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Fact-Checking in Journalism: An Epistemological Framework

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ABSTRACT

Fact-checking has become an enduring form of journalism that can influence public discussion and counter false content on mass media and social media platforms. However, communication scholars have questioned some epistemological premises of fact-checking and their embeddedness in journalistic practices. This study examines the validity of this criticism by defining three deep-rooted challenges threatening to compromise the epistemological basis of fact-checking. We analysed the problems related to degrees of objectivism, truth regimes, and causal relations across five different aspects of fact-checking to trace where epistemological concerns originate and how they can be resolved. Consequently, we provide a set of measures (rigour, presentation, and audience engagement) that can be used to explore the nature of epistemological problems in fact-checking contexts. We argue that these measures can support and reinforce the epistemological foundations of fact-checking if they are applied in a way that transparently recognises the subjective elements included in fact-checking work. Recognition of subjective elements is essential when developing novel and existing fact-checking methods, given the risks of bias replication and subjectivity in AI-powered systems and other technological solutions.

Introduction

False and misleading information threatens democratic societies. This threat manifests through political polarisation (Wilson, Parker, and Feinberg 2020), decreased public trust toward news sources (Banerjee et al. 2023), and in the myriad ways in which social media and artificial intelligence have accelerated these trends by providing platforms and tools for creating and disseminating content (Aïmeur, Amri, and Brassard 2023). Crises such as the COVID-19 pandemic and the Russian invasion of Ukraine further underscore the importance of reliable information given people's tendency to

share novel, false news items (Vosoughi, Roy, and Aral 2018). One way to promote trust in media sources is through fact-checking, which evaluates the truthfulness of public claims and other societally significant content. In previous studies, fact-checking has received credit for its contribution to public discourse (e.g., Amazeen 2015; Graves 2017), but has also been criticised for its epistemological credibility (e.g., Uscinski 2015; Uscinski and Butler 2013), and a need has been voiced for rigour in the development of fact-checking practices (e.g., Nieminen and Sankari 2021).

Despite academic concerns about potential flaws, fact-checking has gained popularity. New fact-checking organisations have been established, and news organisations have started their own fact-checking units (Lauer and Graves 2024). A new stream of research has sought to develop automated tools to facilitate fact-checking (Barbera, Roitero, and Mizzaro 2022). Our concern is that these developments may outpace important discussions on the underpinnings of fact-checking. This relates to the challenges identified in the criticism of the practice regarding its epistemological premises. These challenges are connected to previous discussions on the epistemology of journalism (Ekström and Westlund 2019; Steensen, Kalsnes, and Westlund 2023) and the profession's approach to truth-claims (Steensen et al. 2022) but appear to surface in fact-checking in a way that may threaten the long-term viability of the practice. Can fact-checkers claim to possess the facts? Is the search for commonly shared facts futile in a post-truth context (Harjuniemi 2022)? Is fact-checking a valuable pursuit or bias masquerading as truth? Some have argued that the practical value of fact-checking work outweighs its epistemological critique (Amazeen 2015; Graves 2017). Others see epistemological issues as potentially decreasing the impact of fact-checking, but not as detrimental to the practice (Vinhas and Bastos 2022, 462–463). We argue that downplaying these questions poses a risk to fact-checking's goal of moderating public discourse.

In this study, we define three epistemological problems highlighted in critiques of fact-checking: (1) degrees of objectivism, (2) truth regimes, and (3) causal relations. To demonstrate how these theoretical critiques translate into practice, we consider them in relation to five aspects of fact-checking processes and offer three sets of measures to address these challenges. Using this framework, we examine the following research questions:

(1) How do the epistemological problems faced by fact-checking affect the different aspects of the fact-checking process?
(2) What measures can fact-checkers implement to mitigate the impact of epistemological problems?

Through these questions, we highlight the strengths and weaknesses of fact-checking in addressing epistemological concerns. We propose that credible fact-checking should address applicable critiques and identify where they can be justifiably dismissed, rather than ignoring them or being paralysed by their potential risks. We argue that some aspects previously seen as weaknesses may make significant contributions to the practice.

Epistemological Concern in Fact-Checking

We discuss fact-checking as a practice aimed at verifying or evaluating viral or societally significant content, including political claims, news items, and social media posts, in

dedicated fact-checking articles. This type of "journalistic" fact-checking can achieve various societal goals, including the correction of false beliefs (Graves 2016), reinforcement of prior worldviews (Walter et al. 2020) and improving the rigour of fact-based journalism (Graves 2016). Fact-checking may also serve as a tool for monitoring political actors' accountability and trustworthiness. For example, summaries of fact-checking verdicts can influence voter perceptions (Agadjanian et al. 2019), and the verification of public officials' statements can lead to retractions (Graves and Amazeen 2019, 9).

Although fact-checking can influence media and political practices (and, by extension, society), the ability of fact-checkers to achieve these goals appears to vary depending on the context and individuals being targeted (Thorson 2016; Walter et al. 2020). The diverse implementation of fact-checking practices creates a space where epistemological concerns may emerge or remain inadequately addressed. Among US fact-checkers, Graves (2017, 524–528) recognised five "elements of fact-checking": choosing claims to check, contacting speakers, tracing false claims, working with experts, and transparently explaining how their work was done. In our attempt to review the relationship between epistemology and fact-checking, our analysis incorporates these elements by highlighting *content selection*, *evaluation of claims*, and *outcomes of fact-checking* as well as two additional aspects*: societal demand for fact-checking* and *field-level organisation*, which we perceive as contingent on the epistemological problems of the practice.

We identify three problems which demonstrate the nature of epistemological concerns as they relate to different aspects of fact-checking (Table 1). First, the problem related to degrees of objectivism questions whether objective truth is achievable, as the term "fact-checking" implies an ability to make an objective distinction between true and false—a claim that can be seen as too naïve (Uscinski and Butler 2013). Second, differing conceptions or "regimes" of truth and their social constructions (Foucault 1980) can undermine

Table 1. Epistemological problems of fact-checking in relation to the critique of fact-checking.

