

Online News Audiences:

The challenges of web metrics

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"I know we have twenty million viewers but I don't know who they are. I don't know what the audience wants, and I don't care"

American journalist, as quoted in Gans (1980)

"Oh, we're writing for the editor, of course.

He's the audience"

British journalist, as quoted in Hetherington (1985)

Imagine the scene. As a new journalist with a burning career ambition, you have long awaited a day when you can make a real impact on the world around you. That day seems to have come when a trusted source gives you a tip about a potentially harmful school policy that has been recently proposed for communities in your patch. The same policy, according to the source, has made devastating impacts on people elsewhere, but these are largely unnoticed in your area. With the editor's endorsement, you spend weeks researching the background, approaching people from different camps and carefully crafting all the compelling facts, figures and views together. Everyone is very pleased with the depth of the ground-breaking investigation. At the end of the day when it is proudly published on your news site, an email from your editor pops up on your computer screen. The message: the exclusive report that you hope to become the blockbuster of the day does not fare well. The evidence: the number of its page views and visitors are too low, even lower than a how-to health feature that takes no more than an hour to write. "Perhaps, we have to be more careful in considering whether to invest in this

kind of stories in the future," the editor gently, and somewhat meagrely, concludes.

Welcome to the emerging journalistic culture of "click thinking". Although totally hypothetical and perhaps a little naïve, the above scenario resembles a growing number of real cases in online journalism, where web metrics – audience-tracking data, such as hits, page views, visitors – are rising to the journalist's autonomy in deciding what is and what is not news. As each and every user's IP address and mouse click can be easily tracked, recorded, aggregated and fed into newsrooms to serve editorial and commercial decisions, journalists are finding it increasingly difficult to sustain their traditional "don't care" attitude to their audiences. In this new world, their power in setting the agenda – through the use of an established, quite esoteric set of professional news values – is no longer exclusive. To play on a classic quote, news is no longer just "what newspapermen make it": it is also what the crowd wants it to be.

Such an enhanced presence of the audience in the newsroom, while bringing some hopes for a better journalism, creates a new set of professional challenges. As the above scenario suggests, using web metrics uncritically to respond to what people want might well lead to a disaster for public life in the long term. What would happen if the hypothetical editor above – and his peers in other newsrooms - decided to cut the kind of content like the potentially harmful policy above? This chapter will discuss this issue in depth, based on a review of the emergence of the "clickthinking" culture and its initial impacts on news and journalism. As will be seen, the professional challenges posed by web metrics, if not calmly addressed, could deepen one of journalism's already critical crises - the dumbing down of news - and bring newsroom tensions and conflicts to a new height. If the raison d'être of journalism is to inform and educate the public, journalists must foster a stronger professional culture that helps them to take confidence and pride in their autonomous news judgement and to resist, where necessary, the sentiment of the crowd.

The emergence of a "click-thinking" journalism culture

As a profession, journalism has been criticised for turning blind eyes to its clients' needs and demands. In most of their venerable history, as the quotes at the outset show, journal-

ists write for an imagined audience of one - the editor - or, at best, of a few: their editor, peer colleagues, friends, family members, relatives and so on The people who read/watch/ listen to the news out there - and who directly or indirectly pay for journalism - are, bluntly speaking, weightless: they have very little voice in the journalist's news decision (Allan, 2010; Green, 1999; Schlesinger, 1987). Audience research has been done frequently and expensively, but more often than not, its results only reach people at managerial levels rather than individual journalists, who simply do not care and "tend to be highly sceptical of claims made on the basis of market research" (Allan, 2010, p. 123). Meanwhile, the minimal direct feedback from the audience - in such forms as letters to editors - is often dismissed as "insane and crazy" crap (Wahl-Jorgensen, 2007) "from cranks, the unstable, the hysterical and the sick" (Gans, 1980).

