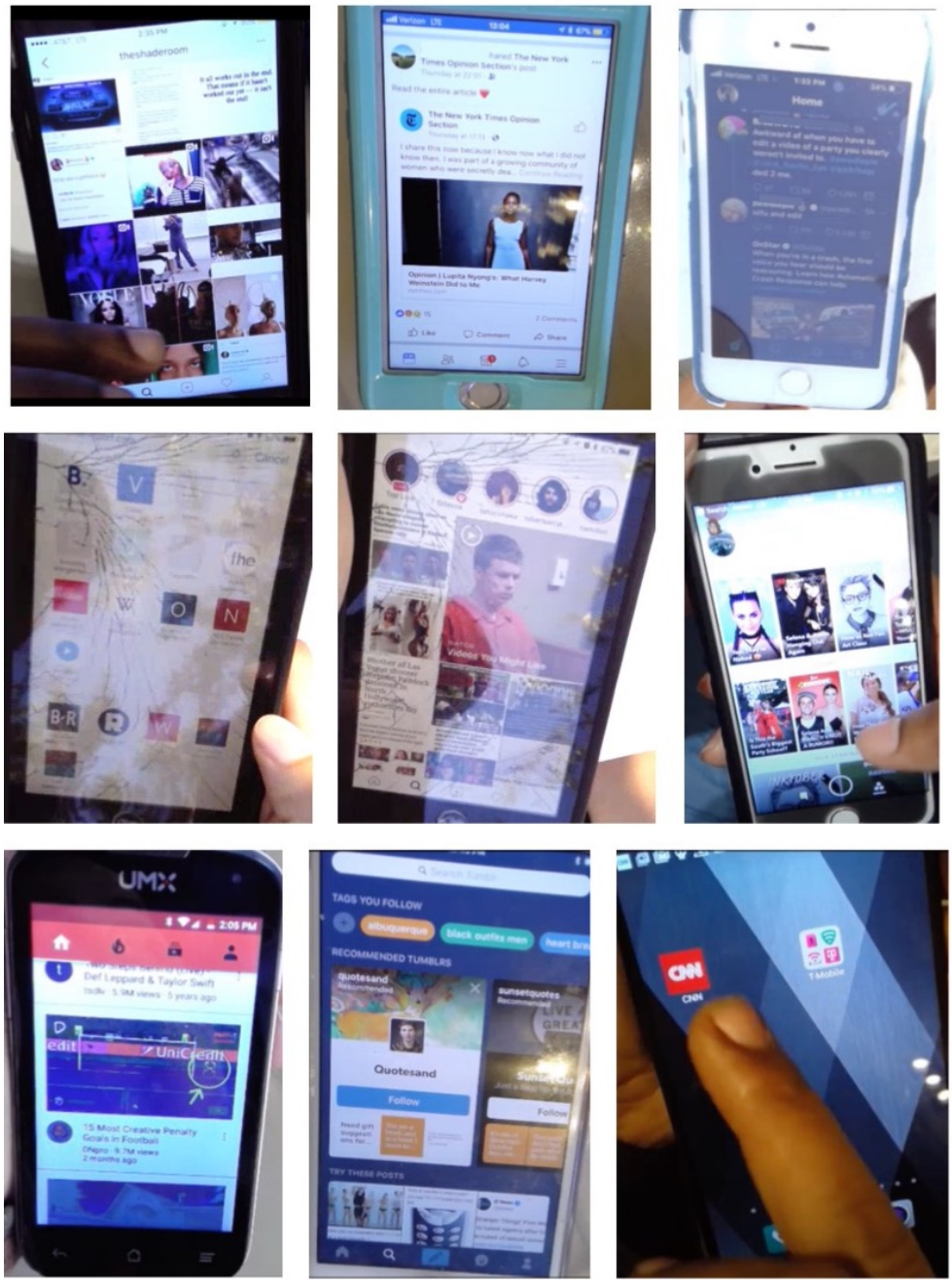

Fig. 2. Diverse experiences of news from less active participants. From upper left: (1) the first news source that came to mind was theshaderoom in Instagram, (2) sees news from friends' Facebook posts, (3) uses Twitter for the latest, (4) looks at Bleacher Report on mobile web as his main news source and (5) his second source is Instagram's Discovery feature, (6) uses Snapchat's Discovery for news, (7) keeps up with sports with a YouTube subscription, (8) follows the tag of his city name on Tumblr, (9) swipes back and forth several times looking for their CNN app.

