Counting Clicks: Quantification and Variation in Web Journalism in the United States and France[1]

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Sociological studies often emphasize the role of metrics in broader processes of convergence and homogenization. Yet numbers can take on different meanings depending on their contexts. This article focuses on the case of journalism, a field transformed by quantification in the form of "clicks." Drawing on ethnographic material gathered at two news websites—one in New York, the other in Paris—it documents important differences in the uses and meanings assigned to audience metrics in the United States and France. At the U.S. website, editors make significant decisions based on metrics, but staff journalists are relatively unconcerned by them. At the French website, however, editors are conflicted about metrics, but staff writers fixate on them. To understand these differences, this article analyzes how the trajectories of the U.S. and French journalistic fields affect newsroom dynamics. It shows how cultural differences can be reproduced at a time of technological convergence.

Modern societies have seen a multiplication of measurements, indicators, rankings, and benchmarks, usually developed with the goal of increasing efficiency, transparency, and accountability across sectors (Weber [1922] 1978; Porter 1995; Espeland and Stevens 1998; Strathern 2000). Over recent de-

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cades, this quantitative impetus has been reinforced through what is sometimes called the Big Data revolution (boyd and Crawford 2012; Cukier and Mayer-Schönberger 2013). Drawing on massive and rapidly expanding amounts of digital data, algorithms and analytics are transforming multiple fields and organizations, from credit (Poon 2009; Pasquale 2015) to finance (Knorr Cetina 2016; McKenzie 2016), health care (Reich 2012), social media (Gillespie 2014), and criminal justice (Harcourt 2006; O'Neil 2016; Brayne 2017), among others.

In this article, I examine the case of web journalism, a field that is currently being reconfigured by analytics in the form of traffic numbers. Newsrooms now rely on multiple software programs that provide detailed data, often in real time, about the online popularity of their articles (Anderson 2011). Editors and journalists know how many visitors are reading each article, how long they stay on each page, and whether they found the article by visiting the website's home page, through search engines like Google, or social media platforms such as Facebook or Twitter. In most newsrooms, journalists have access to daily, weekly, and annual lists of the top 10 "most read" or "most shared" articles, receiving quantitative feedback about their work through rankings and graphs.

This use of analytics in web newsrooms constitutes a major transformation from the situation of print newspapers. Throughout the 20th century, one of the main characteristics of the printed press, in contrast to television and radio networks (Gitlin 1994; Napoli 2011), was the relative lack of information about what made a newspaper successful. Which articles, sections, or authors were the most read? Why exactly did people buy a newspaper? Of course, the marketing departments of major newspapers surveyed readers about which articles they liked best. But these studies were routinely ignored in print newsrooms. Staff writers instead primarily prided themselves on their autonomy, making decisions based on their professional ethos, their own ideas about "newsworthiness," and the judgment of their peers and superiors (Darnton 1975; Gans 1979). In digital news organizations, this changed with the development of analytics software programs designed specifically for editorial departments: given the flow of data they receive, modern-day journalists cannot ignore the preferences of their online readers anymore.

This article examines the effects of web analytics on journalistic production, relating it to broader questions about quantification and its effects. Ex-

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isting research shows that quantification leads to the emergence of "reactive" organizational practices (Espeland and Sauder 2007). In this view, the introduction of metrics in a sector where they did not exist beforehand "re-creates" social worlds by fostering responsive strategies from the actors whose identity and prestige are affected by the quantification process. Such reactive practices in turn tend to converge and take similar forms across institutions facing the same set of metrics (Espeland and Sauder 2016). Sociological studies thus tend to emphasize the connection between quantification and standardization. This resonates with a longer tradition in the social sciences, from Marx's formulation of commodification ([1867] 1992) and Simmel's metaphor of money as the "great leveler" ([1900] 2011) to the constitution of a world society based on consistent indicators across countries (Meyer et al. 1997).

Instead, the current analysis explicitly focuses on variation and divergence. The article asks: Why are numbers—in this case, web analytics—used and interpreted differently depending on their institutional contexts? I present a comparative study of the reception of traffic numbers in web journalism in the United States and France, two countries that are often described as having opposite journalistic traditions and relations to the market (Lamont and Thévenot 2000; Hallin and Mancini 2004; Fourcade 2011; Benson 2013). On the basis of interviews, observations, and digital material gathered at two standalone news websites, TheNotebook in New York and LaPlace in Paris (websites' and individuals' names have been anonymized), I find that editors and journalists use and interpret analytics in strikingly different ways in the two newsrooms. At TheNotebook, editors profess their trust in numbers (Porter 1995), heavily relying on metrics when making editorial and managerial decisions. In contrast, LaPlace's editors are ambivalent about the proper role of metrics and refuse to take traffic numbers into account when managing their staff. Yet paradoxically, TheNotebook's staff writers do not seem personally affected by traffic numbers, good or bad, whereas LaPlace's staffers fixate on clicks in their daily work.

In order to make sense of these different cultures at TheNotebook and LaPlace, which I characterize as bureaucratic and disciplinary respectively, the article turns to the trajectory of the journalistic field (Bourdieu 2005) in the United States and France. In the United States, journalism underwent an early professionalization process, in conjunction and tension with the strong market pressures present in the media industry over the past century and a half (Schudson 1978). In contrast, French journalism, which was long protected from market forces by the state, remains driven to a greater extent by civic goals (Benson 2013). These distinct trajectories, I argue, shaped the internal dynamics of newsrooms in different ways over time. In the United States, a marked division of labor between editors and staffers emerged, in which editors are responsible for commercial concerns, whereas writers focus on their professional craft. In France, news organizations do not rely on the same division of labor, which leaves newsrooms ill prepared to handle growing economic pressure in the form of clicks. Editors and journalists of TheNotebook and LaPlace thus relied on different cognitive categories and organizational strategies when adapting to a rapidly changing environment, which in turn shaped the meanings and practices they attached to traffic numbers.

This article advances three main lines of analysis. First, it documents how journalistic production is changing in the digital age, in part because of increased market pressures in the form of individualized traffic numbers. Second, at a time when the power of new technologies appears boundless, this ethnographic analysis reveals how algorithms and analytics can in fact be put to a variety of ends depending on their institutional contexts. Finally, by qualifying the dominant rhetoric of global convergence and standardization often associated with quantification, the article shows how a subset of journalists in the United States and France reproduced cultural difference at a time of economic, organizational, and technological convergence.

QUANTIFICATION, CONVERGENCE, AND VARIATION

Why are numbers associated with convergence and standardization, and how does this apply to the case of web journalism? Drawing on science and technology studies (STS), I argue that processes of divergence can affect the uses and interpretations of metrics depending on their contexts—here, the U.S. and French journalistic fields.

Quantification and the Convergence of Reactive Practices

Quantification has potent effects on the social world. Although it takes hard and often politically charged work to construct credible metrics (Hacking 1990; Desrosières 2002), once numbers exist they often take an appearance of outward simplicity, traveling easily across time and space. In so doing, quantification often erases alternative definitions of "what counts," transforming categorical differences into numerical ones (Fourcade 2011; Lamont 2012). Espeland and Sauder's (2016) analysis of the impact of the *U.S. News and World Report* rankings in the field of law schools exemplifies this process. In that case and many others, the perception of the object being quantified became more homogeneous after numbers were introduced: "Rankings impose a standardized, universal definition of 'high quality'" (Espeland and Sauder 2016, p. 33). Thus, quantification is often equated with commensuration, or the transformation of different qualities into a single metric (Espeland and Stevens 1998).

Yet the effects of quantification go further than that. Numbers also reshape social worlds by reconfiguring a wide range of institutional practices around them. This is an instance of what Espeland and Sauder call "reactivity," "the idea that people change their behavior in reaction to being evaluated, observed, or measured" (2007, p. 1; see also Sharkey and Bromley 2015). In the example of law schools, after the rankings were introduced and in spite of their initial resistance, many deans changed their practices in order to maintain or increase their school's position in the rankings. A similar set of strategies geared toward rankings optimization diffused across U.S. law schools, including new admission criteria for students with higher Law School Admission Test scores, increased tracking of student employment by career services offices, sending glossy brochures to the legal community, and so on.