All this seems to have changed – at least in the online world. Since its inception in the 1990s, the ability to track the move and the mood of audiences has been hailed as one of the great advantages of online journalism. In recent years, this has come to the fore of newsroom cultures and processes and attracted fresh debates among journalism academics and professionals (Anderson, 2010; Boczkowski, 2010; MacGregor, 2007; Macmillan, 2010; Napoli, 2010; Peters, 2010a; Peters, 2010b; Usher, 2010).

You do not need to be an industry insider to see the increasing prevalence of web metrics in journalism. As an online news user, you might have noted this in the many "most viewed", "most read" or "most popular" lists out there. Indeed, it is now hard to find a news site that does not offer some lists of this kind. Behind the scene, the numbers that generate such lists are, in the words of British editors interviewed by MacGregor (2007), watched "pretty obsessively" with "a hawk eye" so that news judgment is made "on the fly" around the clock. It is now an established routine for many editors to begin news meetings with a rundown of audience data. Some are quite prepared to adjust story placement on home pages according to what is "on the chart" and, in doing so, accept to forgo their longheld practice (and prestige) of using story positions as editorial cues to audiences. In some places, including incumbents such as Washington Post, news teams that produce low traffic have been reportedly downsized so that resources can be allocated to more popular content areas. A growing number of newsrooms – e.g. America Online, Bloomberg and Gawker Media – have even started to use web metrics as a basis to pay story royalties and/or calculate staff bonuses. Judicious use of metrics, according to Tim Armstrong, the CEO of AOL, is the key to success for journalism of the future. "We really want to enhance journalism with technology," he said. "We feel like we have a strategic window to invest in quality content" (quoted in MacMillan, 2010).

Such radical changes at the top management, not surprisingly, leave no space for individual journalists to safely ignore and leave audience data to their managers as they would in the "old days". In some newsrooms, emails are sent every day to all staff, with dozens of performance numbers for each and every story published on the day. Some go even further, erecting fancy panels of data and graphics on the walls, so that reporters can "crunch the numbers" in real time and remain atop their individual and collective performance throughout the day. According to Nick Denton, the founder of Gawker, writers are sometimes caught standing before those big boards "like early hominids in front of a monolith" (quoted in Peters, 2010a). Thus, whether they love or loathe metrics, journalists will have to accept a constant exposure to such data in their daily job and to develop a click-driven thinking routine and culture among themselves.

Undergirding this transformation is, in a substantial part, the power of web tracking technologies. For one thing, these technologies make it easy and simple to collect and deliver real-time audience data with a relatively high level of accuracy. Indeed, tracking audience behaviours is not something entirely new: it has been used for decades to generate ratings, the currency of television industries. But the absence of satisfactory measurement methods associated with ratings has been a key reason for the traditional journalist's dismissal of these data and ignorance of their audiences (Schlesinger, 1987). Online, some serious drawbacks of television ratings methods - e.g. the use of unrepresentative panels to extrapolate to general audiences, or the inability of tracking device to distinguish between a turned-on and actually watched TV set – seem to be no longer a problem. Every user's IP address and web use history and every click on a news site can be easily stored in servers and aggregated into overall use patterns. The resulting data – which are often collected internally and/or by third-party tracking firms - are quite natural and reliable.

Online tracking technologies also create more diverse data that can provide much richer insights into audience behaviours. Software such as Thoora, a recently introduced tracking programme specifically for news sites, collects data for more than 100 attributes to assist editorial and commercial decisions. Broadly speaking, these metrics can be classified into two major categories. The first - which can be called internal metrics - consists of data about behaviours before, during and after a specific visit to the site in question. These include a long (and sometimes confusing) list of indicators that can be further divided into two sub-groups:

- Data indicating traffic to/from the site: hits; visits; unique visitors; which geographical areas users are from; which sites are they led to the site from; what time of the day they visit the site; whether they are a new or returning visitors; where they go after the session; and so on.
- Data indicating actual use behaviours (what users do when they are on the site): how many people read/watch/ listen to an item (i.e. how many times a page is viewed); the number of comments a story receives; how many times an item is shared via email, Twitter, Facebook and other social media platforms; most searched keywords; average time spent on the site or a story; and so on.

