

Journalism and Source Criticism. Revised Approaches to Assessing Truth-Claims

Steen Steensen, Valerie Belair-Gagnon, Lucas Graves, Bente Kalsnes & Oscar Westlund

To cite this article: Steen Steensen, Valerie Belair-Gagnon, Lucas Graves, Bente Kalsnes & Oscar Westlund (2022): Journalism and Source Criticism. Revised Approaches to Assessing Truth-Claims, *Journalism Studies*, DOI: [10.1080/1461670X.2022.2140446](https://doi.org/10.1080/1461670X.2022.2140446)

To link to this article: <https://doi.org/10.1080/1461670X.2022.2140446>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 01 Nov 2022.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Journalism and Source Criticism. Revised Approaches to Assessing Truth-Claims

Steen Steensen ^a, Valerie Belair-Gagnon ^b, Lucas Graves ^c, Bente Kalsnes ^d
and Oscar Westlund ^a

^aDepartment of Journalism and Media Studies, Oslo Metropolitan University, Oslo, Norway; ^bHubbard School of Journalism & Mass Communication, University of Minnesota, Minneapolis, MN, USA; ^cSchool of Journalism and Mass Communication, University of Wisconsin-Madison, Madison, WI, USA; ^dSchool of Communication, Leadership and Marketing, Kristiania University College, Oslo, Norway

ABSTRACT


This article presents a hermeneutical epistemology for the assessment and production of truth-claims in journalism. This epistemology is based on Gadamer's functional hermeneutics, and it advances the concept of *source criticism* as an alternative to other practices and understandings of information verification in journalism. The article argues that source criticism is a better approach to bridge the gap between news and truth in journalism in a time of "information disorder". Source criticism is a common concept in certain journalistic cultures, for instance in Scandinavia, but it needs revision due to current developments in digital information networks. A modern version of source criticism offers great value to journalism as (1) guidelines for the practical assessments of sources and source material, (2) a professional attitude related to what it takes to produce truth-claims, and (3) a tool to perform audits of journalism. The article ends with highlighting three norms for journalistic practice and audits of journalism. These norms, which contain operationalisation of source criticism as journalistic epistemology and methodology, are: (1) harness truth-claims with modesty; (2) deploy interpretive transparency; and (3) operationalise self-reflective truth-claims.

KEYWORDS

Journalism; epistemology; source criticism; hermeneutics; Gadamer; fact-checking

Introduction

The authority of journalism rests on its ability to establish a robust connection between news and truth. Yet, the relationship between news and truth has been complicated for journalism. In *Public Opinion*, (Lippmann 1922[2007]) famously announced that journalists did not have the time nor the resources to seek out "the hidden facts" that needed to be unveiled if truth were to be told, and that truth-seeking therefore was best left to other social institutions, for instance the expert bureaucracy. Nevertheless, seeking out the "hidden facts" has been – and still is – a core mission for journalists in most cultures, especially those who adhere to the monitorial role, which is the most

CONTACT Steen Steensen  steen@oslomet.no

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

wide-spread professional role orientation for journalists across the globe (Hanitzsch et al. 2019).

Journalists have developed several strategies to enhance their authority as truth-tellers who hold those in power accountable (see Carlson 2017). Among those strategies are enhanced methods for information retrieval and assessments in practices like investigative journalism and fact-checking. Digital technologies and information networks have provided such practices with a wide set of new tools and resources to retrieve and assess information, thereby enhancing the potential of journalism to reveal hidden facts and produce truth-claims. However, the same developments in digital technologies and information networks have made information retrieval and assessment more difficult. Previously credible source material like audio and video recordings can no longer be taken for granted as authentic because of deep fake technologies (Diakopoulos 2018), social- and alternative media are troubled by disinformation with damaging effects on democratic societies (Barberá et al. 2018; European Commission 2018), and democratic authorities which used to be credible sources of information can in many instances no longer be trusted (Bennett and Livingston 2018). Journalism no longer controls the “dynamics of news and information” (Waisbord 2018, 1868), news has become separated or dislocated from journalism (Ekström and Westlund 2019; Steensen and Westlund 2021), and modern democratic societies are instead dominated by what Wardle and Derakhshan (2017, 4) labelled “information disorder”, meaning:

Information pollution at a global scale; a complex web of motivations for creating, disseminating and consuming these “polluted” messages; a myriad of content types and techniques for amplifying content; innumerable platforms hosting and reproducing this content; and breakneck speeds of communication between trusted peers.

These disruptive changes in public sphere communication create a need for enhanced ways of scrutinising the credibility of sources and the material they produce, especially amongst journalists. As McNair (2017, 1331) argues, “the journalistic search for credibility of sources, and scrutiny of what those sources say, without fear or favour, has never been more important to the health of liberal democracy.” An important question is therefore to what degree journalists have the skills and know-how to search and assess sources in ways suited to not only unveil the “hidden facts” and produce credible truth-claims, but to do so in a way that breaks through the information disorder and gains the publics’ trust. If we are to take surveys of people’s trust in the news media as an indicator, then the answer seems to be no. Such surveys indicate that there is a mismatch between journalists’ role-perception as monitors of those in power and public opinion on the performance of journalism, including its authority as truth-teller (Fink 2019; Newman et al. 2019).

Steensen (2019) argues that this mismatch creates an “epistemic crisis” for journalism, because journalism struggles to adjust to the new demands concerning how to assess the credibility of sources and produce credible truth-claims in the age of information disorder. The aim of this article is to address this epistemic crisis and advance the concept of source criticism as a fruitful framework to assess the credibility of sources and source material, and to produce truth-claims in journalism in ways more adapted to the “chaos of contemporary public communication” (Waisbord 2018, 1868).

Source criticism is a methodology used to critically evaluate sources and the information they convey. It is not a concept alien to journalistic practice, as it is frequently taught and practised in for instance Scandinavian journalism education, but it has never, to our knowledge, been properly introduced and discussed to an international audience of journalism scholars, educators and practitioners. There are two reasons why we think there is a need to advance source criticism today, both in and beyond Scandinavian journalism. First, source criticism offers an approach suited to tackle the increased complexity of knowledge production. It is thereby suited to answer calls for a “renewed information contract” (Frau-Meigs 2022) between journalists and their audiences amid the information disorder. Second, the current information disorder creates a need to rethink what source criticism is, especially related to *digital* sources, source material and infrastructure.

