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## How Do you Trust?

### On Infrastructural Meaning-making and the Need for Self-reflection

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*Published in:*

Understanding Media and Information Literacy (MIL) in the Digital Age

2019

*Document Version:*

Publisher's PDF, also known as Version of record

[Link to publication](#)

*Citation for published version (APA):*

Haider, J., & Sundin, O. (2019). How Do you Trust? On Infrastructural Meaning-making and the Need for Self-reflection. In U. Carlsson (Ed.), *Understanding Media and Information Literacy (MIL) in the Digital Age: A question of Democracy* (pp. 107). University of Gothenburg and UNESCO.

*Total number of authors:*

2

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## 10. How Do You Trust?

### *On infrastructural meaning-making and the need for self-reflection*

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#### **Abstract**

The chapter focuses on the notion of critical evaluation of information, which is an important part of media and information literacy (MIL). The concepts *frictions of relevance* and *infrastructural meaning-making* are introduced to shed light on the information infrastructure's significance for MIL in today's digital media ecology. Furthermore, the chapter discusses some of the limitations inherent in placing the responsibility for evaluating information predominantly on the individual, thus challenging the straightforward connection between MIL and democracy.

*Keywords:* infrastructure, information evaluation, search engines, algorithms, relevance, trust

### Introduction

Today, major political events are routinely accompanied by discussions of the role of social media and search engines in determining how information circulates in society. It is no exaggeration to say that what is at stake is control over knowledge and information and, thus, the very foundation of society's democratic organization. Democracy itself, it is often argued, is challenged by targeted disinformation campaigns spreading rapidly and effortlessly through our digital information infrastructure, while commercial algorithms fueled with user-generated data are seen to reinforce ideological polarization and partisanship.

Measures to address this situation are generally discussed on four levels: 1. Self-regulation of the platform companies; 2. Changed and strengthened legislative solutions; 3. Support for the production, transmission and vetting of credible knowledge through established institutions such as schools, libraries and legacy media; 4. People's own responsibility for assessing and critically evaluating the information they come across. In this short text, we want to concentrate on the latter two points. More precisely, we focus on the notion of critical evaluation of information – an important part of media and information literacy (MIL) – and specifically on how it is framed in school and library contexts.

What does evaluation of information involve in today's society? What is its purpose? Is evaluation of information mostly a matter of being able to challenge a statement? Is there any other approach to judging information that might at times be more appropriate? Do we need a broader understanding of evaluation of information that more adequately considers the infrastructure implicated in how we are becoming informed? That is, how can evaluation of information also include considerations of, for instance, social media feeds or the workings of search engines? And what are the possible repercussions of framing responsibility for evaluation of information as an exclusively individual obligation?

To address these and similar issues, we introduce the concepts *frictions of relevance* and *infrastructural meaning-making* and combine them with a discussion of the limitations inherent in placing the responsibility for evaluating information predominantly at the level of the individual.

## Currency, accuracy, authority and purpose

UNESCO puts forward the following question as one of the key issues for MIL to address: “How can we access, search, critically assess, use and contribute content wisely, both online and offline”? (UNESCO, 2019). This is illustrative of the way in which the ability to evaluate information is commonly understood to be a part of MIL.

What is often called for is an evaluation of the information itself and of the information *resources*, i.e. of the documents containing certain statements. This evaluation, it is usually advised, should be carried out by following a set of pre-determined criteria, which are often memorized in acronyms, like CRA(A)P, CACAO or similar. How these sets of criteria are composed varies somewhat, but they always include *currency*, *accuracy*, *authority*, and *purpose* or *point of view* (sometimes *objectivity* is used in place of the latter two). Frequently, the criteria also comprise *relevance* or *coverage* of a specific resource in relation to what is sought.

These criteria address questions such as the following: Who is the author and what are the author’s intentions (authority)? How dependent are different sources, which claim the same thing, on each other (accuracy)? When is the information published (currency), or in what way is the information ideologically colored (purpose/point of view)? All of these questions seem reasonable and innocent enough for most intents and purposes. Although originally developed in relation to an older information and media system, they clearly continue to be significant even in today’s digital environment. This is also emphasized when the above criteria are presented on resource pages or in the various guides produced for students, pupils, teaching staff or library users.

However, if the issue were so simple, we could stop writing here and move on to continue advocating for implementation of these criteria through various educational programs. Yet the situation is far from simple, because there is another layer involved that is much more difficult to grasp. This layer involves the very materiality of knowing in the Internet age, the infrastructure we rely on to retrieve or receive information in the first place. This has, as we know, changed considerably during the past decades. It shapes not only how we get information, but also what this information looks like and what it conveys (Haider, 2016a; 2016b).