Needless to say, editors and reporters can gain from these data a sense of whether, and how, a story, a topic, a section or the whole site attracts audience interests and attention. For those on the business side, these data form the currency of the online news industry: they are sold to advertisers, as individual indicators or as composite indices representing overall performance concepts - such as "audience engagement" or "audience growth". Some tracking software can even use real-time data to pin down to the pennies the advertising income that a particular story generates, based on the number of clicks on advertisements on the page.

The second broad group of data - external metrics - in-

volves what is trendy on the web in general. These metrics help journalists to know what topics are likely to attract users and eyeballs and thus what stories might need to be covered on their site. They ultimately serve as a tool for journalists to improve and maximise internal metrics. AOL, for instance, has its own software to keep track of trends on social media – e.g. hot topics on Facebook or buzzes on Twitter – and, based on that, offer "on-demand" stories to users. Meanwhile, the leader on the "big board" at Gawker is a "machine-like person" named Neetzan Zimmerman, whose job is to discover viral topics on the web and produce short posts about those topics for the site (Phelps, 2012). External metrics are also used to guide reporters and sub-editors in producing "search engine-optimised" headlines and stories – i.e. those containing certain trendy keywords that people are likely to use on search sites. For instance, if the data indicate that a person related to a news event is searched frequently on Google, it is better to use his/her name in the headline or somewhere in the top of the story, so that it has a better chance to come up on Google's search results. At TheStreet.com, there is a dedicated "SEO guy" whose job is to do just that: Search Engine Optimisation (Usher, 2010). Many journalism training courses, including those by accreditation bodies like the National Council for the Training of Journalists in the UK, have integrated SEO as a compulsory part of their agenda.

Against the above historical backdrop, such move from gut feelings to systematic metrics in news judgement – or the "rationalisation of audience understanding", as Napoli (2010) calls it – represents quite a dramatic, radical transformation in the way journalists perceive and relate themselves to audiences. For many, this enhanced presence of audiences in the newsroom is a healthy move towards a more caring, more scientific and more democratic journalism than ever before. Nikki Usher (2010) – a former journalist and now an academic – argued that audience tracking "turns journalism from elitism of writing for itself and back to writing what people are actually looking for". In a similar vein, a young US-based British journalist places web metrics third in her ten reasons for online journalism to be better journalism, arguing:

ple are reading our stories, how important those stories are, and who thinks so. Being a successful journalist means paying attention to those numbers and responding to what people want and need, rather than what we think they want and need or – worse – what we think they should want and need." (Henry, 2012)

The issue, however, is not that simple. For if journalists forwent their traditional news judgment to go with whatever people want, journalism could face a further decline in its standards and other critical problems, which is the focus of the next section.

A new race to the bottom?

When Tim Armstrong declared in Business Week that web metrics are a "strategic window (into) quality content" at AOL, he raised more eyebrows than enthusiasm among observers. A reader labelled "AOL's play" as a "new death of journalism" while another called it a dance between the editorial and the commercial, asking: "How long would it take to sweet-write your audience into accepting pandered palaver?" Meanwhile, a media blogger was quoted as saying:

"My fear is that once they start analysing where their traffic comes from and where their dollars come from, they decide maybe journalism should go after Hollywood celebrity and sports figures who are doing dope." (Macmillan, 2010)

These worries are legitimate. Web metrics, internal or external, have the ultimate aim of attracting the largest possible audience attention to news sites. This might sound perfectly desirable: what else can be better for a journalist than having their output reach the largest number of readers? The problem is that the kind of news that can maximise audiences is often the so-called "news you can use" – news that caters to the lowest common denominator of all tastes, addressing the most basic, least sophisticated and least sensitive level of lifestyles and attitudes. In practice, it often means soft news with high entertainment and low information values (McManus, 1992). People want this news in massive numbers partly because they can be

consumed at ease. Meanwhile, hard news about serious public affairs – which is believed to be what people should and need to consume in order to function well in democratic societies – does not always have such wide appeal: it demands, among other things, a serious cognitive effort and a sustained interest in public life that a substantial portion of the audience might not have or feel the need to have.

