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Title: Towards Journalism Everywhere : The New Opportunities and Challenges of Real-Time News Streams in Finland

Year: 2018

Version: Published version

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Please cite the original version:

Uskali, T. (2018). Towards Journalism Everywhere : The New Opportunities and Challenges of Real-Time News Streams in Finland. In M. S. Daubs, & V. R. Manzerolle (Eds.), *Mobile and Ubiquitous Media : Critical and International Perspectives* (pp. 237-247). Peter Lang. *Digital Formations*, 116.

Towards Journalism Everywhere

The New Opportunities and Challenges of Real-Time News Streams in Finland

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INTRODUCTION¹

In early May, 2016 the World Wildlife Fund (WWF) set up a web camera on a cliff on the shore of Finland's largest body of fresh water, Lake Saimaa. The foot of the cliff is known to be a good location to see the Saimaa ringed seals, an endangered species which live only in this particular lake system. Few Finns had, prior to this webcast, ever seen a Saimaa ringed seal in the wild.

Most of the time, the live video-feed showed no activity on the rocks at the foot of the cliff. Nevertheless, soon after the webcast started, a Saimaa ringed seal, later called Pullervo, did choose the location as his sunbathing spot. Aside from a couple visits from a female called Siiri, the web-stream was relatively uneventful. However, during the month of May 2016, Finns viewed the Pullervo live-video stream over two million times for an average of 28 minutes (*Helsingin Sanomat* 2016). In sum, the WWF's live-webcasting proved to be a surprisingly popular form of entertainment for the 5.5 million Finns.

Similar live webcasts focusing on wildlife, especially nesting eagles or other big birds, have been available since 2009, when live-mobile-video services such as Bambuser, Livestream, and U-Stream started. The initial offerings were intermittent. Now new actors in the industry, like Animal Planet, regularly produce live webcasts of a variety of animals, from cats and dogs to pandas and penguins. Thus, it may be argued, live animal streams helped to prepare audiences for viewing lengthy, real-time, always-on, always-accessible video streams.

In a similar vein, Nordic national public broadcasters, like the Norway's NRK, have started to test live video marathons. The first episode of NRK's "Slow-TV" series, in 2009, was a recording of a train journey that lasted 7 hours and 16 minutes. The audience was approximately 1.2 million people. Other similar ventures have included a channel boat trip in 2012 (12 hours), a coastal cruise in 2013 (379 hours of live production over seven weeks), and a national knitting night in 2013 (13 hours). This phenomenon can be referred to as "ubiquitous communication," real-time information streams or pulses which can be produced and consumed by almost everyone, anywhere, via Internet connections.

Relatedly, "ubiquitous journalism"² refers to real-time news streams and pulses which can be produced and consumed by almost everyone anywhere via Internet live-streaming links. Ubiquitous journalism may also be called "journalism everywhere." Consequently, the concept of news production in the era of "journalism everywhere" and social media may need to be redefined because potentially anyone can now produce news. News is no longer defined by news organizations based on their news criteria (see for example Galtung and Ruge 1965), but also by society. For example, hyperlocal events in our neighborhoods, work-related new information, or new family matters can be defined as news to us.

Critically speaking, the live-feeds of WWF, Animal Planet, or NRK were not journalism, which can be defined as critically examined factual information about timely topics that are new to the audience or, in other words, news (See, for example, McQuail 2013, 1–4). Journalism also includes other genres such as features, interviews and documentaries. This chapter argues that live-streaming does not necessarily qualify as a journalistic product, even when produced by a news organization. For this to qualify as journalism, there needs to be at least some kind of journalistic element, commentary, voice over or contextualization. In order to understand the need for these new concepts, "ubiquitous communication" and "ubiquitous journalism" and what makes them distinct from traditional journalism, we present a short historical overview.

