



Epistemic authority in the digital public sphere. An integrative conceptual framework and research agenda

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Abstract

We develop an integrative conceptual framework and research agenda for studying epistemic authorities in the digital age. Consulting epistemic authorities (e.g., professional experts, well-informed laypeople, technologies) can be an efficient fast-track to knowledge. To fulfill this functional role, those who claim epistemic authority need to be both subjectively recognized (have a perceived advantage in knowledge) and objectively justified (have an actual advantage in knowledge). In a digital media context, new and unconventional knowledge sources have emerged that can fulfill the functional role of epistemic authorities. But false authorities that disseminate misinformation have emerged as well while other sources with important knowledge remain unrecognized. We further analyze the functional role of epistemic intermediaries that can mitigate such problematic developments by correcting false authorities and by providing endorsement for unrecognized authorities. We conclude with a research agenda to study functional forms of epistemic authorities and epistemic intermediaries in the digital public sphere.

Keywords: epistemic authority, digitalization, public sphere, knowledge, intermediaries.

In a social world, individuals rely on each other's knowledge. Is this a safe investment? How is the reputation of this candidate? Should I have surgery? Epistemic authorities are the go-to persons and institutions people trust to know better than they know themselves. In other words: "The fact that the authority has a belief p is a reason for me to believe p " (Zagzebski, 2012, p. 107). Believing on the basis of authority is one of the simplest and most powerful social heuristics (Kruglanski, 1989). If others know more than we do, then consulting them can be a rational and efficient fast-track to knowledge. For example, accepting a diagnosis from a medical expert (authority heuristic) is usually more rational than self-diagnosing (individual elaboration).

The wealth and rapid growth of knowledge in modern societies are inconceivable without epistemic authorities and without the public distribution of their knowledge via mass media (Abbott, 1988; Rosenfeld, 2019). For the authority heuristic to be functional and conducive to valid knowledge, however, those who claim epistemic authority need to be both subjectively recognized (have a perceived advantage in knowledge) and objectively justified (have an actual advantage in knowledge). Subjective perceptions of epistemic authority alone can lead to trust in false authorities who disseminate misinformation (Jäger, 2024), while objectively justified sources of knowledge (e.g., minority voices) may remain unrecognized (Fricker, 2007).

The double-edged role of epistemic authority—which involves the benefits of social knowledge sharing as well as the risks of being misinformed by others—has been identified as an inextricable condition of human communication in general

(Sperber et al., 2010) and of public discourse in particular (Goldman, 1999). With the digital transformation of the public sphere, additional challenges and potentials arise (Neuberger et al., 2023). While traditional epistemic authorities such as science and journalism have been challenged, new actors (e.g., social media influencers), organizations (e.g., "alternative" media, NGOs), collectives (e.g., peer production), and technologies (e.g., mobile apps, AI) have emerged that claim epistemic authority and/or are perceived as epistemic authorities by others.

In this article, we develop an integrative conceptual framework and research agenda for analyzing the transformation of epistemic authorities in the digital age. We begin with a review of *definitions of epistemic authority* across different disciplines including sociological, psychological, and philosophical approaches. We then discuss how the concept can be applied to *new and unconventional forms of epistemic authority* in the digital public sphere. We delimit the concept from related phenomena that fall outside the definition of epistemic authority, such as *false and unrecognized authorities*, and explain how such problematic developments can be explained by a divergence between objective, subjective, and socially claimed aspects of epistemic authority. We discuss the functional role of *epistemic intermediaries*, a subtype of epistemic authorities that can intervene to promote convergence between objective, subjective, and socially claimed aspects of epistemic authority by correcting false authorities or by providing endorsement for unrecognized authorities. We conclude our analysis with a *research agenda* to study functional forms of epistemic authorities and epistemic intermediaries in the digital public sphere.

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Defining epistemic authority—an interdisciplinary approach

The concept of epistemic authority is situated in the broader context of social epistemology, an interdisciplinary field of research including philosophy (Goldman, 1999), sociology (Fuller, 1988), and social psychology (Kruglanski, 1989). Social epistemology analyzes the social conditions of knowledge production (Fuller, 1988), the social heuristics of knowledge evaluation (Kruglanski, 1989), as well as the social dimensions of truth-seeking practices, including interactions between individuals, groups, and social systems (Goldman, 1999). A key question of social epistemology is “Which practices have a comparatively favorable impact on knowledge as opposed to error and ignorance?” Goldman (1999, p. 5). In the field of communication research, social epistemology has recently been applied to journalism (Carlson & Lewis, 2015), social media (Matheson & Wahl-Jorgensen, 2020), entertainment (Bartsch et al., 2024), and to the digital transformation of the public sphere (Neuberger et al., 2023).

Epistemic authority is a key concept in social epistemology (Goldman, 1999). It specifies the social strategies for claiming knowledge and expertise (Gieryn, 1999), the subjective perceptions that lead individuals to accept such claims (Kruglanski, 1989), and the objective conditions under which belief on authority can be rational and conducive to valid knowledge (Goldman, 2018). These aspects of epistemic authority are reflected in different definitional approaches.

Subjectivist approaches

Early work on epistemic authority (Gieryn, 1999; Kruglanski, 1989) has focused on the subjective and socially constructed aspects of the concept. From a social psychology perspective, Kruglanski et al. (2005, p. 351) define epistemic authority as:

(...) a source on whom an individual may rely in her or his attempts to acquire knowledge on various topics.

They further explain that:

In Kruglanski's (1989) lay epistemic theory, epistemic authority functions as a “stopping mechanism” analogous in its effects to the need for closure (...). Thus, even though individuals' accuracy motivation may be high and their cognitive resources ample, they may discontinue their epistemic search and instead accept (i.e., ‘seize and freeze’ upon) the pronouncement of a high-authority source, whose statements simply are perceived as beyond reasonable doubt. (Kruglanski et al., 2005, p. 352).

The subjective perception of epistemic authorities as “beyond reasonable doubt” is also echoed in Zagzebski's (2012, p. 107) philosophical definition:

The fact that the authority has a belief *p* is a reason for me to believe *p* that replaces my other reasons relevant to believing *p* and is not simply added to them.

From an individual perspective, it seems rational to assume that, in certain domains, others' knowledge is more reliable than our own. At least in the sense of “bounded rationality”

(Simon, 1990), a realistic form of rational choice that is bounded by the decision-maker's limitations of knowledge and computational capacity. In an ideal world, individuals can question anything and everything. In reality, however, it is often more rational for them to trust others instead of wasting their time.

Social constructivist approaches

Sociologists of knowledge (e.g., Gieryn, 1999) have challenged this view of epistemic authorities as beyond reasonable doubt by drawing attention to the social construction and power dynamics involved in claims to epistemic authority. From a social and cultural perspective, epistemic authority has been conceptualized as result of “boundary work”—which means that knowledge professions such as science (Gieryn, 1999) and journalism (Carlson, 2020) actively construct, claim, and defend their authority in public discourse. Epistemic authority is defined by Gieryn (1999, p. 1) as:

(...) the legitimate power to define, describe and explain bounded domains of reality.

In the words of Carlson (2020, p. 231):

(...) knowledge arises through the relationship between providers of information and their audience in an “epistemic system” (Goldman, 2011, p. 18). The ability to provide such knowledge and have others accept it as such defines epistemic authority.

