Digital news as forms of knowledge: a new chapter in the sociology of knowledge

By Rasmus Kleis Nielsen (University of Oxford)

Draft of chapter forthcoming in Pablo Boczkowski and C.W. Anderson (eds.) 2017. *Remaking the News*: *Essays on the Future of Journalism Scholarship in the Digital Age*. Cambridge, Mass: MIT Press.

> "[News] does not so much inform as orient the public, giving each and all notice as to what is going on."
>
> Robert E. Park (1940), News as a Form of Knowledge

> "Knowledge about a thing is knowledge of its relations. Acquaintance with it is limitation to the bare impression which it makes."
>
> William James (1890), The Principles of Psychology

Introduction

News is intimately related with knowledge. It is part of journalism's self-understanding that news help people understand the world around them. Wanting to know more about the world is a key motivation for using news. The hypothesis that those who do so do in fact know more about the world around them has been a central focus of academic analysis of news. The idea that news lead to a more informed and knowledgeable citizenry and therefore a more well-functioning society and more robust democracy has been central to most normative theories of journalism. All these different self-understandings, personal motivations, academic hypothesis, and normative theories rest on a connection between news and knowledge.

But what kinds of knowledge might news be said to be? And how is news as knowledge changing as the social practices, organizational forms, and media technologies that create and constitute it change over time? Robert E. Park's 1940 essay "News as a Form of Knowledge: A Chapter in the Sociology of Knowledge" remains the seminal treatment of this question, a deeply sociological analysis focused not simply on the information contained in individual news items or the impact of such information may have on media users, but on the significance of the wider category of "news" and the social, organizational, and technological factors that shape it. Park was, in a way, uniquely well positioned to write about this subject—before his pioneering academic work as one of the founders of the Chicago School of Sociology, Park had worked both as a newspaper journalist and as a publicist and researcher for the African-American educator and political activist Booker T. Washington at the Tuskegee Institute. He was a man who more than most connected academic research, professional practice, and a life-long concern for how knowledge is produced, recognized as such, and circulated, with how it orients, engages, and ties together communities in different ways.

The purpose of this chapter is to address the question of what kinds of knowledge today's digital news might be said to be and to offer a contemporary sequel to what Park called "a chapter in the sociology of knowledge" (which I take to be a field focused not on the epistemology of journalism—what and how journalists think they know what they think they know—or the validity of what journalists' knowledge, but the actually-existing conditions under which different kinds of knowledge known as news arise, how they work, and how they change).[1] I am concerned with what changes in news content, the organization of news work, and the technologies involved in producing and disseminating news means for

[1] The epistemology of journalism has received some attention, including from Tuchman (1978), Ettema and Glaser (1998) and Meriditch (2005). The validity of journalism is increasingly a subject of meta-journalistic coverage from, for example, fact-checking organizations (Graves (forthcoming)).

how we think about news as knowledge, and will discuss this more general issues on the basis specifically of past and present examples from the United States. In the first part of the chapter, I return to the United States in 1940 and Park's original analysis of news as a form of knowledge positioned between formal and systematic "knowledge of" and the more intuitive and unsystematic "acquaintance with" (A continuum sketched out by the pragmatist philosopher and psychologist William James). In the second part, I develop an analysis of digital news as forms of knowledge in the very different media environment of the United States in 2015. In the third and final part, I discuss the wider implications of digital news as a new chapter in the sociology of knowledge.

Overall, my argument is that while Park could plausibly offer one broad ideal type for understanding news as a form of knowledge in 1940, such a unitary view is less useful seventy-five years later and we should therefore be increasingly vary of analysis of commentary trying to make generalizations about news as such. News is a historical phenomenon, and its forms have changed over time just as it various across space (Barnhurst and Mutz 1997). I suggest that much news today is still frequently characterized by many of the traits Park identified, but that our increasingly digital media environment offers far more diverse forms of news and also includes a growing amount of substantially different kinds of news closer to James' extremes of "acquaintance with" and "knowledge about". Today, as we see simultaneously an increasing emphasis on presentist, minute-by-minute and second-by-second breaking news and the growth of various forms of long-form journalism, explanatory journalism, and data journalism designed to overcome some of the perceived epistemological shortcomings of older forms of news, new forms of news as knowledge that have greater staying power as content, but also because of certain affordances of digital media. Drawing on Park and his inspiration from James, I suggest we can think of digital news as involving at least three different ideal-typical forms of mediated, public knowledge today. First, we see

the growing importance of forms of news-as-impression, decontextualized snippets of information presented via headline services, news alerts, live tickers, and a variety of new digital intermediaries including search engines, social media, and messaging apps. Second, a recognizable descendant of the archetypical late-20th century form of news remains important, news-as-items, published as in principle self-contained discrete articles and news stories bundled together in a newspaper, a broadcast stream, on a website, or in an app. Third, at the opposite end of James' spectrum from acquaintance-with to knowledge-about, we see the rise of news-about-relations, combining elements of long-form "contextual" or "explanatory" forms of journalism well-known from some 20th century newspapers, magazines, and current affairs programs (Fink and Schudson, 2014) with new forms of data journalism, visualization, and interactivity afforded by digital technologies (Fink and Anderson 2015).