Taking a step back, why are these reactive practices so similar across organizations? Two main mechanisms connect quantification and standardization. The first one could be labeled a *quantification as information* argument, in which rankings—and numbers more generally—reorganize existing fields by changing the amount and kind of information available to the actors concerned. In the case of law schools, rankings brought a whole new type of knowledge with them, which turned the diffuse competition between schools into a zero-sum game: even law schools that did not consider themselves in competition with their peers suddenly realized that they were, in fact, competing with the other schools for a higher spot on the rankings (Espeland and Sauder 2007).

This quantification-as-information perspective in turn resonates with neoinstitutionalism in organizational analysis (Powell and DiMaggio 1991). Specifically, as a type of information, quantification can be part of the "structuration" of organizational fields, which is composed of four parts: an increase in the extent of interaction among the organizations in the field, the emergence of structures of domination, an increase in the information load that organizations need to master, and the development of mutual awareness between organizations (DiMaggio and Powell 1983, p. 148). Quantification accomplishes all of that by objectifying and hierarchizing existing relationships and flows of information between organizations (Espeland and Sauder 2016, p. 180). In fields with significant uncertainty about connections between means and ends (including higher education and journalism), this structuration process is then likely to foster institutional isomorphism, leading to further convergence around a handful of organizational forms and practices.

A second, equally important mechanism driving the standardization of reactive practices in the wake of quantification is a process of *quantification as discipline*. When numbers are introduced, the actors whose performance is being measured—whether directly or indirectly—often feel threatened by the metrics and experience strong emotions, positive or negative, depending on their scores. They monitor themselves, adapt their behavior, and strategize to maintain good numbers. In so doing, they "normalize" their practices, adjusting them to the average of what they see around them (Foucault

1977). Thus, in their study of law schools, Espeland and Sauder show that deans and career services directors internalized the rankings as "arbiters of performance," fearing that they would be "fired for their numbers" and feeling emotionally tied to these quantitative assessments of their work (2016, pp. 127–35). Employees reacted in similar ways across schools, through individualized anxiety, partial resistance, and strategies to "game" the system, all of which eventually contributed to the broader institutionalization of rankings (Sauder and Espeland 2009).

This quantification-as-discipline perspective is closely associated with Foucault's work on power, in the sense that numbers are conceptualized as a form of control (Foucault 1977). For instance, as many workplace studies have shown, performance measurements are frequently mobilized as panoptic technologies of surveillance: workers may not know who is tracking their performance at any given moment, or why, but they try to score well nonetheless, either through direct compliance or by turning the process into a game (Burawoy 1979; Sewell 1998; Levy 2015). Thus, quantification is often described as a form of "governmentality," a type of power that operates at a distance and comes with homogenizing effects, within and beyond the workplace (Rose, O'Malley, and Valverde 2006; Foucault 2010; Vallas and Christin 2018).

Click-Based Quantification and the Case of Web Journalism

I now turn to the specific case under consideration: audience analytics ("clicks" for short) and their growing role in web newsrooms. Starting in the 1990s, journalism as an industry and a profession underwent several major transformations. First, news began to move online. New actors emerged, including digital versions of legacy media organizations, blogging platforms, and news aggregators (Boczkowski 2004*a*). The press then entered a period of economic turmoil: the advertising revenues of newspapers fell by more than half over the past decade (Pew Research Center 2016), a decline due in part to the decrease of print advertising rates but also to the specific dynamics of online advertising. Although the details of digital advertising prices are both complex and rapidly evolving, sheer audience size soon became an essential factor: online advertising overwhelmingly depends on the number of unique visitors that news websites are able to attract (Graves and Kelly 2010; Turow 2011).

Hence, unsurprisingly, web traffic emerged as an absolute priority for most news sites, even those that also charged for subscriptions. This focus on web traffic came hand in hand with the development of new tracking technologies ("cookies" and others) that allowed digital publishers to gather and analyze increasingly fine-grained data about their online readers. Such evolutions in turn led to the increasing use of detailed audience metrics by advertisers, marketers, editors, and journalists alike (Anderson 2011; Lee,

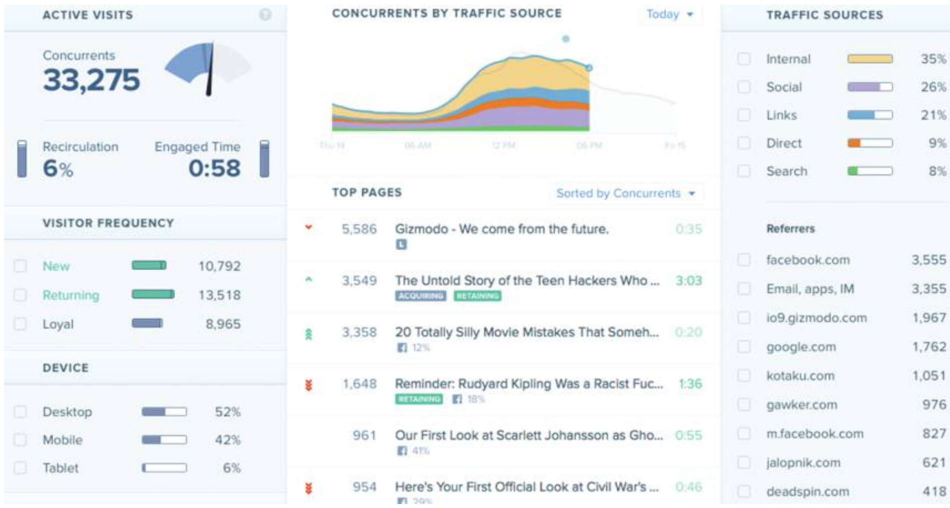

FIG. 1.—April 14, 2016, screen shot from Chartbeat: http://chartbeat.com/publishing/demo/.

Lewis, and Powers 2012; Usher 2013; Petre 2015; Cherubini and Nielsen 2016; Christin 2017).

Of particular interest here are the analytics software programs designed specifically for use by editorial rather than marketing departments. For instance, Chartbeat, a program used by about 80% of publishers in the United States and more than 50,000 media sites in 60 countries, specifically purports to target the "front line" (i.e., editors and writers instead of marketing departments).[2] Every few seconds, Chartbeat displays the number of visits and number of mentions on Facebook and Twitter that an article receives (fig. 1). The software also tracks the behavior of readers, visualizing not only how they accessed the website but also how long they stay on each page and where they are geographically located.

Although many of the metrics provided by Chartbeat target individual articles, others measure the performance of the website as a whole. For instance, the left-side column of the dashboard features a speedometer-like figure measuring the number of "concurrent visitors" for the publication at a whole, as well as data about the percentage of "new," "returning," and "loyal" readers. Chartbeat also provides author-level data, allowing editors and journalists to compare traffic numbers for individual writers and their evolutions over time.

Taking a step back, journalistic production is being quantified by web analytics at several different levels. Analytics first make it possible to compare

[2] See https://chartbeat.com/press/.

the articles themselves, putting on the same scale "hard news" and "soft news," public interest stories and coverage of celebrities. The use of analytics to rate these different kinds of articles is in a sense the opposite of traditional professional prizes such as the Pulitzer Prize, which rewards journalistic excellence in different subcategories (breaking news reporting, local reporting, etc.) and deems journalistic production to be incommensurable across such categories. Yet web analytics do more than make articles commensurable. They also quantify the work and production of individual writers in terms of audience metrics, making such numbers directly comparable on their dashboards. Finally, they provide granular and real-time data about the overall output of news websites, also an important evolution compared to the traditional monthly circulation figures of print newspapers.

The quantification process thus takes place at three different levels in online news: article (output level), author (individual level), and publication (organizational level). This in turn strongly resembles the case of law schools studied by Espeland and Sauder (2016). There, the performance of organizations (law schools) is directly quantified, while certain individuals (deans, career services directors, etc.) become responsible for increasing various metrics that will raise their schools' overall rankings, all with the disputed goal of assessing a complex output (the quality of legal education). Therefore, one might expect the same reactive practices, informational and disciplinary mechanisms, and processes of convergence in web newsrooms as in the case of law schools.