	Degrees of objectivism	Regimes of truth	Causal relations
Epistemological problem	Is objective truth an achievable goal?	Truth is constructed through discourses.	Causal links can be established in multiple ways.
Critique of fact-checking	• Avoiding bias is impossible (Uscinski 2015). • Checking claims that cannot be evaluated as facts (Nieminen and Sankari 2021). • Positioning as arbitrators of truth (Uscinski and Butler 2013, 175). • Positioning can be co-opted (Vinhas and Bastos 2022, 459). • Checking multiple claims as one (Uscinski and Butler 2013, 167). • Inconsistency between fact-checkers (Lim 2018; Marietta, Barker, and Bowser 2015). • Use of simplifying truth scales (Uscinski 2015, 249).	• Inability to correct held beliefs (Thorson 2016). • Fact-checkers are participants in political arguments (Uscinski and Butler 2013). • Fact-checking is a communicative action that constructs social reality (Andersen and Søe 2020). • Fact-checking is vulnerable to partisan selectivity (Shin and Thorson 2017). • Fact-checking does not account for different conceptions of truth, causing disconnection with audiences (Parks 2022).	• Causal claims are difficult if not impossible to prove decisively (Uscinski and Butler 2013, 168–170). • Factual claims about the future cannot be checked (Uscinski and Butler 2013, 170–172).

the effectiveness and legitimacy of fact-checking when audiences hold varying understandings of truth. Third, attempts to define facts and their connections to the surrounding reality may conflict epistemologically with the notion of causality. Although causal links can materialise in multiple ways (Woodward 2003, 345–346), the ability of fact-checkers to validate claims about the existence of such connections can be questioned (Uscinski and Butler 2013, 168–170). These categories can overlap as critiques of fact-checking may involve multiple epistemological problems occurring simultaneously.

Degrees of Objectivism

Fact-checking is deeply influenced by questions of objectivism, including issues like the controversial existence of a "uniquely correct system of epistemic norms" (Goldman 2010, 190) and whether "a body of evidence justifies at most one proposition out of a competing set of propositions" (Feldman 2007, 205). Journalists possess cognitive biases (Uscinski 2015), and studies have shown that different fact-checkers can produce different results (Lim 2018; Marietta, Barker, and Bowser 2015), raising questions about objectivity. Fact-checkers, as the ultimate representation of journalists as "truth-oriented inquirers" (Ward 2004, 292) must credibly apply and present a rigorous form of objectivity. This places differing expectations on how fact-checkers should present their work within the dimensions of objectivism and empiricism (Hanitzsch 2007, 376–377). Pragmatic objectivity, defined as the "holistic, fallible, rational evaluation of reports" (Ward 2004, 300) offers a basis to achieve a form of objectivity without surrendering to either objectivism or relativism. However, pragmatic objectivity does not permanently bind journalists to a specific degree of objectivity, because no such determination can be made with the necessary assumption of fallibility and the demand for case-by-case holistic evaluation. While pragmatic objectivity does not make a strict distinction between "objective fact and subjective opinion" (Ward 2010, 148) and fact-checkers face similar challenges as other fact-seekers (Graves 2017, 530), they still occupy a special position within journalism and their audiences are bound to interpret their work through a strict conception of objectivism. Fact-checkers must continually position themselves within different degrees of objectivism, according to the claims they choose to inspect to justify their strictly "monitorial role" (Christians et al. 2009, 125) within journalism. As Muñoz-Torres (2012) argues, a fact-value distinction is an oversimplification, and the concept of truth should not be replaced with the concept of objectivity. That is, judgements based on values can also be objective, and values guide the selection of facts (Muñoz-Torres 2012, 572; Putnam 2002).

Thus, fact-checking presents novel challenges even for those following the ideals of pragmatic objectivity. The need for constant balancing within degrees of objectivism is also demonstrated by the claims made by fact-checkers. For example, PolitiFact stated, "Our only agenda is to publish the truth so you can be an informed participant in democracy" (n.d.), and Washington Post Fact Checker claimed to have "The Truth Behind the Rhetoric" (n.d.). If consistently followed, these claims may warrant exceedingly rigorous methodologies. Recognising issues related to positioning the practice within degrees of objectivism is crucial as fact-checkers embrace more rigorous methods to enhance their credibility as objective actors. Additionally, this problem highlights the need to justify the use of subjective judgement, whether necessary or unavoidable.

Regimes of Truth

Parker (1999, 1) points to a lack of discussion of the effects of *power* and *interests* in Ward's idea of pragmatic objectivity. This extends our assessment of epistemological problems to concepts related to the power of knowledge and the regimes of truth, both leaning on Foucauldian perspectives. Each society has its own regimes of truth, and people's relationship with truth is never direct or fixed but always mediated by power relations in society (Foucault 1981). This perspective emphasises that knowledge and truth can result from a discursively produced process contingent on the power structures of society (Foucault 1980). The stream of research building on these approaches helps us examine the power–truth and power–knowledge relations behind fact-checking. Several studies have applied the concept of regimes of truth, for example, to understand misinformation and moral panic (Bratich 2020), and the meaning of truth and information in critical research (Stahl 2006).

For fact-checkers, the problem with truth regimes is twofold. First, reaching those operating in different regimes of truth is difficult, especially amid the current political polarisation (Wilson, Parker, and Feinberg 2020) and the dislocation of news journalism, resulting in audiences evaluating the credibility of news in various contexts (Ekström and Westlund 2019, 265–266). Second, this problem is demonstrated through the concept of post-truth, defined as the lack of societal conditions that allow certain conceptions of truth to be generally accepted (Waisbord 2018). Fact-checkers are tasked with upholding the modern (liberal) regime of truth (Harjuniemi 2022, 272) that relies on the credibility of scientific knowledge. Both these challenges are rooted in information disorder: the increased information pollution and polarisation around the world (Bennett and Livingston 2018), interfering with the formation of a collective understanding of facts.