FROM NEWS TICKERS TO LIVE SPORT EVENTS

The news business has always benefited from speed. The first news agencies were created in France, Great Britain, Germany and the United States (Read 1992). Initially, horses, ships and railways set the pace of news production and dissemination. Later, the telegraph revolutionized communication and also offered fresh bulletins to the nineteenth century news (primarily newspaper) business. The tickers (telegraphic printing apparatuses), a modern version of which appears beneath some television newscasts, were first used in 1891 by the New York Stock Exchange and could be defined as one of the first "real-time news media" (Ojala and Uskali 2007).

In journalism, sports have often been at the forefront of live coverage. An early example occurred in 1911, when a Kansas–Missouri American football game was simulated mechanically, almost in real-time, by the *Lawrence Daily Journal-World* with the help of the telegraph and the representation of the gridiron that had been built in front of the newspaper’s office:

The ball was arranged so that it could be turned and shown by the colors whether it was Kansas’ ball or Missouri’s ball. Every minute that vast crowd kept its eyes on the ball, and how they cheered when it neared the goal line.—There was a leased wire run from Rollins field and there was no relaying, no waiting at St. Louis, or Kansas City. At the key there was W. C. Fountaine, of the Western Union, and never has a man at the key handled a wire service in the manner that Fountaine did. His copy was accurate, it was speedy, and he took it so that there was no delay in getting the story to the outside field. (Ljworld.com 2016)

Later during the interwar and post-WWII years, radio (1920’s) and television (1950’s) revolutionized live broadcasting of sporting events. Nowadays live sports broadcasting occurs 24/7 and media agreements can be calculated in billions of dollars. The Olympic Games, football (soccer), American football, basketball, baseball, tennis, golf, rugby, cricket, and even ice hockey are all prestigious live sports events (for more detail see WIPO 2016).

Television news has specialized in live broadcasting and breaking news since its inception, as exemplified by the first moon landing in 1969. Later, the Cable News Network (CNN) revolutionized the television news business by creating the very first 24/7 news channel during the 1980s which, as Tunstall (2008) argues, was made possible by new and cheaper satellite technology. Other broadcasters have followed the model and today many international and major national broadcasters are able to use the 24/7 news cycle model in every major breaking news situation. As Emily Bell (2016) argues: “Our news ecosystem has changed more dramatically in the past five years than perhaps at any time in the past five hundred.” Journalism needs to constantly adopt and adapt new technologies in order to stay relevant.

THE SOCIAL MEDIA EFFECT ON UBIQUITOUS JOURNALISM

“Ubiquitous journalism” is closely linked to the concept of citizen journalism (Gillmor 1994; Jarvis 2006; Rosen 1999). In hindsight, citizen journalism was initially, and certainly before the invention of social media services, a mainly theoretical construction without many successful practical or long-lasting implications. For example, Maher (2005) provocatively claims that “citizen journalism is dead.” He argues that citizen journalism had three weaknesses: ethics, economics, and epistemology (see also: Outing 2005). Maher was almost prophetic as Dan Gillmor’s much-hyped commercial citizen journalism venture *Bayosphere* lasted less than a

year (April 2005–January 2006) (see Johnson 2006) and Jay Rosen’s online collaborative journalism experiment *Assignment Zero* lasted for just 12 weeks in early 2007 (Howe 2007).

There are however numerous examples in the twenty-first century of citizens taking advantage of digital technologies to initiate and participate in breaking news. The earliest examples relate to the Indian Ocean earthquake and tsunami in 2004 and the London bombings in 2005. In both cases, mobile technologies and telecommunications infrastructure still restricted the quick sending of the still images of digital cameras, but in the latter case, mobile phones were used by citizens for sending images to the newsrooms (Uskali 2007, 198–200). The notion of “journalism everywhere” in the early 2000s was not yet compatible with live video streaming.

The emergence of social media would have a profound influence on “journalism everywhere.” According to Nancy K. Baym (2015) the term “social media” first appeared around 2004, when the Internet was still primarily funded by The United States’ National Science Foundation. Interestingly, all commercial activity was still banned before 1994. According to Fuchs (2014, 48) most of social media technologies originated prior to Tim O’Reilly coining the concept of Web 2.0 in 2005.

