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Trust but verify? A social epistemology framework of knowledge acquisition and verification practices for fictional entertainment

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Abstract

Fictional entertainment can serve as a vivid and easily comprehensible source of knowledge, but only if audiences are able to tell its kernel of truth apart from fantasy. In this article, we use the lens of social epistemology to develop a theoretical framework of knowledge acquisition and verification practices for fictional entertainment that integrates various extant lines of work on entertainment education, perceived realism, information processing, credibility assessment, and verification strategies. To flesh out the conceptual model derived from top-down theoretical integration, we use an inductive, bottom-up approach to theory building, assisted by qualitative research. The resulting model describes knowledge acquisition from fiction as an essentially social process characterized by a combination of epistemic trust and epistemic vigilance toward fictional content and sources, in which credibility is assessed via social knowledge sharing and verification practices.

Keywords: fiction, entertainment, perceived realism, credibility assessment, verification practices.

In this article, we propose a theoretical framework of how audiences deal with fictional entertainment as a source of knowledge, with a special focus on social practices for evaluating the credibility of fictional content and sources. For many viewers, fiction can serve as a vivid and easily comprehensible source of knowledge about aspects of reality that they do not know from firsthand experience—for example history, war, current affairs, professional, criminal, or elite milieus. But what motivates audiences to examine the truth value of fiction, and what are their judgment criteria and verification practices?

Understanding how audiences decide what to believe and what to dismiss in fiction is important for several reasons. One is the large time budget individuals spend with fictional entertainment and the growing audience share of "news avoiders" whose media diets almost exclusively consist of entertainment (Gorski & Thomas, 2021). Another reason concerns effects: a long line of theorizing and empirical work suggests that audiences often learn from and are persuaded by fiction. Although research has examined why and how audiences evaluate the veracity of claims in information media and interpersonal communication (Goldman, 1999; Metzger et al., 2010; Sperber et al., 2010), little work has considered these processes with regard to fiction, or the epistemological challenges posed for audiences by genres that blur fiction and reality. This article presents a theoretical framework of knowledge acquisition and verification practices for fictional entertainment, based on top-down integration of various lines of work (entertainment education, perceived realism, information processing, credibility assessment, verification strategies), and bottom-up qualitative research.

As an integrative framework, we use the lens of social epistemology (Goldman, 1999; Sperber et al., 2010; Zagzebski, 2012). This approach, which has primarily been applied to interpersonal sources and nonfiction, proposes that knowledge acquisition and verification practices are embedded in a social network of epistemic trust and epistemic authority relationships. We argue that the same is likely to be true for fiction.

Epistemic functions of fiction—from ancient philosophy to entertainment research

To what extent can fiction teach us truths? This question has been a matter of scholarly debate since the times of ancient philosophy (see Golden, 1969; Young, 2001). For example, Plato was skeptical about the epistemic utility of mimetic art, which he characterized as the "shadow of a shadow" (Golden, 1975), meaning an inferior and distorted representation of the material world which itself is only a representation of the world of ideas. Furthermore, he argued that poets, with their use of rhetoric, incite emotions and passions rather than reason, and were to be banished from his ideal state (Golden, 1975). Aristotle's (1968) *Poetics*, in contrast, emphasize the epistemic value of *mimesis* and *catharsis*. According to Aristotle, the core function of mimesis is a learning process that moves from the particular to the universal and results in an insight or inference (Golden, 1969). Thus, fictional persons and events can be understood as representations of universal principles of human action that derive their truth value from their similarity with a larger set of real occurrences, rather than from their similarity with a single person or event. In the case of tragedy, the learning process involves catharsis, which can be

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understood as "intellectual clarification of emotions" (Golden, 1969, p. 145). In Aristotle's work, the pleasure derived from mimesis and catharsis is mainly attributed to their epistemic function—the pleasure of learning an insight (Golden, 1969).

Both views of fiction, as nonrational (and potentially misleading) vs. meaningful learning experience, are reflected in current entertainment research. Work emphasizing uncritical, nonreflective processing includes *cultivation theory* (Gerbner & Gross, 1976; Shrum, 2006), which has drawn attention to the adoption of distorted world views based on biased portrayals of reality on television. Research examining cultivation processes suggests that quick, heuristic processing (Shrum, 2006), and inaccurate memory for the source (Mares, 1996) may contribute to these effects. Other work emphasizing nonreflective processing includes research on *transportation* (Green & Brock, 2000) and *narrative engagement* (Busselle & Bilandzic, 2008). Together, these lines of work suggest that fictional narratives can (by engaging our emotions and transporting us into the plot) reduce counterarguing, and thereby lead to an uncritical transfer of knowledge from fiction to perceptions of social reality.

Other lines of research have focused more on the reflective processing of fictional content. For example, the Aristotelian idea that fiction may provide audiences with an opportunity to gain insight has been adopted in research on *eudaimonic entertainment* (Oliver & Raney, 2011). This body of work suggests that individuals' appreciation of meaningful and thought-provoking stories constitutes an important motivation for entertainment consumption, on par with hedonic motivations such as fun and suspense. In line with the notion of catharsis as intellectual clarification of emotions (Golden, 1969), viewers of eudaimonic entertainment reported a sense of affective and cognitive challenge (Bartsch & Hartmann, 2017), and the more moved they felt, the more they engaged in cognitive elaboration and information seeking about the social and political issues portrayed (Bartsch & Schneider, 2014).

How to reconcile these seemingly contradictory views of narrative processing as an uncritical, nonreflective transfer of knowledge from fiction to reality versus meaningful and reflective insight? We propose a two-pronged approach. First, we draw on social epistemology (Sperber et al., 2010) and models of perceived realism (Busselle & Bilandzic, 2008) to argue that narrative understanding involves an initial, tentative stance of epistemic trust that may or may not be followed by critical and elaborate forms of processing. Second, we draw on social epistemology (Goldman, 1999; Zagzebski, 2012) and the dual processing model of credibility assessment (Metzger, 2007), to argue that social heuristics can sometimes be as rational and effective as cognitively effortful analytic strategies. Our goal is to integrate heuristic and reflective processes into a single model that would facilitate further hypothesizing not only about the precursors and nature of these processes but also the outcomes with regard to knowledge, attitudes, and behavior.