The article starts with defining key concepts (source, source material, information, claim and fact). We then discuss the problems with standard ways of verifying information in journalism, which we argue are limited by a binary epistemology in which dichotomies like true/false, reliable/unreliable, and accurate/inaccurate structure the approach. We then present the hermeneutics of source criticism. Our discussion leads us to highlight three norms otherwise less salient in traditional forms of journalistic verification. These norms, which we argue are key ingredients in a hermeneutical epistemology for the assessment and production of truth-claims in journalism, are (1) *modesty in how truth-claims are formulated*, implying a greater sensitivity towards interpretation and how socio-technical and cultural contexts shape truth-claims; (2) *transparency related to the interpretations behind formulations of truth-claims*, implying more openness regarding who is involved in the formulation of truth-claims and how the formulation-process unfolds; and (3) *self-reflection and considerations of positionality in relation to journalism as a source of knowledge*, implying the adoption of outsider perspectives on how journalistic stories are perceived and interpreted.

Defining Key Concepts

In this article we use several potentially ambiguous concepts – source, source material, claim, information, and fact – which need to be defined. The first important distinction we will make, and which is a common distinction in the source criticism literature, is between source and source *material*, the latter being produced by the former. Source material can be a document, an oral statement, a social media post, a picture, and so on, while the source is the actor who has produced the material. Furthermore, source material can be analysed as both *testimony* or *remnant* (Ankersborg 2007, 44). Testimony relates to the content of the source material, what the source material is revealing about the *object* it treats. Remnant relates to the form of the source material, and thereby what it reveals about the *subject* who has produced it (the source) and the wider *situation of origin* (see below) in which the source material was produced. This distinction will be further discussed below, as *the double logic of sources*.

Whether we analyse source material as remnant or testimony, we uncover *information*. Our use and understanding of the concept of information aligns with Buckland’s (1991) definition of “information-as-knowledge” (as opposed to “information-as-process” and “information-as-thing”, the latter being equivalent to how we understand source

material). Information (as knowledge) is intangible, it does not exist as a physical thing. Information is therefore closely linked to interpretation. It is deduced from source material by a subject. Information can be factual or non-factual, misleading, deceitful or truthful. We therefore separate between information, claim, and fact, where information is the overarching category. A claim is information containing a statement, which can be *descriptive* (e.g., “most people don’t trust politicians”), *interpretive* (e.g., “most people don’t trust politicians because they are corrupt”), *evaluative* (e.g., “it is unfortunate that most people don’t trust politicians”) or *analytical* (e.g., “if people don’t trust politicians, democracy will suffer”) (Freeman 2000). A fact is a claim, or a part of a claim, that in theory can be verified. This means that facts relate to the descriptive or interpretive parts of claims.

It should be noted that the kinds of facts and truths that we are concerned with in our discussion are the ones related to phenomena in the social world which meaningfully could be disputed. We do not argue that source criticism is relevant in the assessment of what Searle (2010, 18) labels “institutional facts” and “epistemically objective statements”, in which “truth and falsity can be ascertained independently of the attitudes and opinions of observers”. Examples of such statements are “Monday is a day in the week”, “journalists produce news” or “the earth circles around the sun”. Such mundane truth-claims refer to ontological realities which are not disputed in a meaningful way relevant to the practices of journalists and their audiences, even though they contain concepts that to varying degrees are socially and culturally constructed in discourse (“Monday”, “week”, “journalists”, “news”, “the earth”). An important point, however, is that such undisputed truths and sources are becoming increasingly rare in a “post-truth” reality (Waisbord 2018), and that the verification practices associated with the objectivity norm in traditional journalism therefore have decreasing value.

Verification and Binary Epistemology

Studies suggest that while verification is a norm held in high regard by journalists, opinions and competences among journalists related to what it takes to verify pieces of information vary greatly (Brandtzaeg et al. 2016; Shapiro et al. 2013). Moreover, the word “verification” inevitably carries with it some discursive baggage from its origin in logical positivism and the later development of the hypothetico-deductive method (Popper 2005). The concept of verification is therefore developed and discursively framed within methods of the natural sciences and a formal regime of hypothesis-testing, which, while it may perfectly reflect scientific practice (Kuhn 2012), conforms even less well to systems of knowledge production in the sociocultural domain to which journalism belongs.

Nevertheless, this link between verification, logical positivism and the methods of the natural sciences is visible in journalism. Even though many journalists reject the notion of positivist objectivity, their practice is still rooted in positivist notions of information verification and naive realism, argues Waisbord (2018). Textbooks and other practice-oriented literature used in the professional training of journalists and fact-checkers bear witness of this. In the classical *Elements of Journalism*, Kovach and Rosenstiel label verification a discipline, which they argue is the essence of journalism, and which through connection with the objectivity of scientific methods creates a “journalism of objective method” (Kovach

and Rosenstiel 2001, 69). Such belief in the objectivity of scientific methods is echoed in many journalism textbooks, which thereby tends to frame verification in a discourse of binary epistemology, in which dichotomies like true/false, accurate/inaccurate, reliable/unreliable, and facts/fiction structure the reasoning. An example of this is the ways in which verification is discussed in *News Reporting and Writing, The Missouri Group* – a textbook that has been used in American j-schools for decades, in multiple editions. Here, the authors place a heavy emphasis on a binary distinction between accurate and inaccurate information and, by extension, reliable and unreliable sources. Accuracy is grounded in cross-checking from multiple reliable sources. Consulting many sources is presented not as a way to layer in different and perhaps incompatible perspectives, but “to ensure accuracy by verifying information. When additional sources are checked and cross-checked, the chances of a story being accurate greatly improve” (Brooks et al. 2011, 110).

We find the same discourse of binary epistemology also in newer and more specialised textbooks. In the *Verification Handbook*, edited by Craig Silverman, who for many years has taught fact-checkers about verification, the definition of what it means to verify content reads as follows:

Our job is not to parrot sources and the material they provide, but to challenge them, triangulate what they provide with other credible sources and verify what is true, weeding from our work (before we publish, map or broadcast) what is false or not adequately verified. (Silverman 2014, 17)

The problem with this discourse of binary epistemology is, as we see it, that it tends to categorise sources and source material as either accurate or inaccurate, reliable or unreliable while not adequately acknowledging that degrees of accuracy and reliability depends on socio-cultural context and interpretation – a point which will be discussed further below. The consequence is that the way verification is understood pushes journalism towards binary positions, in which information ideally can be interpreted as either true or false, thereby to a certain degree neglecting the complexity of what it takes to produce truth-claims. This is not to say that verification practices in journalism and fact-checking always default to binary positions. For example, many fact-checking organisations nuance the true/false dichotomy by turning it into a scale – so called truth-metres – ranging from for instance “completely false” to “completely true” (Graves 2016). However, even in such nuanced practices, the binary epistemology remains the structuring principle, leaving little room for socio-cultural context and interpretation to interfere with the conclusions drawn. We therefore argue that verification, as it is understood and practised, has a limited range in journalism, both epistemologically and methodologically, as it only applies to facts (i.e., claims that can be verified or falsified).