Digital news may be associated with the rise of news-as-impressions and a potential hollowing out of inherited forms of news-as-items—with more transient information for what Park in 1940 called a "specious present". Certainly many critics amongst journalists, academics, and other public figures complain about its "churnalistic" qualities. But digital news is far more than this and we should be suspicious of overarching generalizations about the nature of news today, which also involves a remarkable growth in news-as-relations more oriented towards providing what James called knowledge-about, and news that today is more accessible, more timely, and more detailed and data driven that probably ever before. Recognizing the properties of digital news as <u>different</u> forms of knowledge—rather than <u>a</u> form of knowledge—will help us understand how journalistic self-understandings, popular conceptions of journalism, academic hypothesis about journalism, and normative theories of journalism might require rethinking as the basic connection between news and knowledge they all implicitly rely on change over time.

News as a Form of Knowledge (US, 1940)

In his original essay on news as a form of knowledge, Park was interested in news specifically as a mediated and publicly available phenomenon. This is the kind of news we associate with journalism. One might draw the distinction between news in this narrower sense of information that is published or broadcast and on the public record versus news in the broader sense of new things, novelties, and tidings which can be largely interpersonal and often private. News in the first sense is deeply intertwined with a wide range of informal forms of social communication including rumor, gossip, and personal conversation—news makes people talk (Shibutani 1960). But it is distinct from it, because it is mediated differently, because of its public character, and because the category of "news" is seen as significant and distinct. Drawing on the sociological tradition of developing ideal types—conceptual constructs formed inductively by accentuating one or more salient characteristics of a given class of phenomena to enable categorization and analytical generalization—Park's essay aimed to identify the shared properties of the kind of news we associate specifically with journalism, to in turn be able to assess what kind of knowledge it might be said to represent.

As noted above, Park's analysis of news in this sense as a form of knowledge starts with the distinction between "acquaintance with" and "knowledge about" developed by the philosopher and psychologist William James (1890) in *The Principles of Psychology*. In James' work, "acquaintance with" is knowledge that is more informal, intuitive, and unsystematic, whereas "knowledge about" is relatively more formal, theoretical, and systematic (these are not a categorical distinction as much as a relative ones, a question of degrees). "Acquaintance with" comes with use and habit and is often based on first-hand experience, "knowledge about" comes with systematic investigation and is actively acquired,

often in part from secondary sources. Here is James, who is worth quoting at length (1890, pp. 221-)—

> There are two kinds of knowledge broadly and practically distinguishable: we may call them respectively knowledge of acquaintance and knowledge-about. Most languages express the distinction; thus, γνώναι/εἴδομαι; noscere/scire; kennen/wissen; connaître/savoir. I am acquainted with many people and things, which I know very little about, except their presence in the places where I have met them. I know the color blue when I see it, and the flavor of a pear when I taste it; I know an inch when I move my finger through it; a second of time, when I feel it pass; an effort of attention when I make it; a difference between two things when I notice it; but about the inner nature of these facts or what makes them what they are, I can say nothing at all. […] But in general, the less we analyze a thing, and the fewer of its relations we perceive, the less we know about it and the more our familiarity with it is of the acquaintance-type. The two kinds of knowledge are, therefore, as the human mind practically exerts them, relative terms. That is, the same thought of a thing may be called knowledge-about it in comparison with a simpler thought, or acquaintance with it in comparison with a thought of it that is more articulate and explicit still. […] What we are only acquainted with is only present to our minds; we have it, or the idea of it. But when we know about it, we do more than merely have it; we seem, as we think over its relations, to subject it to a sort of treatment and to operate upon it with our thought. […] Knowledge about a thing is knowledge of its relations. Acquaintance with it is limitation to the bare impression which it makes.

For Park, as for James, the distinction does not imply a hierarchy, but reflect different ways of acquiring knowledge and forms of knowledge that play different roles in people's lives. Tacit knowledge and practical experience at the "acquaintance with" end of the spectrum is often a better way of know-how to do something or of knowing another person than "knowledge about" is, though more systematic forms of knowledge may be superior when it comes to, say, treating a serious disease or understanding the causes and likely consequences of a global financial crisis. Knowing that there are Russian troops in the Ukraine is about impressions, knowing why they are there or what it might mean is about relations.

Park's basic argument is that if one thinks of James' "acquaintance with" and "knowledge about" as a continuum "within which all kinds and sorts of knowledge find a place", then news has a location of its own between the two extremes (Park 1940, p. 675). It is worth recapitulating what he sees as its defining traits, since many remain instantly recognizable and relevant seventy-five years later (even though historical analysis suggests news in the U.S. on the whole over time has grown longer, more analytical, and more abstract, see e.g. Barnhurst and Mutz, 1997). News as a form of knowledge, according to Park, is more formal and systematic than "acquaintance with" and offers people knowledge of the world beyond personal experience because it is communicable and communicated in a way that tacit knowledge is not. But it is not the same as "knowledge about", because it remains focused on events, rather than processes, relations between events, or causes or meanings of events. In this sense, news is (and this is still a common observation) far better at the first four of journalism's famous "5 Ws"—it offers more on what happened, who did it, when it took place, and where it happened than on the fifth W, the why. (Let alone the so what?)