As sociologists of knowledge have noted, the creation and maintenance of boundaries between epistemic authorities and lay audiences is often based on non-epistemic factors that are unrelated to objective knowledge criteria, such as rhetorical style, self-presentation, disqualification of competing actors, and circulation numbers (Carlson, 2020; Gieryn, 1999). From a social constructivist perspective, this implies that epistemic authority does not exist in an essential sense (Gieryn, 1999). Rather, the discursive power of epistemic authorities is actively constructed, claimed, and defended through boundary work of knowledge professionals and cultural elites and accepted as legitimate by lay audiences.

Objectivist approaches

Through the lens of objectivist positions (Goldman, 2018), however, objective knowledge criteria are important to evaluate the rationality of trust in epistemic authorities. The notion of objectivity implied in this view is based on a veristic concept of knowledge (Goldman, 1999). Veritism takes a moderate position between strong skepticism (relativism) which questions access to objective reality, and naïve (everyday) realism which has no doubts about the attainability of truth. A veristic position acknowledges the essential function of doubt but still accepts evidence, at least provisionally (Goldman, 1999). Knowledge in a veristic sense as “justified true belief” needs to be justified with good reasons and is always open to further scrutiny of its truth value. This includes claims made by epistemic authorities who, according to the objectivist view, are not beyond reasonable doubt but should be held to veristic standards of knowledge (Jäger, 2023). Such a veristic position is reflected in Goldman's (2018, p. 4) definition of

expertise—a concept used to distinguish objective aspects of epistemic authority from other uses of the term:

S is an expert about domain D if and only if (A) S has more true beliefs (or high credences) in propositions concerning D than most people do, and fewer false beliefs; and (B) the absolute number of true beliefs S has about propositions in D is very substantial.

Another objective criterion to define experts is their capacity to help others with problem solving. According to this “functional” or “service” view:

S is an expert in domain D if and only if S has the capacity to help others (especially laypersons) solve a variety of problems in D or execute an assortment of tasks in D which the latter would not be able to solve or execute on their own. S can provide such help by imparting to the layperson (or other client) his/her distinctive knowledge or skills. (Goldman 2018, p. 4)

An integrative definition of epistemic authority

How to reconcile this broad range of views and definitions? In this article, we propose an integrative approach that combines *subjective* aspects (subjects’ reliance on a source of knowledge; Kruglanski, 1989), *socially claimed* aspects (a source’s ability to provide knowledge and have others accept it as such; Carlson, 2020), and *objective* aspects (a source’s advanced knowledge and capacity to help others with their knowledge goals; Goldman, 2018). A definition that covers all three aspects has recently been proposed by Jäger (2024, p. 14):

A given epistemic source *A* is a recognized epistemic authority for an epistemic agent (or group of epistemic agents) *S* at time *t* and relative to some set of propositions or subject matter *p* and set of epistemic goods *G* if *S* correctly believes that:

- i) *A* has the epistemic capacity to help *S*—in suitable circumstances and in virtue of being in a significantly advanced epistemic position—accomplish *S*’s epistemic goals in *G* concerning *p* (*competence condition*), and
- ii) *A* reliably exercises this ability in suitable circumstances (*performance condition*).

The remainder of this article is based on this integrated definition of epistemic authority. This definition is broader than the current focus of journalism research on the social construction of epistemic authority through boundary work (Carlson, 2020; Carlson & Lewis, 2015; Vos & Thomas, 2018). It also covers objective and subjective aspects of epistemic authority that have been examined by communication scholars using other related concepts.

Related concepts in communication research

Subjective aspects of epistemic authority overlap with concepts such as *opinion leaders* (“those individuals from whom others seek advice and information,” Rogers & Cartano, 1962, p. 435), *source credibility* (“the believability of a communicator, which is determined by the receiver’s evaluation of a source’s

expertise and trustworthiness,” Flanagan & Metzger 2014, p. 2), and *media trust* (“the willingness of the audience to be vulnerable to news content based on the expectation that the media will perform in a satisfactory manner,” Hanitzsch et al., 2018, p. 3). A common assumption implied in these concepts is that the persuasiveness of sources depends on two interrelated judgments: expertise (“whether the communicator is in a position to know the truth”) and trustworthiness (“whether the communicator will likely be inclined to tell the truth,” O’Keefe, 2016, pp. 292–293). Both judgments are reflected in Jäger’s (2024) integrated definition of epistemic authority: expertise in the competence condition and trustworthiness in the performance condition. Consistent with this two-pronged definition, communication scholars have argued that perceptions of both expertise and trustworthiness are necessary to establish credibility (O’Keefe, 2016), media trust (Quiring et al., 2021), and opinion leadership (Turcotte et al., 2015), while neither expertise nor trustworthiness alone is sufficient. Research on persuasion has found that perceptions of expertise and trustworthiness can be shaped by several factors, some of which are related to objective knowledge criteria (e.g., education, occupation, experience, citation of evidence sources) while others are not (e.g., fluency, liking, physical attractiveness) (O’Keefe, 2016; Ou & Ho, 2024). In a digital media context, perceptions of expertise and trustworthiness are further complicated by challenges of determining the authenticity of sources (“is the communicator really who he claims to be?” Lee, 2020). It is therefore important to complement research on audiences’ subjective perceptions of credibility, trust, and opinion leadership with research on objective aspects of epistemic authority that may or may not justify such perceptions.

In the field of journalism research, *objective aspects of epistemic authority* have been studied using concepts such as *journalistic objectivity* (which “guides journalists to separate facts from values and to report only the facts,” Schudson, 2001, p. 150) and *journalistic evidence* (“the indirect signs of veracity accompanying mediated information,” Godler & Reich, 2017, p. 562). Examples of professional practices to enhance knowledge accuracy and justification include cross-verification, source transparency, and separation of news and opinion (Kovach & Rosenstiel, 2007). In the case of non-professional epistemic authorities like opinion leaders, however, research on objective knowledge criteria is relatively rare (Trepte & Scherer, 2010).

Figure 1 illustrates how concepts used by communication scholars relate to the interdisciplinary field of research on epistemic authority, including sociological, psychological, and philosophical approaches. We propose that communication research can profit from such an integrative perspective in several ways: (1) by using insights from other disciplines; (2) by bridging the divide between journalism and audience research; (3) by clarifying the theoretical network of concepts concerning discursive processes through which epistemic authority is *socially claimed* (e.g., boundary work), *subjectively recognized* (e.g., trust, credibility, opinion leadership), and *objectively justified* (e.g., objectivity, evidence); and (4) by elucidating the interdependence of these discursive processes.

