Journalism's Epistemic Crisis and its Solution: Disinformation, Datafication and Source Criticism

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Journalism in many cultures is today in an epistemic crisis. The mains drivers of this crisis are discourses of disinformation and the general datafication of society, which combined render dubious the ways in which journalism assesses sources and information in its production of knowledge. Basic journalistic competencies related to information literacy—which constitute a key prerequisite for journalism's ability to establish trust, authority and accountability—are out of tune with the challenges of modern information societies. If the institutions and professionals of journalism do not update their information literacy competencies, and if the public doesn't have faith in journalism's ability to master such competencies, journalism will lose its societal relevance, simply because it loses its ability to produce trustworthy knowledge.

In this short essay, I will briefly discuss the challenges for journalism posed by discourses of disinformation and datafication. I will argue that these challenges push journalism towards an epistemic reorientation beyond the right/wrong and true/false dichotomies. Such a reorientation can begin with the further development and normalization of *source criticism* as attitude and practice in journalism. Being a common methodological and epistemic concept in historiography and information science, source criticism constitutes a more constructivist attitude towards information literacy, which, I will argue, is exactly what journalism needs.

The problems of disinformation

Since then-candidate Trump in 2016 started his campaign against what he derided as the 'failing' media, 'fake news', propaganda, media manipulation and other forms of disinformation have become a global phenomenon. This phenomenon is by no means new, but the ways in which disinformation spreads, and how it ramifies within and across societies, are more profound and complex than ever. In March 2018, the European Commission published a High Level Group of Experts report on disinformation, arguing that the phenomenon potentially erodes public trust in media, politicians, and institutions, degrade political debate, shut down opposition, threaten the integrity of electoral processes, and intensify polarization – all of which contribute to undermining democratic legitimacy and functioning (European Commision, 2018).

The EC report advocates that long-term societal resilience to disinformation must be increased. Significant responses suggested by the report include promoting media and information literacy to counter disinformation and help users navigate the digital media environment; and developing tools to empower users and journalists to tackle disinformation and foster a positive engagement with fast-evolving information technologies. In short, democratic functioning and integrity depend, in part, on reliable

information and trustworthiness, which is difficult to envision without well-functioning institutions of journalism.

However, the problem of disinformation is not only related to claims of 'fake news' and 'alternative facts' put forward by politicians and others in power. It is also related to specific advancements in media manipulation technology, which alter previously established notions of what a trustworthy source is. For instance, tech and software companies are developing sophisticated tools to not only manipulate audio and video recordings, but also to create recordings of actual people saying things they have never said (Diakopoulos, 2018). These developments destabilize the traditional hierarchy of sources, in which video and audio recordings have been prominently positioned at the very top as trustworthy sources of information. These new technologies therefore make what has been labelled 'digital forensics' (Garfinkel, 2010) both much more difficult and more important for journalism to master. Consequently, journalists must be more cautious with making knowledge claims based on such previously trustworthy sources of information, and they need training in such digital forensics techniques.

Datafication and the problems of algorithms

The problems of disinformation are further enhanced by changes in the nature and origin of journalistic sources and information. Since the turn of the millennium we have seen a massive increasing in practices related to data journalism (Fink and Anderson, 2015), algorithmic journalism (Dörr, 2016) and robotic journalism (Carlson, 2015), all of which pose both opportunities and challenges for journalistic information literacy. No doubt, the over-all datafication of society (van Dijck, 2014) provides journalism with a magnitude of new, valuable sources of information. Analysing big data is increasingly becoming part of journalistic investigations in such a way that journalism is experiencing a 'quantitative turn' (Coddington, 2015). Such new journalistic endeavours make statistical competencies and questions of data reliability and validity important. However, journalism's encounters with numbers and data are often framed within a discourse of objectivity and the accompanying belief in the accuracy of numbers, expresses in terms like "precision journalism" (Meyer, 2002). Even though data journalism to a large degree rely on second-hand data, i.e. data gathered by some else—which makes questioning the data's reliability both more important and more difficult—data journalists have found it difficult to 'move beyond their established epistemology', as argued by Lewis and Westlund (2015: 452). The problems with this is that there is no such thing as naturally occurring, objective, raw data. In fact, as argued by Gitelman (2013), 'raw data is an oxymoron'. Data have always been collected by someone with an agenda, implying that some data are considered important while other data have been rendered insignificant and thus omitted.

