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Critical algorithm literacies

An emerging framework

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Olof Sundin: Critical algorithm literacies: An emerging framework

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Extended abstract

The presentation addresses a problem that many of you have come across; it is a problem very typical for our time and that has occupied my mind for some years now. It concerns the problem of how to analytically address the phenomenon critical evaluation of online information. My goal is to present an emerging framework of how to understand this phenomenon that has been described by many stakeholders as maybe the most important way to fight back and provide resistance against a post-factual society. The difficulty lies in, as many commentators have pointed out, in challenging not the least the often relativistic perspectives advanced in the new right's take on facts, truth and falsehood, while at the same time not ending up in pure simplistic positivism. How can society response to what Bruno Latour already nearly 15 years ago described as a form of "instant revisionism" (2003, p. 228), that is when established knowledge of, for example environmental research, is questioned by providing so-called alternative facts, reducing everything to a mere question of perspective? The presentation revolves around the following questions: Is it possible to criticise so-called fake news and alternative facts if we do not accept the existence of the binary couple true and false facts? Is the problem the difficulties to distinguish facts from opinions, or rather that we cannot control what kind of facts and opinion we meet in our algorithmically filtered search results and social media feeds? Is the solution more focus on developing abilities for critical assessing credibility of mediated information, or is it rather something else?

My theoretical starting point draws on a sociomaterial understanding (e.g. Orlikowski, 2007). One characteristic of today's information infrastructure is the way in which it is constantly being remade as people interact with or "feed" it with various forms of data. Whatever we call the entangled components that together perform the possibilities and limitations when searching for information, keeping us updated through social media, they form our information infrastructure (e.g. Haider, 2016; Sundin et al., 2017). Some of the most central components of this infrastructure are the algorithms that orchestrate the flow of data in search engines and social media. These algorithms are fed with the data various actors – not least by, but not only, humans – provide them with in order to prioritise, rank, share and filter information on individual, geographical, political, or cultural bases. A consequence of this sociomaterial understanding of media and information literacy is that we cannot analyse and understand peoples' actual searching, the critical evaluation of information, fact-checking – as well as the talking about these practices in interviews – as separated from the infrastructure; they are indeed sociomaterial practices (Sundin & Carlsson, 2016).

The infrastructure for keeping up to date and for searching information is for most people more or less treated as neutral (cf. Halavais, 2009; Hillis et al., 2013). We can instead metaphorical take Latour's (2003; see also Andrejevic, 2013) advice and turn to how things are made into facts in the networked world. The practice of critically evaluating the

credibility of information sources, would then include understanding how a factual statement on top of the search results ended up there in the first place rather than merely questioning the fact as such based on some kind of general critical judgement. This includes abilities to understand how people, indexes, algorithms, meta-data and so forth hang together. Having said this, I would like to end this presentation by making a claim not just for the need to evaluate information – either seen as decontextualized pieces of news etc or seen as part of a larger infrastructure – but also for the need to reclaim trust. When the official representatives of the public order argue for the need to develop digital skills or competencies framed as information assessment skills, we also need to make the argument for establishing a stable public service in its broadest understanding (not just for journalism) in the networked society and to raise trust to it. All in all, I am you could say, advocating for critical algorithm literacies. But I am also arguing for finding ways to re-establish trust in the established knowledge institutions in the networked society.

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