The Hermeneutics of Source Criticism

As an alternative to verification, the concept *source criticism* has a wider reach methodologically and epistemologically. The term’s origin rests with German historian Leopold von Ranke, who developed source criticism (*Quellenkritik*, in German) during the first half of nineteenth century as a method within historiography (Allern 2015, 53). In its modern version, source criticism implies a hermeneutic view on the relationship between news

and truth. It complements previously proposed alternative epistemologies of journalism, like pragmatic objectivity (Ward 2010) and critical realism (Wright 2011). Both these philosophical directions provide journalism with a much-needed middle-ground between naive realism and postmodern relativism, as do source criticism. Pragmatic objectivity prescribes an attitude suggesting that journalists do not have direct and immediate access to the reality “as it is”, but instead develop their knowledge about the world through different concepts and ways of understanding. Similarly, critical realism implies a belief in an objective world beyond discourse, but that journalists (and everyone else) only can gain knowledge about this world through discourse.

The benefits of source criticism are that it not only is based on a similar middle-ground epistemology between naive realism and relativism, it is also a distinct methodology of knowledge production. This methodology, we argue, is of great value to journalism as (1) guidelines on how to assess sources and information, (2) a professional attitude related to what it takes to produce truth-claims, and (3) a tool to perform audits of journalism. We will explore this further by first looking at the epistemology of modern source criticism and then its methodology.

The Epistemology of Source Criticism

The catalyst for modern source criticism was German philosopher Hans-Georg Gadamer and his book *Truth and Method (Wahrheit und Methode*, in German), published in 1960. Gadamer argued that truth in relation to human and social life is not an objective entity, but an evolving understanding based on interpretations and re-interpretations of the sources of information we have available. The human sciences relate to “modes of experience in which a truth is communicated that cannot be verified by the methodological means proper to science” (Gadamer 2013, xxi). In other words, truth, in relation to social life (the kinds of truth that journalism mostly deals with) cannot be accomplished through the binary epistemology that tends to structure traditional ways of understanding verification in journalism. To Gadamer, truth is irrevocably connected to interpretation and understanding. A phenomenon in the social world should always be understood with interpretation, and an understanding of that phenomenon will therefore always be coloured by the interpreter. Interpretation and understanding do not constitute a linear process, but rather a circular movement. An interpretation of a phenomenon in the social world is always guided by a degree of understanding, which in turn leads to new interpretations and new understandings in a potential never-ending loop.

The following hypothetical, yet realistic, example illustrates this hermeneutical process: A journalist is about to write a news story on a claim a politician has made in a tweet containing a link and an image supposedly supporting the claim. This tweet is therefore the initial source material the journalist relates to. The journalist has preconceived knowledge and therefore understandings related to this source (the politician) and the source material (the tweet) and therefore immediately performs several interpretations of the tweet, before moving on to the link, which the journalist also may have preconceived knowledge of depending on whether or not s/he recognises the root url. The journalist interprets this next source and source material and their relation to the politician’s claim and to the third source material, the image, which the journalist also interprets based on preconceived knowledge related for instance to similar images s/he has seen

before. All these interpretations are also affected by the journalist's preconceived knowledge on the topic the claim is about and the wider social, cultural, technological and political context it is part of. The interpretations also affect what other source material the journalist might consult before writing the story. However, when consulting other source material (typically from a rather narrow network of sources), the journalist might get new understandings leading to additional or renewed interpretations of the original tweet, link and image. For instance, she might find other images giving a completely different perspective of the event depicted in the original image. After publishing the news story, the journalist might get reactions, which might lead to new understandings and interpretations of the tweet, the link and the image. And future source material, like for instance different tweets by other politicians, different images and links covering future events of the same sort, might lead to re-interpretations and new understandings of the original source material.

The hermeneutics of source criticism implies that source material "can never give an objective or neutral description of the topic it treats" (Ankersborg 2007, 10 our translation). Source material – whether it is a tweet, a written document, an image, registry data, a video, an audio recording or any other kind of source material – will always be influenced by the sources' "horizon of understanding" (Gadamer 2013), the situation of origin, the wider socio-cultural context of that situation, the genre and language applied, and so on and so forth. This is what within the vocabulary of source criticism is labelled "tendency". All sources and source material have a tendency, and an important task when performing source criticism is to reveal this tendency and assess how it affects the source material's information value.

The hypothetical example of a journalist assessing a tweet illustrates that much of what many journalists already do when they consult source material is in adherence with the epistemology of source criticism. However, such scrutiny of source material is rarely reflected upon in journalistic practice and the process of interpretation and reinterpretation is seldom made transparent. Journalistic practice in most cultures encourages journalists to categorise sources as reliable or unreliable, and source material as accurate or inaccurate, in accordance with the binary epistemology that tends to structure traditional verification practices. Consequently, journalists tend to highlight the sources' authority rather than their tendency, and do not routinely confront the fact that all sources and the material they produce have a position. A shift towards source criticism would entail that journalists to a greater extent take into consideration and make visible that source material will never reach a state of complete saturation related to potential interpretations and the understandings that could be derived from it, because source material can never be detached from its originator (the source), its socio-cultural context, its interpreter or from other sources.

The tendencies of sources and source material can be intentional or unintentional. They can be related to human bias, based on cultural or political positions, social class, gender, financial status, geography and other traits. Tendencies can also be found with genre attributes. The hard news genre has other rhetorical conventions and social functions than for instance a short story, implying that the genre itself bears with it some expectations and thereby tendencies related to how information is conveyed. Tendencies can also be embedded in technological affordances, as such affordances can affect how the information is interpreted and understood, and they can be black-boxed in algorithms

(Diakopoulos 2015). Because of such tendencies, it is impossible within the hermeneutics of source criticism to determine the credibility of source material based on an assumed existence of a true-false scale – it is only possible to assess whether sources express themselves in accordance with what they *believe* to be true (Ankersborg 2007, 110).

The most important take-away from the epistemology of source criticism to the assessment of the truth-telling capabilities of journalism are:

1. *Tendency*: All sources and source material have a tendency, irrespective of their reliability and accuracy. These tendencies are affected by the source's horizon of understanding, the situation of origin, the wider socio-cultural context, and potentially also technological affordances.
2. *Interpretation*: All sources and source material must be interpreted and re-interpreted in relation to other sources, other source material and shifting contexts.

Source Criticism as Methodology

Source criticism offers several methodological approaches to reveal the tendencies of sources and source material, and their potential information value. In this article, we focus on four such approaches that are relevant for journalism: (1) the distinction between source material as remnant and testimony, (2) the relational dimension of source material, (3) analysing presuppositions and what is left out in source material, and (4) self-reflection related to journalism as source material.