Throughout his essay, Park stresses that news is oriented towards events, and interested in the past and the future, in causality and teleology, only in so far as it recognizes such relations as throwing light on the actual and present. (Commentary and opinion is and arguably always has been a variation on this, perhaps less strong on informing people about events, and more oriented towards interpreting or asserting causality and teleology.) Making another point that is still commonplace today, Park argues that news can be said to exist only in what he calls a "specious present"—"present" because it is about the now (here today, gone tomorrow, first draft of history, etc.), "specious" because what qualifies as present news is determined not simply by actuality, let alone intrinsic importance, but by journalists' news considerations, organizational routines, publishers' commercial or other interests, and their various conceptions of what people are interested in. This combination leads news to focus on the authoritative, the exciting, the unusual and unexpected (though of course much of the actual present is rather more humble, mundane, usual, and expected). This focus on events and the present, in Park's view, makes news "transient and ephemeral", a constant flow of small, independent communications that can be easily and rapidly comprehended by people who by doing so can orient themselves in a wider world than that of their personal experience, but who still relies on other forms of knowledge (closer to the "acquaintance with" and "knowledge about" ends of the continuum) when it comes to navigating everyday life and work. News, in this sense, help "orient" us in the world, especially the world beyond personal and professional experience (Park, 1940), even if it does not necessarily cultivate acquaintance with or knowledge about things. Having read about Russian troops in the Ukraine is different from having seen them in your back yard or being privy to their plans or purpose.

Park's description of news as characterized by (a) an orientation towards events over processes, (b) little discussion of causality or teleology, (c) its transient and ephemeral nature

is so recognizable and relevant seventy-five years later that it is easy to forget that his analysis is based on a very different media environment from today's. Briefly, the United States in 1940 was a heavily regionalized media system with little in terms of truly national media (let alone international media), and where news was mediated primarily via newspapers and radio (and to some extent magazines and newsreels). The most common media technologies of Park's time are material incarnations of his point about transient and ephemeral news, with daily newspapers often overtaken by events and radio broadcasts dissipating into thin air, here one moment, gone the next. The newspaper industry that survived the Great Depression was a vibrant one with high circulation (about 115 weekday copies per 100 households). Most of the country was covered by local papers, and large metropolitan areas sustained a range of competing morning and evening titles of different orientations and political persuasions—in Chicago including not only the *Tribune*, but also other dailies like the *Daily News*, the *Times*, and the *Sun*, the country's most prominent African American newspaper, the *Chicago Defender*, as well as a range of weeklies, community papers, suburban papers, and a number of titles in other languages. Radio, by 1940, had made it into about 80% of all households but was no longer the free-wheeling free-for-all of the 1920s. The 1930s had seen the transformation of what had been a large number of separate transmission towers, broadcasting independently and for variety of different reasons, and vying for attention with many other, into a more consolidated and commercial business dominated by a few large networks linking a large number of stations across the country (Barnouw, 1968).

This media environment was definitely a "mass" media environment in terms of large audience of individual media users paying attention to the same print or broadcast content. But it is not the kind of more nationally oriented mass media environment characteristic of post-war radio and television broadcasting. Franklin D. Roosevelt's famous "fireside chats"

in 1940 reached an estimated 25% of the radio audience, about half the audience share that major Presidential addresses would draw on television during the 1960s and 1970s (Craig, 2000; Eshbaug-Soha and Peake, 2011). Nor is it the kind of local and regional monopoly newspaper media environment that arose especially with the demise of most evening papers in the 1960s and 1970s. Most importantly for the purposes of this chapter, it is an environment devoid of the two most important news media platforms of today's environment—television and the internet—and an environment in which media were a more confined part of most people's everyday life than is the case today, neither always-on nor ever-present the way television and the mobile web increasingly are today.

Digital News as Forms of Knowledge (US, 2015)

Even as Park's description of news as oriented towards events, as thin on discussions of causality (why does it happen) and teleology (what does it mean), and as transient and ephemeral may still strike us as capturing key aspects of much of today's news, our media environment is of course markedly different. The United States in 2015 still has a regionalized media structure with more than 16,000 radio stations, more than 2,000 television stations, and over 1,300 daily newspapers, as well as thousands of digital-only news sites of various sorts.[2] It is a media market where local and regional media are still an important part of most people's media repertoire, but there are also a range of truly national news media, most importantly television network news, cable television news channels, and the websites of a small number of high profile newspapers such as the *New York Times* and digital-only news media like the *Huffington Post*. (Where the US in the 1940s offered lots of local media and fewer national media, the situation in 2015 is increasingly lots of national media and fewer local media.) It is an increasingly digitized and digital media environment (though TV

[2] Data from the FCC, the NAA, and the Project for Excellence in Journalism's 2014 State of the Media report.

still accounts for most time spent with media), increasingly accessed via the internet and navigated via branded websites but also search engines and social media.

This is a media environment, like Park's, with plenty of mass audiences, if by mass audience one means large numbers of individuals engaging with the same media content. But it is also, like Park's, not a media environment in which these mass audiences routinely approximate a national mass audience, the way they did in the 1970s and 1980s. President Barack Obama's 2015 State of the Union Address drew more than 30 million viewers and a combined audience share of 20 percent (across 13 television channels)—not far from the audience Roosevelt could command for his fireside chats, but down considerably from the 67 million viewers and 44 percent audience share that President Bill Clinton drew for his first State of the Union Address in January 1993.[3] Media events like the Super Bowl and the Olympics may still draw large national audiences, but everyday news media use is characterized by a combination of audience fragmentation and audience duplication rather than a few large audiences gathered around a few media outputs (Webster, 2014). It is a media environment where legacy media predating the rise of digital remain the most important producers of and sources of news for most people, but where their business models have been deeply disrupted by the migration of advertising to digital platforms and by increased competition for audiences' attention. It is an environment where the two most important media platforms for news are television and the internet (Newman et al, 2015), both of course very different from the dominant news media of Park's time.