Harjuniemi (2022, 278–279), considering the regimes of truth approach and the post-truth communication environment, calls for "ways to discipline the liberal media market". This presents a question about fact-checkers: Do they perform a form of this discipline or is fact-checking just another instance of extending market logic to a new area of public communication? These questions are especially relevant when considering the "debunking turn" (Graves, Bélair-Gagnon, and Larsen 2023) in fact-checking, as this prominent form of fact-checking involves cooperation with social media platforms. From these perspectives, fact-checking is a communicative action (Andersen and Søe 2020) exercising power and making it a participatory actor in the process of establishing truth. Examples of this phenomenon are blunt verdicts of politicians' claims using "truth scales" (Amazeen et al. 2018) and publishing their records of truthfulness based on previous fact-checks (Abels et al. 2024). Many fact-checking organisations have also sought to legitimise their position as credible producers of truth by joining established fact-checking networks (Lauer and Graves 2024, 14). It is critical to question whether these tendencies affect fact-checking's ability to operate across different truth regimes.

Causal Relations

Claims often include a causal relationship or a prediction of consequences. This presents a problem for fact-checking because plausible causal links can be established in numerous ways (Woodward 2003, 345–346), and fact-checkers must determine the credibility of

claims that suggest these links. Suggestions to restrict the scope of fact-checking to exclude causal relations (Uscinski and Butler 2013, 168–170) are problematic when we consider that the special sciences generally rely on causal relations to provide explanations (Ross, Ladyman, and Collier 2007, 192; Woodward 2003, 183), even if the proper ways to establish these relations are debated (Pearl 2009). Specifically, it is difficult to decisively prove or disprove causal links in the social sciences (Hedström and Ylikoski 2010; Morgan and Winship 2015). Furthermore, it can be detrimental to avoid expressions of causality because this might lead to making implicit causal claims and can even conceal important knowledge (Pearl 2009, 138; 176–178). If the social sciences, and special sciences in general require non-definite criteria for explanations (Woodward 2003, 239), fact-checkers, who do not follow a scientific process (Graves 2016, 150), must adopt similar approaches to moderate discussions on these topics. Different models for establishing causation, such as considering "sufficient" and "necessary" causes (Pearl 2009, 283) can be considered. The challenge for fact-checkers is to determine how much information about the causal history of an event (Lewis 1986, 217) (or, as is often the case in societal discussions with complex circumstances, causal histories of comparable events) is needed to deem a claim sufficiently substantiated. This task, with often limited resources and reliance on selected experts, can be subjective and exposes the practice to inevitable criticism.

For example, discussing the effects of terminating a public policy includes multiple possible scenarios: In a fact-check by PolitiFact (Gardenswartz 2024), Joe Biden's claim on the impact of repealing a health care policy was deemed "mostly true". This fact-check includes caveats and considerations, including whether it is realistic to expect that a substitute policy would be introduced, how many people are affected by the policy, and whether employers or workers would be incentivised to take action that would prevent a certain impact. This example highlights the problem of causal relations. Determining sufficient justifications and assigning a verdict to plausible but improbable claims remains challenging.

How Do Epistemological Problems Impact the Different Aspects of Fact-Checking?

Epistemological critiques highlight key challenges in the operationalisation of fact-checking practices. Figure 1 (below) portrays our framework for these aspects and outlines their central interrelations. The demand for fact-checking arises from various conditions such as an increased flow of unverified information, the value of claims perceived as unbiased and accurate, or audience expectations of accurate information. These conditions determine the degree and sophistication necessary for fact-checking to be perceived as legitimate. Furthermore, the resulting fact-checking practices create opportunities for epistemological problems to arise.

Societal Demand for Fact-Checking

Epistemological problems partially arise from the demand for fact-checking because these expectations can affect how fact-checking is performed and how results are presented. Fact-checking can serve societies by holding political actors accountable for
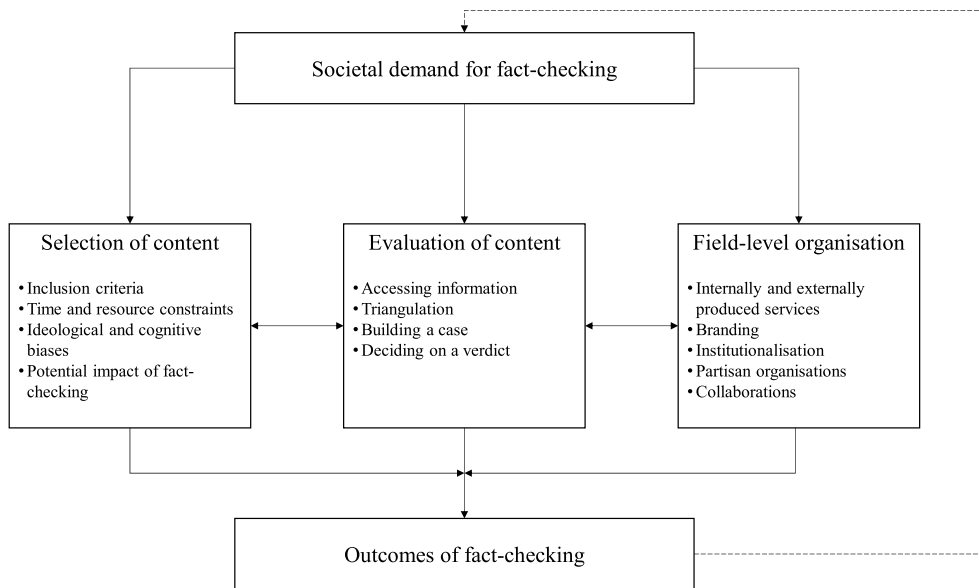
Figure 1. Aspects of fact-checking practices.

distorting facts and identifying foreign efforts to influence public discourse and election outcomes. These aspects of societal demand emphasise that reporting statements without evaluation prioritises an unrealistic and undesirable form of neutrality over the values of accuracy and credibility (Ward 1999, 7). Fact-checkers must uphold these values while claiming a degree of objectivism that is realistic and fulfils the demand for objective evaluation.