A social epistemology framework of knowledge acquisition from fiction

Social epistemology is a relatively young sub-discipline of philosophy that "focuses on social paths or routes to knowledge" (Goldman, 1999, p. 4). That is, it considers the role of second-hand knowledge provided by others (rather than our direct experience), and the social practices for evaluating the validity of such knowledge (Goldman, 1999; Jäger, 2023; Sperber et al., 2010; Zagzebski, 2012). Working from a veristic definition of knowledge as justified true belief (Goldman, 1999), social epistemology often distinguishes "weak" forms of knowledge in the sense of "true belief" adopted unreflectively from accurate sources—as opposed to "strong" forms of knowledge that require "some additional element or elements of justification or warrant for the belief" (Goldman, 1999, p. 23).

For example, Sperber et al. (2010) argue that acquiring knowledge from others requires an initial tentative stance of epistemic trust in order to attend to and comprehend the content. However, they note that we have "a suite of cognitive mechanisms for epistemic vigilance, targeted at the risk of being misinformed by others" (p. 359). Epistemic vigilance is conceptualized as a critical (dis)confirmation process that evaluates the credibility of both the source and the content of information communicated by others. Thus, the recipient's tentative stance of epistemic trust in the comprehension stage can be transformed into an informed and validated sense of either acceptance or rejection of the information (Sperber et al., 2010). In other words, the process of epistemic vigilance serves to clarify the reasons that either warrant rejection of the information or that may transform it from "weak" (relatively unjustified) knowledge into "strong" (relatively justified) knowledge.

The social epistemology framework was developed in the context of interpersonal communication and information media (Goldman, 1999; Neuberger et al., 2023; Sperber et al., 2010). We argue that it may also be fruitfully applied to fictional entertainment media and that it bears interesting parallels and differences with current work on narrative processing, perceived realism, and credibility assessment. We describe these points of connection and difference below before laying out the theoretical and empirical case for an integrative model.

Narrative comprehension and engagement

In line with Sperber et al.'s (2010) description of tentative epistemic trust in the comprehension stage, Busselle and Bilandzic's (2008) model of narrative comprehension and engagement posits an uncritical comprehension stage. Audiences for fiction start by positioning themselves in the fictional world, monitoring the characters' actions, story timelines, etc., to make sense of the unfolding narrative and create a coherent mental model. The viewer's default epistemic stance is one of accepting the story, so they can experience a sense of flow that drives enjoyment, and such acceptance may facilitate effects on knowledge, attitudes, and behavior. This tacit acceptance can be disrupted by inconsistencies that signal unreality (e.g., the narrative world seems incoherent, or narrative events differ from real-world schemas). Such moments of inconsistency may prompt a second (optional) step in which viewers make reflective judgments of external realism that compare the outcomes of narrative comprehension with real-world knowledge. However, according to the model, this stage of reflecting on realism is not needed for narrative comprehension, learning and persuasion. Indeed, in some instances, such a lack of reflection may be seen as beneficial. For example, when key health messages are embedded in fictional narratives, unreflective epistemic trust may reduce counter-arguing (Moyer-Gusé, 2008; Slater & Rouner, 2002) resulting in "weak" but potentially life-saving knowledge.

We agree that reflective evaluations of realism are optional for narrative understanding, learning and persuasion effects

to occur. Yet, in line with a social epistemology approach, we propose that such evaluations have an essential epistemic function in that they serve to sort the wheat of valid information from the chaff of make-believe, and because they help clarify reasons that justify belief in that information. That is, default trust in the comprehension stage may lead to 'weak' forms of knowledge (Goldman, 1999, p, 23) when the information happens to be true (e.g., in entertainment education campaigns that are based on scientific evidence). However, "strong" knowledge in the sense of justified true belief (Goldman, 1999, p. 23) requires that the belief is justified with good reasons, which arise from a process of epistemic vigilance that leads to informed confirmation or disconfirmation. In the next section, we turn to work on viewers' judgments about what constitutes good reasons—the ways in which they evaluate the realism and informational utility of media content.

Perceptions of realism

Perceived media realism, "the way in which a media experience is seen to relate to real-world experience" (Hall, 2003, p. 624) has been characterized as a multidimensional construct (Busselle & Greenberg, 2000; Hall, 2003; Potter, 1992). In reviewing the literature related to the perceived realism of television content, Busselle and Greenberg (2000) identified six dimensions that had been conceptualized and examined by researchers. The first, *magic window*, referred to young children's erroneous beliefs that television was a window into a real world where the characters resided. Three further dimensions involved viewers' judgments about *social realism* (whether content resembled real life), *plausibility* (whether events or characters could exist in the real world), and *probability* (likelihood of events or characters in the real world). Finally, two dimensions involved viewers' *identification* with events or characters (e.g., feelings of similarity, closeness, involvement) and *perceived utility* of the content for their own lives.

Hall (2003) subsequently conducted qualitative focus group discussions to examine how audiences themselves perceived media realism, and how their understandings related to the types of theoretical conceptualizations developed by researchers. She found six empirical dimensions of realism judgments that partly overlapped with the theoretical dimensions identified by Busselle and Greenberg (2000) and that have since been replicated in quantitative survey research (Cho et al., 2014). Of particular interest, the participants in Hall's (2003) study seemed to agree on a set of three criteria of external realism that involved judgments about connections between the story and the real world: factuality, plausibility, and typicality. *Factuality* focused on whether the content accurately represented specific real-world persons and events. *Plausibility* was described similarly to the theorized dimension and *typicality* combined the social realism and probability dimensions. An additional three criteria were discussed by her interviewees as independent of external realism. *Emotional involvement* was described in similar terms as the theoretical dimension of identity; participants observed that their emotional responses to the characters and events made fiction seem more real. *Narrative consistency* refers to the internal coherence and lack of contradiction in a story, regardless of real-world plausibility (e.g., in science fiction or fantasy stories). *Perceptual persuasiveness* was described as a "compelling visual illusion" (p. 637).