Evidence of this is not hard to find. In the 19th and early 20th century, the popular press thrived in England with a service philosophy that is aptly captured in the following widely circulated rhyming lines on Fleet Street: "Tickle the public, make 'em grin. The more you tickle, the more you'll win. Teach the public, you'll never get rich. You'll live like a beggar and die in a ditch." Today, tabloids like the Sun and Daily Mail are sold in several millions copies per day in the UK while even its bestselling broadsheet, Daily Telegraph, has a circulation of less than 600,000 (as of writing). A similar trend is happening online: recent research shows that most read/viewed lists on news sites feature mainly trivial, sensational and entertaining stories – i.e. sex, crime, celebrities, "how-to" advice, human interest and the like (Bird, 2010; Boczkowski, 2010). As users are more and more exposed to those lists, this trend is likely to continue in the long term.

The implication of all this is huge. If journalists were to faithfully and uncritically follow the sentiment of the crowd reflected in web metrics, they would have to think about providing people what they want to consume and can consume at ease, rather than what they need to consume and must consume with effort to become informed and self-governed citizens. That would translate into an intensification of an already perennial problem of journalism: the dumbing down of news, or the trend to making the news, in the words of a British journalist, "bright, trite and light" (quoted in Franklin, 1997). In other words, if metrics were to dominate online journalism, they would be likely to stimulate a massive online migration of the many traditional print and TV tabloid practices. These include, among others, "the sensationalisation of news, the abbreviation of news stories, the proliferation of celebrity gossip, and the more intensive visual material such as large photographs and illustrations" (Rowe, 2010, p. 351).

Indeed, a visit to some current popular news sites, such as MTV News and Daily Mail, will reveal how such practic-

es might look online: celebrity stories are given prominent space; stories squeezed to minimal lengths; content chunked into news snippets; audio/video material broken into nuggets; photo slideshows offered intensively for fun; headlines bizarrely worded to match the algorithm of search engines; and so on. Thus, rather than acting as a "strategic window (into) quality content", web metrics might add insult to an already critical injury. A metrics-driven race for the largest possible audience could be further push the news towards self-destruction. It is a "race to the bottom" - to use the words of Phu Van Nguyen (2010), a respected Vietnamese journalist who laments about the recent competition for revenues through sex and sensationalisation in Vietnam's online news media. And if all or most news decisions were guided by metrics, journalism would risk becoming a mere entertainment trade, rather than a profession that should exist primarily to inform, educate and ultimately enlighten people.

It would be naïve – I hasten to add – to think of the future of journalism in terms of such worst scenarios, for reasons that I will discuss later. And it should be noted that soft news is not always a bad thing: it has its social functions and serves certain human needs – such as the need to escape from daily routines, to gossip, or to address other private concerns. [See Nguyen (2012) for an overview of the debate on the function of soft news). But, given journalism's recent dismal past, the risk of its standards and practices being dumbed further down in the wake of web metrics is real and high.

Such risk is even more critical in the context of an online news industry that is still struggling to find a business model for itself. Despite the phenomenal growth in the size and substance of audiences, online journalism finds it hard to convince users to pay for its content. Having been offered for free since its very beginning, online news seems to have been taken for granted as such by users. Meanwhile, according to recent research, online news is yet to convince advertisers, with the majority of online advertising expenditure being allocated to non-news platforms, especially search sites. In that uneven race for advertising and under the pressure to survive, many news sites have had to resort to the traditional weapon: soft news. This trend is particularly strong among multimedia firms that are merged between news and non-news media

providers. These firms, according to Currah (2009, p. 88), opt to maximise their appeal to the attention-scarce online audiences with a "digital windsocks" strategy – i.e. maximising traffic and holding users' attention for as long as possible, which "by default, … favours a softer and more populist orientation to the news agenda".