Scholars and commentators invested in a certain vision of what news may have been or ought to be have been highly critical of what television news and digital news offers today. Briefly summarized, many argue that increasing commercial pressures and intensified

[3] http://www.nielsen.com/us/en/insights/news/2015/31-7-million-viewers-tune-in-to-watch-pres-obamas-state-of-the-union-adress.html (accessed March 10, 2015).

competition for audiences leads to more infotainment, more opinionated content, and to more sensationalism (e.g. Fenton, 2010). James Fallows—journalist, writer, and former speech writer for President Jimmy Carter—summarized the overall assessment of digital news as "shallow, divisive, and unreliable" (Fallows, 2011). (In the UK, the trend has been summarized as a move from journalism to "churnalism".) President Obama, for one, seem to share the assessment. When asked in 2010 by a student at George Washington University what most surprised him in his first years in office, the President responded:

> "Well, where do I start? (Laughter.) You know, let me tell you something. On the one hand, I've been surprised by how the news cycle here in Washington is focused on what happens this minute as opposed to what needs to happen over the course of months, years. The 24-hour news cycle is just so lightning fast and the attention span I think is so short that sometimes it's difficult to keep everybody focused on the long term. The things that are really going to matter in terms of America's success 20 years from now when we look back are not the things that are being talked about on television on any given day or appear on the Internet on a blog on any given day."[4]

The charge from academics, commentators, and various public figures seems clear. News organizations may have been initially slow to reinvent the form of news and adapt to a digital environment, preferring to just transfer analogue content to digital platforms as "shovelware" (Barnhurst, 2010). But now new forms of genuinely digital news are developing, and many critics are not impressed. If journalism has traditionally aspired to inform people by making the significant interesting and the interesting significant, the

[4] http://www.whitehouse.gov/the-press-office/2010/10/12/remarks-president-a-moving-america-forward-town-hall (accessed March 10, 2015)

accusation is that today, in face of commercial and competitive pressures and enabled by technology, it is increasingly simply focusing on making the interesting as interesting as possible in the battle for attention, while leaving the significant aside. The charge in short is that news in 2015 is like the news that Park wrote about in 1940, only more so—more focused on events, even thinner on discussions of causality and teleology (even if offering probably even more commentary and analysis, some of it as opinionated and speculative as ever), and even more transient and ephemeral. At its epistemological best, such forms of news may provide a mediated, second-hand form of "acquaintance with" (this, that, and the other happened). At its worst, it may not make sense to think of it in terms of knowledge at all, but just a torrent of impressions—all noise, no signal (Gitlin, 2001).

As made clear from the outset, I think the critics are partly right, but also that the charge is misleading if we mistake what may be the most voluminous forms of contemporary news for the wider, more varied, and abundant total output of news. Even recognizing the differences between newspapers, radio, newsreels, and magazines, Park could plausibly offer an analysis of news as *a* form of knowledge, positioned between "acquaintance with" and "knowledge of" in 1940. His ideal type never corresponded to all news, but it captured key aspects of most news, and the most important forms of news. But such a unitary view is less useful in 2015, where we have certainly seen the intensification of some of the features Park outlined, developments that move some forms of breaking news and light news towards a version of the "acquaintance with" of William James' spectrum, but also, in parallel and arguably equally important, the development of forms of news that are closer to the "knowledge of" end of James' spectrum, while still being very much news—mediated, publicly available, and far more timely than other forms of "knowledge of" (like that offered by scientists). Digital news is live tweeting, live blogging, and live TV coverage of breaking news, sometimes of a character where one may not feel news is any form of knowledge at all.

But digital news is also long-form journalism, in-depth, detailed, data-driven interactive features, and on-demand streaming or download of well-researched current affairs or documentary programs. We need more ideal types to capture the increasingly diverse real types of news that abound, and we should be skeptical of analysis and commentary that aims or claims to capture one general tendency common to all forms of news.

At the "acquaintance with" end of James' spectrum, we see the increasing importance of forms of news that are increasingly unsystematic reportings of what, who, when, and wheres, with less and less room for or attention paid to the whys and so whats, and where it is, as with first-hand experience, left to the media user to make sense of the stream of content, to transform news into some sort of knowledge. A Facebook posting, a 140 character tweet, a news alert on a smartphone or a smartwatch, or an image or a 57 second video shared on Instagram will give you an impression, and maybe some information, but not a lot about relations, causation, or teleology, no matter how otherwise self-consciously serious and substantial the news organization behind it is. In television, 24 hour news channels might be the clearest example of this, because they are not about not having the time or the space to cover relations (they are 24 hour channels, after all), but are built around a format where the imperative to go live and break the news in real time frequently leads to situations that seems to question the value of the whole enterprise, at least in terms of knowledge. Consider just a few from CNN, an organization arguably more committed to conventional forms of news journalism than some other U.S. cable news channels: June 28, 2012, CNN splashed "Mandate struck down" on air, on their website, and on Twitter, with the sub heading "High court finds measure unconstitutional", suggesting, erroneously, that the Supreme Court had ruled against the Affordable Care Act ("Obamacare"). In fact it had upheld it 5-4. April 18, 2013, while the manhunt was still going on, CNN wrongly reported that a suspect had been

arrested after the Boston Marathon case. Both are high-profile events where cable television news audiences spike, and both are serious, high-profile, cases of getting it wrong.