First, the distinction between source material as remnant and testimony, or what we might call *the double logic of sources*. As previously mentioned, all source material are both remnant and testimony. When viewing source material as remnants, we are interested in what it can tell us based on its appearance. When viewing source material as testimony, we look at what the source contains and therefore what it can tell about the topic it treats (Ankersborg 2007, 44ff). Looking at source material as a remnant forces us to ask questions about the material's situation of origin and the wider cultural, social, technical, and political context in which it was, or is, produced. This reveals the horizon of understanding embedded in the material intentionally from the source and unintentionally as indirect remnants of the conditions of the situation of origin. Such indirect remnants might be easy to detect when the source material originates from a different socio-cultural context than our own, but they are present even if the source is from a familiar context.

The second methodological aspect is the relational dimension of sources and source material. A source is never an isolated entity, nor is source material. It always relates to other sources, either directly, through for instance quoting other source material, or indirectly as indirect remnant or testimony through phrases, perspectives, motives, genre attributes, etc that can be found in other source material, which the source is likely to build upon. The tweet with the image and link used as an example above will for instance relate to other tweets and images on a genre level, it will relate to the sources behind the link and the image, to many other sources and source material, including other claims by the same politician. Digital source material often has direct relations embedded in links, which calls for what Grut (2021, 27) labels "network reading", meaning reading vertically across different sites instead of only within one article or site to determine the credibility of digital information. Moreover, source material is always related to

its source, the situation of origin and the wider socio-cultural context of this situation of origin.

In an analysis of Israeli journalists verification strategies, Godler (2020) recognises the importance of such contextual relations in what he develops as an “adaptationist theory of truth”, suited to describe journalists’ pursuit of truth and the context-dependence of their veristic criteria. Also, digital source material has relations to the technologies and platforms in which it is embedded. Koch and Kinder-Kurlanda (2020, 284) argue that internet platforms provide specific modes of data creation, which “affects provenance, authenticity, and integrity of the data collected”, while Fridlund (2020) advises to perform more advanced research on digital tools, underlying mechanisms, affordances and programmed omissions of digital source material.

The third methodological aspect of source criticism we will discuss is related to what source material does *not* include, or what Ankersborg (2007, 78) refers to as “the hermeneutics of silence”. This could be because not everyone with potentially valuable information is available as sources, for instance because they can’t, don’t want to or are not allowed to express themselves. It could also be related to information that is presupposed, intentionally or unintentionally left out, or perhaps even manipulated. Figuring out what is left out, presupposed and/or manipulated can be crucial when determining the information value of sources and the material they produce, and source criticism methodology here to a large degree rests on methodologies like critical discourse analysis, in which analysing unsaid implicit presuppositions are common (see for instance Fairclough 2014).

Finally, it is necessary to add a meta-analytical layer related to the outcome of source criticism, which in many cases, and particularly in journalism, is source material of its own. When journalists produce a story, this story becomes source material with a specific originator and situation of origin. Since journalists often have similar training and professional education, there are similarities in how their situation of origin and horizons of understanding create tendencies in the stories they produce, for instance related to techniques of narration. This affects how journalism as source material can be understood and assessed. Source criticism as methodology in journalism implies a critical scrutiny of the information conveyed by the journalistic story itself, meaning the sources and source material the story contains and the ones that are missing, how the narrative structure and interlinking of sources and source material contain and create interpretations, how the situation of origin and the journalist’s horizon of understanding create implicit layers of meaning, interpretation and understanding in the story. This calls for self-reflection as a crucial part of source criticism.

Fossum and Meyer (2008, 136–137) argue that journalism constitutes a “source criticism problem” since journalistic products, as all other source material, have tendencies created by the sources’ horizons of understanding, the situation of origin and the wider socio-cultural context. Since journalistic products are second-hand source material for the audience, they also embed all the tendencies of the source material they contain and are therefore more interpretive than what they often portray themselves as.

The most important take-aways from the methodology of source criticism to the assessment of the truth-telling capabilities of journalism are:

3. *The double logic of sources*: In order to assess how source material is affected by the source's horizon of understand, the situation of origin and socio-cultural context, it is important to distinguish between source material as remnant and as testimony
4. *Relations*: All sources and source material have relations to other sources, both as testimony and remnant. Such relations are particularly important with digital source material, which also include relations to technological affordances.
5. *Omission*: Analysing what information source material does *not* include is as important as analysing what it does include. This also includes analysing what potentially is left out because of information manipulation.
6. *Journalism as source*: Journalism produces source material which should be analysed with the same scrutiny as other source material.

Towards a New Hermeneutic of Journalism

In this section, we will explore how source criticism can aid the production and assessment of truth-claims in journalism. We will exemplify our discussion with how investigative journalism and fact-checking in particular can benefit from source criticism, because these are the practices within journalism that invest the most “epistemic effort” (Ekström, Ramsälv, and Westlund 2021), meaning the degrees to which they produce actual truth-claims and adhere to the monitorial role of revealing the “hiddens facts” and speaking truth to power.

Above we pointed to six take-aways from the epistemology and methodology of source criticism labelled as: 1) *Tendency*, 2) *Interpretation*, 3) *The double logic of sources*, 4) *Relations*, 5) *Omission*, and 6) *Journalism as source*. These take-aways create a need for advancing three norms for the ways in which journalism produces truth-claims. These norms are: (1) harness truth-claims with modesty; (2) deploy interpretive transparency in the production of truth-claims; and (3) operationalise self-reflective and positional truth-claims.

Applying these norms does not represent a radical change for the practices and audits of investigative reporting and fact-checking. To some degree, they already exist in certain parts of these journalistic practices, but they are in need of revision and should, we argue, be more salient. In [Table 1](#) we highlight how these norms relate to the six take-aways, and we exemplify what relating to them would mean for practices of journalism and fact-checking.

Norm 1: Harness Truth-claims with Modesty

The first take-away above relates to the epistemology of source criticism and the premise that all sources and source material have a tendency. The question is not *if* a source has a tendency, but *what* the tendency is and *how* it affects the source material. Most source material can therefore not be assessed as telling either truths or lies, they can mainly be assessed according to whether the sources present information they *believe* to be true, as suggested in take-away 2, *Interpretation*, above. The combination of several sources in a piece of journalism is therefore rarely more than a collection of beliefs.

Table 1. How source criticism and the norms of modesty, interpretive transparency and self-reflexivity can be operationalised when journalists produce truth-claims.