The role of emotional involvement, perceptual persuasiveness, and narrative consistency in Hall's (2003) interviews seems consistent with Busselle and Bilandzic's (2008) description of the comprehension stage, in which smooth perceptual, emotional, and cognitive comprehension of narratives results in an uncritical state of engagement characterized by flow, attentional absorption, and transportation. In addition, Hall's respondents discussed critical evaluations of the factuality, typicality, and plausibility of a story against real-world knowledge. As such, this work hints at the judgment criteria for epistemic vigilance toward fictional content that can lead to 'strong' knowledge based on justified confirmation or rejection of the content. What determines whether audiences have the resources to engage in these critical (dis)confirmation processes is suggested by work on information processing.

Cognitive capacity for narrative processing

Several theories have focused on cognitive capacity as an important constraint on individuals' ability to comprehend and evaluate information in media narratives (e.g., Lang, 2000, 2006). That is, cognitive resources for processing information, such as attentional capacity and working memory, are finite. Whether these resources are fully occupied by encoding and comprehension or there is capacity for epistemic vigilance is theorized to depend on characteristics of the content (e.g., how complex, fast-paced) and characteristics of the viewer (e.g., cognitive development, prior knowledge, and motivation).

According to the limited capacity model of motivated mediated message processing (LC4MP; Lang, 2000; 2006), a viewer's *motivation* for allocating cognitive resources to specific pieces of information can be conscious and volitional. For example, if a viewer's goal is to learn about a specific topic, such as history, then their attention and epistemic vigilance will be targeted at the historical details in a story, as opposed to details about interpersonal relationships, etc. However, those resources may also be automatically allocated by appetitive and aversive motivational systems. For example, an aversive state, such as cognitive dissonance, aroused by inconsistencies may automatically motivate scrutiny of the discrepant information. Cognitive resources are then reallocated from narrative comprehension and encoding to the process of epistemic vigilance which stores and integrates newly encoded information from the story with real-world knowledge retrieved from memory.

In addition to motivation, the LC4MP (Lang, 2000) draws attention to the role of personal *resources* as another constraint of knowledge acquisition. Specifically, viewers' background knowledge is theorized to play a critical role, as it can facilitate comprehension, free up attentional capacity, and provide a basis for evaluating and integrating new information. A narrative format can facilitate comprehension of information (Lang, 2000), even for viewers with minimal background knowledge. Prior knowledge about the real-world situations portrayed is key, however, in the process of epistemic vigilance, because knowledge verification is recursive, in the sense that the validity of new information is evaluated against the background of knowledge that has previously been established as valid.

Given the constraints of motivation and resources, epistemic vigilance is necessarily limited and selective for "online" judgments of external realism which occur during exposure, and which may come at the cost of resources

needed for narrative comprehension (Busselle & Bilandzic, 2008). Alternatively, in the case of "offline" judgments, the process of epistemic vigilance can be (partly) postponed until after exposure (Busselle & Bilandzic, 2008). As such, the process of epistemic vigilance can be open-ended and recursive. For example, knowledge verification may start with curiosity or confusion during exposure and may be followed up when more information is presented later in the story, or when more time and resources for elaboration are available after exposure. The validity of knowledge learned can even be revisited after a delay when new resources become available (e.g., after visiting the scene, reading a biography) or when new motivations arise (e.g., an argument about the topic).

With the limits of individual capacity in mind, collective forms of epistemic vigilance where individuals share their background knowledge and their evaluations of source credibility may be particularly useful. These social epistemological processes have primarily been examined in the context of audiences' assessments of online information. We briefly review that literature, before identifying general principles that may equally apply to fiction.

Credibility assessment and verification of nonfiction content

A considerable body of work has examined the ways in which audiences evaluate and try to verify nonfiction information found online, given the wide array of differing claims and opinions (Metzger et al., 2010; Metzger & Flanagin, 2015). Consistent with Sperber et al.'s (2010) notion of epistemic vigilance as involving intertwined evaluations of source and content, Metzger and Flanagin (2015, p. 446) observe that "In the fields of communication and psychology, credibility is traditionally defined as the believability of information, and it rests largely on the trustworthiness and expertise of the information source or message, as interpreted by the information receiver." Based on their literature review and survey research, Flanagin and Metzger (2000) identified five credibility criteria: accuracy, authority, objectivity, currency, and coverage, as well as a set of verification practices to assess these criteria—including background research about the authors (their names, organizations, contact, qualification, credentials, goals, and objectives), seeking out other sources to double-check information (its accuracy, currency, comprehensiveness, and objectivity), and looking for endorsement (an official "stamp of approval" or a recommendation from someone they know).

Consistent with the LC4MP (Lang, 2006), Metzger's (2007) dual processing model of credibility assessment posits that the cognitive complexity of strategies for credibility assessment varies as a function of ability and motivation. Like the concept of epistemic vigilance (Sperber et al., 2010), the motivational component of Metzger's (2007) model involves awareness of risks and consequences of being misinformed—depending on which, fast heuristic strategies or more elaborate analytic strategies of credibility assessment may be employed. Results from survey research and qualitative interviews suggest that the most common analytic strategies include double-checking facts, checking other websites for supporting contextual information, and considering all views on a topic (Metzger & Flanagin, 2015), while heuristic strategies include reputation, endorsement, consistency with other sources, absence of expectancy violations (e.g., unprofessional appearance, attitude-inconsistency), and persuasive intent (Metzger et al., 2010).

Survey results of Flanagin and Metzger (2000) indicate that heuristic strategies of credibility assessment are employed more often than analytic strategies, particularly for entertainment information but also for news and reference information. Although analytic strategies might seem to provide the best and most rational justification to accept a given piece of information as true, work on "bounded rationality" (Simon, 1955) suggests that individuals may opt for "satisficing" (good enough) options when cognitive resources are limited. Indeed, Metzger et al. (2010) argued that social heuristics can be more efficient and just as effective as effortful analytic strategies, especially in environments like online media that are characterized by uncertainty and information overload. This argument resonates with the core assumption of social epistemology that individual elaboration is not the sole path to valid knowledge. The concept of epistemic authority explains the conditions under which social heuristics can be a rational tool in the process of knowledge acquisition.