As Neuberger (2017) has argued, discursive practices for claiming and recognizing epistemic authority are closely intertwined, and these discursive practices, in turn, are essential in the process of knowledge justification. This interdependence can be observed on different levels, from discourse about specific knowledge claims to meta-discourse about legitimate knowledge practices and knowledge-related values

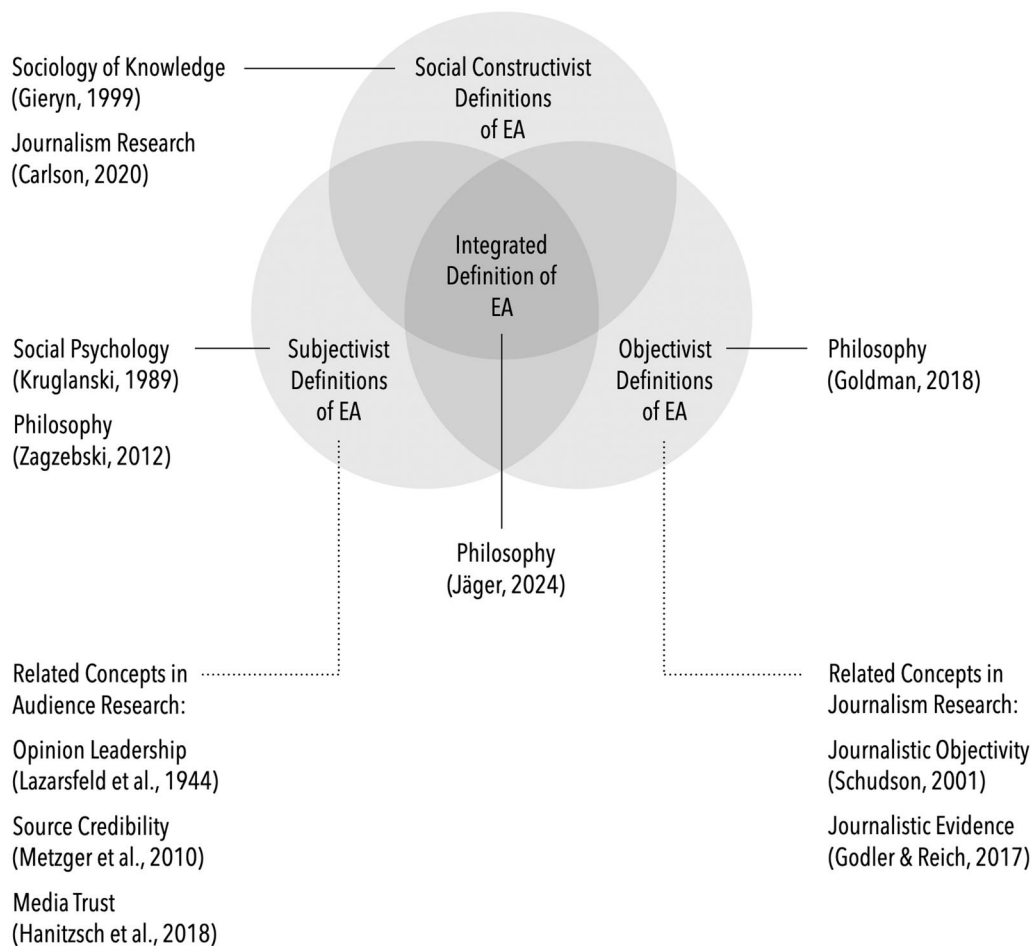


Figure 1. Epistemic authority (EA) as an interdisciplinary field of research: Sociological, psychological, and philosophical approaches to define EA and related concepts in communication research.

(Neuberger, 2017). Further conceptual and empirical work is needed, however, to elucidate the interplay of practices for claiming, recognizing, and justifying epistemic authority in the digital age. With our integrative conceptual framework and research agenda, we aim to clarify how communication research can contribute to such an interdisciplinary endeavor.

New and unconventional forms of epistemic authority in the digital public sphere

How can an integrated definition of epistemic authority (Jäger, 2024) be useful for communication researchers? In this section, we unpack the details of this definition and their benefits for understanding new and unconventional forms of epistemic authority in the digital public sphere.

Epistemic authority as a context-specific phenomenon

First, the integrated definition draws attention to the context-specific nature of epistemic authority (Jäger, 2024)—meaning that epistemic authorities are not universal but authorities for a specific subject, in a specific domain, at a specific time, under specific circumstances, with a specific epistemic goal in mind. For example, an educational influencer who offers math tutorials on YouTube (Gil-Quintana et al., 2020) may be an epistemic authority for a student, but not for a

mathematics teacher (subject). Both the influencer and the teacher may be epistemic authorities on mathematics but not music (goal, domain). The student may appreciate the teacher's interactive lessons at school but may turn to the YouTuber when studying at home (time, circumstances).

Such a context-sensitive concept of epistemic authority is in line with context theories of media use (Karnowski et al., 2024) and with the micro-level of analysis inherent in subjectivist approaches (Kruglanski, 1989). Compared to a macro-level analysis of social power dynamics associated with boundary work (Carlson & Lewis, 2015; Gieryn, 1999), it offers a more fine-grained perspective. In the case of digital media, a combined analysis seems particularly useful. While a macro-analysis of boundary work can explain why professional experts are recognized as epistemic authorities among large audiences (Carlson, 2020), context-specific factors are important to understand the long tail of epistemic authorities with smaller, more specific, and fragmented audiences (Neuberger et al., 2023). For example, lifestyle influencers can also serve as political opinion leaders for their followers, depending on micro-level factors such as trust, perceived similarity, and parasocial relationship with the influencer (Harff, 2022).

Experts, semi-experts, and lay authorities

Second, consistent with Kruglanski's (1989) lay epistemic approach, the integrated definition (Jäger, 2024) broadens the

scope from experts (Goldman, 2018) and professional boundary work (Gieryn, 1999) to the role of laypeople who can serve as epistemic authorities as well. Such an inclusive concept is helpful to understand the emergence of new epistemic authorities in the digital public sphere where the roles of professional experts and lay audiences have become more flexible (Neuberger et al., 2023). Knowledge professions (e.g., scientists, journalists) and other professional experts (e.g., doctors, lawyers, craftspeople) still count among the most typical cases of epistemic authorities. However, depending on the context, laypeople and semi-experts who have advanced but less than expert knowledge can fulfill the role of epistemic authorities as well.

The concept of epistemic authority does not require the same breadth and depth of knowledge as Goldman's (2018, p. 4) definition of experts whose "absolute number of true beliefs (...) about propositions in D is very substantial." The advantage of knowledge implied in the integrated definition is not absolute but relational. It only requires "a significantly advanced epistemic position" relative to others (Jäger, 2024, p. 14). Thus, if the knowledge of a subject in a domain is very limited, non-experts (e.g., parents, friends) or semi-experts (e.g., teachers, influencers) can serve as epistemic authorities as well. They just need the "capacity to help S (...) accomplish S's epistemic goals" (Jäger, 2024, p. 14). For example, do-it-yourself influencers on YouTube (Ceh et al., 2022) need not be experts in engineering or cuisine to be helpful epistemic authorities for users who are seeking goal-specific knowledge how to repair a certain device or how to prepare a certain dish.

It is also important to note that the concepts of "epistemic goals" and "epistemic goods" in the integrated definition (Jäger, 2024, p. 24) are broader than knowledge per se. They also include understanding and justification of knowledge as well as epistemic skills that enable a person to produce related knowledge items independently (Goldman, 2018; Jäger & Malfatti, 2021). Therefore, epistemic authority is relative to subjects' epistemic goals (e.g., learning a knowledge item vs. understanding it vs. learning the skill to produce it independently).

For example, when their goal is to understand a complex topic, lay audiences often turn to entertaining formats such as science influencers (Buitrago & Torres Ortiz, 2022) or entertainment education (Bartsch et al., 2024). In some (but not all) cases, users' perception of entertainment media as valid sources of knowledge can be objectively justified by authors' background research or by the involvement of expert advisors in the production team (Bartsch et al., 2024). Individuals' attributions of epistemic authority did not pertain to entertainment in general, however, but were reserved for specific titles, authors, and production teams.