## A changing information infrastructure

The above-named criteria – accuracy, authority, currency and purpose/point of view and even relevance and coverage – are not free from material assumptions. Yet as the infrastructure they relate to has long been dominant and unquestioned, these assumptions have become invisible. The infrastructure enfolded into them comprises (Western) society’s various traditional and long-established knowledge institutions, such as libraries and publishing houses, universities, museums and archives, schools, the press and so on. These institutions bring about certain documentary practices and systems for producing, vetting, distributing and importantly for organizing knowledge around them, and the printed document has played a key role in how they were formed. Yet for most people and in very many situations, they no longer constitute the dominant information infrastructure of everyday life (Sundin et al., 2017).

Although these institutions, their methods and systems continue to have important functions in how society stabilizes knowledge, their methods of operation are being challenged. In addition, how we encounter them has undergone changes. They exist in relation to a new information infrastructure, one that works according to different rules and presents a different, and at times conflicting, materiality. This means that the ways in which we evaluate information need to account for the actual infrastructural arrangements that produce the information we come across in different walks of life.

## Outsourcing trust

Our own and other's research on information search and evaluation shows that vigilant assessment of information is not something we normally have time for in everyday life. Instead, we tend to outsource the act of evaluating to the various digital services that dominate society, or more specifically to their algorithms (Sundin and Carlsson, 2016). We simply trust – usually in an unreflected manner – Google's, YouTube's or other platforms' ability to deliver what we are looking for or what we encounter in our social media feeds; we trust – at least most of the time – that what ends up at the top of a search engine result page is the best information available (e.g., Höchstötter and Lewandowski, 2009). Relevance, which is what these systems are programmed to deliver, has come to equal reliability or even quality (Hillis, Petit and Jarrett, 2012).

Likewise, we take our social media feeds or search engine results for granted, reacting only if noticeable changes are made to the algorithms controlling the way the information is displayed. Undoubtedly, this is often a sensible course of action that helps us obtain reasonably accurate and suitable information for many purposes. But not always, and especially not in situations that have bearing on how knowledge is trusted on a more fundamental, societal level. This explains some of the concern being expressed about how changes in the contemporary information and media landscape may be affecting the relationship between people, knowledge and (liberal) democracy.

## Frictions of relevance

In a short amount of time, today's digital, networked information infrastructure has become largely invisible. Infrastructures tend to go largely unnoticed as long as they work well and do not break down (Star and Ruhleder, 1996). Breakdowns, we argue, can be technical, but also social or even individual. The concept *friction of relevance* helps us understand a specific type of breakdown of the information infrastructure we have come to depend on (Haider and Sundin, 2019). For instance, when the information we get is very different from what we expected it to be or when it diverges considerably from societal values, we tend to notice the system that made that piece of information appear for us. For example, when Google's search results give weight to racist blogs or when YouTube's algorithms promote clearly extremist positions through its recommender system, we become aware of them, and in doing so we also realize – if only for a fleeting moment – that they are otherwise invisible to us.

We might also recognize that our most used information systems do not in fact provide a neutral mirror of what is available in a clearly delineated collection or work according to the principles of knowledge organization we have learned to relate to in our old knowledge institutions. A *friction of relevance* arises that can be understood as a temporary breakdown of the information infrastructure we have come to depend on.

## Infrastructural meaning-making

It is against this background that we propose a broader conception of evaluation of information in relation to MIL. Evaluation of information today also needs to comprise an understanding of *why* certain information reaches us the way it does as well as of how people's data and the algorithms in search engines, social media and other information systems shape what we come across.

In our book *Invisible search and online search engines: The ubiquity of search in everyday life* (2019), we suggest using the concept *infrastructural meaning-making* to capture a critical understanding of how information systems work and how they present information, including search engine result lists or social media feeds. What does it help to know how to compare two texts and decide which best survives an evaluative examination (e.g., CRA(A)P, CACAO or a similar list of criteria) if we only ever see one of the texts

in our real-life social media? What does it help to learn that *Encyclopaedia Britannica* online or an official health portal contains credible articles unless these surface when we Google? What use is it to get a view-point confirmed if we phrased our query in a way that did not allow the search engine to find anything that would contradict it?

By directing attention to *infrastructural meaning-making*, some of the focus is shifted from the information and the resources themselves to the material conditions facilitating the emergence and circulation of information in specific ways. An understanding of individual media and their content is complemented by an understanding of today's dominant platformized information infrastructures – such as Google, Facebook, Youtube, Twitter or similar existing and emerging services. However, the gaze is then not only turned to the infrastructure, but also to ourselves and to how we use the various services and applications: what we do, how we search, how we share and, not least, *how we trust*. Evaluation of information and information sources becomes an exercise in self-reflection, where we might learn to assess some of the implications of our own and others' activities on those platforms. Thus, we suggest an expanded understanding of evaluation of information, where in addition to considering the source of a certain piece of information, the surrounding infrastructure and one's own role and limitations in this infrastructure are also taken into account. Importantly, however, self-reflection cannot mean a focus on the isolated self, but rather a critical reflection on the self as part of a culture or community of shared norms and values.