Breaking news on television is not alone in providing a steady stream of news-like content. Constantly updated news feeds on websites as well as dedicated live blogs built around individual events like high profile political speeches, product launched, or sporting events, as well as many streams of content distributed via third-party social networking sites ranging from Facebook and Twitter to Instagram and Snapchat are other examples. Alf Hermida (2010) has coined the phrase "ambient news" for how micro-blogging platforms like Twitter can function as an "awareness system" that provides instant online dissemination of short fragments of information from a variety of sources. This is a subset of what media industry professionals see as a wider phenomenon, where digital information is, in the words of Eric Schonfeld, "increasingly being distributed and presented in real-time streams instead of dedicated Web pages".[5] It is a web organized, like breaking news on television, in a reverse-chronology based on nowness and a permanently unfinished flow of information. We see it with social networking sites like Facebook and especially Twitter, we see it with how news brands and others use these sites to distribute stream of their own content (and on average have about one percent of users click on links, according to one estimate (Thompson, 2015)), and we see it in digital news with initiatives ranging from Buzzfeed to the Times Wire (Madrigal, 2013). This stream of content is the kind of phenomenon many academics, commentators, and public figures decry. It is still news, in the sense of being produced by journalists and laying claim to a category of "news" as distinct from the wider "news to me", it is mediated and publicly available, but it is also in many ways more unsystematic, closer to William James' notion of "acquaintance with" that the more distinct packages we associate with more traditional forms of newspaper and television bulletin news. It gives (mediated,

[5] http://techcrunch.com/2009/05/17/jump-into-the-stream/ (accessed March 16, 2015).

second-hand) impressions, but it does not convey relations. And there is a whole lot more of it.

But it is not alone. This is a simple but important point.[6] There is also today far, far more mediated and publicly available news much closer to the "knowledge of" end of James' spectrum. While retrenchment in the news industry has led to an overall decline of specialized beat reporting, we have also over the last decades seen the rise of various forms of long-form journalism, explanatory journalism, and new forms of data journalism that all are clearly different from the more immediate and unsystematic news offered on 24 hour news channels and various digital streams and different from form of news that Park wrote about. (Katherine Fink and Michael Schudson (2013) call this "the rise of contextual journalism".) Take one example, Dana Priest and William Arkin's investigation into "Top Secret America" for the *Washington Post*, extensive reporting on the growth in the national security and intelligence services in the aftermath of 9/11. The project took almost two years, involved 27 other contributors, and produced a four-part series of articles in the newspaper, a dedicated project website with additional stories, video, multiple interactive graphics, and searchable databases, a project blog, a Facebook page, a Twitter account, an hour-long *Frontline* documentary for TV broadcast by PBS (and a later sequel), as well as a book. Whatever this is, it is not acquaintance with, and it is not "churnalism". (It might have other shortcomings as a form of mediated, public knowledge, in not connecting to audiences and their everyday concerns, view of the world, etc.) Or consider the currently active *New York Times* visual guide to the Iraq-ISIS conflict, a continually updated and evolving digital offering that combines conventional reporting from the area (text and pictures) with multiple interactive maps, annotated satellite imagery of the Euphrates and the Tigris rivers, maps of

[6] As Herbert J. Gans (1974) has noted, cultural critics concerned with "dumbing down" often overlook parallel processes of "smartening up".

US airstrikes, data visualizations of where ISIS fighters come from, historical maps of the area going back to the Ottoman empire, and much, much more. This is far more systematic reporting, still primarily oriented to the what, who, when, and wheres, but with far more attention paid to the whys and the so whats, and with forms of storytelling that go well beyond individual news items or the multi-part series to embrace new forms of digital presentation. This is not impressionistic. It is about relations, much closer to James' view of "knowledge of", while still being mediated and publicly available. And it is far more timely than the "knowledge of" produced by NGOs, think tanks, and academics. The point here is not that this kind of in-depth reporting is intrinsically superior to the more ambient news provided by cable television and digital news feeds. It is not. Nor that it is perfect (data journalism, for example, is highly dependent on datasets that can be hard to verify, and well-resourced investigative reporters too make mistakes). The point is simply that it is different, that there is more of it, and that these different kinds of news coexist and that both are characteristics of news as different forms of knowledge today.

In a post sometimes invoked by industry professionals when talking about digital news, the American author Robin Sloan has suggested a distinction between the stream of impressions (which he calls the "flow") and the "stock" of more durable things that stand out.

> Flow is the feed. It's the posts and the tweets. It's the stream of daily and sub-daily updates that remind people that you exist.
>
> Stock is the durable stuff. It's the content you produce that's as interesting in two months (or two years) as it is today. It's what people discover via search. It's what spreads slowly but surely, building fans over time.[7]

[7] http://snarkmarket.com/2010/4890 (accessed March 13, 2015).