Hence, our argument is not that *all* laypeople, influencers, entertainment media, and other unconventional knowledge sources should count as epistemic authorities. Rather, we propose to consider epistemic authority as a functional role that can be fulfilled by different types of sources. Understanding how and why this functional role can be fulfilled by non-news sources is essential in a high-choice media environment such as the digital public sphere.

Collective, non-personal, and hybrid forms of epistemic authority

Third, the integrated definition covers complex forms of epistemic authority beyond individual agents by including

collective and non-personal authorities (Jäger, 2023). It is not a new phenomenon that epistemic authority can be ascribed to collectives (e.g., boards, juries, academies) and technologies (e.g., measurement and navigation devices). With the emergence of social media platforms and other digital technologies such as mobile apps and AI, however, collective and non-personal forms of epistemic authority have developed an unprecedented dynamic (Neuberger et al., 2023).

Collective epistemic authority

Collective forms of epistemic authority can involve different levels of social complexity (Goldman, 1999), including informal collectives of individuals (e.g., user ratings, citizen science) as well as a meso-level of organizations (e.g., news media, NGOs), and a macro-level of social systems (e.g., science, journalism). The case of Wikipedia (Pentzold, 2020) illustrates how different levels of social structure can interact in shaping new forms of collective epistemic authority. While the breadth of knowledge on Wikipedia is based on open peer production of experts and laypeople, peer governance of knowledge quality has led to the emergence of quasi-organizational norms, rules, and hierarchies. Despite their tension, both levels (participatory openness and organizational structure) are key constituents of Wikipedia's epistemic authority (Pentzold, 2020).

Non-personal epistemic authority

Epistemic authority can also be attributed to non-personal entities such as theories, methods, and technologies (Jäger, 2023). Navigation is a knowledge domain where consulting the authority of technologies from astrolabes to mobile apps is common practice. In addition to general motivations for using digital technologies such as instrumentality, convenience, and entertainment, the use of mobile apps was associated with a new gratification factor of constant availability across situations and contexts (Haught et al., 2016). Ubiquitous availability might explain the popularity even of apps that perform suboptimally compared to human experts, as in the case of machine translation (Freitag et al., 2021). A traveler may be aware of the limitations of their translator app but may nevertheless appreciate the app as the most helpful linguistic authority available in contexts where no human interpreter is around. A similar logic applies to AI applications such as digital assistants (e.g., Siri, Alexa) and chatbots (e.g., ChatGPT). Users' willingness to delegate knowledge tasks to AI was context-dependent and mediated by perceptions of trust, convenience, and usefulness for the specific task at hand (Svikhnushina et al., 2023).

Hybrid forms of collective and technology-based epistemic authority

In a digital media context, the lines between collective and non-personal forms of epistemic authority are often blurred. For example, peer governance of knowledge quality on Wikipedia is assisted by digital technologies (Petroni et al., 2023); and the detailed coverage of navigation apps would be impossible without collective efforts of tech companies and peer production projects like OpenStreetMap. As Jarrahi et al. (2022) have noted, some "AI" applications (e.g., large language models) may be more aptly characterized as "hybrid intelligence" because the knowledge they generate in response to prompts is typically aggregated and transformed from human-generated online content and training data.

Such hybrid forms of collective and technology-based knowledge generation are characteristic of the digital transformation of knowledge (Hepp et al. 2023, Neuberger et al., 2023) and are therefore important to include in the concept of epistemic authority.

The functional role of epistemic authorities in the digital public sphere

Figure 2 gives an overview of the different forms that epistemic authority can take in the digital public sphere. It is important to note that the forms of epistemic authority discussed in this and the following sections are “ideal types” in the sense of Max Weber, by which he meant an analytical category rather than a description of real existing cases. In reality, different types of epistemic authority (e.g., experts, semi-experts, and laypeople) may blur.

Among the different forms of epistemic authorities displayed in Figure 2, professional experts are the most well researched (Abbott, 1988; Carlson, 2020; Gieryn, 1999). But epistemic authority can be understood in a more inclusive sense: as a functional role that can be fulfilled by a variety of other sources as well, including influencers, entertainment media, peer production networks, mobile apps, and AI. To paraphrase Jäger’s (2024) definition in simplified terms, epistemic authority can be characterized as a functional role in a relationship between two knowledge agents A and S, where the role of A as epistemic authority for S is based on: (1) a A’s advanced epistemic position relative to S; (2) A’s competence and reliability to help S accomplish their epistemic goals; and (3) S’ recognition of A’s advanced epistemic competence and reliability.

With this functional role in mind, the question whether a given source should count as epistemic authority in a given context becomes an analytical and empirical one: Is the source in an advanced epistemic position relative to others? Is the source competent and reliable to help others accomplish

their epistemic goals? Are the source’s advanced epistemic competence and reliability recognized by others? If the answers are affirmative, then it seems worthwhile to further examine the source’s potential as a functional and legitimate form of epistemic authority.

False and unrecognized authorities

Conversely, such an analysis can help delineate the concept of epistemic authority from what it is *not*—by observing phenomena where the functional role of epistemic authorities is not fulfilled. Examples are false authorities who disseminate misinformation (Jäger, 2024) and unrecognized authorities whose knowledge remains ignored because they are unknown, unintelligible, or untrusted (Fricker, 2007; Quiring et al., 2021). In this section, we turn to phenomena that fall outside the definition of epistemic authority and discuss how they can be explained by discrepancies between objective, subjective, and socially claimed aspects of epistemic authority. Digital media technologies can exacerbate such discrepancies. As we will argue in the section on epistemic intermediaries, however, processes of convergence between objective, subjective, and socially claimed aspects of epistemic authority can be observed as well. Analyzing the factors behind both trends is key to understand the empirical reality of epistemic authority in the digital public sphere as well as its normative implications.

False authorities

A common characteristic of false authorities (fake and unintended authorities) is that they spread false information instead of valid knowledge (Jäger, 2024). Another shared characteristic of false authorities is that their authority is subjectively recognized—which, through the lens of purely subjectivist definitions (Kruglanski, 1989; Zagzebski, 2012) would be sufficient to qualify them as epistemic authorities.

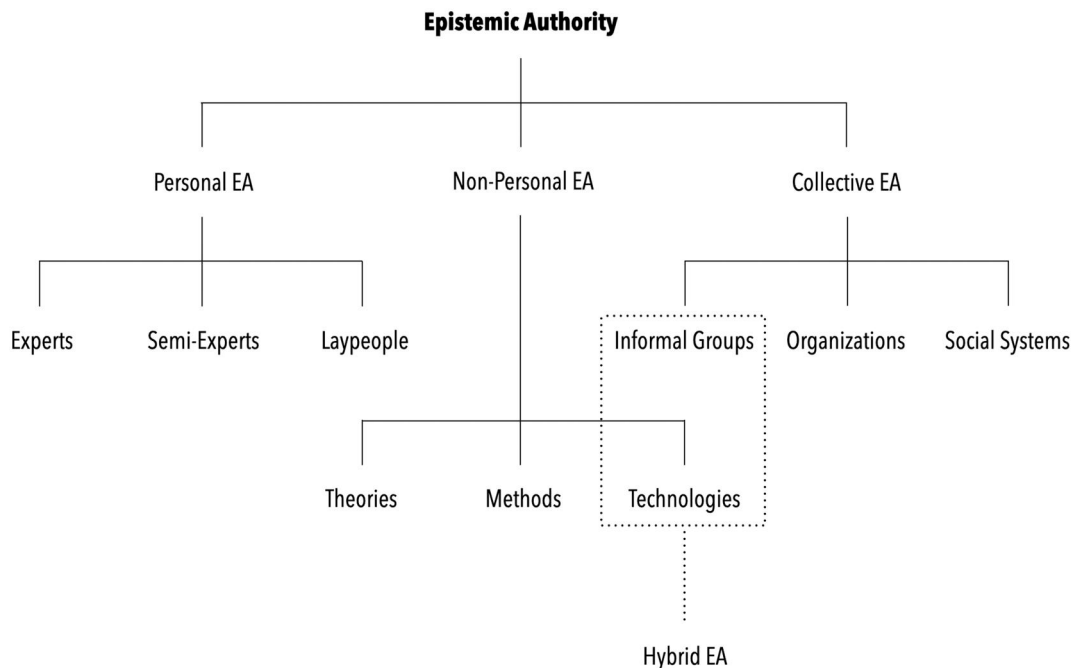


Figure 2. Conventional and unconventional forms of epistemic authority (EA).