The Question of Variation

As we saw, existing sociological work primarily emphasizes homogeneity and convergence when studying the effects of numbers on organizations and fields. Scholars would agree that variation and divergence take place, but these are not the focus of most studies of quantification.[3] Yet the adoption of a common metric by distinct actors at different sites does not necessarily mean that their practices are becoming more similar (Zelizer 1994). In fact, there are also good reasons to expect systematic variation, reinterpretation, and heterogeneity when metrics are deployed in the social world. Indeed, these are core research topics in STS. Against technological determinism, STS argues that the meanings given to scientific and technological forms are always open, ambiguous, and negotiated (Pinch and Bijker 1984; Star and Griesemer 1989; Timmermans and Epstein 2010). The STS perspective emphasizes how the uses associated with technological artifacts emerge from

[3] This is more broadly the case in neoinstitutionalist research, which also tends to emphasize the convergence and standardization of organizational forms (Schneiberg and Clemens 2006, pp. 219–20).

the encounter—or "co-construction"—between their technical capabilities and the contextual features of the organization, occupation, or field in which they are deployed (Bechky 2003; Boczkowski 2004*b*; Orlikowski 2007; Leonardi and Barley 2010).

Comparative approaches have proven particularly fruitful in analyzing which features of contexts end up affecting the reception of technological forms (Pinch and Bijker 1984; Knorr Cetina 1999). For instance, in his classic study of the reception of CT scanners in radiology departments, Barley (1986) shows that the same imaging technology led to different outcomes in two hospitals where it was used: one department became more decentralized and horizontal after the technology was introduced, whereas the relationship between radiologists and technicians remained strictly hierarchical at the other one. According to Barley, these differences stemmed from the distinct "scripts" and interactional orders defining the exchanges between radiologists and technicians, themselves shaped by the distinct histories and management traditions of the two hospitals. In conclusion, Barley writes, "identical technologies can occasion similar dynamics and yet lead to different structural outcomes" (p. 105). Thus, technological innovations often lead to processes of both convergence and divergence—two forms of structuring that should be analyzed together.

In its study of contextual effects, however, the STS perspective has remained somewhat silent about the role of macrolevel factors such as national traditions (Prasad 2014). It is therefore helpful to turn to another area of research—namely, transnational studies—to examine what happens when cultural, technological, and organizational forms cross national borders. Existing work on the global circulation of ideas (Lamont 1987; Bourdieu 2002; Molnár 2005) and organizational forms (Westney 1987; Czarniawska and Sevón 2005) shows that their uses and meanings are frequently transformed when they move between countries. A suggestive example is Sallaz's (2012) analysis of convergent "theming" practices in the casino industry in Las Vegas, South Africa, and Native American casinos in California. Casinos in all of these locations adopted the same architectural adornments, but the meanings given to the themes varied widely. For Sallaz, this variation shows that casino themes are signals intended for constituencies within each casino's field, rather than mere absorption of global norms.

What would this look like in the case of metrics? Although there is no comparative research on the topic in spite of repeated calls for it (Espeland and Sauder 2007, p. 34; Stark 2009; Fourcade 2011; Lamont 2012), I argue that we should expect metrics to be put to different uses depending on the mesolevel features of the fields and organizations that adopt them, including their respective degree of professionalization, relation to the state, and role of market pressures. In these respects, American and French journalisms provide particularly striking contrasts.

Mapping the Journalistic Field in the United States and France

To compare journalistic traditions in the United States and France, I rely on the concept of journalistic field (Bourdieu 2005; Benson 2013), which analyzes journalism as a "heteronomous field," or a configuration of objective relations organized around conflicting (e.g., autonomous vs. heteronomous) orders of legitimacy. In this view, the main differences between American and French journalism stem from the respective relationship of the journalistic field with the market and the state, as well as the degree of journalistic professionalization in the two countries.

Journalism in the United States has been characterized since its early stages by a strong marked-based heteronomy and an equally powerful professionalization process. A mass-media market developed from the 1830s onward with the rise of the "penny press" in large cities (Schudson 1978). The professionalization of journalism began in the 1880s, when journalists sought to distinguish their work from less reputable purveyors of information by defining a set of methodological and ethical tenets for themselves—the most important of these being objectivity (Abbott 1988; Schudson 2001). From the start, journalism in the United States developed in conjunction and tension with the strong market pressures that have defined the media industry over the past century and a half, first in the printed press and later in radio, television, and online media (Klinenberg 2007; Krause 2011).

Journalism followed a different path in France. When a mass market for print newspapers emerged in the 1880s, journalism was more of a literary ambition than a profession: journalists were writers first and foremost, deploying their imagination and style in newspapers but aspiring to move on to writing novels or becoming political figures (Ferenczi 1993; Chalaby 1996). Journalism as an occupation with specific rights and duties was legally recognized by the state in 1935, but journalistic practice remained relatively uncodified until the development of journalism schools in the second half of the 20th century (Ruellan 1992). The French state also became a central actor in the media industry after the Second World War: radios and television channels were nationalized at the Liberation, and a wide array of public subsidies for the printed press emerged.

In spite of recent pressures toward globalization and convergence between the two national fields (Lemieux and Schmalzbauer 2000; Benson and Saguy 2005; Christin 2016), these distinct trajectories continue to shape U.S. and French journalism. For instance, in France, the state monopoly on radio and television ended in the 1980s, but state aid still accounts for between 10% and 15% of press revenues on average, which is not the case in the United States (Benson 2013). Market pressures on the press remain stronger in the United States compared to France. Thus, U.S. newspapers derive a significantly higher percentage of their total revenues from advertising than do

French newspapers, making them more dependent on business cycles. The role of publicly owned firms is also more important in the United States: "Big Media" companies routinely earned double-digit profits margins until the late 1990s, whereas French newspapers' owners are typically content when the publication breaks even. Finally, journalistic styles remain different in the two countries: American journalism is more sensationalistic and based on personal narratives than French journalism, which is more abstract and often openly politicized (Hallin and Mancini 2004; Benson 2013).

To summarize, marked professionalization and strong market-based heteronomy remain constitutive features of the American journalistic field, whereas the French journalistic field is still weakly professionalized, more autonomous with respect to market forces, and geared toward a civic logic. Hence, one might expect enduring differences in the reception and uses of traffic numbers in U.S. and French web newsrooms. The direction that such differences might take, however, is hard to predict. Since French journalism is more protected from market pressures than American journalism, French journalists might be more critical of—or at least indifferent to—traffic numbers compared to their American counterparts. Yet if we were to focus on relative level of professionalization in the two countries, we should instead expect French journalists to be more vulnerable than American journalists to the growing influence of traffic numbers, since they do not have the same professional buffers protecting them against this new form of commercial interference. As the rest of this article shows, both sets of expectations in fact end up shaping newsroom dynamics, although in paradoxical ways.

METHODS AND DATA

This section introduces the ethnographic material serving as the basis for this article: observations of the offices of TheNotebook.com in New York and LaPlace.com in Paris (the names of the organizations and individuals have been changed) complemented by semistructured interviews with current and former employees of the two websites.

Most online publications are fairly secretive about their craft: owners and editors fear that external observers will steal their formulas for maximizing the visibility of their content on Google, Facebook, and Twitter. They are also adamant about protecting the "culture" of their newsroom, which they believe contributes in a crucial way to the alchemy of the publication's success. Hence, it took between six months and two years to receive permission to conduct observations in the newsrooms studied in this project.[4] I first received access to the French newsroom and began conducting observations

[4] This comparison of LaPlace and TheNotebook is part of a larger project for which I studied five news websites in the United States and France. All translations are mine.

and interviews at LaPlace, in northeast Paris, at least two days per week between January and March 2012. During my days of observation, I "shadowed" web journalists in their daily work for periods ranging from one to five hours for each writer. I sat at their desks, observed what they were doing on their computers, and asked them questions about their work. I attended editorial meetings and took notes on interactions I witnessed in the newsroom. In parallel, I conducted 33 recorded interviews with staffers, editors, freelancers, and former employees of LaPlace. I went back to LaPlace and conducted additional observations, one day per week, in April–May 2013. I reinterviewed six journalists during that time.