[It should be noted that from an economic perspective, soft news has another appeal to the industry: it is often much less expensive to produce than hard news. This creates a "perfect combination" for those on the business side: it maximises the output (audience attention) while minimising the production cost at the same time. For a news industry that is still striving for revenues, that combination could serve as a strong motivating force.]

New tensions and conflicts in the chaotic newsroom

The issue is not just about the dumbing down of news. Along with the ubiquitous use of web metrics and the constant urge to compete for the largest audiences will come challenging changes to newswork and newsroom processes. The chaotic and intense newsroom will be even more stressful with the likely rise of new types of tensions and conflicts. Some of these have unpredictable but chilling prospects. If, for instance, the aforementioned metrics-based payment and staff bonus system - which is in essence a newsroom discipline mechanism becomes common, where would it take journalism? The idea of journalists striving and competing for audiences to gain monetary rewards, rather than to fulfil a sense of public duties, is quite scary. But let us hope that this new mechanism would not follow the dark path of incentive systems elsewhere - such as that of the banking industry, where lucrative bonuses encourage many unhealthy and outrageous practices that, in part, led to our current global economic crisis.

While that remains to be seen, many immediate consequences can be expected. At the least, it is certain that occupational stresses will come to a new height and on a more permanent basis. "At a paper, your only real stress point is in the evening when you're actually sitting there on deadline, trying to file," explained Jim VandeHei, the executive editor of <u>Politico.com</u>, in the New York Times. "Now at any point in the day starting at five in the morning, there can be that same

level of intensity and pressure to get something out" (quoted in Peters, 2010a). Thus, young journalists who once dreamed of trotting the globe in pursuit of a story are instead shackled to their computers, where they try to eke out a fresh thought or be first to report even the smallest nugget of news — anything that will impress Google algorithms and draw readers their way (Peters, 2010a).

And whenever key indicators – especially page views, visits and visitors – do not fare well, the newsroom could be taken over by a worrying or even panicking atmosphere, as is exemplified in the following memo to staff at the Philadelphia Inquirer and its Philly.com news site in 2008:

"We're in a summer slump – and we aggressively need to find a way to end it. We will protect our growth in page views! Everybody here should be thinking of "what can I get to Philly.com now" in terms of content. And what can I add to the story that's good for the web. There should be an urgency around the idea of sending stuff to Philly.com" (quoted in Anderson, 2010, p. 560).

Not all journalists would survive such stresses. Already, it has been reported that some journalists at metrics-driven newsrooms quit jobs or even change careers for being unable to stand the franticness and fatigue under the constant pressure of producing news to the chart. At Politico, for instance, roughly a dozen out of 70 reporters and editors left in the first half of 2010 while at Gawker Media, "it is not uncommon for editors to stay on the job for just a year" (Peters, 2010a).

Those who survive would have to live other kind of stresses and distresses, since the ubiquity of metrics is likely to create permanent tensions in news judgement. Research by Anderson (2011) in the US, Boczkowski (2010) in Latin America and MacGregor (2007) in the UK has produced some evidence to suggest that dilemmatic situations like the hypothetical case at the outset of this chapter – where journalists stand between serving people with the news they need and serving them with the news they want – might well become commonplace in a near future. In an ethnographic study at the Philadelphia Inquirer's Philly.com, for instance, one reporter, citing a thoroughly researched story about a local army firm

that "just bombed ... and did terribly" on the site, lamented: You want to throw fear into the heart of journalism professionals? That's a way (quoted in Anderson, 2011, p. 559).

Beyond head counting: journalism professionalism as a panacea

So far, I have been quite negative about the potential impacts of web metrics on journalism and journalists, which is unfair for two reasons. First, it must be noted that web metrics per se are not a negative development. Although an uncritical use of them can be disruptive and might lead to professional and social disasters, a direct, real-time access to such data, by nature, adds an unprecedented, healthy element that can work to the advantage of journalism, both as a profession and as a business. These natural data provide a considerable amount of accurate and reliable information for journalists and news executives to understand certain important aspects of the audience and use that understanding to serve people in a more considered, more scientific manner.