Thus, without the inclusion of objective aspects in the integrated definition, false authorities would not be conceptually distinguishable from epistemic authorities that share valid knowledge.

Conversely, through the lens of a purely objectivist definition (Goldman, 2018), the role of non-epistemic factors in boundary work (Gieryn, 1999) would remain unobserved. If epistemic authorities use non-epistemic strategies to demarcate their boundaries and claim legitimacy (e.g., presentation style, rhetoric, contestation of competing actors, circulation numbers), these strategies can be adopted by other actors to portray themselves as epistemic authorities and promote otherwise poorly substantiated knowledge claims (e.g., conspiracy narratives; Watkins, 2024).

Fake authorities

Fake authorities are characterized by Jäger (2024) as those who claim epistemic authority and are subjectively recognized as such, while the knowledge they share is not valid in the sense of justified true belief. Thus, the objective aspect of the integrated definition is not fulfilled. For instance, a Flat Earther (Watkins, 2024) who spreads false geographical information to a credulous followership can be characterized as a fake authority.

In some cases, fake authorities are aware of their lack of expertise but continue to claim epistemic authority for various reasons. For example, Flat Earthers in Watkins' (2024) study seemed to enjoy the hypermasculine and aggressive rhetoric of war against scientific authorities, took pride in their impressive circulation numbers on social media, and used the conspiracy narrative to promote a political agenda.

In other cases, fake authorities sincerely believe that they have expertise in a domain, but erroneously so (Jäger, 2024). Some authorities in the Flat Earth Movement (Watkins, 2024) and other conspiracy milieus (Harambam & Aupers, 2015) seem to represent this sincere but misinformed type of fake authority. Their claims to epistemic authority can be explained by overconfidence, the so-called "Dunning-Kruger effect" (Dunning, 2011, p. 248): a "lack of expertise and knowledge often hides in the realm of the "unknown unknowns" or is disguised by erroneous beliefs." Conspiracy milieus are not the only context of fake authorities, however. Overconfidence effects are common, particularly among new learners (Dunning, 2011) and "epistemic trespassers" (Ballantyne, 2019) who venture outside their domain of expertise.

Unintended authorities

Some sources of misinformation do not claim epistemic authority but are nevertheless perceived as such (Jäger, 2024). Such unintended authorities fulfill only the subjective but not the objective and socially claimed aspects of epistemic authority. For example, a travel blogger may be perceived as an expert on foreign culture among their followers, although, like a majority of travel bloggers, they do not claim epistemic authority in this domain (Ashe, 2023). To avoid the impression of claims to epistemic authority and preempt liability for any misinformation, influencers and providers of mobile apps in the domains of health and finance often include a disclaimer that their content is "for entertainment purposes only" (Weaver et al., 2013, p. 4), but subjectively, they may nevertheless be perceived as epistemic authorities.

Unrecognized authorities

Another conceptual cluster includes unrecognized authorities who, objectively, are competent and reliable sources of knowledge, but who, subjectively, are not recognized by those who could benefit from their knowledge. Thus, the subjective aspect of epistemic authority is not fulfilled. Such forms of unrecognized epistemic authority have not been systematized so far. Therefore, we present our own conceptual analysis.

Untrusted authorities

Untrusted authorities are rejected as sources of knowledge, not because they lack expertise but because the criterion of trustworthiness is not fulfilled from the subjective perspective of others. For example, traditional epistemic authorities such as science and journalism are suspect among users of "alternative media" and conspiracy milieus. Reasons for distrust include perceptions of science and journalism as dogmatic, biased, partisan, deceitful, distanced from ordinary people, influenced by vested interests, and part of a global power elite (Harambam & Aupers, 2015; Vos and Thomas, 2018). As Harambam and Aupers (2015) have noted, some of these allegations overlap with critical views of science in the sociology of knowledge, thus not all forms of distrust should be dismissed as irrational.

As Quiring et al. (2021) have argued, however, it is important to distinguish between a healthy dose of constructive skepticism and generalized cynicism about the sincerity and reliability of an entire professional field. For reasons of analytical clarity, we use the concept of untrusted authorities for cases where objective criteria of epistemic authority (advanced epistemic competence and reliability) are fulfilled, while subjective criteria (being recognized as competent and reliable) are not fulfilled in the perception of others. For example, in the case of generalized cynicism, distrust was based on "unsubstantiated claims such as assuming a conspiracy of the media and political actors" (Quiring et al., 2021, p. 3497). Constructive skepticism, in contrast, was justified by objective criteria, for example by "shortcomings, such as the tendency of news media to exaggerate negative aspects," which are supported by research evidence (Quiring et al., 2021, p. 3497). Such skeptical but realistic perceptions were found to be compatible with general trust in news media. Therefore, we reserve the concept of untrusted authorities for cases of divergence between objective competence and reliability vs. subjective distrust.

Unintelligible authorities

In the case of unintelligible authorities, it is not a lack of trust, but a lack of mutual understanding that gets in the way of a functional epistemic authority relationship between experts and laypeople. As Jäger and Malfatti (2021) have argued, expertise is not sufficient if potential epistemic authorities are unable to make their knowledge intelligible to others. The concept of "epistemic empathy" (Jäger & Malfatti, 2021) denotes the capacity of epistemic authorities to understand the current state of knowledge of others, to recognize their knowledge goals, and to support them in the process of acquiring new insights. Laypeople and semi-experts such as influencers, teachers, and science journalists may have greater epistemic empathy with their target audiences than scientific experts who often remain unintelligible.

Unknown authorities

Unknown authorities remain unrecognized because they are unfamiliar to those who could benefit from their knowledge. In a digital public sphere with many potential authorities to consult, the relevance of digital practices for matching those who are offering knowledge with those who are seeking it can hardly be overstated. Research on algorithmic curation and personalization (Jürgens & Stark, 2022; Kümpel, 2022; Soffer, 2021; Thorson & Wells, 2016) highlights the role of search engines and social media algorithms in curating the sources that constitute an individual’s online information environment. Traditional forms of curation like personal preferences, social recommendations, and journalistic gatekeeping are supplanted by such algorithms that tend to increase the homogeneity of sources in individuals’ information flow (Thorson & Wells, 2016). Moreover, with their “social media logic,” algorithms can reinforce homogeneity on a macro level (Van Dijck & Poell, 2013), such that the impact of some sources is amplified while leaving the long tail of other potential authorities in the unknown.