Epistemic authority

Belief based on authority (e.g., taking an expert's word as fact) is one of the most simple and powerful heuristics in social epistemology. In the words of Zagzebski (2012), "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." (p. 107). If others know more than we do and if they are sincere in sharing their knowledge, then trusting their judgments can constitute a rational fast-track to knowledge for those who lack the resources and background information to generate or verify a given piece of knowledge by themselves. For example, accepting a diagnosis from a doctor (authority heuristic) is usually more rational than self-diagnosing (individual elaboration). However, for the epistemic authority heuristic to be conducive to valid knowledge, the authority's advantage in knowledge must not only be subjectively present (we perceive them to be more expert) but also objectively present (they do actually know more than us about the topic). As Jäger (2022) noted, we may subjectively (and erroneously) trust in false authorities who disseminate misinformation unintentionally (pseudo-authorities) or intentionally (fake authorities).

In this context, credibility assessment can be understood as an evaluation of whether a source has the capacities (advanced knowledge and sincerity) that qualify it as an epistemic authority on a given topic (Jäger, 2023; Zagzebski, 2012). Thus, credibility assessment occupies a key position at the interface of analytical and heuristic strategies: One well-founded analytical judgment concerning the epistemic authority status of a source can provide individuals with a rational basis for a potentially unlimited number of heuristic judgments concerning the validity of specific pieces of information communicated by the source. Moreover, as illustrated by the work of Metzger et al. (2010), judgments of epistemic authority are recursive: the epistemic authority of new sources is often evaluated based on knowledge and recommendations of previously established epistemic authorities (the endorsement heuristic). Likewise, consistency of information across sources is taken as an indication that a new source has the same level of advanced knowledge as other authoritative sources. In the case of reputation, a new source is judged by its established

epistemic authority relationships with other audience members.

In sum, the rationality of an individual's assessments of credibility is not based solely on whether the processes were analytical or heuristic. Rather, it also depends on the rationality of the (potentially nested) judgments of epistemic authority that were part of that assessment (i.e., the combined rationality of epistemic vigilance toward the content and source).

Moving toward a social epistemology of fiction

In Figure 1, we present our initial attempt to integrate these various lines of work into the bare bones of a framework of social epistemology of fiction that highlights the social dimensions of knowledge acquisition and verification practices. To summarize, research on narrative comprehension (Busselle & Bilandzic, 2008) and entertainment education (Slater & Rouner, 2002) suggests that audiences are willing to use fiction as an opportunity to learn from others and that they approach this communicative situation with an initial stance of epistemic trust. At the same time, research on perceived realism (Hall, 2003) documents a degree of epistemic vigilance toward fictional content as expressed in judgments of external realism. Research on credibility assessments for nonfiction (Metzger et al., 2010) draws attention to the social dimensions of knowledge verification, in which content credibility is interpreted in conjunction with source credibility. Audiences often extend the limitations of their own cognitive resources and background knowledge with the help of others who serve as epistemic authorities on the topic—via analytic strategies (double-checking facts, checking for supporting information) and heuristic strategies (reputation, endorsement, consistency among sources).

In sum, we propose that learning and verification of knowledge derived from fictional entertainment media are notably social in nature and speak to the philosophical work on social epistemology and epistemic vigilance. Nonetheless, as can be seen from Figure 1, and as we describe below, many questions remain regarding perceived epistemic functions of fiction as well as motivations, resources, judgment criteria, and verification practices for fictional content and sources. Therefore, to