## The limits of individual responsibility

Having said that, after researching this area for more than a decade, we can safely say that people's own responsibility for assessing and critically evaluating the information they come across has its limits as a solution to the contemporary crisis of trust in public information and knowledge. It is not enough to constantly assess and question information, news and knowledge claims if one is not starting from reasonably stable ground. In addition, (critical) evaluation of information takes the ideal of the rational, sensible and enlightened citizen for granted, but does everyone always want to be like that? Can the critical and rational gaze that is implicit in how the role of evaluation of information is typically cast hold up against a politics of affect? Is it really the *truth* we want, or is it at times rather a confirmation of what we already believe we know?

The difference between fact, fiction and opinion is not always clear cut, and distinguishing between real and fake is becoming increasingly difficult. This situation is aggravated by the way in which the spread of conspiracy theories and disinformation tends to pick up speed, and artificial intelligence (AI) powered *deep fakes* have begun to fundamentally blur the distinction between what is real and what is not. In addition, as a YouTube search quickly shows, evaluation of information is not something democratic forces have a monopoly on.

Therefore, relating to information, online or offline, cannot just be about critical evaluation and rational assessment of information, but needs to be just as much about trust. If we always question all institutions, people or documents, we make democratic conversation impossible. The position of trusting nothing is in practice not far from accepting everything. What, then, do we do? Even if we appreciate that knowledge is always in motion, we must accept that some sources and institutions, and most importantly their methods, can reasonably be assumed to be more credible than others.

Critical evaluation of information is important, but it must be couched in trust. Naturally, it must also be paired with a general education and an understanding of how knowledge is created and how science works, including how science has failed and how it can change. Here the school system, libraries and universities play an important role as knowledge mediators and calibration instruments. This does not

mean that they are always right or that they should not be improved or criticized. Far from it. However, it is a reasonable starting point to assume that these institutions are largely reliable in democratic societies. Trust in information as well as criticism of it must ultimately be based on trust in institutions that are accepted as trustworthy by citizens regardless of their ideological standing as well as on trust in the most basic processes we have to improve these institutions.

### Whose responsibility?

At a time when people are frequently called upon to expand and improve their abilities to critically review and assess information, we want to contribute a more comprehensive and multifaceted understanding of evaluation of information, but also advance awareness of its limits. Society needs a better grasp of how different actors argue for what (critical) evaluation of information and similar abilities should entail, specifically what they think the purpose of evaluation of information is and what problems it should solve. In the public debate, people's MIL is usually discussed as a positive force and a prerequisite for a democratic society, a claim made very strongly by UNESCO. However, we wish to stress that although algorithm awareness – as it is often expressed today through strategic liking, sharing, viewing, hash tagging and so on – does help construct what is visible in social media and search engines, it does not automatically support democracy as we know it.

MIL does not necessarily go hand in hand with democratic commitment; its tools can also be (and are) used for non-democratic activism. One could even say MIL can and has been reverse engineered to serve anti-democratic campaigns. We can reverse engineer it back, but we need to acknowledge what has happened. The difficult question that needs to be asked is whether the unconditional reciprocal link between MIL and democracy is worth maintaining or whether it should be given a clear direction. Democratic participation requires MIL, but it does not necessarily flow from it.

### Conclusion

In this chapter, we have introduced two concepts: *frictions of relevance* and *infrastructural meaning-making*. We explore these further in our book *Invisible search and online search engines: The ubiquity of search in everyday life* (Haider and Sundin, 2019). Most of the time, the digital infrastructure we use to become informed and stay in touch works smoothly, without us even noticing it. It is often only when it suddenly stops, or when the workings of the algorithms involved lead to an incongruity of individual needs and societal interests, that we experience an infrastructural breakdown, thus noticing the infrastructure's operation. If more permanent visibility is to develop, an understanding of the infrastructural conditions for information in contemporary society together with a heightened awareness of their mechanisms is required. We also need to know how people understand algorithms and artificial intelligence and their effects as well as how people relate and adapt to this knowledge.

We have addressed what we refer to as the limitations of MIL in its role as an engine for democracy. An interest in MIL is certainly important for the development, some would say survival, of democracy. Yet in this context, we wish to emphasize the dangers involved in seeing evaluation of information or even infrastructural meaning-making – as well as the problems these are meant to solve – primarily as the responsibility of individuals. Because “knowledge is a collective good,” as Steven Shapin (1994: xxv) famously reminds us, evaluation of information must be a collective enterprise. As important as individual responsibility and critical self-reflection are, MIL is just as much a social issue, and as such it must be addressed at the societal level.

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