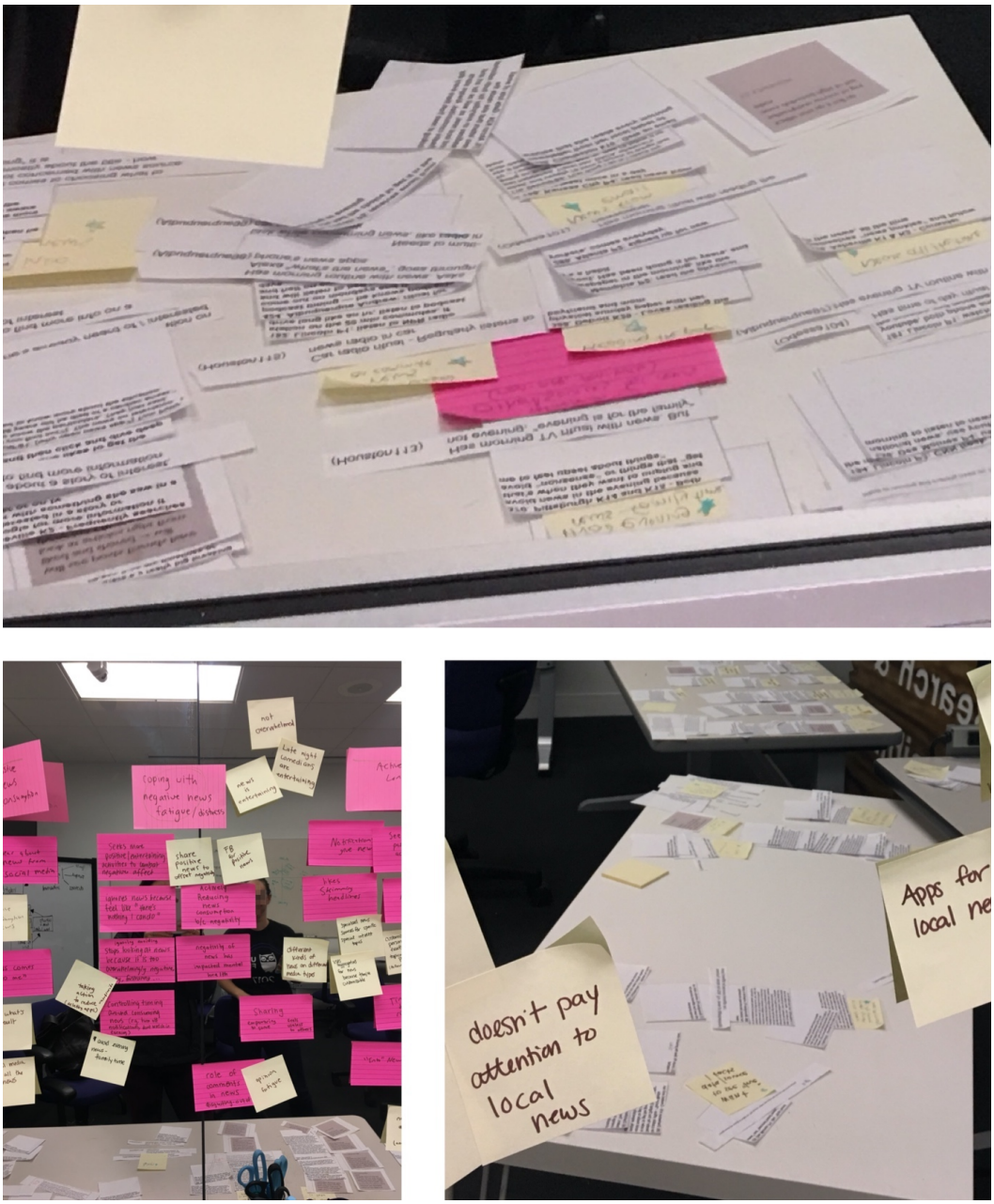

Fig. 3. Photographs documenting the affinity diagram analysis process: Small sample of the hundreds of data cards consisting of quotes, field notes, and observations, arrayed on tables, as well as sticky notes naming tentative sub-groups of those cards.

Excerpt from Interview Script

Hi. I'm <name>. I work for Yahoo to find out how people are using technology in their lives. Thanks for agreeing to talk with me. (Introduce sled and gain permission to record).
1. How do you keep up with what's going on in the world... or around here?
2. Can you show me all the ways that you look at news?
3. Do you have habits around this? Times of day? Devices?
4. *If notifications not mentioned...* Do you get notifications on your phone? What kinds? Can you show me? When notifications like this (news related) come up ... is that enough info? Do you click through?
5. *If following sources not mentioned ...* Do you use social media, Facebook, Snapchat, Instagram, Twitter, Youtube, etc.? Can you show me?
6. Do you ever see biased or fake news? What do you do?
7. <Question added in week 4> Do you ever feel overwhelmed with news? What do you do in those moments?

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