In 1940, Park argued that news as a form of knowledge is positioned between the ends of William James' continuum, between intuitive, unsystematic, and first-hand "acquaintance with" and more formal, systematic, and often second-hand "knowledge of" as a form of knowledge that was mediated and publicly available and characterized by (1) an orientation towards events over processes, (2) little discussion of causality or teleology, and (3) a transient and ephemeral nature. Much of this is still true for much news. But the unitary view he offered is less and less useful when it comes to digital news, and a single ideal type is no longer adequate to capture a phenomenon that is growing more and more diverse and varied. (The intellectual utility of ideal types rest not on whether they correspond to an always messier reality but in whether they help us order and understand the most important aspects of that reality.) A part of news, by volume a large part, is, as many have argued, become more akin to James' "acquaintance with" as a steady stream of television news and digital news feeds flow freely and continuously and offers impressions, but little in terms of narrative structure of focus on relations. We might call this news-as-impressions. A part of it remains recognizably akin to what Park analyzed in the mid-twentieth century, even if some of the aspects he identified may have been intensified. This is news-as-items, coming in the form of discrete articles and stories. But simultaneously, the rise of combinations of long-form, explanatory, and data journalism exceeding the headline and the story suggests that some kinds of news increasingly offers knowledge that is closer to the more formal, systematic, and second-hand "knowledge of" James talked about, but is still recognizably news, based in part on on-the-ground reporting and bearing witness (vicarious mediated first-hand experience) and far more timely than, for example, the humanities and social sciences as other forms of "knowledge of" current affairs. We can call this news-about-relations. News still offers the first draft of history, but the draft comes in more and more different forms, ranging from instant impressions scribbled and shared in streams to more detailed, data-

driven, and systematic forms of explanatory journalism that goes well beyond what news offered in the 20th century.

Part of this development—form news as a form of knowledge between acquaintance with and knowledge about in the 20th century to digital news as more differentiated forms of knowledge including more acquaintance with but also more knowledge about—is about the professional innovation and journalistic ambition associated with pioneers like Jonah Peretti of Buzzfeed and Melissa Bell of Vox Media as well as evolutionary thinking by established brands like CNN and the *New York Times*. But it is also, at a more fundamental level, driven by the development of the larger technological systems within which news is produced and published. It is highlighted by Sloan's reference to "search" above, and it bears directly on the question of whether, and how, news is "transient and ephemeral". In terms of informational content, much digital news may well be transient. But in terms of how it is mediated and made publicly available, much of it is less and less ephemeral because of the combination of digital publishing and the development of search engines, most importantly Google. The digital humanities scholar Lev Manovich captured many of the key changes early on. In 2001, he highlighted five tendencies of "a culture undergoing computerization" (Manovich 2001, pp. 27-)

1. Numerical representation: new media objects exist as data.
2. Modularity: the different elements of new media exist independently.
3. Automation: new media objects can be created and modified automatically.
4. Variability: new media objects exist in multiple versions.
5. Transcoding: the logic of the computer influences how we understand and represent ourselves.

All of these developments can be observed in news, which takes the material form of digital data in the production process and increasingly at the point of use, that can be aggregated, shared, and remixed, and is increasingly seen through the cultural lens of the technologies that allow us to use news in new, digital, ways. In an earlier piece, Manovich (1999) highlighted how the internet privileges databases over narratives, a prescient point given how search engines help us navigate the web on the basis of link patterns and page ranks rather than semantic principles (in his analysis, the development represents a basic inversion of the relationship between syntagm and paradigm, from a situation in which we navigated by narrative and the database was implicit, to a situation in which the database paradigm is central and the syntagm (narrative) less central). In part because of the numerical representation of media content (as digital data) and its modularity (elements independence of each other) we can encounter news in new ways through new and increasingly important digital intermediaries like search engines and social media (Bell, 2014, Dijck 2013). No systematic data is publicly accessible, but conversations with digital editors suggest not only that search engines and social media account for larger and larger parts of overall web traffic to news, but also that direct visits to the home page, traffic coming via search, and traffic coming via social, exhibit interestingly different temporal orientations, with home page traffic driven by news updates, search traffic by older pieces (and much of this by pieces that are weeks or even months old), and social media driven by recent but not breaking news pieces.

At the most basic level, the features of the rise of digital media that Manovich describes means that even news content that is highly transient is no longer ephemeral in terms of our ability to access it. Search the web for almost any topic, and you will find news items, sometimes years old, from highly visible news organizations all over the world. Click on links shared via social media on current affairs, and they may take you to historical

context, not just breaking news. News media organizations themselves are increasingly aware of this and—in line with Manovich's point that the way in which digital media influences how we understand what we do and present it to the world—are trying to operate with more differentiated forms of distribution and content creation, marketing their archives (sometimes decades or even centuries back), prioritizing measures to increase the "shelf life" of new content, and using various tools and technologies to lead readers from one article (whether old or new) to other articles (whether old or new). This is a new way of encountering, experiencing, and exploring news, a transformation in how most of us can engage with news. This development is only in its early stages, as the technical limitations of search engines, database navigation, and the costs of storage and transmission (declining as they are) still prioritize textual content over images, audio, and video in terms of its "findability", but it points towards a future where much of what is published as news never need to disappear (unless someone wants it to disappear, keeps it in proprietary databases, or are forced to make it hard to find—as per the European Court of Justice's landmark "Right to Be Forgotten" ruling against Google in 2014).