We use the term social media to refer to “forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)” (Merriam-Webster 2016). However, Fuchs (2014, 6) emphasizes “social media is a complex term with multi-layered meanings.” A frequently asked question about social media is ‘what is *social* about social media?’ (boyd 2015; Couldry 2015; Fuchs 2014; Papacharissi 2015; Van Dijck 2013). Since each and every medium offers some social aspects for communication, it could be argued that “all media is social.” The rise of social media including blogging, micro-blogging and social networking has brought about new ways of disseminating the news. In this way, social media is also “spreadable media” and “an expression of participatory culture” as Jenkins, Ford, and Green (2013) have suggested. Van Dijck (2013) even argues that we should replace the term “social media” with “connective media.”

Blogging, and especially live-blogging, are used in some early forms of ubiquitous journalism. Thurman and Walters (2013, 83) define live-blogging as a “single blog post on a specific topic to which time-stamped content is progressively added for a finite period—anywhere between half an hour and 24 hours.” They state that *The Guardian* started to use live blogging in 1999. Initially, for about eight years, live-blogging was mainly used for live sport reporting. The London bombings in July 2005 were a turning point in live-blogging, especially in the UK. After that, live blogs evolved as a popular daily component of many UK news sites; they were also increasingly used to cover serious breaking news events. In 2012, *The Guardian*’s

live blogs were getting 300% more views and 233% more visitors than conventional online articles on the same subject (*ibid.*, 85).

The development and innovations in the UK's newsrooms, from the BBC to newspapers and news agencies like Reuters, have always been closely watched and also copied by many news organizations around the world. Blogging went mainstream in the Nordic countries in 2005–2010. One interesting example is the Finnish Business Weekly *Talouselämä*, which for years had a special financial crisis live-blog. Several journalists regularly updated it, but one can argue that it was not technically a live blog, at least when using Thurman and Walters' definition which limits the use of the live-blog to only 24 hours.

Since its launch in 2006, the micro-blogging service Twitter has also been used in many local and global breaking news events (Beckers and Harder 2016; Vis 2013). Indeed, Twitter is already a common tool for journalists around the world and is replacing live-blogging to an extent, or at least having the effect of reducing the number of live-blogs. This was the case, for example, with the real-time reporting of the mass murderer Anders Behring Breivik's court hearings in Oslo by the Finnish newspaper *Helsingin Sanomat's* Scandinavian correspondent (Kauhanen 2012). Since 2009, *Helsingin Sanomat* has used Twitter regularly in news events by inserting thematic hashtags. The newspaper had, by November 2016, gained impressive Twitter statistics with over 40,000 tweets and almost 200,000 followers.

Many sports journalists turned to Twitter during the London 2012 Olympics in a trend that was also strong in the Rio 2016 Olympics. In both Olympic Games, many broadcasters such as the BBC, also offered plenty of live webcasts of events—in London about ten, and in Rio over 30 at one time, including journalistic voice-overs.

The emergence of low cost smartphones offering HD quality cameras and mobile Internet connections has enabled anyone to be a potential citizen journalist. As Manuel Castells (2009) claims, this is the era of “mass self-communication.” Facebook's personalized and algorithmic based “news stream” has arguably been one of the most successful ubiquitous communication paradigms, so far with over two billion users. However, an increased dependency on social media platforms can profoundly influence the future of news organizations:

Journalism is a small subsidiary activity of the main business of social platforms, but one of central interest to citizens. The Internet and the social Web enable journalists to do powerful work, while at the same time helping to make the business of publishing journalism an uneconomic venture. (Bell 2016). What has happened already, according to Bell, is that news publishers have lost control over distribution, and increased the power of social media companies.

THE FINNISH MEDIA SYSTEM AS A TEST BED

In this section, I will present some additional findings about “journalism everywhere” in the Finnish media system. First, some explanations: why bother to focus on the Finnish media landscape and its 5.5 million inhabitants? Hallin and Mancini (2004) consider Finland, along with other Nordic countries, as belonging to the Democratic Corporatist model of media systems. First, the countries that have adopted this model share historical similarities, such as the early development of a mass-circulation press, a strong party press, and relatively strong state-owned public broadcasting companies. Second, in the context of the contemporary media landscape, the Nordic countries seem to still have high newspaper circulations, independent public broadcasting companies and a strong journalistic professionalism.