Another source of demand is created by the internet and social media platforms enabling large-scale disseminating of (false) information, requiring countermeasures. Editors and journalists have ceded ground to social media as a regular source of news (Pew Research Center 2023). This could contribute to the public demand for explicit assessments of factuality. These demands are highlighted in the "debunking turn" of fact-checking (Graves, Bélair-Gagnon, and Larsen 2023), where collaboration with online platforms on content moderation shifts the goal of fact-checking from raising awareness to constraining the visibility of content. Recognising these differences is important as prioritising commercial incentives—such as platform demands—may lower the quality of fact-checking work by prioritising easily debunkable content rather than complex claims with greater public impact (Graves, Bélair-Gagnon, and Larsen 2023, 10).

The fact-checking movement has also seen the rise of partisan organisations or "media watchdogs" focused on holding opposing sides accountable (e.g., Media Matters for America and Media Research Center). Political actors can also share only fact-checking content that disproves their opponents' statements (Shin and Thorson 2017), making fact-checking vulnerable to partisan influence. Here, the demand for fact-checking can be viewed as the demand to uphold certain truth regimes.

Considering these sources of demand, fact-checkers must demonstrate that they follow consistent criteria to satisfy the demands of objectivity. This is a challenging task because the criteria for non-partisanship vary across truth regimes; some may argue

that an opposing side should be targeted more because they present more falsehoods, while others might view unequal representation as a sign of partisanship. This conflict between issues of objectivism and truth regimes presents a challenge in selecting content.

Selection of Content

Selecting content for evaluation presents a significant challenge to fact-checkers (Lim 2018; Nieminen and Sankari 2021). Not everything can and not everything *should* be fact-checked. When selecting content, fact-checkers face challenges in making often subjective judgements about (1) the impact of the original content (Micallef et al. 2022, 14), (2) suitability for evaluation based on verifiability (Walter and Salovich 2021), and (3) the potential to correct false perceptions instead of platforming false content (Graves, Bélair-Gagnon, and Larsen 2023, 12). Impact is evaluated by gathering data on the visibility of the content, as well as considering societal impact and the prominence of the speaker (Micallef et al. 2022, 12–14). Criticism of content selection includes accusations of subjective selection and checking of unsuitable claims (Nieminen and Rapeli 2019). Because fact-checking can bring visibility to certain topics, the question of selection has become increasingly relevant alongside the focus on social media content moderation.

Problems related to the degrees of objectivism underlie the central issue in content selection. As Uscinski (2015, 247) argued, selecting content requires introducing biases because journalists have "predictable political backgrounds and ideological predispositions". Lim (2018, 7) also emphasised that content selection between fact-checkers warrants more consistency. If we follow both arguments, combining unavoidable bias with a demand for consistency in content selection between fact-checkers would result in every fact-checker expressing similar biases. Unintuitively, it is not detrimental for fact-checkers to utilise different selection criteria if the criteria are transparently justified. Various criteria can provide a basis for comprehensive fact-checking across different types of content, reflecting the varying goals and evolving standards of fact-checkers. This seems to be implicitly understood by the International Fact-Checking Network (n.d.), which requires adherence to principles of transparency, non-partisanship, and equal standards of evidence, but does not provide more detailed guidance.

Even if strict, unified criteria for content selection are not required, questions of principles posed by the problem of causal relations remain relevant. Ruling out the selection of causal claims could reduce the impact of fact-checking. Uscinski and Butler argued that causal relationships cannot be verified by "looking up the answer" (2013, 168–170). This would be a misrepresentation if interpreted as the sole purpose of fact-checking. According to the German news agency Deutsche Presse-Agentur (n.d.), they do not check facts but rather examine claims based on verifiable facts. The credibility of the evidence supporting a claim can be evaluated whether the claim is causal, and even imperfect information can be utilised. A claim does not become non-factual because decisive evidence is lacking; it is still crucial to assess the justifications (Graves 2017, 522). If fact-checkers focus on simple factual claims, politicians and others could tailor their statements to evade scrutiny.

The problem of truth regimes is also pronounced when determining the criteria for content selection. According to Graves, Bélair-Gagnon, and Larsen (2023, 12–13), fact-

checkers increasingly consider virality when deciding whether online content should be fact-checked, whereas statements by politicians are automatically deemed influential. Collaborations with social media companies have allowed platforms to influence content selection, risking a shift away from holding political actors accountable (Graves, Bélair-Gagnon, and Larsen 2023, 16–17). Fact-checkers must remain mindful of these developments to maintain a monitorial rather than a collaborative role in society (Christians et al. 2009). Subjective choices should not be hidden behind seemingly objective algorithms.

Fact-checkers can take different steps to alleviate epistemological problems without limiting their scope or seeking absolute consistency through automation. First, inviting audience suggestions helps mitigate biases and reach different truth regimes. Second, transparency ensures that fact-checkers contribute to an impartial body of evaluated content. To integrate transparency with subjective elements in content selection, we suggest using explicit credibility criteria. The agreed criteria for selecting claims do not guarantee a body of fact-checks that appears even-handed. Fact-checkers may, consciously or unconsciously, shape their work to project an appearance of impartiality. For example, if the criteria result in fact-checks mostly targeting one presidential candidate, fact-checkers may try to balance the situation. It would be more sustainable to express this aim by implementing pre-determined quotas if the criteria do not result in an appearance of impartiality. Embracing a strict degree of objectivism can lead to concealing, instead of dispensing, the subjective aspects of fact-checking.

Evaluation of Content

We examine the epistemological problems in content evaluation through three processes: (1) accessing information that can be used to evaluate a claim, (2) building a case based on the available information, and (3) deciding on a verdict.