I conducted fieldwork at TheNotebook in New York City in April–May 2012, September–October 2012, and February–March 2013. I obtained permission to spend a week of observation at TheNotebook's office, which I divided in two sequences of observation, one in September 2012, the other one in February 2013. During these days of observation, I was able to sit at the desks of various staffers, ask them questions about their work during the time that they were working, and attend editorial meetings. I conducted 28 recorded interviews with journalists, editors, external contributors, and former employees of TheNotebook during these three periods. Many of these interviews took place at the office. Although this was not part of the "official" period of observation, I was usually able to stay for a couple of hours in the newsroom after the interviews and sit with interviewees at their desk, thus gathering additional data. I reinterviewed three journalists after the end of the observations.

I tried to maximize variation when choosing my periods of observations and the people I interviewed. I varied the days of observations and alternated between busy news days (typically the beginning of the week) and slower days. Some of my observations took place during presidential campaigns in the two countries; others took place after the presidential elections had occurred. Within each organization, I strove to reach empirical saturation by contacting as many staff writers, editors, and managers as possible. In parallel, I followed the online activity of journalists and editors, from their Twitter "clashes" to responses to readers' comments, posts on blogs, collective e-mails, and participation in group chats when I was given access. By paying close attention to the triangulation of in-person and online data about the sites and people studied, this project draws on the methods of "digital" or "networked" ethnography (Burrell 2009; Coleman 2010), adapting them to a cross-national research design.

In terms of sampling, I consciously decided to study organizations that could be expected to converge significantly. This was done first by selecting two news websites with similar features and positions in the journalistic field: TheNotebook and LaPlace were among the first online-only publications in their respective countries; they both identify as "web magazines" with a strong editorial identity and won multiple journalistic awards for their coverage; they are both owned by larger companies and got their revenues from advertising. As of 2014, when I finished my fieldwork, both were unprofitable.

PROCESSES OF CONVERGENCE: A TALE OF TWO WEBSITES

TheNotebook, an "Old New Media" Site in a Competitive Market

TheNotebook was founded in the mid-1990s by a prominent print journalist, under the patronage of a leading technology company that was then investing in several media projects. Except for a brief period in the late 1990s when TheNotebook attempted to make its readers pay to access content by creating a subscription system, the site does not charge for access, instead relying on advertising as its main source of revenue. In 2004, TheNotebook was acquired by a large media group, called here Newspapers Inc., which owned several major print and online publications. In 2012, the website attracted about 10 million unique visitors per month. During my fieldwork, TheNotebook had not reached financial equilibrium but was close to making a profit, according to its editors. The editorial team was composed of 46 employees (including 10 editors), 13 regular contract workers, and many more occasional freelancers. The marketing department, not included in this count, was shared with Newspapers Inc.

TheNotebook offers analysis and commentary about politics, news, business, technology, and culture. The editorial line of the web magazine consists of a witty and conversational take on current events. According to the editor in chief, Sam, TheNotebook's writers have an innovative writing style: "TheNotebook's competitive advantage in the world is a quality advantage. When you get to TheNotebook, the things you see will be smarter, funnier, more provocative than what you get elsewhere. Our advantage is that we are, like, smartypants."

Many critics and journalists call TheNotebook an example of "old new media": it has survived for about 20 years, an impressive life span in the online world. In the mid-1990s, when the website started, online competition was relatively scarce. Instead, TheNotebook, which was staffed and directed by print journalists, sought to compete with prestigious print magazines and was still strongly influenced by print routines. Over time, however, online competition increased. The collapse of the dot-com bubble in 2000–2001 cut digital advertising, making it harder to reach financial equilibrium with a business model based only on advertising revenues. In the mid-2000s, the emergence of news aggregators—websites drawing extensively on other publications' content—with aggressive technological and commercial strategies further increased competition for traffic and advertising revenues.

TheNotebook adapted to this new situation in two main ways. First, it dramatically expanded the amount of content it published, tripling the number of articles posted on the website. This was achieved through editorial partnerships (e.g., contracts with organizations who agree to let TheNotebook publish their content for little money in exchange for exposure) and by hiring productive young writers who were able and willing to publish on a more frequent basis. This acceleration in the pace and amount of publication went hand in hand with the multiplication of what were internally called "blog posts," or pieces that are shorter and less closely edited than regular articles. TheNotebook also adapted to the new rules of the digital game by investing heavily in techniques that help increase traffic, mostly search engine optimization (SEO, or the art of appearing at the top of the results provided by Google and other search engines for a given query). The company hired an SEO specialist who organized regular training sessions with TheNotebook's staffers in order to maximize their ranking on search engines and visibility on social media platforms. Such techniques are now routinely used in the New York newsroom.

LaPlace, a Conscious Imitator of TheNotebook

On the other side of the Atlantic, LaPlace was created in Paris in the mid-2000s. The founders, several journalists formerly employed by a leading national newspaper, provided most of the initial capital but relied from the beginning on external investors. In 2011, the website was still not profitable. The founders decided to sell LaPlace to a larger media group, LeGroupeMag, a midsized media company created by a left-leaning investor who after making his fortune in another business ran it like a nonprofit foundation. In 2013, LaPlace attracted slightly more than 2 million unique visitors each month. The organization had 25 employees, including 15 journalists; the marketing department was shared with LeGroupeMag. Three of the founders still worked at LaPlace after the sale, as editor in chief, president, and CEO.

From the start, LaPlace explicitly imitated the editorial line of TheNotebook. Two of the founders of LaPlace had been foreign correspondents in the United States in the early 2000s. During their years abroad, they avidly followed English-language news websites. When they returned to Paris, in the mid-2000s, the journalists tried to replicate and improve on the innovations they had witnessed in the United States, with TheNotebook as an explicit source of inspiration. During the first year of its existence, LaPlace thus borrowed several features from TheNotebook: its witty editorial style; the cultivation of participation by readers, who were active commenters during the early years of the New York website; and the replication of specific editorial formats, such as a column dedicated to the simple explanations of complicated economic phenomena. Between 2007 and 2009, an editorial partnership was even created between the two sites. The French publication obtained permission to translate articles from TheNotebook and published more than 50 articles from the U.S. site over that period.

During my fieldwork, most staffers and editors in Paris still acknowledged their feelings of affinity with TheNotebook. Yet LaPlace also rapidly developed its own editorial line, which revolved around a liberal, left-leaning stance, as well as a participatory approach. On the political side, the website gained renown for several scoops implicating Nicolas Sarkozy, the former conservative French president. On the participatory side, LaPlace featured not only the work of journalists but also of experts, bloggers, and Internet users. In editorial terms, LaPlace primarily covers politics, news, culture, technology, and social issues.

Just as TheNotebook evolved, LaPlace's identity underwent significant changes over time. The French website had started as an artisanal, quasi-countercultural digital project (Turner 2006). In 2007, the four founders and a handful of journalists met in the apartment—more accurately, the kitchen—of one of the founders. Most of the people who worked at LaPlace during these first years remember a time of experimentation: they felt that they were changing journalism in a meaningful way; they worked long hours with little structure, no editorial meetings, and little or no money. At the personal level, strong social ties existed within the team: romantic ties, friendships, and relations of deep admiration for the founders, often described as "gurus."

Yet this experimental euphoria did not last forever. After 2008, LaPlace needed more revenue to reassure external shareholders and later LeGroupeMag. Competition increased as other news sites became successful, threatening LaPlace's market share. Among the different initiatives to grow and increase revenue, the most important was the search for traffic, which took several guises. As with what happened at TheNotebook, a first solution was to develop partnerships and rely on more bloggers to provide content for free. The editors also tried to increase the pace of publication and amount of content posted on the website: as at TheNotebook, staffers were encouraged to cover breaking news immediately with short, witty, lightly edited blog posts. Finally, similar to TheNotebook, the editors and staffers at LaPlace began paying more attention to technical means that would increase traffic and SEO. The team took training programs to become more familiar with SEO and social media techniques. Although LaPlace did not have a full-time SEO expert, the two copy editors in charge of posting articles online followed the same recipes as at TheNotebook.