As Stewart et al. (2022) have argued, algorithmic curation can exacerbate epistemic injustice (Fricker, 2007)—meaning that the outreach of majority voices is amplified to the disadvantage of minority voices that represent marginalized groups. Minority voices and controversial opinions can also be silenced by hate speech and discrimination (Stark et al., 2020). Such developments can create a situation where potential epistemic authorities remain unknown although, objectively, their expertise and trustworthiness would qualify them as credible sources of knowledge.

Figure 3 provides an overview of phenomena such as false and unrecognized authorities that fall outside an integrated definition of epistemic authority. To summarize our conceptual analysis of false and unrecognized authorities, divergence between objective, subjective, and socially claimed aspects can interfere with the functional role of epistemic authorities in multiple ways. On the one hand, false authorities (fake and unintended authorities) can spread misinformation intentionally or unintentionally, while being subjectively perceived as genuine epistemic authorities. On the other hand, unrecognized (untrusted, unintelligible, and unknown) authorities objectively hold important knowledge but are intentionally or unintentionally ignored by others who could benefit from

their knowledge. Thus, in terms of Goldman’s (1999, p. 5) key epistemological question, false authority is conducive to “error,” while unrecognized authority is conducive to “ignorance.”

Epistemic intermediaries

Which brings us back to the positive side of the question: “Which practices have a comparatively favorable impact on knowledge as opposed to error and ignorance?” (Goldman, 1999, p. 5). In this section, we discuss the concept of epistemic intermediaries and argue that practices of epistemic intermediation can be part of the solution by correcting false authorities and by providing endorsement for unrecognized authorities. We define epistemic intermediaries as epistemic authorities that fulfill an additional functional role: they mediate between subjects and third-party sources by processing (e.g., verifying, explaining, curating) knowledge from those sources in the service of subjects’ knowledge goals. Like the primary criteria of epistemic authority, the additional roles of epistemic intermediaries involve competence and reliability and need to be socially claimed, subjectively recognized, and objectively justified to fulfill our working definition.

Journalism is a traditional example of epistemic intermediaries (Kohring, 2004; Neuberger et al., 2023; Reich & Lahav, 2021). It is important to note, however, that the concepts of epistemic authorities and epistemic intermediaries are not mutually exclusive. According to our working definition, epistemic intermediaries are a subtype of epistemic authorities—meaning that they need to fulfill the criteria of epistemic authority in the first place before they can fulfill their additional roles as epistemic intermediaries. For example, as epistemic authorities, journalists need to be competent and reliable sources on the topic. As epistemic intermediaries, they additionally need to be competent and reliable in their role of verifying and curating the most relevant sources and explaining their knowledge to lay audiences (Neuberger et al., 2023).

Recent work on news recommendation and curation (Kümpel, 2022; Thorson & Wells, 2016) has drawn attention to the role of new intermediaries and to the multiple layering of sources in the digital public sphere. For example, knowledge from an expert source may be reported in a news article

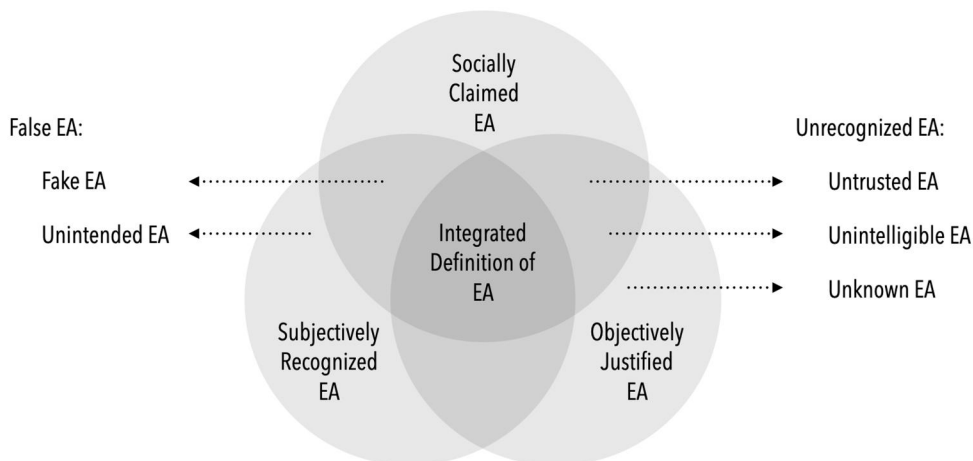


Figure 3. False and unrecognized authorities: Divergence between objective, subjective, and socially claimed aspects of epistemic authority (EA) and resulting phenomena that fall outside an integrated definition of EA.

which is then recommended to a user on social media by an algorithm or by a friend. In each step of intermediation, source information can be added or lost. Algorithmic curation can weaken the traditional role of journalism as epistemic intermediary by decontextualizing information (Ekström & Westlund, 2019; Kümpel, 2022) and by diminishing news brand attribution (Kalogeropoulos et al., 2019). However, news media are also frequently recommended by search engines (Unkel & Haim, 2021) and can gain trust through personal and aggregated recommendations on social media (Kümpel, 2022). Thus, journalistic intermediation is not replaced but modified by added layers of algorithmic and personalized curation and can be complemented by new epistemic intermediaries as discussed in the following sections.

As with epistemic authorities in general, it is important to keep in mind that others' subjective perception of epistemic intermediaries does not equal objective justification. False authorities can also act as false intermediaries. For example, false intermediaries may claim to verify sources but endorse misinformation and undermine valid sources instead. They may claim to explain sources but distort their original meaning. They may claim to curate relevant sources but cherry-pick convenient facts. Such cases of false intermediation are important to observe but fall outside our working definition of epistemic intermediaries. Therefore, we will focus on functional practices of epistemic intermediation that can serve to correct false authorities and provide endorsement for unrecognized authorities.

Epistemic intermediaries as corrective for false authorities

The growing prevalence of false authorities in the digital public sphere has raised concerns about the dissemination of false and unverified claims to knowledge (e.g., fake-news, rumors, conspiracy narratives; Ha et al., 2021; Tsfati et al., 2020). As Neuberger et al. (2023) have argued, the rising influence of false authorities can be understood as a result of digital disintermediation—meaning that sources can reach audiences directly, without independent verification.

Epistemic gatekeeping

In the knowledge order of traditional mass media, verification and distribution of knowledge are closely intertwined in the role of professional journalism as gatekeeper and intermediary (Neuberger et al., 2023). Epistemic gatekeepers like journalists independently verify knowledge before passing it on from sources to audiences. In this process of epistemic gatekeeping, they can promote convergence between objective, subjective, and socially claimed aspects of epistemic authority by filtering out information and sources that do not conform to objectively justified standards of knowledge.

Given the low cost of knowledge distribution via digital media, false authorities can reach and persuade audiences directly without journalistic gatekeeping. On the positive side, however, the traditional role of journalism as epistemic intermediary continues to be functional in the realm of legacy media. In a worldwide study of trust in the press, Hanitzsch et al. (2018) found that the decline of trust observed in the US did not generalize to most other countries where trust in legacy media remained relatively stable in the digital age.

Epistemic gatewatching

In addition to epistemic gatekeeping, new epistemic practices such as fact-checking and gatewatching have emerged whereby the credibility of content and sources is verified after publication. Journalists, peer production networks, and NGOs have been observed to contribute to this functional role of epistemic gatewatching (Neuberger et al., 2023). Moreover, hybrid forms of gatewatching assisted by AI have emerged, for instance in the context of deep fake detection (Groh et al., 2022) and source verification on Wikipedia (Petroni et al., 2023).