First, accessing information can be challenging in multiple ways (Micallef et al. 2022, 17), ranging from unwillingness to engage with journalists to a lack of reliable sources or lengthy processes requesting access. Problems related to the degrees of objectivism challenge a fact-checker's ability to objectively discern information, especially under time, cognitive, or financial constraints. Steensen, Kalsnes, and Westlund (2023) noted that the fast pace of breaking news in live fact-checking often reinforces existing views and confirms widely accepted facts. Similar pressure arises from the problem of truth regimes as opinions diverge on reliable sources. Triangulation of facts—cross-examining multiple sources, prioritising (politically) independent sources and diverse ideological viewpoints (Graves 2016, 127–128)–supports claims of objectivity. This method guarantees some measure of balance but does not eliminate bias entirely. Triangulating sources may also have weaknesses, as each additional viewpoint does not necessarily reflect objective reality (Blaikie 1991, 125). To address this, triangulation should include scrutinising expert opinions, examining different data sources, and considering plausible interpretations. A useful way of achieving this goal is source criticism, as Steensen et al. (2022, 2126–2129) described: (1) Tendencies of sources should be considered, (2) interpretations within sources and those made by journalists themselves need to be considered, (3) sources should be considered both in terms of their appearance and within the wider contexts of their origin, (4) sources should be considered in relation to other

sources, (5) what the source material omits or what is left as implicit should be considered, and (6) the created journalistic content should itself be critically assessed as source material.

Second, building a case requires considering contextual and structural questions because claims are often made within specific circumstances. Fact-checkers have faced criticism for combining multiple claims into one and dissecting individual statements (Uscinski and Butler 2013, 166–168). These critiques highlight the problems related to the degrees of objectivism. If fact-checkers try to achieve objectivity by checking claims individually, they might strip away the context. Combining or separating claims on a case-by-case basis introduces another level of subjectivity. Nieminen and Sankari (2021, 363, 374) argued for separating claims to ensure clarity, although legitimate exceptions can exist. Uscinski and Butler (2013, 166–168) saw combining and separating claims as unavoidable, making fact-checking inherently subjective. We argue that strict rules for handling claims are unfeasible as no rule can cover all claim types. This argument aligns with the idea of pragmatic objectivity as a holistic and dynamic interpretation (Ward 2004, 277–278). A sufficient fact-checking guideline would require transparent reasons for combining or separating claims. Transparency holds fact-checkers accountable for deviating from original wording. Acceptable reasons for doing so could include clarifying statements or avoiding conflating unrelated claims. The reasons for doing this sparingly are highlighted by the problem of truth regimes, because combining and separating claims can be used to frame statements. If a politician makes a false statement during a speech, one can argue that the broader message of the speech is true, whereas others might claim intentional deception.

When building a case for a fact-check, various counterarguments can be considered. Parks (2022) suggested that journalists should consider different "senses of truth". For example, claims based on ideological beliefs should not be reported similarly to those supported by empirical evidence, and certain ideological truths are prominent for journalists (Parks 2022, 185–186). These issues relate to truth regimes: fact-checkers use a certain definition of truth, while audiences may rely on different ones. This leads to a clash between problems related to objectivism and truth regimes. To address this without compromising their evaluation criteria, fact-checkers can pre-emptively engage with critiques from different truth regimes.

Challenges in handling claims are amplified by using truth scales, which present verdicts in a potentially confusing or simplified manner (Uscinski 2015, 249). This brings us to the third phase of content evaluation: deciding on a verdict. Examples of ambiguous verdicts are found in the Truth-O-Meter used by PolitiFact, which includes verdicts such as "half-true" and "mostly false" and the "Pinocchios" used by the Washington Post Fact Checker. Explanations for these verdicts are provided on the organisations' webpages (Drobnic Holan 2018; Kessler 2017), but they risk confusion for the occasional reader. Truth scales can, however, improve the effectiveness of fact-checking (Amazeen et al. 2018). Truth scales can also have other advantages, such as increasing comparability, building a recognisable brand and capturing wider audiences.

Inconsistency is the overarching threat to content evaluation (Lim 2018; Marietta, Barker, and Bowser 2015). Fact-checkers are committed to holding everyone to the same standards, but fact-checking must also be consistent across organisations. Problems stem from trusting different sources, handling claims differently and drawing different

conclusions. Consistency can be improved by sharing practices and utilising similar criteria. Problems related to the degrees of objectivism can guide the formation of effective guidelines through realistic conceptions of objectivity because some aspects of fact-checking require subjective choices. Establishing subjectivity criteria to define when subjective considerations are appropriate would make these choices open to scrutiny. The principles of pragmatic objectivity (Ward 2004) combined with transparency regarding subjective judgement offer a sustainable approach for fact-checkers to navigate degrees of objectivism. Epistemologically, significant differences exist between (1) claiming to use completely objective methods for triangulating information, claiming to be able to objectively decide when enough context is provided, or claiming to be able to reach an objective verdict in borderline cases, and (2) conceding a level of subjectivity, explaining why subjective choices were made and justifying why they should be considered legitimate.

Field-Level Organisation

Media companies must determine how to structure the fact-checking process, including whether the required capabilities and resources can be found internally or procured externally (Lowrey 2017). Some companies have internally developed fact-checking practices, while new fact-checking organisations have also been established (Graves and Cherubini 2016). A prominent example of field-level organisation affecting fact-checking practices is increased collaboration with social media platforms, raising concerns about fact-checkers' ability to direct their work and maintain their standards of impactful fact-checking (Graves, Bélair-Gagnon, and Larsen 2023, 16).