Acquiring Web Analytics Software Programs

In their similar quest to increase their traffic numbers, and at about the same time, TheNotebook and LaPlace eventually turned to the same innovation to track the behavior and preferences of their online readers: analytics software programs. In New York, TheNotebook's marketing department first started to rely on analytics in the late 1990s. The site began using Google Analytics as early as 2005, but it was only after the promotion in 2008 of a new editor in chief that the newsroom started relying heavily on real-time analytics. TheNotebook licensed Chartbeat at that point, while another in-house program was developed in parallel. According to Sam, the new editor in chief and former print journalist, this careful attention to web metrics was one of his main accomplishments as editor in chief: "We're being much more conscious about data and using data. The first 10 years that TheNotebook existed, we didn't really think very much about traffic in an explicit way, people were always very scared of it. So we really pushed on that."

Similar evolutions took place at LaPlace. At first, the French website solely used Google Analytics. In 2009, the editors licensed Chartbeat. Gael, LaPlace's social media editor who is also partly in charge of traffic, recalls how it happened: "[Our web developer] was the one who found out about Chartbeat. Beforehand, we were making do. But we're not as sophisticated as most American newsrooms; here it's less precise."

This parallel acquisition and use of Google Analytics and later Chartbeat at TheNotebook and LaPlace epitomized the broader pressures toward convergence experienced by the two sites (see table 1). Some of these pressures were built into the design of this study: for instance, the two websites have similar characteristics and occupy comparable positions in their respective fields; the French website also explicitly imitated its American counterpart from the start. In addition, similar evolutions took place over time: both at TheNotebook and LaPlace, traffic became a central priority after 2008, when the two websites started using Chartbeat.

TABLE 1
TheNotebook and LaPlace

Structural Similarity	Built-In Convergence	Similar Evolution
Created by print journalists	LaPlace consciously imitated TheNotebook from the start	Traffic became a high priority in 2008–9
Focus on news, politics, culture, and technology	Editorial partnership between 2007 and 2009	Both organizations started using Chartbeat in 2009
Award-winning publications		
Liberal editorial line and witty writing style		
Income from online advertising		
Small organizations		
Owned by larger media corporations		
Not profitable as of 2014		

THE EDITORS' RECEPTION OF INTERNET METRICS

The acquisition of the same analytics tools, however, does not necessarily entail that the two teams use and interpret audience metrics in similar ways. This section compares how editors make sense of web analytics at the New York and Parisian websites. In one place, trust in numbers (Porter 1995) is the order of the day, whereas ambivalence and conflicted feelings reign in the other.

Trust in Numbers at TheNotebook

At TheNotebook, most editors consider web metrics to be reliable, unproblematic indicators that are helpful for guiding editorial and managerial decisions. An interaction with Sam, the editor in chief, illustrates this approach:

> Sam: But the fact is . . . that what we see in our data is that the more we publish, the more readers we get.
>
> AC: Where do you get this information?
>
> Sam: From different places. Here, I'll just show you [*he opens an in-house software program showing traffic trends over time*]. . . . If you look here. . . . This is how much we publish. There is almost a direct link with traffic. . . . So we're trying to publish more, because more gets us more. All the evidence that we have from our own data suggests that, the more we publish, the more readers we get.

When asked about his publication strategy, Sam explains the correlation (more content equals more traffic) that he gathered from TheNotebook's "data," which, in his own words, should be understood as a "fact" or even a piece of "evidence." Sam then makes editorial decisions based on this evidence, implied by the coordinating conjunction "so" ("So we're trying to publish more, because more gets us more"). In the face of radical uncertainty about the determinants of online popularity, Sam protects himself from external criticism by justifying his editorial decisions as based on "objective" criteria (Porter 1995).

Similarly, editors at TheNotebook who used to be "scared of traffic" now routinely rely on web metrics to make editorial decisions, either to better understand what is "wrong" with an article or to boost the popularity of a piece that is already working well. For instance, Emma, a section editor, explains: "I do not diminish the importance of numbers. That's not all that matters . . . or we would only be doing cat videos [*laughs*]. But journalism is a marketplace. If no one reads your articles it's that there is something wrong, the packaging is wrong or the article is not good."

The use of analytics is now highly technical in the New York newsroom: it involves mixing information from different programs to build new indicators. In addition, traffic numbers are used to justify cutting or dropping specific articles or even entire sections. For example, TheNotebook cut its international coverage in 2011 when one of the senior writers in charge of international news was fired. Tom, the website's home page editor, commented on this decision: "It's true that we scaled back our international coverage. . . . We didn't have the resources, and there wasn't enough interest among our readers." In this case, the preferences of the readers were cited as a reliable criterion to cut the international section—or at least to justify it post hoc.

Top editors at TheNotebook also rely on Internet metrics in their management of the staff: they openly ask staffers to help them increase the website's traffic. As Sam describes: "We made a decision here to be very frank with our writers about what our business challenges were, about what we would do on the business side. We just say, 'Here are the needs that we have, we need to prove to the advertisers that we are a sufficiently large site, we need to get traffic, how do we do that, what can you do to help us?' And my sense is that people have been incredibly eager to do that." In fact, the editors developed an array of strategies to make web metrics omnipresent in the newsroom. Reports are regularly sent to all editors and staffers with a ranking of the top 10 "most read" and "most shared" articles for the day or month. Meetings with the entire staff also gather ideas about the best ways to use different technologies at TheNotebook in order to improve the website and attract more readers. The management even briefly imitated a rival New York website and tried to implement a similar performance-based compensation system, in which bonuses would be distributed to editors depending on their traffic numbers. Noah, a former editor, recalls

> You know this David Mamet movie in which a corporate guy is coming to a company and says: "Next week you're going to have to make as many sales as possible, the guy who makes the most sales is going to have a new car, and the next one is going to have steak knives and everyone else is fired." . . . At TheNotebook, they said that there were going to break out traffic numbers by section, and they had meetings with everyone, and they said: "Here is what your numbers are all like, your goal is 50% by next year." And I really got the sense that, well, if you don't make your numbers, you're in trouble.

This measure was not implemented for very long at TheNotebook, however: it required a degree of monitoring that was beyond the capabilities of the management team, according to several editors, and was abandoned after a year.

Ambivalence at LaPlace

In comparison, LaPlace's editors have a more conflicted relationship with traffic numbers. In contrast to TheNotebook, where editors spoke of the "facts" and "evidence" provided by Internet metrics, editors at the Parisian website are more reluctant to use Chartbeat. As Philippe, the editor in chief, explains: "I don't follow Chartbeat much. . . . I try not to look at it. When you look at Chartbeat all the time, you make choices that might not be the best ones for the identity of the media. . . . If we only cared about the number of clicks, about Chartbeat, it would be simple: we would only write about celebrities. Celebrities . . . it always works. But that's not the kind of credibility we're looking for. In the long run, when it gets too trashy, people move somewhere else."

Yet this ambivalence is not universal among LaPlace's editors. Marina, a managing editor who arrived at LaPlace in 2010 after a career at women's magazines and print newspapers, does not share Philippe's distrust of Chartbeat. In her words: "I'm a Chartbeat addict! I look at Chartbeat all the time. When I arrive in the morning, I start my computer, and the three screens that I open are LaPlace, Chartbeat, and Gmail. I see immediately how things are going. . . . I need to feel what the internet users are reading, what is going on in France and in the world and with our readers. Chartbeat is a tool that gives you the possibility to feel that." Marina's understanding of analytics is nonetheless different from that of TheNotebook's editors. She does not describe Chartbeat as a "signal" providing "evidence" about the content of the website. Her liking for Chartbeat is more impressionistic: it is a useful tool to get the pulse of a mass of readers, to "feel" the public of the website. Indeed, Marina also has doubts about the relevance of clicks as a measure of her professional value as an editor. She narrates how her confusion grows once the excitement caused by the frantic rhythm of online traffic wears down: "When you start, you get super excited, you get a lot of comments and a lot of clicks on an article and you think, 'Wow! It really worked well!' But later you start thinking, 'Maybe it wasn't that good, maybe it wasn't that important.' "

At LaPlace, traffic numbers do matter in making editorial decisions, but only to a limited extent. Similar to the situation at TheNotebook, editors at LaPlace rely on analytics when deciding which articles to promote: those that are doing well are displayed on top of the home page, whereas articles that are attracting fewer readers than expected are downgraded on the website. There is a subtle equilibrium to be reached, at LaPlace and at TheNotebook: on the one hand, headlines have to attract as much traffic as possible; on the other hand, they have to be representative of the editorial line of the publication. Interestingly, LaPlace and TheNotebook rely on the same unwritten rule: articles about sex—which tend to be highly popular—are not posted on top of the home page but are often placed in the second most visible location.