Beginning in 2016, Nordic journalism educators have started to emphasize the special Nordic model. Hovden Nygren, and Zilliacus-Tikkanen (2016, 15) consider how “the many similarities of their educational and media systems, and relative lack of language barriers, means that Nordic journalism teachers have very often looked across the Nordic borders for useful models and inspiration for their own programmes.”

In particular, the high quality of Finland’s basic national education system offers solid ground for media professionals to tackle the new communication challenges and opportunities.³ It is also worth emphasizing that Nordic countries are very often at the top of the lists of the most technologically advanced societies. This is especially due to their strong history in mobile technology and the influence of companies like Nokia and Ericsson. For example, Finland was in fifth place in 2016 in the Global Innovation rankings, following Switzerland, Sweden, the UK, and the US (Dutta *et al.* 2016). These conditions in combination indicate that Finland is well positioned to be a test bed for current and future communication modes, such as Twitter’s live mobile video service, Periscope, which includes real-time chat.

Periscope entered the news scene in Finland in 2015. As is often the case with innovative services, early users experimented with it. The first example is from *Helsingin Sanomat*, when a photographer used Periscope at rival pro- and anti-immigration demonstrations in Lahti (central Finland) in October 2015. The reporter went to these two rival demonstrations, which took place in close proximity, and using voice-over, commented on what he saw and experienced.

Another example is from February 2016, when *Keskisuomalainen*, a central Finland newspaper, used Periscope at an annual student festivities event. There was no voice-over with this broadcast and the camera stayed in one place the entire time. This lack of movement resulted in some critical remarks by the viewers in the Periscope broadcast chat stream as they wanted new camera perspectives, more information, and also more active participation by the photographer from *Keskisuomalainen*. There was no reaction to these critiques. Also, many amusing

but incorrect comments were published in the chat stream. One false claim was that every time the local ice hockey team JYP won, there were street celebrations.⁴ *Keskisuomalainen*'s Periscope broadcast appears to have been a one-off. Furthermore, based on the definition outlined above, this live stream was not journalism, but ubiquitous communication because it did not involve any journalism elements (such as criticism).

Facebook Live, the popular social network's live video option, is the newest tool for ubiquitous communication and journalism, and became available to all Facebook users in Finland in February-March 2016. Some prominent US news organizations, like *the Washington Post*, are aiming to be more "visual and visceral" (Ciobanu 2016) on Facebook Live and avoid talking heads. In other words, the reporters need to go out of the newsrooms more for Facebook Live. This video option was prominently visible during the US Presidential elections in autumn 2016, when many Facebook Live sessions were broadcast. They first appeared on MTV3, the commercial TV broadcaster owned by the Swedish media company Bonnier, and *Helsingin Sanomat*.

After the US elections, Facebook Live has maintained its position as the leading social media live video platform in Finland. Based on the observations by the author of this chapter, almost every day there are many Facebook Live sessions by various Finnish news organizations. The themes vary from entertainment to morning news programs and foreign news.⁵ After the adoption of Facebook Live by the Finnish news media, the use of Periscope for the same outlets has diminished. It seems that ubiquitous journalism favors the social media platforms that can offer the largest audience, and right now that is clearly Facebook.

In addition to Periscope and Facebook Live, which offer new opportunities for ubiquitous journalism and communication, new devices like camera drones and smartwatches are also available to journalists. Camera drones in particular are often mentioned as suitable new tools for breaking news events and, especially, for crisis reporting. Video recordings, shot with camera drones, first appeared in the news media in 2011 in connection with the riots in Warsaw and the Occupy Wall Street movement. In Finland, all the major news organizations have used camera drones for journalistic purposes in recent years. The majority of camera drone news footage has been about social unrest (demonstrations) and natural disasters (floods) and also for environmental and investigative reporting (Lauk, *et al.*, 2016).