New intermediaries like search engines and social media platforms, however, have tended to avoid responsibility for the content they host and its algorithmic curation (Stark et al., 2020). Regulatory efforts to hold platforms accountable are a relatively recent development. Platform providers still claim limited responsibility for misinformation, unless reported by users, and mainly point to AI as a solution (Katzenbach, 2021). Hybrid platform governance based on user reporting and AI could limit at least illegal forms of misinformation, but its effectiveness as a form of epistemic gatewatching remains to be observed.

The possible role of influencers in epistemic gatekeeping and gatewatching remains to be observed as well. In Ashe's (2023) study of travel bloggers, about half claimed to "Tell the truth even if it was upsetting to trip sponsors" (p. 118)—in which case bloggers can serve as epistemic intermediaries who provide independent verification of sponsors' marketing claims.

Again, our argument is not that *all* influencers, NGOs, peer production, AI, and platform governance make functional contributions as epistemic intermediaries. Nevertheless, it seems worthwhile to observe and learn from functional developments that can promote convergence between objective, subjective, and socially claimed aspects of epistemic authority.

Epistemic intermediaries as endorsement for unrecognized authorities

In the case of unrecognized authorities, a common characteristic is that, objectively, they hold important knowledge (e.g., news, scientific facts, minority voices) that would be worthwhile for individuals and society to consider in their opinion- and decision-making processes. What stands in the way of a functional relationship between unrecognized authorities and those who could benefit from their knowledge are subjective factors such as lack of trust, understanding, and/or awareness. If these barriers are removed by unrecognized authorities themselves or by epistemic intermediaries, they can become recognized as epistemic authorities.

Intermediaries of epistemic trust

In some cases, lack of trust can be resolved by trusted intermediaries (Coleman 1990). For example, an untrusted authority can regain trust or be conditionally trusted after independent verification. Such intermediation of trust is part of the traditional role of journalism as gatekeeper between sources with particular interests (e.g., corporate sources, political actors) and lay audiences (Kohring, 2004; Neuberger et al., 2023).

In the digital public sphere, new layers have been added to the intermediation of trust. For example, personal recommendation of news on social media can improve others' trust

in the news outlet. This added layer of media trust was reinforced when the friend who recommended the news story was perceived as an opinion leader characterized by high levels of expertise and trustworthiness (Turcotte et al., 2015).

Another example of new intermediaries of epistemic trust is the “epistemic division of labour” (Herzog, 2020) between consumers, fair trade labels, and NGOs in a global fashion market. Where individuals would be overwhelmed with the complexity of knowledge about supply chains and ethical standards, fair trade labels and their verification by trusted NGOs can mediate trust and facilitate ethical consumer choices.

Celebrities can also serve as trusted intermediaries. For example, celebrity endorsement has been found effective in correcting false beliefs about vaccines during the COVID-19 pandemic (Alatas et al., 2022). It is important to note, however, that subjective perceptions of trust are not equivalent with objective justification. In some cases, opinion leaders, influencers, celebrities, and “alternative media” can act as false intermediaries of trust for their followers by endorsing false authorities and undermining accurate sources (Primig, 2024).

Intermediaries of epistemic empathy

In the case of unintelligible authorities, semi-experts (e.g., science journalists, teachers, influencers) can serve as intermediaries of epistemic empathy in the sense of explaining knowledge and making it intelligible for lay people. Again, this functional role in translating jargon, reducing complexity, and highlighting the life-world relevance of knowledge for their audiences is part of journalists’ professional service (Neuberger et al., 2023).

New intermediaries of epistemic empathy include science influencers and entertainment education. For example, YouTube channels of science influencers have been found to reach a comparatively large followership with content characterized by currency, practical utility, curiosity, and personalization (Buitrago & Torres Ortiz, 2022). Entertainment education can serve as an additional way of epistemic intermediation that provides vivid and easily comprehensible portrayals of complex issues in a narrative format (Bartsch et al., 2024). Again, it is important to distinguish between functional forms of epistemic intermediation where information from the original source is accurately explained vs. false intermediation where the source’s knowledge is intentionally or unintentionally distorted (Bartsch et al., 2024).

Intermediaries of epistemic justice

Explaining expert knowledge can be understood as one way of reducing epistemic injustice because it can lower the threshold of access to knowledge. But can intermediaries also reduce epistemic injustice in the sense of lowering the threshold for participation and outreach of unknown authorities? Overly optimistic expectations in the early times of the Internet have been disillusioned (Pentzold, 2020). Despite their limitations, however, the collective authority of peer production networks can promote participation and outreach of laypeople (Pentzold, 2020).

Moreover, research on online credibility (Metzger et al., 2010) has drawn attention to the role of previously recognized authorities as epistemic intermediaries that can recommend unfamiliar sources and endorse their credibility to other users. This can be official authorities, semi-experts, or laypeople (Metzger et al., 2010). Such recommendations are not free of bias either. However, as Jackson (2018) has argued in her case

study of the #MeToo movement, mutual recognition and endorsement of marginalized voices can overcome epistemic injustice by creating collective epistemic authority where individual voices would remain unrecognized.

As with other forms of intermediation, however, epistemic justice can be misconstrued, like in the case of false balance (Brüggemann & Engesser, 2017) where reporting all views on a topic can give undue prominence to poorly justified claims.

The functional role of epistemic intermediaries

Figure 4 gives an overview of functional forms of epistemic intermediaries and their role in correcting false authorities and endorsing unrecognized authorities.

A general takeaway from our analysis of epistemic intermediaries is that a functional epistemic authority relationship can sometimes require three (or more) knowledge agents. Epistemic authority as a three-way relationship includes an epistemic authority (A), another knowledge subject (S), and an epistemic intermediary (I)—where the functional role of I is to process (e.g., verify, explain, curate) A’s knowledge in the service of S’ knowledge goals. In this role, epistemic intermediaries can promote convergence between objective, subjective, and socially claimed aspects of epistemic authority, thus creating a functional epistemic authority relationship where the relationship between A and S alone would not qualify as such (Neuberger et al., 2023). Conversely, reference to recognized authorities can enhance an intermediary’s credibility and authority (O’Keefe, 2016).

These synergies involved in epistemic intermediation can facilitate the emergence of new epistemic authorities: Through repeated endorsement by epistemic intermediaries, unrecognized authorities can become recognized independently (Metzger et al., 2010). Epistemic intermediaries can process others’ knowledge to an extent that qualifies them as original knowledge sources (Reich & Lahav, 2021). And collective processing can lead to emergent properties of knowledge that are not attributable to individual actors (Schindler et al., 2024). Knowledge production in hybrid figurations of humans and machines (Hepp et al., 2023) is an interesting special case of such emergent knowledge properties that has been characterized as “hybrid intelligence” (Jarrahi et al., 2022). Thus, the functional roles of epistemic authorities and epistemic intermediaries are open to new types of knowledge agents including individual, collective, nonpersonal, and hybrid agents (see Figure 2).

A research agenda for studying epistemic authorities in the digital public sphere

We conclude our analysis with a research agenda for studying the digital transformation of epistemic authorities. To cover the diversity of new and unconventional forms of epistemic authorities discussed throughout this article, we propose a set of general research questions.