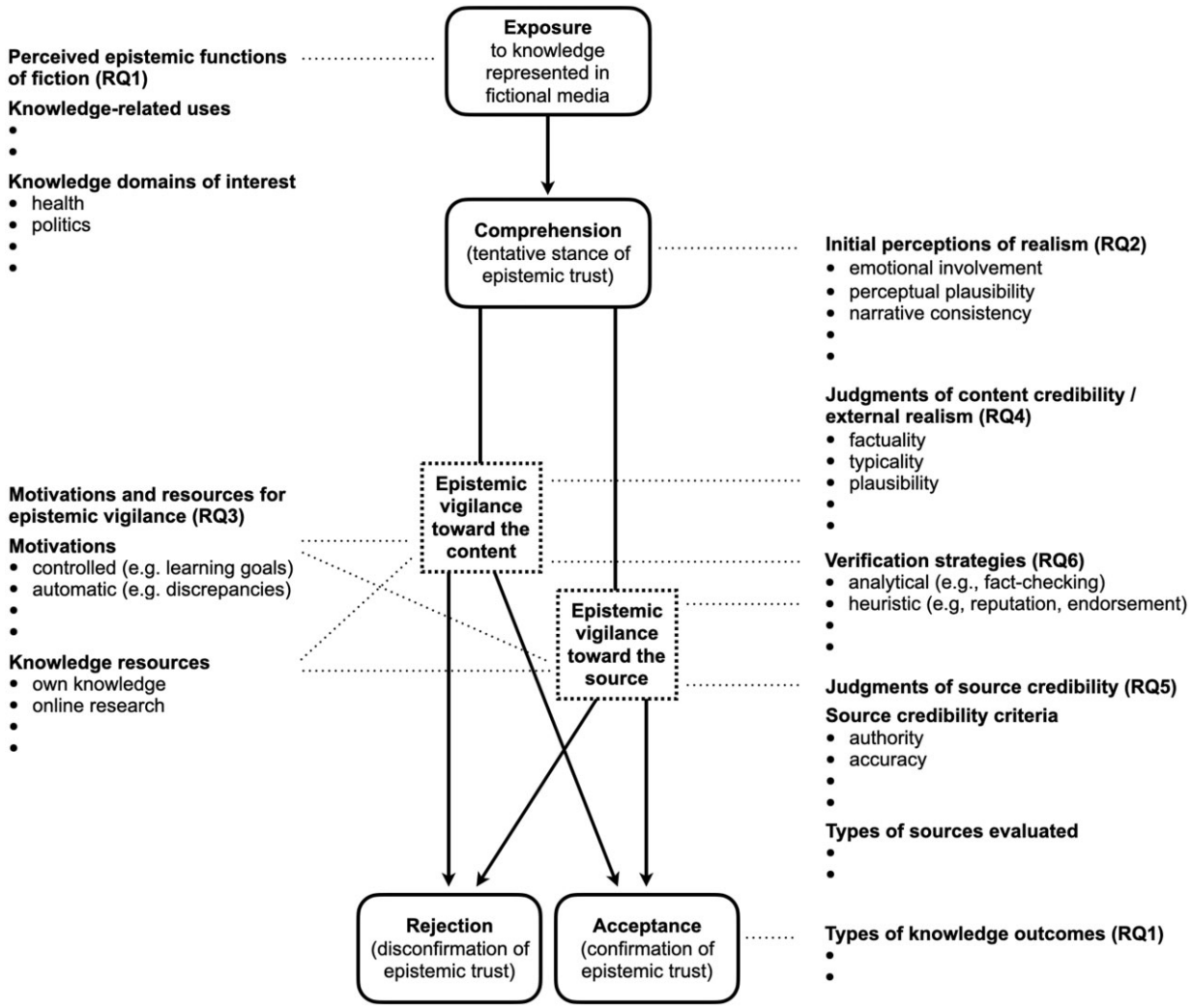

Figure 1. Knowledge acquisition from fiction as a social process: an initial conceptual model.

Note. The central columns of the figure present the proposed process of knowledge acquisition from fiction—from exposure and comprehension through epistemic vigilance toward the content and source to an informed acceptance or rejection of such knowledge. The left column of the figure presents prior findings about the boundary conditions of this process (e.g., motivations and resources for epistemic vigilance). The right column unpacks what is known about the strategies and outcomes associated with each step in the process and identifies research gaps.

flesh out and refine our top-down conceptual model, we added an inductive, bottom-up element to our theory building, assisted by qualitative research.

Inductive phase of theory building: a qualitative approach

Our inductive qualitative phase of theory building aimed to replicate, extend, and refine the theoretical model discussed above. Our first research question dealt with audiences' motivations for using fiction as a source of knowledge and the range of knowledge types and knowledge domains that they sought in fictional entertainment. While prior work has tended to focus on specific domains, such as health information in entertainment education (Moyer-Gusé, 2008) or political issues in eudaimonic entertainment (Bartsch & Schneider, 2014), we asked more broadly about the main types and content areas of information that audiences think they learn from fiction, including generalized interpretive knowledge about human nature as conceptualized in theories of mimesis and catharsis (Golden, 1969).

> RQ1: How do audiences describe the epistemic functions of fiction in terms of knowledge-related uses, knowledge domains of interest and types of knowledge outcomes?

Research question two concerned initial perceptions of realism that arise during narrative comprehension and encourage a tentative stance of epistemic trust (Busselle & Bilandzic, 2008; Sperber et al., 2010). We revisited the role of emotional involvement, perceptual persuasiveness, and narrative consistency (as described by Hall, 2003) and considered other potential sources of initial epistemic trust.

> RQ2: How do audiences explain their initial perceptions of realism and credibility with regard to fiction?

Our third research question inquired about individuals' motivations and resources for epistemic vigilance (Sperber et al., 2010) in the case of fiction. Models of narrative engagement (Busselle & Bilandzic, 2008) and entertainment education (Moyer-Gusé, 2008; Slater & Rouner, 2002) suggest that, in the absence of inconsistencies, epistemic vigilance is often slackened during entertainment consumption. However, the LC4MP (Lang, 2006) suggests that cognitive resources can also be allocated in a controlled and goal-directed manner. The LC4MP also draws attention to the interaction of motivation with individuals' limited ability and resources (e.g., background knowledge), while social epistemology suggests that access to social resources of knowledge (e.g., epistemic authorities) may extend individuals' own limited resources for epistemic vigilance. Therefore, we asked:

> RQ3: What motivates audiences to engage in epistemic vigilance with regard to fiction, and which personal and social resources of knowledge do they use?

Our fourth research question dealt with audiences' epistemic vigilance toward the content of fictional entertainment as expressed in judgments of external realism. That is, we revisited the role of factuality, typicality, and plausibility (as described by Hall, 2003) and inquired about other potential criteria of external realism.

> RQ4: How do audiences explain their judgments of content credibility and external realism with regard to fiction and which criteria do they use?

Our fifth research question focused on epistemic vigilance toward the source (Sperber et al., 2010). While some credibility criteria identified by Flanagin and Metzger (2000) might be specific to news reporting (e.g., currency, coverage, objectivity), other criteria such as authority (e.g., qualification, expertise, credentials) and accuracy (generalized expectations that information from the source is correct) may equally apply to fictional sources.

> RQ5: How do audiences explain their judgments of source credibility with regard to fiction, which types of sources do they evaluate, and with which criteria?

Our sixth and final research question inquired about audiences' strategies for credibility assessment of fictional content and sources. Although research on entertainment education (Moyer-Gusé, 2008; Slater & Rouner, 2002) suggests that vigilance toward the source's persuasive intent is slackened in the case of fiction, other forms of credibility assessment could be applied, including analytical strategies (e.g., double-checking facts) and heuristic strategies (e.g., reputation, endorsement) (Metzger et al., 2010).

> RQ6: What verification practices do audiences use to evaluate the credibility of fictional content and sources?

Method

To explore these research questions, we conducted qualitative in-depth interviews with 59 participants from different professional backgrounds: The largest group of interviewees was from the general public (29 participants). A second group came from professions often portrayed in entertainment media (e.g., medical staff, police, law, military, politics; 15 participants). Through the lens of the LC4MP (Lang, 2000, 2006), this group had favorable preconditions for epistemic vigilance toward the content in terms of resources (advanced background knowledge) and motivation (topic interest). A third group consisted of professionals concerned with the production, verification, and public distribution of knowledge (e.g., scientists, teachers, journalists; 15 participants). We expected that this group would have privileged access to resources (professional research practices and sources) and heightened motivation (accuracy standards) for epistemic vigilance toward both content and sources. Taken together, the three groups were designed to shed light on a broad spectrum of strategies for epistemic vigilance and knowledge acquisition from fiction, including epistemic goals and practices that may go beyond the motivation and resources of lay audiences. In addition, we took care to include participants from different educational backgrounds and with different entertainment preferences (e.g., novels, movies, TV series, video games). The full sample consisted of 59 participants, 29 male and 30 female, aged between 18 and 63 years (for an overview of age, gender, occupational groups, and interview IDs, see Supplementary Appendix 1).