LaPlace's editors (but not TheNotebook's) use strong moral terms to characterize this fragile equilibrium, drawing on metaphors of "hostile worlds" (Zelizer 2005) to describe the uneasy coexistence between traffic imperatives and editorial concerns. They often develop analogies with prostitution, calling their popular articles "whorish pieces" and repeatedly asserting that they refuse to post "degrading" articles. Editors at LaPlace also steadfastly refuse to cut articles and sections that are not successful. On the contrary, they understand it as their duty to provide important news about technical or demanding topics. As Marina, the managing editor, explains: "The headline . . . If it's something about Syria, well, our readers don't care about Syria, there will be only 4,000, 5,000 clicks, which is not a lot for the headline, but we'll still do it. . . . Some pieces are not read a lot online but they're super important on the website." The editors see it as their role to post articles that may not be popular but provide "credibility" to the website. In contrast to TheNotebook, where the international section was dismantled, editors at LaPlace continue to post articles about international news, although such articles attract little traffic.

Another essential difference between TheNotebook and LaPlace regards the use of metrics as a management tool. LaPlace's editors and managers do not send reports with rankings of the most popular articles or moot the possibility of performance-based bonuses. On the contrary, they often try to cheer up staffers disappointed by their articles' lack of popularity. For example, Marina said this about a journalist's pieces in the culture section: "The papers that she writes about culture, graphic novels, etc. always get 5,000 clicks, but we really want to develop that, we're supporting her. Sometimes she's a bit discouraged, she works for four days on something and she only gets 4,000 clicks. . . . But I tell her, listen, you're building a community, it's something that we value a lot."

Hence, editors at TheNotebook and LaPlace both rely on web analytics to make minor editorial decisions, but these decisions also have limits, such as the editors' refusal to feature articles about sex as the main headline. Editors at TheNotebook profess greater trust in web metrics, cutting entire sections that were not popular enough and relying on analytics as a management tool. In contrast, editors at LaPlace are more conflicted and condemn traffic maximization techniques, using strongly moralized language when criticizing the dominance of analytics over editorial decisions.

THE PARADOXICAL RECEPTION OF INTERNET METRICS AMONG STAFF JOURNALISTS

Given the differences in how editors use web metrics at TheNotebook and LaPlace, how do staffers make sense of traffic numbers in each organization? One might expect that each staff's reaction would be in line with the position of the editors: trust in numbers at TheNotebook and ambivalence at LaPlace. Instead, TheNotebook's writers do not seem to take traffic numbers to heart, instead interpreting metrics as a technical game that does not strongly affect their professional identity. Conversely, LaPlace's writers fixate on traffic numbers, which are ubiquitous in the French newsroom.

Metrics as a Technical Game

Staffers at TheNotebook adopt a distanced attitude toward Internet metrics generally and toward their own traffic numbers more specifically, often asserting that they pay little attention to the number of page views for their articles. For example, Martin, a staff writer specializing in economic topics, explains that he does not check his traffic numbers since these numbers are not directly related to the quality of his articles: "I try not to look at traffic too much . . . because at the end of the day it doesn't depend on me but on the editors, it depends on where my posts are put on the website." Sean, who also works for TheNotebook as a culture and travel writer, confirms this attitude: "I have access to traffic numbers. . . . They keep sending me links where I can log on and see all that stuff. In great detail [*laughs*]! I just don't bother. It's not worth it to me. . . . I certainly prefer not to have to pay attention to that stuff at all and do good work."

This attitude was widespread among TheNotebook's journalists, who often declared that they did not systematically check their traffic numbers despite repeatedly being sent links and passwords by the editors. This was also made clear during my observations at TheNotebook. With the exception of the managing editor, the home page editor, and the social media editor, who all have separate offices, staffers did not check traffic numbers in the open-space section of the office while I was there. Staffers spent a lot of time on TheNotebook's home page, the content management system, search engines, e-mail, instant messaging, and social media, but they did not open Chartbeat or the in-house traffic-measurement program, although they had access to them.

This does not mean, however, that TheNotebook's writers were totally unaware of traffic numbers. In spite of what journalists asserted, one should keep the caveats about observer effects in mind.[5] Indeed, I realized that the journalists usually had a general sense of what their numbers were. As we saw in the previous section, they receive numerous e-mails every week about traffic. They also usually know whether they have one of the "top ten" most visited articles. Yet they seem to understand metrics as a technical game, one that editors must master but without significant consequences for the journalists' own professional identity. For example, several writers expressed similar

[5] Not only can talk be "cheap," as Jerolmack and Khan (2014) remind us, but ethnographic observations can also be deceptive: my presence in the newsroom may have influenced the journalists' presentation of themselves.

criticisms of the two main strategies developed by the editors at TheNotebook to maximize traffic numbers: pagination (a trick by which articles are divided into two or three pages, automatically doubling or tripling the number of clicks counted compared to a single-page article) and slideshows (each image counts as a click, so a slideshow with 10 images receives 10 clicks if the reader views all the images). As Jane, a staff writer, told me: "When TheNotebook started publishing slideshows, they were doing this fairly unique thing, they were essays with images that were supposed to advance some kind of argument. And then we moved to the same model that other websites have, where it's just about traffic. There is no real text, only captions. It's just that . . . You get more clicks. I mean, it's cheating."

Staffers disapprove of these strategies but also understand the pressures faced by the editors to increase traffic. For example, Jane acknowledges that editors were constrained and only "doing their best to make the publication survive." This sentiment, in which editors are simply conforming to their professional role when handling traffic numbers, is confirmed by Sean, who was mentioned above: "Editors . . . It's part of their job to know that stuff, to really understand SEO and make good SEO lines, to understand what kinds of stories are going to do well and what kind probably aren't. . . . My editor, all day she's on Omniture, Chartbeat, whatever this is, she's looking at that. But it's not my job to look at that stuff. My job is just to hand them my copy and hope that it's good."

In sum, the staff at TheNotebook does not seem strongly affected by traffic numbers, whether high or low. They report that it is pleasant to see one's articles in the "most read" rankings, but this form of success does not appear to have a deep impact on their professional identity. They know about the strategies used by editors to optimize traffic numbers and criticize these tricks when they compromise the editorial standards of the publication. Nonetheless, they also understand that editors are forced to make such trade-offs, thus drawing strong boundaries between the roles of editors and writers.

Traffic Numbers as a Marker of Professional Value

The situation is quite different at LaPlace. At first glance, the Parisian staffers seem cynical about traffic. Like their editors, writers rely on a moralizing vocabulary when analyzing the types of topics that attract the most page views. For example, during a cigarette break in front of the office with two journalists, I asked what kinds of articles were usually chosen as headlines for the website. They replied: "A headline piece . . . well, when you have some sex, or Sarkozy, or a touch of racism, it works! [*they both laugh*]." Other staffers confirmed these views: "We know the recipes to get more traffic . . . kittens and sex, obviously!"

In spite of these distancing comments, web analytics and the subject of traffic are in fact ubiquitous in the French newsroom, to a much greater extent than at TheNotebook. First, traffic is a constant topic of conversation at LaPlace. Take the case of editorial meetings, during which staffers, writers, and interns pitch their ideas for the upcoming week in front of the editors and the rest of the team. During my days of observation, I noticed that traffic concerns were an essential component of LaPlace's editorial meetings; expressions such as "this is a one-million click topic!" were frequently heard. Chartbeat is also omnipresent in the open-space portion of the office. When I was spending time in the newsroom, I realized that most staffers and editors kept a window open on their computer screens to view Chartbeat: each time that an article was posted, the writer and editors would scrutinize how the piece was doing in terms of traffic during the first minutes after its publication. The staff writers would often joke about it, pretending to be too scared to open Chartbeat or on the contrary mimicking visible signs of addiction when checking their numbers.