An interdisciplinary approach to the study of epistemic authorities

Our first point of argument was that epistemic authority is an interdisciplinary field of research with sociological, psychological, and philosophical approaches that have focused on how epistemic authority is socially claimed, subjectively

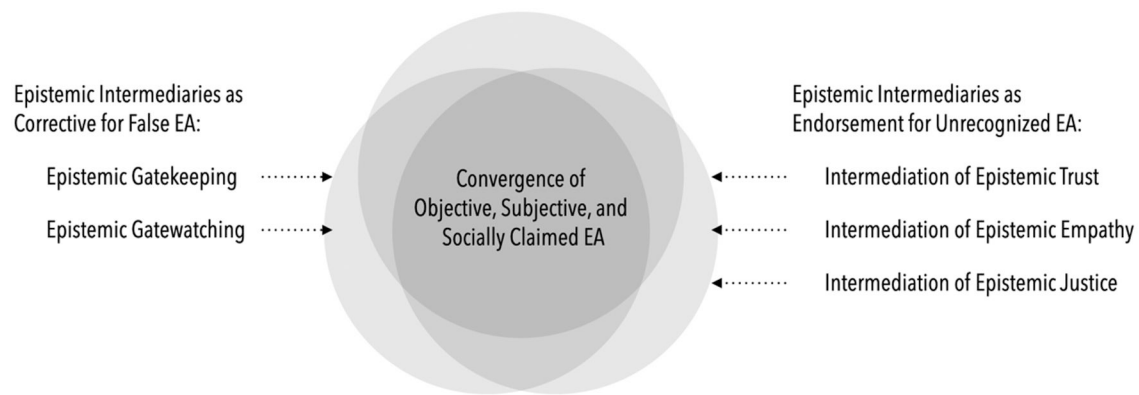


Figure 4. Epistemic intermediaries: Practices that can promote convergence between objective, subjective, and socially claimed aspects of epistemic authority (EA).

recognized, and objectively justified. So far, these aspects have mostly been studied in isolation. As we have argued, however, convergence of all three aspects is what defines a functional epistemic authority relationship. Therefore, we propose three general research questions that need to be studied in combination to understand the digital transformation of epistemic authorities:

- RQ1: What are the social practices for claiming epistemic authority?
- RQ2: What are the subjective reasons for recognizing epistemic authority?
- RQ3: What are the objective criteria for justifying epistemic authority?

A combined theoretical and empirical analysis of these research questions can be helpful to integrate journalism and audience research with research from other disciplines that have studied epistemic authority including philosophy, social psychology, and sociology of knowledge (see Figure 1). Such an interdisciplinary approach is needed to elucidate the interdependence of discursive practices through which epistemic authority is socially claimed (RQ1), subjectively recognized (RQ2), and objectively justified (RQ3). It remains an open empirical question to examine which discursive practices for claiming, accepting, and justifying epistemic authority are used in the specific case of new and unconventional epistemic authorities and how these practices intertwine in the digital public sphere.

Methodologically, research on epistemic authorities can benefit from an integrated approach as well. Sociologists of knowledge have approached RQ1 with document analysis, qualitative interviews and digital ethnography. Social psychologists studying RQ2 have mainly used experiments and survey research. Philosophers have addressed RQ3 with theoretical analyses. Moreover, our research overview suggests that media content analyses (e.g., Buitrago & Torres Ortiz, 2022), computational methods (e.g., Ceh et al., 2022), and cooperation with computer scientists (e.g., Petroni et al., 2023) can be worthwhile additions to the methodological toolkit for studying epistemic authority.

Additional theoretical and methodological approaches can be derived from research on related concepts such as *source credibility factors* (O’Keefe, 2016; Ou & Ho, 2024), *media trust* (Hanitzsch et al., 2018), *opinion leadership* (Turcotte

et al., 2015), *journalistic objectivity* (Neuberger, 2017; Schudson, 2001), and *journalistic evidence* (Godler & Reich, 2017).

Identifying, describing, and explaining new forms of epistemic authority

Our second point was that theoretical integration of objective, subjective, and socially claimed aspects can help elucidate the nature of epistemic authority as a functional role in a relationship between knowledge subjects. Based on Jäger’s (2024) integrated definition, we derived three specific research questions to determine whether the functional role of epistemic authority is fulfilled by a given source in relation to other knowledge subjects:

- RQ 4: Is the source in an advanced epistemic position relative to others?
- RQ 5: Is the source competent and reliable to help others accomplish their epistemic goals?
- RQ 6: Are the source’s advanced epistemic competence and reliability recognized by others?

These research questions can be used as an analytical screening tool for new and unconventional forms of epistemic authority. The examples we discussed (e.g., influencers, entertainment media, peer production networks, mobile apps, AI) are not exhaustive. We hope that further research will complement the list of potentially functional forms of epistemic authorities to consider. An important next step is to operationalize the forms of knowledge and other epistemic goods implied in RQ4, the epistemic goals, competencies, and reliability factors implied in RQ5, as well as the claims and perceptions thereof implied in RQ6. Based on these operationalizations, the question whether the functional role of epistemic authority is fulfilled by a given source for a given audience can be examined as an empirical question.

In the case of new forms of epistemic authority, qualitative and exploratory research methods seem particularly useful. Considering the context-sensitive nature of epistemic authority, case studies in the long-tail of epistemic authorities with smaller, fragmented, and more specialized audiences can be helpful to identify functional forms of epistemic authority in the digital public sphere (e.g., minority voices and their communities). Once a functional form of epistemic authority has

been identified, described, and explained, researchers can learn from seemingly “small” authorities and can examine the prevalence and effects of similar phenomena on a larger scale using quantitative and computational methods.

Identifying, describing, and explaining new epistemic intermediaries

Our third point was that it is also important to learn from those cases where objective, subjective, and socially claimed aspects fail to converge, such that the functional role of epistemic authorities is not fulfilled (see Figure 3). As discussed in our literature review, phenomena such as false and unrecognized authorities (e.g., conspiracy milieus, science denial, media cynicism, epistemic injustice) have already attracted considerable research efforts. What we suggest adding to the research agenda are functional three-party relationships, where the role of epistemic intermediaries is to correct false authorities and/or endorse unrecognized authorities. With epistemic intermediaries in mind, the general question “Which practices have a comparatively favorable impact on knowledge as opposed to error and ignorance?” (Goldman, 1999, p. 5) can be translated into two more specific research questions:

RQ7: Which epistemic intermediation practices can correct false authorities?

RQ8: Which epistemic intermediation practices can endorse unrecognized authorities?

On an abstract theoretical level, the answer is: Those practices that promote convergence of the criteria in RQ1–3 to the point where the criteria in RQ4–6 are fulfilled. But what this means on a practical level remains an open empirical question. The methodological approach we suggest for studying new epistemic intermediaries resembles the methods for studying new epistemic authorities. In a first step, new forms of epistemic intermediaries can be observed on a small scale using qualitative and exploratory research methods. In a second step, their prevalence and effects can be examined on a larger scale.

Practical implications and outlook

In terms of practical implications, insights from case studies, descriptive and explanatory research can be used to inform media innovation and governance approaches. By learning from the kinds of epistemic authorities and epistemic intermediaries that are already present and functional on a smaller scale, innovative media formats and governance approaches to support these trends on a larger scale can be developed. We acknowledge that our research agenda is still sketchy, and that its theoretical and methodological details need to be developed further. Nevertheless, we hope that our conceptual analysis can provide a roadmap for other researchers to identify, describe, and explain new forms of epistemic authorities and epistemic intermediaries in the digital public sphere.

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