Robotic and automated journalism also tend to come with a belief in their ability to produce objective outcomes. After all, journalism produced by algorithms is untouched by humans and must therefore be objective, right? Of course not. Algorithms are always written by someone, and are therefore marked by the same subjective bias as any other man-produced information. Moreover, algorithms are black boxes for most journalists, even if they are openly accessible (because most journalists lack the skills to read code) and especially if they are protected by patent laws or similar. This mean that all the processing and evaluation of information an algorithm does are in most cases inaccessible to

journalists, which again means that the knowledge claims produced by journalism relying on algorithmic information processing are enmeshed in more or less invisible layers of uncertainty.

To make the matters even more complex, journalism is increasingly involved in algorithmic data collection and processing rendered invisible for the audience and often involving a myriad of third party players. Kammer (2018) has demonstrated this in an analysis of automated data transfers between online newspapers and third-party companies, and Ananny (2018) reports on evolving platform-press collaborations in the USA between Facebook and five major news and fact-checking organizations. This demonstrates a sort of mutual dependence between the social actors and algorithms at tech companies, and the human journalists at news media. The problem is that journalists and news organizations are not the powerful actors in these exchanges.

Source criticism and epistemic reorientation

With the above-discussed trends in mind, it seems that journalism is epistemologically challenged. The still prevailing journalistic epistemology of objectivity, in which practices of fact checking and verification predominantly rely on a belief that knowledge claims can be categorised as true or false, fake or real, does simply not cut it anymore. The ways in which journalism produces knowledge claims need to be more adapt to a world in which knowledge and truth are increasingly understood as constructions, and in which absolute certainty has become an unreachable luxury. Yet, journalism needs to rely on some kind of relationship to truth and facts that separates it from fiction. The solution might be to adopt a concept developed within historiography and information science; source criticism.

Source criticism was originally developed as a concept and method to study information in religious and historical documents and has been instrumental in methodological and epistemological developments in historical scholarship, especially in Northern Europe (Kjeldstadli, 1999). Source criticism is considered a key journalistic competence and professional norm in Scandinavian journalism, but the concept is not commonly used in journalistic cultures elsewhere. As a journalistic method, source criticism involves (ideally) a critical and systematic investigation by the journalist into all sources used in the different phases of the journalistic production process. The question of the source's tendency is important here, i.e. how a source's motives and interests might affect the information conveyed (Fossum and Meyer, 2008). The basic principle is that every source, and thereby every piece of information, has a tendency. Figuring out what this tendency is and how it affects the information conveyed is therefore crucial to practises of source criticism. Furthermore, source criticism involves an investigation of the source's origin; whether other, alternative sources confirm or contradict the information conveyed by the source; and a critical investigation of what information the source actually conveys and thereby what it does not convey (Handgaard et al., 2013: 127). Hence, source criticism goes beyond methods of fact checking and verification and incorporates critical scrutiny of qualitative aspects of sources and information, as well as how the combination of sources and pieces of information affects the knowledge claims produced and distributed.

Source criticism therefore involves a more constructivist epistemological approach to knowledge claims produced by journalism since its starting point is that every source and every piece of information has a tendency and thereby a potential bias. There is no such

thing as neutral, naturally occurring, objective information in the epistemology of source criticism. Source criticism as attitude and practice therefore encourages the journalist not only to investigate the authenticity and tendency of sources and information of all kind; it also encourages journalists to make these tendencies transparent in the journalistic product. Journalism produced within such an epistemological framework is therefore pushed towards displaying uncertainty. It might seem paradoxical to argue that in an age of disinformation and datafication, journalism needs more uncertainty. However, uncertainty is an undervalued currency in modern information societies, and displaying it might be exactly what journalism needs to do in order to regain authority.

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