Still, to date, none of the Finnish news organizations have used camera drones to provide live video connections. This is due to the technical limitations of camera drones, and the risk assessments of the journalists' organizations. For example, according to interviews most of the regional newspapers in Finland have not yet even invested in drones, but used freelancers. (Lauk, Uskali, and Kuutti 2016.) Nevertheless, the latest drones are capable of sending live video streams in flight and with 4K quality. In the near future, this technology could be a game changer, especially in live breaking news situations.

The adoption of smartwatches for journalistic purposes has been quite slow in Finland, with the key problems being that, initially, smartwatches were too expensive, and because the first generation of smartwatches still needed smartphones in order to be used. Only one evening newspaper *Ilta-Sanomat* has customized a special app for smartwatches. Research indicates users of smartwatch news apps in Finland are still only numbered in the thousands (Uskali and Hirvinen 2016). Smartwatches are, however, effective in breaking news situations and also in delivering financial and sports news (*ibid.*). The hyped promotion of computer wearables, especially smartwatches, seemed to be cooling during 2016. According to IDC (2016), the smartwatch market declined over 50% in the third quarter of 2016.

Still, news streams accessed via smartwatches could be one possible scenario for the future of “journalism everywhere”; another is Virtual Reality/Augmented Reality, which was greatly hyped in 2016 (Nordrum 2016). Furthermore, automated journalism, also known as robot journalism, which refers to content creation and publishing based on algorithms, could offer new interesting openings for ubiquitous journalism (Diakopoulos and Koliska, 2016).

CONCLUSIONS

With the development of ubiquitous computing, smartphones, social media, and the automation of communication and wireless Internet connections, new real-time data streams are already a reality. This chapter has been an attempt to introduce and justify new concepts of ubiquitous communication, and ubiquitous journalism (also “journalism everywhere”) to media, journalism, and communication research. Ubiquitous journalism was defined as real-time news streams and pulses, which can be produced and consumed by almost everyone, everywhere via Internet connections. In a similar vein, ubiquitous communication refers to real-time information streams or pulses, but lacking in journalistic commentary.

The evolution of ubiquitous communication and journalism can be seen in the case of Finland. Not only are news organizations constantly testing new applications like Periscope or Facebook Live, but also NGOs like the World Wildlife Fund can offer live-streaming hits like Pullervo, the Saimaa ringed seal.

The trend towards ubiquitous journalism everywhere is not without problems. Ubiquitous journalism has its risks, especially for sending unverified and false information, as seen in the case of the *Keskisuomalainen* Periscope broadcast mentioned above. Therefore, criticism, fact-checking and verifying sources should be included in the practices of ubiquitous journalism. The need for this quality control was already in evidence during the US presidential elections, when Facebook shared more fake news rather than real news (Isaac 2016).

Finally, ubiquitous communication and journalism seem to favor social media platforms that can safeguard the largest audiences. Camera drones, smartwatches, virtual reality and automated journalism may offer new opportunities for the future of journalism everywhere. Therefore, future research on ubiquitous communication and journalism should focus on these emerging areas of innovations.

NOTES

1. I thank the ViSmedia project (<http://vismedia.org/>) at the University of Bergen, Norway for supporting this research, and Derettens (www.derettens-english-language-editing.com) for proof-reading the manuscript.
2. The term ubiquitous journalism was first used by the Georgia Institute of Technology for a seminar in January 2008, but the term was not yet defined properly. (See Stenger 2008)
3. The OECD's Pisa rankings compare the test results of 15 year olds in countries and regional education systems, and for some time Finland has produced the best achieving pupils. (OECD/Pisa, 2016).
4. Initially, Periscope only provided storage and viewing capacity for the first 24 hours. A change of policy by Periscope has enabled users to have the choice of longer storing and have viewing capacity for longer periods.
5. For a directory of all Facebook Live broadcasts: <https://www.facebook.com/livemap/>.

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