SC concepts	Modesty in truth-claims	Norms Interpretive transparency	Self-reflective truth-claims
Tendency	– Modify truth-claims according to sources' tendencies	– Make the sources' tendencies and how they affect the truth-claims visible	– Reflect on how the journalists' own "horizon of understanding" and positionality affects the assessments of the sources' tendencies and thereby the truth-claim
Interpretation	– Be aware of how interpretations of sources and source material affect the truth-claim	– Make visible the interpretation of source material and potentially also how other sources affect the interpretation	– Reflect on how the journalists' own "horizon of understanding" and positionality affect the interpretations of sources and source material
Double logic of sources	– Distinguish between how source material both as remnant and testimony affects the truth-claim	– Make visible important aspects related to the remnants and/or testimonies of source material, which the truth-claim is based on	– Reflect on the journalists' own ability to detect aspects of source material related to both remnant and testimony
Relations	– Assess how source material's relations to other sources (and to technological affordances) affect the truth-claim	– Make visible the relations that might affect how source material is interpreted, and why certain source material are deemed more important than others in the framing of the story	– Reflect on how the journalists' own "horizon of understanding" and positionality affect the assessment of the relations of important sources and source material
Omission	– Assess what the source material used does <i>not</i> contain and how missing and potentially also manipulated information can affect the claim	– Make visible what the source material does <i>not</i> say anything about	– Reflect on how the journalists' own "horizon of understanding" and positionality affects their ability to detect what source material, does <i>not</i> say anything about
Journalism as source	– Be aware that the truth-claim produced becomes new source material, with its own tendencies	– Provide guidance to the audience on how to assess the strengths and weaknesses of the truth-claim as source material	– Reflect on how the genres the journalists use contain certain text norms that might affect how the truth-claim is formulated and thereby understood

Consequently, truth beyond "institutional facts" (Searle 2010) is seldom, if ever, absolute or independent of a particular source and thereby point of view. Truth, argued Putnam (1981, 49–50), "is some sort of ideal coherence of our beliefs with each other and with our experiences (...) and not correspondence with mind-independent or

discourse-independent ‘state of affairs’’. Adding to this is the complexity of digital source material and how affordances of technologies and platforms create both tendencies and relations (take-aways no. 1 and 4). Rephrasing Putman, we state that truth, in relation to the social world, is an ideal coherence of beliefs that is neither mind-independent, discourse-independent nor platform-independent.

Practices like investigative journalism and fact-checking go beyond the level of belief and aim at creating conclusions referring to an assumed mind-, discourse- and platform-independent truth. With such journalistic practices, there is therefore a need to pay more attention to the gap between beliefs and truth. Echoing Putnam’s argument about ideal coherence of beliefs, Graves (2017) argues that “factual coherence” is a better way of judging the epistemic labour of fact-checkers, and that some fact-checkers indeed operate by such a standard by adding various forms of modifications to truth-claims. Experienced fact-checkers realise that their work reflects journalistic judgement, and they therefore express “epistemological modesty” (Graves 2017, 521). After leaving the fact-checking organisation Politifact, Bill Adair, one of the minds behind the original “Truth-O-Meter”, has been involved with developing alternatives to the truth-meter, because he “recognize[s] it doesn’t work for everyone, and I’m open to other ways of telling the truth” (Adair 2018).

Some practical implications of highlighting modesty when journalists and fact-checkers produce truth-claims are visible in table 1. Of special importance is to recognise that a truth-claim produced by a journalist or fact-checker is always a claim, and not truth per se. As any other truth-claim, it has tendencies marked by the socio-cultural context in which it is produced and the horizon of understanding of the journalist or fact-checker producing it. Every piece of journalism and fact-checking has a tendency. This is only a problem if it is not recognised – and it should be dealt with by deploying interpretive transparency.

Norm 2: Deploy Interpretive Transparency

In recent decades, journalism has portrayed transparency as a vital journalistic norm because of its alleged ability to connect news to truth and thereby increase the publics’ trust in journalism. According to Kovach and Rosenstiel (2001, 80), “the willingness of the journalist to be transparent about what he or she has done is at the heart of establishing that the journalist is concerned with truth”. Central to the norm of transparency as a catalyst for truth in news, the authors argue, is that it allows the audience to assess the validity of the source material, the process by which it was secured, and the motives and biases of the journalist.

However, the normative assumptions embedded in these links between transparency, trust, and truth have proven difficult to confirm through empirical research (Karlsson 2020). Moreover, to our knowledge, to date not many studies have overtly looked at transparency in relation to how truth-claims are formulated and the interpretive and deliberative processes leading up these formulations in practices like investigative journalism and fact-checking (but see Graves 2017; Humprecht 2020; Johnson and St John 2021). Take-away number 2 above pointed to the importance of interpretation and reinterpretation when assessing source material. This applies to the assessment of investigative journalism and fact-checking also, since the outcome of these practices are new source material. Being transparent about the interpretations that underpin the truth-claims put forward

by these practices and who have been involved in the interpretations and deliberations can be of importance. When a news outlet decides to break an agenda-setting investigative story, editors at various levels are usually involved, but they rarely appear in bylines. Being transparent about the process unfolding from the time an investigative reporter finishes a story to it is published could open up one of the last black boxes of journalistic production, namely the in-house interpretations and deliberations on the work of their own journalists, the acceptance of ideas, sources, methods and conclusions, the formulation of headlines and leads, and the decisions on whom to involve in such process. Ethnographic research has revealed that such processes are important in news work (e.g., Gravengaard and Rimestad 2012), in investigative reporting (e.g., Konow-Lund 2019), and fact-checking (e.g., Graves 2017). They involve a lot of self-reflexive, deliberative epistemological labour which is relevant to the understanding of how and why truth-claims are made. We argue that finding a way to reveal this epistemological labour to the public could be important in order to strengthen the connection between news and truth in investigative journalism and fact-checking.

Some ways of doing this and thereby practically implementing the norm of interpretive transparency are visible in table 1. The most important points are to make visible interpretations, both the ones that are embedded in source material and how journalists and fact-checkers interpret the same material, its relations, omissions, and the overall assemblage of source material that constitute the story. There are tendencies within journalism to perform such interpretive transparency. Podcasts, like *The New York Times' The Daily*, often discuss how a particular story was produced, with what purpose and with what deliberations. The independent investigative journalism newsroom *ProPublica* publishes methodological articles, and sometimes even articles discussing why an investigative project was launched (see for instance Gallardo and Sussman 2020; Hopkins 2019). And the US-based, industry-led Trusting News project has done some experiments suggesting that adding an “explain your process” box to news stories improves the degree to which people perceive a news organisation as reliable (Masullo, Curry, and Whipple 2019). However, such meta-journalistic coverage can run the risk of becoming self-celebratory performances (Perdomo and Rodrigues-Rouleau 2021). Striking the right balance between self-praise and epistemological necessity therefore requires critical, self-reflexive scrutiny involving, amongst other things, assessments of one’s own and others’ positionality. Such reflexivity constitutes the third and final norm we argue is important.