Certain epistemological problems persist across the field. Critiques connected to the degrees of objectivism are related to the brand of fact-checking. The term *fact-checker* implies an objective arbitrator of truth (Uscinski and Butler 2013, 175), inviting stronger critique than more measured approaches. Fact-checkers could adopt a name such as "credibility evaluator", but this might fail to convey the importance of factual accuracy. Fact-checkers must consider aims such as increasing reach and building trust with their audiences. There is tension between tempering claims of objectivity and reaching a wide audience. Hence, the existing brands themselves are solid arguments against altering their name. Notably, fact-checking networks (International Fact-Checking Network and European Fact-Checking Standards Network) hope to ensure quality and a strong brand which can protect the field from misuse. For example, Vinhas and Bastos (2022, 459) referred to the organisation Fact-Checking Turkey, which validates information provided by the government. Without considering the epistemological problems of fact-checking, it is difficult to argue against organisations that co-opt the label *fact-checker*. If fact-checkers cannot defend their objectivity, it becomes difficult to argue against organisations with alternative presentations of truth or to justify the legitimacy of the truth regime fact-checkers operate within. Institutionalisation (Lowrey 2017) and transparency (Ye 2023) are needed to counter attempts to co-opt the fact-checking movement's credibility.

Fact-checking actors also include partisan organisations that do not prioritise neutrality, a core principle for most fact-checking organisations (International Fact-Checking Network n.d.). Nevertheless, some partisan fact-checkers have been found to use robust methods (Tsang, Feng, and Lee 2023, 2246). Fact-checking networks must decide where

to draw the line between legitimate and illegitimate organisations, balancing between problems of objectivism and truth regimes. Partisan fact-checkers could be included in professional networks as a separate category to increase the quality of their fact-checking; however, this could undermine the network's credibility. One solution could be to create a separate network for partisan fact-checkers, where guidelines can directly answer challenges related to partisan fact-checking.

Outcomes of Fact-Checking

A way to present fact-checking results is chosen from different alternatives. Headlines can declare that a fact-check has been conducted or summarise the conclusion. The results can indicate the presence of lies or state inaccuracies. Presenting the results is a communicative action (Andersen and Søe 2020) seeking to moderate public discussions. This can both highlight and alleviate epistemological problems. Truth-claims can be tempered by using discursive resources, such as epistemic disclaimers and reduction of truth-claims (Ekström, Ramsälv, and Westlund 2021, 179–180). Here, we use epistemic disclaimers to refer to the limitations of certainty of truth-claims. Such disclaimers may include phrases such as "current data do not support X" or "experts do not interpret evidence as supporting Y". We use the reduction of truth-claims to refer to restrictions in the context in which a claim is evaluated. A reduction of truth-claims can be accomplished through phrases such as "records at the time indicate" or "it was widely accepted"— useful when information is derived from secondary sources or evaluated within a certain context. Using disclaimers can ease pressure by claiming to only present facts with selected qualifiers, recognising how facts can be interpreted through different conceptual schemes (Ward 2004, 272–273). However, these qualifiers can introduce an additional level of subjectivity: Truth regimes can call for different qualifiers. For example, some might accept government-provided data, whereas others might dismiss it. Fact-checkers should be transparent about the qualifiers they are ready to include.

Perhaps the most serious epistemological problem related to the results of fact-checking is inconsistency between fact-checkers (Lim 2018; Marietta, Barker, and Bowser 2015) which undermines the credibility of all fact-checking organisations. Lim (2018, 6) noted that fact-checkers often disagree in cases where their verdict falls between true and false. Here, fact-checking includes elements like interpreting context and assessing the level of deception. These are controversial evaluations, even if set criteria are used; for example, the context of a claim can include previous statements and personal and societal circumstances. Fact-checkers also use different sets of possible verdicts. These reasons explain why consistency is not easily achieved; however, important actions can be recognised. First, fact-checkers should ensure the scale they use is comparable to other organisations. Second, fact-checkers must transparently justify fact-checking claims when a clear-cut result is not obtained. These complicated forms of falsehoods can be important targets for fact-checking (Lim 2018, 6), but this needs to be disclosed to avoid accusations of bad-faith interpretation. Another option is to refrain from giving a verdict and instead provide context for examined claims (Steensen, Kalsnes, and Westlund 2023, 7).

Epistemological problems also arise from compiling results into a database of politicians' records (Graves 2016, 145–147). This is effective when a politician has been

found to spread falsehoods repeatedly (Abels et al. 2024); otherwise, the practice can be seen as dubious. For example, the number of "true" verdicts is the result of how many true claims have been selected from each politician. A politician making true but "news-worthy" claims often does not reflect overall truthfulness. Creating credible records of truthfulness would involve using methods such as randomised selection of claims. This is not plausible because fact-checking must consider news value. As such, percentages of false claims among politicians should not be compared.

Finally, in fact-checking efforts focused on moderating social media content, the results of fact-checking can become the absence of misinformation. Graves, Bélair-Gagnon, and Larsen (2023, 17) argue that this designates audiences as "potential victims" who need to be protected. This effectively renders the debunking process invisible. Transparency does not become futile in these cases; focus should be on monitoring how and why content is suppressed. The risk here lies in powerful social media platforms employing "fact-check-ers" to suppress content.

## Measures to Address Epistemological Challenges in Fact-Checking

Based on our framework, we suggest three types of measures as potential answers to the critique targeted at fact-checking (Figure 2). These measures related to rigour, appearance, and engagement address the criticism related to fact-checkers' ability to assess and produce truth-claims, seeking to advance norms (Steensen et al. 2022, 2129) in these contexts.

Rigour Measures

Rigour measures are methods that can provide clarity to practices in discerning verifiable information, making justifiable choices, strengthening fact-checkers' claims to objectivity, and building structure and transparency to the subjective aspects of fact-checking. These measures are especially important when fact-checking (co)operates with social media platforms, since algorithms and commercial interests (Graves, Bélair-Gagnon, and Larsen 2023, 16) may inhibit transparency. In aggregate, successful application of rigour measures can help fact-checkers defend their work against accusations of insuffi-cient methods or unwarranted subjectivity and thus meet expected levels of justification for the production of knowledge (Ekström, Ramsälv, and Westlund 2021, 177; Ekström and Westlund 2019, 264).