The interviews were conducted in Germany and lasted about 45 min. Informed consent about the interview

procedure, recording, transcription, and anonymization was obtained. A semi-structured interview guideline was used including questions about audiences' use of fictional entertainment media as a source of knowledge (RQ1), their initial perceptions of realism (RQ2), their motivations and resources for epistemic vigilance (RQ3), their judgments of content credibility (RQ4) and source credibility (RQ5), and their verification practices (RQ6). The interviews were fully recorded, transcribed and analyzed using MAXQDA software. Consistent with an exploratory research design, the material was analyzed using both deductive categories derived from theoretical concepts and inductive categories developed from the interviews (Mayring, 2000).

Results

When asked about examples of knowledge gained from fictional entertainment, participants discussed various types of *media* and *genres*. TV series and movies were the media from which the most examples were cited, followed by novels and video games. Drama was by far the most frequently mentioned genre, followed by crime drama, comedy, science fiction, fantasy, action, and thriller. The examples discussed in the interviews included narratives based on a true story as well as purely fictional content. Figure 2 provides an overview of the main and sub-categories of statements concerning our research questions. As such, it fills in some of the gaps in Figure 1 and provides a visual summary of our refined social epistemology framework of knowledge acquisition and verification practices for fictional media content. Frequency counts of statements in each category are displayed in parentheses in Figure 2. Additional information about frequencies of statements per sub-sample is provided in Supplementary Appendix 2. Quotes from the interviews in the text below are annotated with participant identification numbers and transcript lines in parentheses.

RQ1: Perceived epistemic functions of fiction: knowledge types, domains, and uses

Our first research question inquired about the perceived epistemic functions of fiction, specifically participants' perception of knowledge-related uses, as well as the range of knowledge types and knowledge domains that they sought from fictional entertainment.

Knowledge-related uses

Concerning their motivations for using fictional media, most interviewees reported both entertainment motives (mood management, transportation, suspense, escapism) and epistemic motives, such as topic interest and learning—with the notable exception of journalists as the sole group who (consistent with professional norms) denied using fiction for information purposes. Many participants valued fiction as an easily accessible source of knowledge due to its comprehensibility, vividness, and emotionality, and described fiction as a fun and inclusive conversational topic. Interestingly, more than half of the participants—including journalists—mentioned that learning sometimes occurred as an unexpected byproduct from the use of fiction for entertainment purposes.

Knowledge domains

With regard to learning experiences from fictional entertainment, participants reported a remarkably broad spectrum of knowledge domains. The most frequent domain was history, followed by crime/law, politics, military/war, medicine, science/technology, lifestyle/relationships, and foreign countries. To further elucidate the perceived knowledge functions of fiction, we also analyzed the types of knowledge discussed.

Knowledge types

Factual knowledge

Most interviewees mentioned some form of factual learning related to the knowledge domains reported above (e.g., historical, political, or scientific facts):

> With the chemist, uh, "Breaking Bad", for example, you also have chemical, physical concepts and compounds, and in physics lessons I was never interested in that. (ID01, 43)

An interesting special case was factual learning about historical sites in video games:

> I have to mention "Assassin's Creed," of course. My girlfriend and I had some weird moments in Rome, where one of the games is situated. You are standing inside the Colosseum, and you think: Wow, I'm quite familiar with this place! It's so accurate in every detail. Also, in the Castel Sant'Angelo we thought: Oh my god, I know what's around the corner, even if I've never been here before. (ID39, 6)

Practical knowledge

Another knowledge function discussed by the interviewees was the acquisition of practical knowledge for dealing with real-life situations. Examples ranged from the learning of foreign languages and technical terms to useful job-related information, for example about medical diagnoses (ID23, 71). Some interviewees even mentioned that fictional content informed their career choices (ID21, 96; ID07, 80).

Authentic knowledge of inaccessible situations and events

In addition to factual learning, participants emphasized the role of fiction as a source of authentic insight into situations and events that they did not know by firsthand experience. Specifically, they were interested in finding out about the lived experience of people in the situations portrayed, such as historical periods, foreign countries and cultures, organized crime, war, interesting professions, illness, politics, and other elite milieus. Thus, participants seemed to use fictional entertainment as an opportunity for safe exploration, meaning-making, and interpretive understanding of inaccessible or unknown situations and knowledge domains:

> She attends her sister from the outbreak of her cancer till the end. And you realize what a machinery you get caught in as a patient, what they do with you, and how your environment has to live with and learns to live with it. And I thought that afterwards I understand the world of people who are terminally ill better than before. (ID35, 52)