A New Chapter in the Sociology of Knowledge?

Digital news, because of changes in the social practices, organizational forms, and media technologies that create and constitute news, represent a variety of different forms of knowledge today. Robert E. Park's analysis from 1940 still captures key features of much of what we encounter as news—it is oriented towards events over processes, rarely systematically deals with causality or teleology, and the content is often transient—but news is also growing more diverse and much of it is far from ephemeral.

Some forms of digital news—by volume probably most of digital news—may well be inching towards the "acquaintance with" end of William James' continuum of forms of

knowledge, offering mediated impressions of things going on in the world beyond our immediate experience, but little in terms of placing those events in relation to wider processes in terms of why they are happening and what it means. Such news-flows are produced by digital media organizations like for example BuzzFeed but certainly also legacy media organizations like the CNN (on air and online) and the *New York Times* (through the Times Wire, Twitter accounts, headline service on smartwatches, etc.) Many critics decry such forms of news, some for some good reasons.

But this development should not blind us to the parallel and simultaneous growth in forms of digital news that are far closer to the "knowledge-about" end of James' spectrum, forms of long-form, explanatory, data-enriched journalism that offers mediated, publicly available, forms of news very much concerned with questions of causality and teleology, with the relations between events, and that offers this in a far more accessible and timely fashion than other forms of "knowledge about" current affairs. Legacy media organizations like CNN and the *New York Times* invest significant resources in producing in-depth, detailed, and enduring investigations, but also sites like BuzzFeed has in recent years built investigative journalism teams in both the US and the UK.

These more diverse forms of digital news, which I have suggested we think of as news-as-impressions, news-as-items, and news-about-relations, are also in important ways less transient and ephemeral than Park's news. This is in part about the character of some of the content produced—the temporal orientation of news-as-impressions is often "now", of "news-as-items" the roughly last 24 hours we associate with newspapers and television evening news, but for news-as-relations, the orientation is often much longer, and breaks with an accelerated news cycle in favor of news meant to be more durable. It is also about technology, about content digitally published and left online by media organizations, and news that today can be accessed through a whole new range of database queries, search

engines, and social media that gives us whole new ways of engaging with news, including news from yesterday or yesteryear. (Especially important for forms of news *meant* to be less transient and ephemeral.)

These changes in news as knowledge seems to merit a new chapter in the sociology of knowledge, and an appreciation of the many different forms of knowledge that news offer most people today. Of course, to understand the implications of this change, digital news as forms of knowledge have to be understood in relation to the different self-understandings, popular conceptions, academic hypothesis, and normative theories we hold of it. Very briefly, the evidence so far suggests that even as news grow more diverse and is accessed in new ways deeply embedded in wider everyday media practices (a glance at your phone at the bus stop, as part of a social media feed), most people still see the category of "news" as significant and distinct from the broader "news to me". But the ways in which people navigate the news on offer in an abundantly supplied increasingly high-choice media environment underlines the increasing importance of understanding the changing relationship between news production (including journalistic self-understandings) and news use (popular conceptions, the social meaning of news, the motivations for using it, etc.) (Prior, 2007; Neuman et al, 2012; Boczkowki and Mitchelstein, 2010). As Alexis Madrigal (2013) has pointed out, the questions we face include how content producers position themselves between what people in the industry term "stock" and "flow", how different intermediaries facilitate stock and flow and offer us ways of dealing with each, and finally how we as media users combine stock and flow. (The supply side of news-as-impressions, news-as-items, and news-about-relations is important, but so is the demand side.) Leading digital news professionals are highly conscious of these differences and are experimenting with new ways of doing journalism that leverages the advantages of each form for different editorial (and commercial and other) purposes.

For academics concerned with the impact of news on what people know, the development of news forms of digital news challenges established theoretical and methodological designs in interesting ways (Bennett and Iyengar, 2008). Consider three of the most important ways of studying the relationship between news and knowledge—surveys, experiments, and content analysis. Survey research relying on self-reported data on media exposure is good for many things, but not necessarily for capturing the impact of a six-second Vine news video or a detailed, interactive, piece of multi-media journalism. Experimental research under controlled settings can give us a far better understanding of the importance of certain variations in content and form of news, but increasingly face problems of external validity and thus generalization if news use becomes a less discrete practice and news content a more fluid and diverse category. Content analysis, developed for analysis of news-as-items, also faces challenges when it comes to coding large volumes of very pithy news-as-impressions and more expansive forms of news-about-relations that go beyond the individual article or story, challenges that will become more pronounced as news organizations begin to use more responsive forms of design and potentially automatically personalize text, images, and videos to different demographics on the basis of audience data.