Norm 3: Operationalise Self-reflective Truth-claims

Self-reflexivity, meaning the act of self-reference and the capacity of social actors to recognise their place in social structures, is not only important in relation to unveiling how truth-claims are being made. It is also important on a meta-level related to the ways in which journalism not only relies on sources but also *are* sources producing source material, as take-away number 6, *Journalism as source* points to. Journalistic products should be assessed with the same scrutiny as other kinds of source material. The question every investigative journalist, fact-checker and editor should ask themselves before publishing a story should not be “does this story have a tendency?” It should be: “What is the tendency of this story?”

To provide answers to that question, we argue that investigative journalism and fact-checking should be critically assessed as source material on two levels: (1) a meta-relational level, implying an analysis of the totality of the relations between various sources and source material both used and not used in the story, and (2) an analysis of positionality. Reflecting take-away number 4, *Relations*, the meta-relational level implies going through all the steps of a proper source criticism analysis as described above to assess how the situation of origin and the wider socio-cultural context in which the story is produced, and the combination of all sources and source material used, and the relations set up between them, create a particular horizon of understanding, which becomes embedded in the story. Such assessments include questions like why this is a news story, why it is important, what is taken-for-granted in the story (take-away number 5, *Omission*), how layout, design and genre attributes testify to the tendencies of a specific situation of origin (take-away number 3, *The double logic of sources*), what impressions are a reader/viewer/listener likely to be left with, and so on and so forth.

We are not suggesting that every published story needs an accompanying published reflection, but rather that journalism needs mechanisms to encourage this kind of reflexivity, for instance when newsrooms perform audits of their own practice (see Sung, Blakley, and Tong 2021 for a recent example). Such mechanisms should also involve asking questions about the affordances of technologies and platforms used both to produce and distribute journalistic stories. Are there differences in how a story is likely to be perceived and interpreted on print vs online? Do the truth-claims look differently when they are published on different social media platforms? How is the socio-technical context of consumption – meaning the different social and technical environments in which audiences can encounter the story – likely to affect how a story is perceived?

The second level of self-reflexive scrutiny concerns *positionality*. Positionality refers to the ways in which social class, racial ability, sexuality, childhood experiences, and gender identities play into news production. It means identifying social identities, the effect of these identity positions on knowledge and communities, and the details that are tied to the uniqueness and complexity of identities (see Jacobson and Mustafa 2019). Paying attention to positionality implies that journalists accept that the processes and practices they are involved in are socially constructed, and that the stories they produce embed various positions (for instance the journalist as narrator, the voices of the sources and the positions they speak both from and to, the implied audiences, etc.). Such awareness is vital to be cognisant of the sources' horizons of understanding, the journalist's position as interpreter of source material and as narrator, and the positions of audiences who encounter the story on various platforms in various contexts. Positionality is therefore closely linked to standpoint epistemology, which has been portrayed as vital "to fulfill the liberatory goals of journalism" (Durham 1998, 117).

Some practical suggestions on how to operationalise self-reflective truth-claims are visible in Table 1. There are examples of such self-reflective awareness of positionality within certain fringe practices of journalism. New journalists like Joan Didion and Norman Mailer tried, through self-reflection and awareness of positionality, to investigate "what it feels like to live in a world where there is no consensus about a frame of reference to explain 'what it all means'" (Eason 1990, 192). Another example is found with a US public radio station that started a "culture competence" project in order to make the journalists more self-reflexive of their sourcing practices, including the positionality of their

sources. This project led to greater diversification of sources and a renewed understanding of what objectivity in reporting can mean (Wenzel 2021).

Conclusion

The aim of this article has been to advance source criticism as an epistemological methodology for journalism suited to tackle the problems of the current information disorder (Wardle and Derakhshan 2017) and of the binary epistemology that tends to structure traditional verification practices. Our discussion of source criticism led us to six take-aways – tendency, interpretation, the double logic of sources, relations, omission, and journalism as source – which in turn led us to highlight three norms we believe are important for journalistic practice and audits of journalism: (1) harness truth-claims with modesty; (2) deploy interpretive transparency; and (3) operationalise self-reflective truth-claims. Even though these norms have value predominantly related to investigative journalism and fact-checking – because these practices produce truth-claims beyond what could be attributed to sources alone – we believe they are important to journalism in general and that they constitute key ingredients in a hermeneutic epistemology for journalism. Similar to Brennen’s (2018, 440) investigations of the epistemology of science journalism, we believe these norms can help “to hold strongly enough to its antecedents so that truth can circulate widely, but also to open the truth to new connections and relationships”.

One central advantage of source criticism over traditional verification practices is that it pertains to *all* sources and the information they convey in source material, not only facts (i.e. information that can be verified or falsified). As such, source criticism offers a much more wide-reaching and applicable approach to all practices of journalism. However, since source criticism is based on a hermeneutic view on knowledge production, it can seem like a demanding approach to undertake. Even though source criticism offers specific methodological approaches, it might feel overwhelming for journalists to adhere to it because of the levels of uncertainty and interpretation involved. However, we argue this is not a practical problem – it’s a question of attitude. Adopting source criticism as an attitude implies abandoning the idea that most facts can be verified or falsified. By being transparent about this doubt through modesty in how knowledge claims are formulated and by making visible an assessment of the tendency of the most significant sources and source material, journalists can come a long way in solving the epistemic problems of traditional practices of verification. We believe this can be done without losing clarity, limiting audience reach and engagement, or diminishing the real-world impact of journalistic truth-telling.

However, much is yet to be explored related to the epistemological and methodological consequences of digitally produced, distributed and assessed source material, digital situations of origin, digital contexts of source material, and the ways in which technologies and algorithms contribute to the tendencies of source material and how to assess it. We have pointed to some of these consequences, but what *digital source criticism* implies should be further investigated. This term – digital source criticism – is beginning to gain traction, especially within digital historiography (e.g., Fridlund 2020; Owens and Padilla 2020; Paju, Oiva, and Fridlund 2020). Within journalism, digital source criticism has been used

to describe the application of digital tools to the assessment of digital source material (Grut 2021; Nygren and Brounéus 2018). Given the constant and rapid evolution of digital technologies and information networks, digital source criticism and the assessment of truth-claims in (digital) journalism, must therefore – like source criticism itself – be a hermeneutic process involving constant interpretations and re-interpretations, assessments and reassessments.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Research Council of Norway under grant number 302303.