Triangulation is often the best available practice when interpreting statements and statistics or drawing conclusions from different perspectives or imperfect data. Triangu-lation should strive for creative ways to procure and use different types of sources and to cross-examine them in a way that enriches the pool of available evidence. Rigorous tri-angulation is often used, for example, when evaluating legal disputes (e.g., Gore 2025) by referencing legal experts, the law and previous judicial decisions.

Source criticism (Steensen et al. 2022) supplements triangulation by investigating state-ments given from positions of authority. Triangulation and source criticism help address the relationship between facts and values (Putnam 2002) by considering different data and viewpoints through the standards of pragmatic objectivity (Ward 2004, 297–299). Source criticism also helps make fact-checking credible from the perspective of
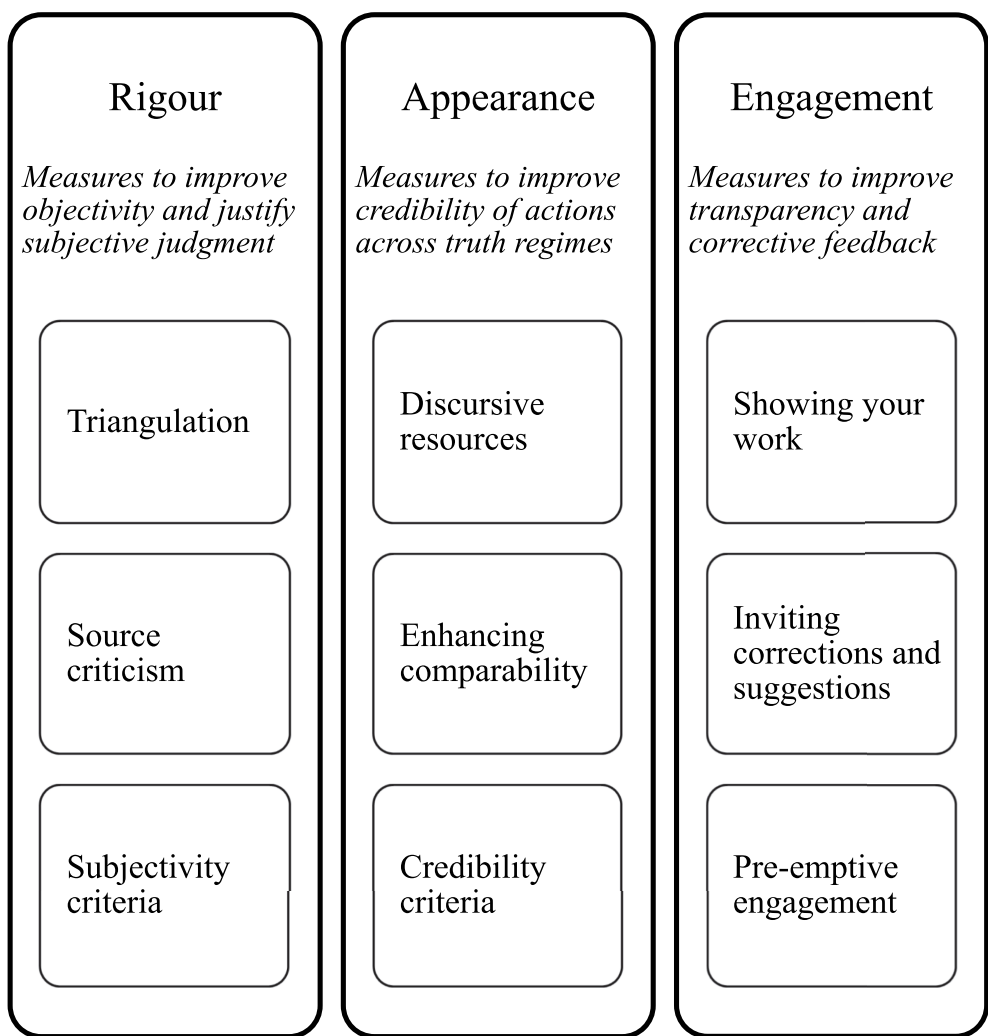
Figure 2. Measures for answering the epistemological problems of fact-checking.

different truth regimes because it promotes scrutinising the process of fact-checking over habitual confirmation of hegemonic views (Steensen, Kalsnes, and Westlund 2023, 15). An expert statement reviewing data differs from an interpretation or a prediction: fact-checkers should be mindful of how they present different kinds of statements. Further, the choice of experts can determine the field in which the claim is evaluated.

Subjectivity criteria steer fact-checkers to transparency in explaining *why* subjective judgement is used, by e.g., highlighting instances of interpretation and omission in used sources (Steensen et al. 2022, 2129–2130) and in fact-checks themselves. When a statement does not make explicit factual claims, fact-checkers should justify why performing a fact-check is still appropriate. Similarly, giving a verdict between truth and false leaves more room for subjectivity; explaining these choices provides audiences context for why verdicts from different fact-checkers differ. For example, in a fact-check by Politifact (Cercone 2025), a statement blaming the previous administration for an egg shortage

was deemed half-true because it included a correct factual claim but "leaves out important details and context", which are explained in the fact-check.

Appearance Measures

Appearance measures represent methods to manoeuvre between degrees of objectivism and increase credibility when fact-checking is approached from different truth regimes. Consistent application of appearance measures can improve fact-checkers' ability to maintain credibility, especially when their work is constantly contested in public. Overall, we suggest that appearance measures address the challenges that political polarisation (Vinhas and Bastos 2022, 458) poses to maintaining the perceived credibility important for achieving societal impact (Liu et al. 2023 , 20).