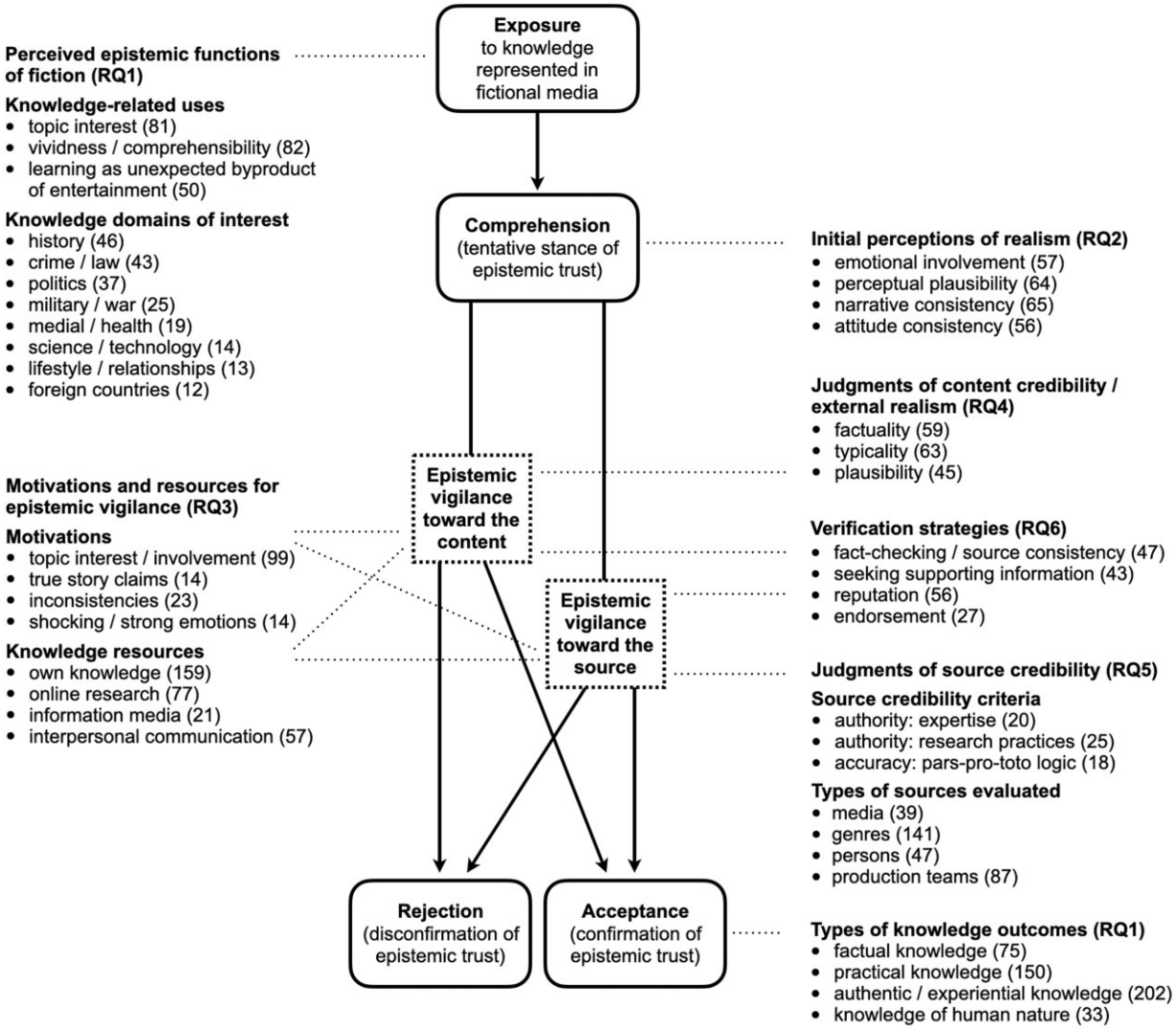

Figure 2. Knowledge acquisition from fiction as a social process: a refined conceptual model including insights from the inductive qualitative phase of theory building.

Note. Frequency counts in parentheses reflect the number of statements per category, including the possibility of multiple statements per category in the same interview.

Knowledge about the self and human nature

Participants also discussed more generalized forms of interpretive knowledge including self-knowledge and insight into human nature, their understanding of human development, relationships, and conflicts. For example, one of the interviewees reported learning about the development of social outsiders (ID36, 54). Another discussed a video game that made him reflect on his fallibility as a parent:

> The video game Heavy Rain affected me deeply, because I have a son too. There is this opening scene, where the main character loses sight of his son on a crowded children's playground. And suddenly you have to answer all these questions at the police station: What time was it? What did he wear? – I wasn't aware of these things in the game, I didn't see it, or didn't think it could be important. And suddenly you are confronted with it. That hit me personally, because in real life, I should have paid attention all the time. That hit me like a rock. (ID46, 7)

RQ2: Initial perceptions of realism of fictional entertainment

Our second research question dealt with audiences' initial perceptions of realism. When asked about their intuitive sense of realism, most interviewees discussed emotional and perceptual features, narrative consistency, and/or consistency of the content with their attitudes, values, and beliefs. The first three categories were similar to the corresponding categories in Hall's (2003) research and are therefore presented only briefly.

Emotional involvement

Many participants mentioned that their perceptions of realism were influenced by emotional responses to the characters and events, such that stronger responses of empathy and identification made the fictional content seem more real.

Perceptual plausibility

Many participants also mentioned the influence of perceptual features that contributed to their sense of felt realism. The

most frequently mentioned features were visual realism (i.e., the creation of a compelling visual illusion) and the quality of acting.

Narrative consistency

The inner logic and consistency of fictional stories further contributed to perceptions of realism. Many interviewees reported that feelings of confusion or contradiction made a story seem unreal, whereas the smooth processing of self-consistent stories contributed to their sense of felt realism.

Attitude consistency

Many interviewees observed an attitude consistency bias, such that they were more inclined to take a story at face value if it was consistent with their personal attitudes, values and beliefs (e.g., ID31, 60). In the case of interactive entertainment, participants reported that their involvement as active decision maker meant that the events in video games were more consistent with their values, and thus seemed more real:

> I think especially because you can participate and follow your own opinion and make your own decisions to change the course of action in the game, that makes a difference, that makes it seem more realistic. (ID42, 17)

Most participants voiced self-critical awareness that their affective, perceptual, consistency-, and attitude-based perceptions of realism were potentially biased and insufficient as a rational basis for judging the external realism and truth value of fictional content. They often reported that their initial perceptions of realism and credibility emerged from "intuition" (ID59, 76) or "gut feelings" (ID20, 54) which they were unable to explain or justify further.

RQ3: Motivations and resources for epistemic vigilance

Such initial, "weak" judgments of realism can be subject to a process of critical scrutiny that can lead to "stronger", more justified reasons to accept or correct the initial judgment. RQ3 inquired about audiences' motivations and resources for this process of epistemic vigilance.