Thus, journalists at LaPlace are highly conscious of the number of visits that their respective articles attract. They also describe how traffic numbers affect their emotional states. For instance, Louise, a staff writer on economic issues, told me: "It's hard not to look at the number of clicks. I don't think that I choose my topics based on it, but I look at it and it makes me happy. It's a stupid reward: when you see that a piece is working well, you're happy, it's like a reflex." Similarly, Agnès, who writes in the culture section, describes her feeling of anxiety and doom when her numbers are not good: "When you have an important topic, a topic that matters . . . and you get 2,000 clicks . . . then you're really mortified. So okay, you know your way around, you know that's the way it works . . . but you have a ghost whispering in your ear, 'not cool.' On the contrary, it always makes me feel much better when I post an article online and it gets 40,000 clicks. Then it's cool. So then you realize that it's important because you're very happy when your paper has a large audience."

QUANTIFICATION, ORGANIZATIONAL CULTURES, AND JOURNALISTIC FIELDS

The previous sections document counterintuitive findings. First, I find strong pressures toward convergence between LaPlace and TheNotebook: in both places, the chase for clicks became a more prominent imperative after 2008, when the two sites licensed Chartbeat. As in the case of law schools analyzed by Espeland and Sauder (2016), web analytics brought with them similar reactive practices on both sides of the Atlantic, here, the same traffic-related expertise and standardized editorial strategies. As the quantification-as-information perspective would predict, metrics thus created new forms of knowledge and led to the development of converging practices between TheNotebook and LaPlace. Yet these pressures toward convergence did not prevent the emergence of divergent interpretations.

Indeed, a closer look at the uses and meanings assigned to traffic numbers reveals deep and paradoxical differences between the two newsrooms. Editors at TheNotebook appear to trust and use web metrics to make durable editorial and managerial decisions, whereas editors at LaPlace are more critical of metrics and use them to a lesser extent, a finding consistent with the stronger role of commercial forces and market-based heteronomy in journalism in the United States compared to France. At the same time, staff writers at LaPlace fixate on traffic to a much higher extent than staffers at TheNotebook, who consider traffic more as a technical game. This in turn is compatible with the stronger professionalization of U.S. journalists compared to their French counterparts: American journalists are able to draw on professional definitions of journalistic value as a buffering strategy against these new numerical measures, whereas French journalists do not have such a strong professional identity readily available.

In other words, my analysis shows that even within broader movements of convergence, the uses and meanings of web metrics vary depending on their institutional context. Contrary to the expectations of the quantification-as-discipline perspective, I find that metrics may well have a disciplining effect in one site and not another. Although there is widespread anxiety about traffic numbers at LaPlace, this is not the case at TheNotebook. That said, a puzzle remains: how can U.S. editors be more attuned to traffic concerns than French editors, while U.S. journalists pay less attention to traffic numbers than their French counterparts? Before addressing this question, a short detour through the literature on organizational cultures is needed to make sense of the empirical findings from TheNotebook and LaPlace.

Organizational Cultures between Bureaucratic and Disciplinary Power

Research in organizational sociology generally distinguishes between two recurrent ideal types of organizational cultures. The first, "bureaucratic" type of organization relies on clear hierarchies, centralized power, strict and formal rules, limited autonomy given to individuals, impersonality, and clear and visible sanctions when rules are infringed (Gouldner 1954; Etzioni 1961; Weber 1978; Burawoy 1979). The second kind of organizational culture, often labeled "hegemonic" or "disciplinary," has fuzzy rules, no apparent hierarchy, and a capacity for giving greater autonomy to individuals. In this more informal environment, rules and sanctions are not implemented by a centralized power; instead, they are internalized by each individual (Sewell 1998; Kunda 2006). Quantification, as we saw earlier, is typically associated with the second type of organizational culture: numbers are often characterized as part of disciplinary control (Foucault 1977; Porter 1995; Sauder and Espeland 2009), which is neither centralized nor visible but works instead from a distance and through "capillarity," in diffuse, constant, and meticulous ways.

Yet it remains an open question whether quantification is always disciplinary rather than bureaucratic in character. Depending on the organizational setting, the nature of the relationship between managers and employees, and the system of rewards and penalties that managers put in place, metrics may well be part of either disciplinary or bureaucratic power. In fact, the uses of audience metrics at TheNotebook and LaPlace—and more broadly the organizational cultures at the two websites—reveal precisely such a contrast (see table 2).

Table 2 shows that quantification at TheNotebook seems to operate as a form of bureaucratic power: editors rely extensively on web metrics to make editorial decisions and manage their staff. These direct pressures are met with indifference and disdain on the part of the staffers, who do not feel threatened by the metrics and engage instead in buffering strategies, criticizing how editors "cheat" when they play the numbers game. At LaPlace, in contrast, editors manifest ambivalent attitudes toward traffic numbers: they assert that traffic is a poor criterion for making decisions but also pay constant attention to web analytics. The same ambivalence characterizes LaPlace's staffers, who in spite of their critical comments fixate on metrics and express feelings of anxiety when their numbers are bad. Hence, at LaPlace, quantification resembles discipline inasmuch as it is individualized, internalized, and expressed in emotional terms.

Going a step further, we can now address why we see these different organizational cultures at TheNotebook and LaPlace. The final part of this article returns to the distinct trajectories of the journalistic field in the United States and France, examining how it affects newsroom dynamics in the two countries.

TABLE 2
Quantification as a Bureaucratic or Disciplinary Power

	Bureaucratic Power	Disciplinary Power
Related concepts	Despotic power (Burawoy 1979), utilitarian power (Etzioni 1961)	Hegemonic power (Burawoy 1979), normative power (Etzioni 1961)
Source of power	Centralized, hierarchical	Unclear, diffuse, flat hierarchy
Rules	Yes	No (or vague)
Sanctions and rewards	Material (fines, layoffs) Administered by the centralized authority	Mostly symbolic Internalized and self-administered
Role of metrics	Measures of performance Initiated and controlled by the centralized authority	Unclear (measure of value/status) No central control, individualized relationship to metrics
Example	TheNotebook	LaPlace

American Newsrooms and the "Wall of Separation"

As we saw earlier, strong market pressures and a marked professionalization process have characterized American journalism for the past century and a half (Schudson 1978, 2001). In addition to shaping editorial practices and news content in the United States, this enduring tension between market forces and professional norms resulted over time in the emergence of several organizational forms designed to protect journalistic autonomy.

First, it led to the creation of a physical and symbolic "wall of separation" between editorial and marketing personnel within news organizations. According to many print journalists and managers, commercial concerns should not—and do not—infringe on editorial decisions; for that reason, editorial offices should always be separated from marketing departments. Gans documented the existence of such a distinction in his study of CBS, NBC, *Newsweek*, and *Time* in the 1960s, writing that "editorial and business departments operate independently of each other" (1979, p. 214).

Within editorial departments themselves, an additional division of labor emerged over time between editors and staff writers. In most print newsrooms, staff writers were largely insulated from market pressures. They were expected to focus on their reporting and journalistic writing, whereas top editors not only defined the editorial strategy of the publication but also connected the editorial and commercial departments of the media company. For instance, in his depiction of the *Washington Post* in the 1970s, Padioleau (1985) compares the newsroom to a "sanctuary" where profit concerns do not enter the picture. He introduces Benjamin Bradlee, then executive editor, as having two complementary roles: as an "awe-inspiring figure" who repeatedly protected his "heroic" reporters from outside interference and encouraged them to write only the "best" articles, regardless of time, cost, and risk (pp. 161–79), but also as a manager who checked circulation numbers obsessively, analyzed audience segmentation, and negotiated cost-cutting measures with the newspapers' publishers (pp. 144–49).[6]

French Journalists and the Role of *Intellectuels*

French newspapers did not develop the same organizational forms and division of labor as in the United States. Top editors play a different role in France. In the late 19th century, the most prominent media magnates were not busi-

[6] Along similar lines, noticing the strong division of labor between editors and staffers, Gans compared the organization of print newsrooms to "assembly-lines" that have an "industrial" and even "militaristic" character (1979, pp. 84–93). Gans also noted that top editors were in constant contact with corporate executives, meeting at least once a week with managers and marketing people, which was not the case for the rest of the editorial staff (p. 95).

nessmen but rather public figures who relied on the symbolic capital that they had gathered in the cultural or political world in order to promote their newspaper. For example, during the Dreyfus Affair, it was the future prime minister Georges Clemenceau—the publisher and editor of *L'Aurore*—who came up with the famous headline for Emile Zola's "J'accuse" (Ferenczi 1993, p. 185).