It is not in itself surprising or interesting to point out that news has changed, also in terms of its relation with knowledge, in the last seventy-five years. News is a historical phenomenon, always changing over time, just as it is a socially contextual phenomenon, varying across space. But let me highlighting two key points that run through the chapter. First, Robert E. Park remains an insightful commentator on news and its relation to knowledge, its (changing) character as something that "does not so much inform as orient the public, giving each and all notice as to what is going on" and his 1940 analysis continues to capture certain key traits of what sets news as mediated, publicly available information apart from other forms of knowledge. Second, while Park's media environment too of course was

complex and diverse, our media environment today is arguably even more so, and the idea of news as a form of knowledge should be replaced by the idea of news as forms of knowledge to acknowledge how much of it is pushing towards the extremes of "acquaintance with" (news-as-impressions) and "knowledge of" (news-about-relations) that Park placed it between, even as the middle, represented by 20th century forms of newspaper journalism and broadcast news bulletins (news-as-items), may well be eroding.

References

Barnhurst, Kevin G. 2010. "The Form of Reports on Us Newspaper Internet Sites, an Update." Journalism Studies 11 (4): 555–66. doi:10.1080/14616701003638426.

Barnhurst, Kevin G., and Diana Mutz. 1997. "American Journalism and the Decline in Event-Centered Reporting." Journal of Communication 47 (4): 27–53. doi:10.1111/j.1460-2466.1997.tb02724.x.

Barnouw, Erik. 1968. *The Golden Web: A History of Broadcasting in the United States: Vol. 2 - 1933 to 1953*. New York: Oxford University Press.

Bell, Emily. 2014. 'Silicon Valley and Journalism: Make up or Break Up?' Presented at the Reuters Memorial Lecture 2015, Reuters Institute for the Study of Journalism. http://reutersinstitute.politics.ox.ac.uk/events/silicon-valley-and-journalism-make-or-break.

Bennett, W. Lance, and Shanto Iyengar. 2008. "A New Era of Minimal Effects? The Changing Foundations of Political Communication." *Journal of Communication* 58 (4): 707–31.

Boczkowski, Pablo J., and Eugenia Mitchelstein. 2010. "Is There a Gap between the News Choices of Journalists and Consumers? A Relational and Dynamic Approach." *The International Journal of Press/Politics* 15 (4): 420–40. doi:10.1177/1940161210374646.

Craig, Douglas B. 2000. *Fireside Politics : Radio and Political Culture in the United States, 1920-1940*. Baltimore ; London: Johns Hopkins University Press.

Dijck, José van. 2013. *The Culture of Connectivity : A Critical History of Social Media*. Oxford ; New York: Oxford University Press.

Eshbaugh-Soha, Matthew, and Jeffrey S. Peake. 2011. *Breaking through the Noise : Presidential Leadership, Public Opinion, and the News Media*. Stanford, California: Stanford University Press.

Ettema, James S., and Theodore Lewis Glasser. 1998. *Custodians of Conscience : Investigative Journalism and Public Virtue*. New York: Columbia University Press.

Fenton, Natalie, ed. 2010. *New Media, Old News : Journalism & Democracy in the Digital Age*. London: SAGE.

Fink, Katherine, and Michael Schudson. 2014. 'The Rise of Contextual Journalism, 1950s–2000s'. *Journalism* 15 (1): 3–20. doi:10.1177/1464884913479015.

Fink, Katherine, and C. W. Anderson. 2015. "Data Journalism in the United States." Journalism Studies 16 (4): 467–81. doi:10.1080/1461670X.2014.939852.

Gans, Herbert J. 1974. *Popular Culture and High Culture : An Analysis and Evaluation of Taste*. New York: Basic Books.

Gitlin, Todd. 2001. Media Unlimited: How the Torrent of Images and Sounds Overwhelms Our Lives. New York: Metropolitan Books.

Graves, Lucas. Forthcoming. Deciding What's True: The Fact-Checking Movement in American Journalism. New York: Columbia University Press.

Hermida, Alfred. 2010. "Twittering the News." *Journalism Practice* 4 (3): 297–308. doi:10.1080/17512781003640703.

James, William. 1890. *The Principles of Psychology*. New York: Henry Holt.

Madrigal, Alexis C. 2013. ‘2013: The Year “the Stream” Crested’. *The Atlantic*. December 12. http://www.theatlantic.com/technology/archive/2013/12/2013-the-year-the-stream-crested/282202/.

Manovich, Lev. 2001. *The Language of New Media*. Cambridge, Mass: MIT Press.

Neuman, W. Russell, Yong Jin Park, and Elliot Panek. 2012. “Tracking the Flow of Information into the Home: An Empirical Assessment of the Digital Revolution in the U.S. from 1960–2005.” *International Journal of Communication* 6: 1022–41.

Park, Robert E. 1940. “News as a Form of Knowledge: A Chapter in the Sociology of Knowledge.” *The American Journal of Sociology* 45 (5): 669–86.

Prior, Markus. 2007. *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. New York: Cambridge University Press.

Shibutani, Tamotsu. 1966. *Improvised News : A Sociological Study of Rumor.* Indianapolis: Bobbs-Merrill.

Thompson, Derek. 2015. ‘The Unbearable Lightness of Tweeting’. *The Atlantic*. February 16. http://www.theatlantic.com/business/archive/2015/02/the-unbearable-lightness-of-tweeting/385484/.

Tuchman, Gaye. 1978. *Making News: A Study in the Construction of Reality*. New York: Free Press.

Webster, James G. 2014. *The Marketplace of Attention : How Audiences Take Shape in a Digital Age*. Cambridge, Massachusetts: The MIT Press.