Second, the problems that I have reviewed should be seen as indicators of what might – not will – happen on a large scale in the future. The newsroom is not a no-man land for an excessive reliance on web metrics to conquer without resistance. Research has found that editors and reporters still tend to be adamant and firm on established professional standards and are not that ready to accept and internalise the click-thinking mind-set as some of those mentioned in this chapter (Anderson, 2011, Boczkowski, 2010; MacGregor, 2008; Usher, 2010). For most journalists, their "gut feelings" in deciding what's news, and what ought to be news to the public, have always been essential in making and shaping journalism as an indispensable component of democratic life. That perception is a professional pride that will take to any excessive development of web metrics.

This leads to a broader issue: the crucial role of journalists' professional attitudes in preventing the negatives and promoting the positives of metrics. As you enter the newsroom in a near future, you might find many of your senior colleagues still seeing themselves as members of a trade, rather than a profession. In other words, they see themselves as doing a semi-skilled job for a living, rather than as administering a

specialised, complicated service to humanities. This less serious attitude to the status of journalism is a – if not the – key reason for many of journalism's recent dismal behaviours, including the dumbing down of news discussed earlier. If journalists think of themselves as professionals, they would see themselves in the business of a public service, not a "market service". And it is only with this perception that journalism could function well to inform, educate and enlighten citizens, with the public interest as its overarching value. Without it, journalism would not take for granted that its utmost output is a citizenry that self-governs, not a massive audience that maximizes profits. And that would give amble space for the potential negatives of web metrics to come into play on a large scale.

So, the best panacea for fixing the potential problems of web metrics – and many others in contemporary journalism – is a professional culture that breeds, fosters and protects journalists' autonomy in exercising their specialist knowledge, skills, values and standards. It is a culture in which journalists are encouraged to take confidence and pride in – among other things – their own news judgment and, if necessary, are able to stand up for it against market and management forces.

This is not simply an idealistic professional principle: it is a very practical business issue indeed. It is about a news publication's brand, for editorial judgment is what makes, or does not make, it unique to an audience. People come back and forth a certain news site in part because they trust – or at least expect – that the content on the surface is the outcome of a sound, reliable judgement of what is important and relevant to them. [Here, it should be noted that the audience is not a homogenous set of mere consumers that can then be turned into a soulless commodity to sell to advertisers. The audience that journalists often envision as a monolithic set indeed consists of many audiences, each with a peculiar set of needs, demands, uses and gratifications, which is why we need different types of news outlets.]

Of course, it would be deplorable if journalists continue to apply their traditional dismissal of audience data to web metrics since, as said above, they are helpful for journalism to a certain extent. But we must get the metrics to serve us and not let us "serve" them. Here, it might be worth repeating the words of the former BBC correspondent and politician, Martin Bell, to conclude this chapter:

"It does no harm ... to ask ourselves a simple question: What do we believe in? If it is only making money, then we are clearly in the wrong business because money can deflect, if not corrupt, us. But if we have standards and values and principles, then we should stand by them because they are what we believe in and what sustain us. There is actually a word for it. The word is integrity." (quoted in Barnett, 1998, p. 89).

Challenging Questions

- In journalism, there is an inherent conflict between serving the public and serving the market (McManus, 1992).
 Discuss the nature of this conflict, using the various journalistic challenges of web metrics as a case in point.
- Review the typologies of web metrics in this chapter and discuss how they might be used to improve the quality of journalism.
- To what extent do you think journalism professionalism can help prevent the potential harms and promote the potential benefits of web metrics?

Recommended reading

Allan, Stuart (2010a) (ed.). *The Routledge Companion to News and Journalism.* London: Routledge. [Chapters 4, 6, 18, 32, 33, 36, 37, 38, 39 and 50 are particularly relevant to the issues of news judgement, tabloidization, and news audiences.]

Boczkowski, Pablo (2010). News at Work: Imitation in an Age of Information Abundance. Chicago: University of Chicago Press.