The Dreyfus Affair marked a turning point in the history of journalism in France: journalists and editors became part of the new category of *intellectuels*: men and women of culture (artists, writers, academics, etc.) who became engaged in the public sphere as producers and consumers of political and civic opinions (Charle 1990). This tradition persisted in the second half of the 20th century: French news organizations were more concerned with prestige and intellectual aura than their American counterparts. For example, Padioleau (1985, p. 41) describes *Le Monde* as a "national monument" more public than private, which he contrasts with the economic orientation of the *Washington Post*, where "news is business" (p. 117).

In French newspapers, top editors still typically occupy uneasy positions in which they have to manage the conflicting expectations of their staff writers, often organized into representative bodies (Sociétés de Journalistes), and the demands of the management. Newspaper editors often need to make unpopular decisions, such as opening the newspaper's capital to new investors or firing employees. Their legitimacy within the newsroom, however, typically stems from their journalistic career and intellectual prestige rather than their economic and managerial skills (d'Iribarne 1993). As a result, editors often have a complicated moral standing within French news organizations.[7]

Because of the distinct trajectories of the journalistic field in the two countries, French print newsrooms thus came to differ from U.S. ones in several important ways: there is no official "wall of separation" between commercial and editorial departments, the authority of media managers is based on intellectual legitimacy rather than business skills, and no institutionalized division of labor emerged between editors and journalists.

Reproducing Cultural Difference at a Time of Convergence

It is now possible to return to our web newsrooms with a better understanding of their different organizational dynamics and paradoxical relationships to traffic numbers. The editors at TheNotebook and LaPlace spent the first

[7] Among other examples, take the case of Claude Julien, managing director of *Le Monde* in 1969. In one of Julien's speeches to the Société des Rédacteurs du *Monde*, he pleaded: "I have been speaking as a manager so far, but am I allowed to speak now as a human being who decided a long time ago to become part of the splendid profession that is journalism? My greatest joy is not to cut operating costs. . . . Like you, I am a journalist. Like you, I like to write, and I prefer to read García Márquez . . . rather than analyze accounts" (Padioleau 1985, p. 63).

half of their careers at print publications in New York and Paris. When trying to solve the challenges of creating a new type of publication in a rapidly changing environment, Sam, Philippe, Marina, and their colleagues relied on what they knew best: they drew on the specific set of cognitive categories, justifications, and organizational forms that developed over time in U.S. and French print newsrooms, respectively.

At TheNotebook, editors thus felt responsible for the commercial success of the publication. They paid close attention to traffic numbers, repeatedly asking the journalists for help in achieving their economic objectives. The incorporation of web analytics into this bureaucratic form of management provoked a counterreaction among the staffers, who quietly engaged in passive resistance. Staffers drew on their professional ethos of editorial excellence and independence to shield themselves from the editors' demands. Hence, despite editors' pressure to attract more traffic, staffers in the newsroom remain relatively buffered from market forces: they could be fired if profits are too low, but they do not have to care about metrics in their daily work. Web journalists at TheNotebook are able to adopt a distanced attitude toward metrics, but only because editors bear the responsibility of maximizing traffic numbers.

In contrast, editors at LaPlace define their primary role as publishing "important" pieces, even when they know that such pieces are not popular with the readers, which is consistent with the ambition prevalent among French intellectuals to provide political and cultural guidance to a broad public. Yet LaPlace's editors could not help but realize over time that traffic was essential for the survival of the website, given the renewed pressure from its parent company to get more traffic. Contrary to TheNotebook's editors, however, they refused to change their editorial line or fire employees; they did not shield their staffers from the pressures they were experiencing. The absence of specialization between editors and staffers in turn left both groups ill prepared to handle the strain of having to maximize traffic numbers. Over time, metrics became integrated into a broader—disciplinary—form of anxiety about their individual and collective performance in the competitive market for online news.

TheNotebook and LaPlace have a hybrid position: they were founded by print journalists yet operate online. This provides a rare opportunity to examine the transition from print to online news in the United States and France, revealing how a subset of journalists actively reproduced national differences at a time of technological and economic convergence. Such differences, however, may not be permanent: these distinct organizational dynamics should not be understood as having a strict causal influence shaping the future of online news in the two countries. For instance, it is not clear that the "wall of separation" will survive the digital transition in the United States and elsewhere as the development of "native advertising" (i.e., forms of advertising that mimic actual articles) increasingly blurs the boundary between editorial and commercial concerns in digital news organizations (Carlson 2015).

CONCLUSION

Drawing on the study of traffic numbers and their reception in a U.S. and a French newsroom, this article shows how and why metrics are taken up differently depending on their institutional contexts. TheNotebook and LaPlace reacted in similar ways to the emergence of web analytics, developing standardized editorial strategies and metrics-related expertise in order to maximize traffic. Yet my analysis also reveals important and paradoxical differences in the uses and meanings that editors and journalists assign to traffic numbers: American and French journalists see different things when looking at web analytics. At TheNotebook, editors profess their trust in numbers and rely on metrics to make lasting editorial and managerial decisions, whereas staff writers consider metrics as a technical game easily separable from their professional identity. In contrast, at LaPlace editors and staffers alike are deeply conflicted about traffic numbers. Although they criticize metrics as a manifestation of base market pressures, everyone in the French newsroom fixates on clicks in his or her daily work, turning them into a more ambiguous symbolic object.

This article draws on a mesolevel framework in order to make sense of these differences. I argue that the distinct ways in which metrics are mobilized at TheNotebook and LaPlace—two forms of organizational culture that I respectively analyze as bureaucratic and disciplinary—stem from larger differences in the formation and structure of the U.S. and French journalistic fields. In the United States, a long tradition of tension between market forces and professional norms led to the development of specific roles and organizational forms, including the "wall of separation" and a strict division of labor between editors and journalists. TheNotebook's editors drew on these bureaucratic recipes when managing their newsroom, which staffers countered by engaging in buffering strategies. In contrast, in France, the relative absence of market pressures until recent years, the weaker professionalization of journalism, and the traditional role of editors as *intellectuels* with a civic orientation made LaPlace's editors reluctant to implement profit-oriented policies to secure the survival of the publication. This left everyone in the newsroom unprepared to handle growing market pressures in the form of clicks.

Web analytics and their uses in newsrooms are rapidly changing, with important consequences not only for the kinds of information being offered online but also for the very structure of the digital ecosystem. The current analysis focuses on a specific type of websites—hybrid publications founded and still largely staffed by print journalists. We need to know more about the editorial practices of other publications, from legacy newspapers to news aggregators, content farms, partisan websites, and social media platforms like Facebook and Twitter. "Filter bubble" and "fake news" panics notwithstanding, it remains an open question whether the increased competitiveness of the digital media landscape, together with the expansive reliance of news websites on traffic numbers and social media platforms, actually leads to a marked impoverishment of the content offered on the web. Taking advantage of the massive amounts of data available online, scholars should continue investigating how news production and public opinion are affected by the Internet, in the United States and elsewhere.

Finally, in a period when "data"—"big" or not—is the watchword of the day (boyd and Crawford 2012), it is crucial to analyze what exactly takes place when new algorithms, metrics, and standards emerge. Rationalization, accountability, and transparency are often the stated objectives of the people who introduce metrics, but what happens on the ground often differs from these grand intentions (Scott 1998). Against today's dominant rhetoric of unbound technological change, future research should study how institutional forces as canonical as professional norms, work practices, and organizational dynamics shape the impact of digital technologies on the social world.

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