ORCID

Steen Steensen  <http://orcid.org/0000-0003-2675-1817>

Valerie Belair-Gagnon  <http://orcid.org/0000-0002-7756-1688>

Lucas Graves  <http://orcid.org/0000-0002-2980-7145>

Bente Kalsnes  <http://orcid.org/0000-0002-8764-6925>

Oscar Westlund  <http://orcid.org/0000-0002-2533-6737>

References

- Adair, Bill. 2018. "Beyond the Truth-O-Meter". *Columbia Journalism Review*. July 24. https://www.cjr.org/first_person/beyond-the-truth-o-meter.php.
- Allern, Sigurd. 2015. *Journalistikk og kildekritisk analyse*. Oslo: Cappelen Damm akademisk.
- Ankersborg, Vibeke. 2007. *Kildekritik i et Samfundsvidenskabeligt Perspektiv*. Frederiksberg: Forlaget samfundslitteratur.
- Barberá, Pablo, Joshua A. Tucker, Andrew Guess, Cristian Vaccari, Alexandra Siegel, Sergey Sanovich, Denis Stukal, and Brendan Nyhan. 2018. "Social Media, Political Polarization, and Political Disinformation: A Review of the Scientific Literature". *Monograph*. California, USA: William and Flora Hewlett Foundation. <http://eprints.lse.ac.uk/id/eprint/87402>.
- Bennett, Lance W., and Steven Livingston. 2018. "The Disinformation Order: Disruptive Communication and the Decline of Democratic Institutions." *European Journal of Communication* 33 (2): 122–139. doi:10.1177/0267323118760317.
- Brandtzaeg, Petter Bae, Marika Lüders, Jochen Spangenberg, Linda Rath-Wiggins, and Asbjørn Følstad. 2016. "Emerging Journalistic Verification Practices Concerning Social Media." *Journalism Practice* 10 (3): 323–342.
- Brennen, J Scott. 2018. "Magnetologists on the Beat: The Epistemology of Science Journalism Reconsidered." *Communication Theory* 28 (4): 424–443. doi:10.1093/ct/qty001.
- Brooks, Brian S., George Kennedy, Daryl R. Moen, and Don Ranly. 2011. *News Reporting and Writing*. The Missouri Group. 10th ed. Boston: Bedford/St. Martin's.
- Buckland, Michael K. 1991. "Information as Thing." *Journal of the American Society for Information Science* 42 (5): 351–360. doi:10.1002/(SICI)1097-4571(199106)42:5<351::AID-ASIS>3.0.CO;2-3.
- Carlson, Matt. 2017. *Journalistic Authority: Legitimizing News in the Digital Era*. New York: Columbia University Press.
- Diakopoulos, Nicholas. 2015. "Algorithmic Accountability: Journalistic Investigation of Computational Power Structures." *Digital Journalism* 3 (3): 398–415.

- Diakopoulos, Nicholas. 2018. "Reporting in a Machine Reality: Deepfakes, Misinformation, and What Journalists Can Do about Them". *Columbia Journalism Review*. May 15. https://www.cjr.org/tow_center/reporting-machine-reality-deepfakes-diakopoulos-journalism.php.
- Durham, Meenakshi Gigi. 1998. "On the Relevance of Standpoint Epistemology to the Practice of Journalism: The Case for "Strong Objectivity"." *Communication Theory* 8 (2): 117–140. doi:10.1111/j.1468-2885.1998.tb00213.x.
- Eason, David. 1990. "The New Journalism and the Image-World." In *Literary Journalism in the Twentieth Century*, edited by Norman Sims, 191–205. New York: Oxford University Press.
- Ekström, Mats, Amanda Ramsälv, and Oscar Westlund. 2021. "The Epistemologies of Breaking News." *Journalism Studies* 22 (2): 174–192. doi:10.1080/1461670X.2020.1831398.
- Ekström, Mats, and Oscar Westlund. 2019. "The Dislocation of News Journalism: A Conceptual Framework for the Study of Epistemologies of Digital Journalism". 2183–2439, February. Cogitatio Press. doi:10.17645/mac.v7i1.1763.
- European Commission, Directorate-General for Communications Networks, Content and Technology. 2018. *A Multi-Dimensional Approach to Disinformation: Report of the Independent High Level Group on Fake News and Online Disinformation*. Luxembourg: Publication Office. doi:10.2759/0156.
- Fairclough, Norman. 2014. *Language and Power*. 3rd ed. London: Routledge.
- Fink, Katherine. 2019. "The Biggest Challenge Facing Journalism: A Lack of Trust." *Journalism* 20 (1): 40–43. doi:10.1177/1464884918807069.
- Fossum, Egil, and Sidsel Meyer. 2008. *Er nå det så sikkert? Journalistikk og kildekritikk*. 2nd ed. Oslo: Cappelen akademisk forlag.
- Frau-Meigs, Divina. 2022. "How Disinformation Reshaped the Relationship Between Journalism and Media and Information Literacy (MIL): Old and New Perspectives Revisited." *Digital Journalism* 10 (5): 912–922. doi:10.1080/21670811.2022.2081863.
- Freeman, James B. 2000. "What Types of Statements Are There?" *Argumentation* 14 (2): 135–157. doi:10.1023/A:1007846431353.
- Fridlund, Mats. 2020. "Digital History 1.5: A Middle Way Between Normal and Paradigmatic Digital Historical Research." In *Digital Histories*, edited by Mats Fridlund, Mila Oiva, and Petri Paju, 69–88. Mountain View, CA: Helsinki University Press. doi:10.2307/j.ctv1c9hpt8.9.
- Gadamer, Hans-Georg. 2013. *Truth and Method*. London: Bloomsbury Academic.
- Gallardo, Adriana, and Nadia Sussman. 2020. "How We Worked With Survivors of Sexual Assault in Alaska to Tell Their Stories — ProPublica". *ProPublica*. June 1. <https://www.propublica.org/article/how-we-worked-with-survivors-of-sexual-assault-in-alaska-to-tell-their-stories>.
- Godler, Yigal. 2020. "Post-Post-Truth: An Adaptationist Theory of Journalistic Verism." *Communication Theory* 30 (2): 169–187. doi:10.1093/ct/qtz031.
- Gravengaard, Gitte, and Lene Rimestad. 2012. "Elimination of Ideas and Professional Socialisation." *Journalism Practice* 6 (4): 465–481. doi:10.1080/17512786.2011.642243.
- Graves, Lucas. 2016. *Deciding What's True: The Rise of Political Fact-Checking in American Journalism*. New York: Columbia University Press.
- Graves, Lucas. 2017. "Anatomy of a Fact Check: Objective Practice and the Contested Epistemology of Fact Checking." *Communication, Culture and Critique* 10 (3): 518–537. doi:10.1111/cccr.12163.
- Grut, Ståle. 2021. *Digital Kildekritikk*. Oslo: Gyldendal akademisk.
- Hanitzsch, Thomas, Folker Hanusch, Jyotika Ramaprasad, and Arnold S. de Beer. 2019. *Worlds of Journalism: Journalistic Cultures Around the Globe*. New York: Columbia University Press.
- Hopkins, Kyle. 2019. "Why We're Investigating Sexual Violence in Alaska". *ProPublica*. May 16. https://www.propublica.org/article/why-were-investigating-sexual-violence-in-alaska?token=8JGdLgdwIU0izBRjvJUOv_PQFUET-J7_.
- Humprecht, Edda. 2020. "How Do They Debunk "Fake News"? A Cross-National Comparison of Transparency in Fact Checks." *Digital Journalism* 8 (3): 310–327. doi:10.1080/21670811.2019.1691031.
- Jacobson, Danielle, and Nida Mustafa. 2019. "Social Identity Map: A Reflexivity Tool for Practicing Explicit Positionality in Critical Qualitative Research." *International Journal of Qualitative Methods* 18 (January), doi:10.1177/1609406919870075.