Discursive resources (Ekström, Ramsälv, and Westlund 2021, 179–180) facilitate qualification of truth-claims, enabling fact-checkers to credibly evaluate causal claims or the plausibility of claims. By using discursive resources, such as epistemic disclaimers, fact-checkers can show adherence to the norm of "harnessing truth-claims with modesty" (Steensen et al. 2022, 2128). This manoeuvrability can also help fact-checkers avoid regressing toward a "confirmative epistemology"—situations where complex claims tend to be avoided (Steensen, Kalsnes, and Westlund 2023, 15–16)—by providing tools for navigating complexity in uncertain and contested areas.

Enhancing comparability can help fact-checking organisations reach different truth regimes when similar results are obtained by different organisations. Comparability can also facilitate outsider interpretation of the fact-checking process and reveal potential sources of subjectivity. Poor comparability hinders discrediting invalid fact-checks and increases the risk of politically motivated actors entering the field with alternative conceptions of factuality.

Further, it is possible to outline the subjective aspects of fact-checking with explicit *credibility criteria* and by presenting fact-checkers themselves as a journalistic source (Steensen et al. 2022, 2128). Ideally, credibility criteria help recognise how fact-checkers use power (Parker 1999, 1) in the process of selecting claims. Some fact-checkers state that their content selection is not based on the source of the claim (e.g., Deutsche Presse-Agentur n.d.). However, substantiating this type of claim to objectivism is difficult. A preferable alternative would be to aim to cover topics and political perspectives by creating a target range of even-handedness, implementing pre-determined quotas when needed. Another way to achieve this is to fact-check the original statement and a response from a political counterpart simultaneously (e.g., Cercone and Swann 2025). In digital environments, adherence to credibility criteria may provide guidelines and limit algorithmic outsourcing of fact-checking. Credibility criteria would also help answer the concerns about political partisanship voiced by social media platforms, with an explicit and measurable guideline to point to.

Engagement Measures

Engagement measures are ways to address the problem of truth regimes with active communication and participatory collaboration. These measures highlight transparency by inviting reader contributions, potentially creating links between truth regimes.

Collaborative initiatives can nurture the audience's capability to perceive fact-checking critically, aligning with the norm of self-reflective truth-claims (Steensen et al. 2022, 2131–2132).

"Showing your work" (Graves 2016, 125) is especially important when dealing with complicated cases, such as those highlighted in the problem of causal relations and when relying on less than definitive information (Woodward 2003, 239). Transparency of the fact-checking process is already an enforced norm, for example in the IFCN Code of Principles which guides fact-checkers to enable the replication of their work (International Fact-Checking Network n.d). Emphasising this transparency can help determine credible criticism: Has a fault been pointed out in the described process?

As an extension of showing your work, *inviting corrections and suggestions* can increase credibility and participatory engagement. Inviting corrections and suggestions can also ease the tendency to view fact-checkers as self-proclaimed arbitrators of truth by presenting audiences as participants in the process.

Fact-checkers should also try to connect with different audiences by covering different truth regimes, to influence the critical evaluations audiences make regarding the acceptance of knowledge claims (Ekström and Westlund 2019, 265–266). One way to do this is *pre-emptive engagement* which can help fact-checkers scrutinise experts by presenting them with anticipated critique or common rebuttals from the perspective of different truth regimes. The importance of understanding different truth regimes is amplified when fact-checking social media content, as algorithmic personalisation may prime each claim's audience to accept it.

Discussion

In this article, we attempt to integrate (1) the epistemological problems present in fact-checking, (2) the literature's critique of fact-checking, and (3) the practical aspects of fact-checking. Our work contributes to the perspectives discussing the practical epistemologies of journalism (Ekström and Westlund 2019; Graves 2017; Steensen et al. 2022; Ward 2004) by defining the core epistemological challenges that arise from previous studies and by proposing three types of measures as potential answers to the critique targeted at fact-checking (Figure 2). We argue that these measures can direct journalistic fact-checking in the current communication environment where the prominent regime of truth supporting the credibility of journalism is challenged (Harjuniemi 2022; Waisbord 2018). Adherence to their consistent implementation and evaluation can also smoothen fact-checkers' adaptation to the development of automation and algorithms, which introduce epistemological challenges of their own (Graves, Bélair-Gagnon, and Larsen 2023).

At the same time, we recognise that the real-life application of the suggested measures and their interrelations requires constant effort to manage the balance of various epistemological issues. This challenge highlights the need for creativity on the side of the practitioners but also underscores the necessity of future research to understand the process of applying these measures and to determine the extent to which we can realistically expect their consistent adoption. Especially, we identify research opportunities in three directions.

First, future research can scrutinise how different approaches to the implementation of source criticism and subjectivity criteria can translate into measurable rigour in fact-

checking. For example, social media fact-checking carries new implications for source criticism when viewing fact-checking itself as a source. Social media posts are selected for fact-checking with emphasis on their virality, but the effects of this type of fact-checking are still uncertain. For example, large-scale content moderation might create an assumption of factuality in the absence of a fact-check. Subjectivity criteria need to be examined especially in cases where an indefinite verdict is given: Are subjective choices made consistently from case to case and do these choices negatively affect comparability between fact-checkers? While Lim (2018, 4) and Nieminen and Sankari (2021, 374) have discussed the effects of subjectivity, it remains unclear how fact-checkers should systematically approach subjective decisions.

Second, future studies can improve our understanding of the application of appearance measures while acknowledging the limits of rigorous practice on public perceptions. Research on the presentation of results (e.g., Amazeen et al. 2018) can be extended to other potential ways to improve these perceptions. For example, the willingness of fact-checkers to adopt credibility criteria in content selection can affect if fact-checking evolves to achieve wider societal impacts or eventually becomes a form of media with a siloed audience of those least in need of corrected information.

Third, research on engagement measures should consider pre-emptive engagement: Why do certain people distrust fact-checking regarding certain subjects and how could timely research help fact-checkers tailor their work to counter these reasons? This would contribute to answering challenges such as the limited efficacy of correcting false information (Thorson 2016). Through these efforts, research can better account for the persistent epistemological concerns involved in fact-checking.

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