- Domingo, David & Patterson, Chris (2011) (eds.). Making News Online. Second edition. London: Peter Lang.
- McManus, John (1994). Market-Driven Journalism: Let the Citizen Beware? London: Sage.
- Meikle, Graham & Redden, Guy (eds.) (2011). News Online: *Transformations and Continuities.* London: Palgrave.
- Napoli, Phillip (2009). Audience Evaluation: New Technologies and the Transformation of Media Audiences. New York: Columbia University Press.

References

- Allan, Stuart (2010b). News Culture. Third edition. Maidenhead: Open University Press.
- Anderson, CW (2011). "Between creative and quantified audiences: web metrics and changing patterns of newswork in local US newsrooms." *Journalism: Theory, Practice and Criti*cism, 12 (5), pp. 550-566.
- Bird, Elizabeth (2010). "News practices in everyday life: beyond audience response." In Stuart Allan (ed.), The Routledge Companion to News and Journalism, pp. 417-427. London: Routledge.
- Boczkowski, Pablo (2010). News at Work: Imitation in an Age of Information Abundance. Chicago: University of Chicago Press.
- Currah, Andrew (2009). "What's happened to our news?" Research report within the Challenges series of the Reuters Institute for the Study of Journalism.
- Donsbach, Wofgang (2010). "Journalists and their professional identities." In Stuart Allan (ed.), The Routledge Companion to *News and Journalism*, pp. 38-48. London: Routledge.
- Franklin, Bob (1997). Newszak and News Media. London: Hodder Arnold.
- Gans, Herbert (1980). Deciding What's News. New York: Vintage Books.
- Green, Kerry (1999). "How newsroom failures limit readership gain." Australian Studies in Journalism, 8, pp. 18-36.
- Henry, Emily (2012). "Ten reasons why online journalists are better journalists (in theory)." The Online Journalism Review, May 23. Retrieved 23 July 2010, Available at: http://tinyurl. com/6s2ha6p.

- Hetherington, Alastair (1985). *News, Newspapers & Television*. London: Macmillan.
- MacGregor, Phil (2007). "Tracking the online audience." *Journalism Studies*, 8 (2), pp. 280-298.
- Macmillan, Douglas (2010). "AOL moves to build tech newsroom of the future." *Business Week*, February 21. Retrieved 23 July 2012, Available at: http://tinyurl.com/ycpmjt9.
- McManus, John (1992). "Serving the public and serving the market: A conflict of interest?" *Journal of Mass Media Ethics*, 7 (4), pp. 196-208.
- Napoli, Phillip (2009). Audience Evaluation: New Technologies and the Transformation of Media Audiences. New York: Columbia University Press.
- Nguyen, An (2012). "The effect of soft news on public attachment to the news." *Journalism Studies*, 13 (5).
- Nguyen, Phu (2010). "Cuộc đua xuống đáy" (The race to the bottom). *NVP Blog*, March 27. Retrieved 23 July 2010, Available at: http://tinyurl.com/cbyhywj.
- Peters, Jeremy (2010a). "In a world of online news, burnout starts younger." *New York Times*, July 18. Retrieved 23 July 2012, Available at: http://tinyurl.com/cv2sl4n.
- Peters, Jeremy (2010b). "Some newspapers, tracking readers online, shift coverage." *New York Times*, September 5. Retrieved 23 July 2012, Available at: http://tinyurl.com/24crrlp.
- Rowe, David (2010). "Tabloidisation of news." In Stuart Allan (ed.), *The Routledge Companion to News and Journalism*, pp. 350-361. London: Routledge.
- Schlesinger, Philip (1987). *Putting Reality Together*: BBC News. London: Methuen.
- Usher, Nikki (2010). "Why SEO and audience tracking won't kill journalism as we know it." *Nieman Journalism Lab Blog*, September 14. Retrieved 30 August 2012, Available at: http://tinyurl.com/26fbbo9.
- Wahl-Jorgensen, K. (2007). Journalists and the Public: Newsroom Culture, Letters to the Editor, and Democracy. Creskill, NJ: Hampton Press.

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