- Johnson, Kirsten A., Burton St John III 2021. "Transparency in the News: The Impact of Self-Disclosure and Process Disclosure on the Perceived Credibility of the Journalist, the Story, and the Organization." *Journalism Studies* 0 (0): 1–18. doi:10.1080/1461670X.2021.1910542.
- Karlsson, Michael. 2020. "Dispersing the Opacity of Transparency in Journalism on the Appeal of Different Forms of Transparency to the General Public." *Journalism Studies* 21 (13): 1795–1814. doi:10.1080/1461670X.2020.1790028.
- Koch, Gertraud, and Katharina Kinder-Kurlanda. 2020. "Source Criticism of Data Platform Logics on the Internet." *Historical Social Research/Historische Sozialforschung* 45 (3): 270–287.
- Konow-Lund, Maria. 2019. "Negotiating Roles and Routines in Collaborative Investigative Journalism." *Media and Communication* 7 (4): 103–111. doi:10.17645/mac.v7i4.2401.
- Kovach, Bill, and Tom Rosenstiel. 2001. *The Elements of Journalism. What Newspeople Should Know and the Public Should Expect*. New York: Crown publishers.
- Kuhn, Thomas S. 2012. *The Structure of Scientific Revolutions*. 4th ed. Chicago: University of Chicago Press.
- Lippmann, Walter. 1922[2007]. *Public Opinion*. Minnesota, MN: Filiquarian Publishing, LLC.
- Masullo, Gina M., Alex Curry, and Kelsey N. Whipple. 2019. "Building Trust: What Works for News Organizations - Center for Media Engagement". <https://mediaengagement.org/research/building-trust/>.
- McNair, Brian. 2017. "After Objectivity?" *Journalism Studies* 18 (10): 1318–1333. doi:10.1080/1461670X.2017.1347893.
- Newman, Nic, Richard Fletcher, Antonis Kalogeropoulos, and Rasmus Nielsen. 2019. "Reuters Institute Digital News Report 2019." Oxford, UK: Reuters Institute for the Study of Journalism.
- Nygren, Thomas, and Fredrik Brounéus. 2018. "The News Evaluator: Evidence-Based Innovations to Promote Digital Civic Literacy." In *Youth and News in a Digital Media Environment: Nordic-Baltic Perspectives*, edited by Yvonne Andersson, Ulf Dalquist, and Jonas Ohlsson, 19–28. Gothenburg: Nordicom.
- Owens, Trevor, and Thomas Padilla. 2020. "Digital Sources and Digital Archives: Historical Evidence in the Digital Age." *International Journal of Digital Humanities*, doi:10.1007/s42803-020-00028-7.
- Paju, Petri, Mila Oiva, and Mats Fridlund. 2020. "Digital and Distant Histories: Emergent Approaches Within the New Digital History." In *Digital Histories*, edited by Petri Paju, Mila Oiva, and Mats Fridlund, 3–18. Mountain View, CA: Helsinki University Press. doi:10.2307/j.ctv1c9hpt8.6.
- Perdomo, Gabriela, and Philippe Rodrigues-Rouleau. 2021. "Transparency as Metajournalistic Performance: The New York Times' Caliphate Podcast and New Ways to Claim Journalistic Authority." *Journalism*, doi:10.1177/1464884921997312.
- Popper, Karl. 2005. *The Logic of Scientific Discovery*. London: Routledge.
- Putnam, Hilary. 1981. *Reason, Truth and History*. Cambridge: Cambridge University Press.
- Searle, John. 2010. *Making the Social World: The Structure of Human Civilization*. Oxford: Oxford University Press.
- Shapiro, Ivor, Colette Brin, Isabelle Bédard-Brûlé, and Kasia Mychajlowycz. 2013. "Verification as a Strategic Ritual." *Journalism Practice* 7 (6): 657–673. doi:10.1080/17512786.2013.765638.
- Silverman, Craig. 2014. "Verification Handbook. A Definitive Guide to Verifying Digital Content for Emergency Coverage." Maastricht, Netherlands: European Journalism Centre. <http://verificationhandbook.com>.
- Steensen, Steen. 2019. "Journalism's Epistemic Crisis and Its Solution: Disinformation, Datafication and Source Criticism." *Journalism* 20 (1): 185–189. doi:10.1177/1464884918809271.
- Steensen, Steen, and Oscar Westlund. 2021. *What Is Digital Journalism Studies?* Oxon: Routledge.
- Sung, Ki, Jonathan Blakley, and Vinnee Tong. 2021. "Want to Know If Your News Organization Reflects Your Community? Do a Source Audit. Here's How." *Nieman Lab*. March 5. <https://www.niemanlab.org/2021/03/want-to-know-if-your-news-organization-reflects-your-community-do-a-source-audit-heres-how/>.
- Waisbord, Silvio. 2018. "Truth Is What Happens to News." *Journalism Studies* 19 (13): 1866–1878. doi:10.1080/1461670X.2018.1492881.

- Ward, Stephen JA. 2010. "Inventing Objectivity: New Philosophical Foundations." In *Journalism Ethics: A Philosophical Approach*, edited by Christopher Meyers, 137–152. New York: Oxford University Press.
- Wardle, Claire, and Hossein Derakhshan. 2017. *Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making*. Strasbourg: Council of Europe.
- Wenzel, Andrea D. 2021. "Sourcing Diversity, Shifting Culture: Building "Cultural Competence" in Public Media." *Digital Journalism* 9 (4): 461–480. doi:[10.1080/21670811.2020.1810585](https://doi.org/10.1080/21670811.2020.1810585).
- Wright, Kate. 2011. "Reality Without Scare Quotes." *Journalism Studies* 12 (2): 156–171. doi:[10.1080/1461670X.2010.509569](https://doi.org/10.1080/1461670X.2010.509569).