Motivations for epistemic vigilance

The motivations reported included topic interest and involvement as well as curiosity to verify the truth content of fiction that was advertised as "based on a true story" (ID8, 89; ID52, 24). In addition, epistemic vigilance was prompted by skepticism due to inconsistencies with prior knowledge and beliefs as well as strong emotional responses:

> This horror scenario where you're scared that it could really happen that the world is going to end because of the economic crisis, somehow... I don't know, it was just so unbelievable that I had to google it. (ID29, 108)

Resources for epistemic vigilance

Concerning audiences' personal and social resources for epistemic vigilance, most interviewees mentioned their own background knowledge as an important resource, specifically those with first-hand experience of the issues portrayed:

> Or international conflicts on a military level, what are the structures, how do nations work together? How, if you go into the details, how do different nations fly together, how do they organize? There was reference to maneuvers that I've been part of myself, and somehow the circle closes when you say, yes, I've seen this, I've been part of it. (ID03, 49)

In addition, most participants used social resources for knowledge verification. The most frequently mentioned access to social resources of knowledge was Internet research, specifically using Google and Wikipedia. Some interviewees also used information media like nonfiction books, news media, and documentaries. Interpersonal communication emerged as another frequent resource for background knowledge:

> For example, with colleagues at school, other historians or other acquainted colleagues. And with [first name], my son, I talk about it quite a lot, especially in the case of historical series. With people who are also interested in history. You compare a bit: Was it like that or was it different, what do the sources say? (ID58, 50)

It is important to note, however, that some participants mentioned situations when, despite their critical awareness and resources for epistemic vigilance, they "contented" themselves with an unresolved sense of epistemic uncertainty. (ID59, 38; ID02, 68)

RQ4: Epistemic vigilance toward the content: judgments of external realism

Interview statements concerning participants' epistemic vigilance toward the content of fictional entertainment mainly replicated the criteria of external realism identified in prior research (Hall, 2003). Therefore, the findings are summarized relatively briefly.

Factuality

One of the critical judgment criteria reported by the interviewees was how consistent the fictional content was with preexisting factual knowledge, especially in the case of participants with first-hand experience of the issues portrayed.

Typicality

Participants criticized the lack of realism and insight in fictional stories that simply reproduced social stereotypes or genre routines. Conversely, the content was judged more credible if the resources, abilities and responses of the characters were consistent with participants' real-life experiences.

Plausibility

Judgments of plausibility dealt with the causal logic and coherence of stories concerning physical, social, and psychological principles that apply in the real world.

RQ5: Epistemic vigilance toward the source: judgments of source credibility

Participants mentioned considering the credibility of specific entertainment media and genres. For example, books (ID16, 44) and historical dramas (ID37, 43) were mentioned as relatively credible compared to other media and genres such as comedy and fantasy (ID30, 55). In addition, participants said

that they considered the credibility of specific persons (e.g., authors, directors, actors) and production teams behind specific media titles.

Authority

Judgments concerning the epistemic authority of fictional sources focused on their experience and expertise with the topic and their standards for research practices.

> There are thriller authors like Frederick Forsyth. I think he's incredibly good. He's formerly been a journalist himself and a MI6 agent, and his thrillers always border on reality. And it always feels like someone leaked some information to him that you don't know yourself, but it recently happened exactly like this. (ID05, 145)

Accuracy

Source credibility judgments were also formed through pars-pro-toto logic, meaning that the portrayal of specific pieces of insider knowledge that the viewer knew to be accurate was taken as an indication of the source's general accuracy even for other content, or (conversely) that incorrect details undermined overall credibility. This criterion was particularly salient for participants with first-hand experience of the issues portrayed. Such participants reported how flawed and unrealistic many fictional portrayals were; yet, they expressed appreciation for well-researched and accurate portrayals. The quotes below illustrate these contrasting positive and negative pars-pro-toto judgments:

> Probably it's that I have heard any details that occur in it before, and I use those as fixpoints whether the rest is also credible. So, if I already know some information and I know it's true, then I think okay, the rest will be fine as well. (ID19, 48)

> When there are too many inconsistencies that simply don't fit with my personal experience. Or when I simply know that things can't be like that, like in the mountain film, when I see that there's a wrong knot in the rope, and I think to myself - then it's all wrong from start to finish. (ID14, 87)

RQ6: Verification practices for knowledge derived from fictional entertainment

Our sixth and final research question inquired about audiences' use of verification practices. In addition to comparing fictional content with their own background knowledge, participants discussed a broad spectrum of social verification strategies. As reported above, initial perceptions of realism were shaped by smooth emotional, perceptual, narrative, and attitude-consistent processing, which can already be interpreted as a basic form of credibility assessment in line with the expectancy violation heuristic (Metzger et al., 2010). Further heuristic strategies of credibility assessment included reputation and endorsement.

Reputation

Reputational heuristics involved generalized assumptions about the credibility of specific persons (e.g., authors, directors, actors) or production teams behind specific media titles. Based on their celebrity, success, and the quality of their prior work, participants concluded that the same high standards could be expected of their current work.

> When Oliver Stone makes a movie about the war in Vietnam or so, then it is preceded by quite different and much deeper research. So, it very much depends, uh, what kind of format are we dealing with, and how high are the standards that the makers set for themselves. (ID17, 10)

> Actors are a very good indicator, I think, because there are actors who are very knowledgeable and who would never act in any bullshit film. (ID29, 71)

Endorsement

Endorsement was typically sought from trusted epistemic authorities such as professional reviews or well-informed friends and colleagues.

> Mostly, I proceed from Wikipedia to other sources, as they always report how realistic is the film, what kind of reviews did it get. That means, Wikipedia aggregates the film reviews, most of which are also concerned with the truth content. (ID15, 76)

> Some colleagues discussed the truth content of House of Cards, especially those who have been foreign correspondents in the US. Of course, it's exciting for them because they can compare it with their own experience and it's quite interesting to hear what they say. (ID51, 44)

Double-checking facts and consistency with nonfiction media

Analytical strategies, such as double-checking facts, were discussed more rarely and (consistent with observations of Metzger et al., 2010) were not always clearly distinguishable from heuristic strategies such as checking for consistency across sources. However, the entire spectrum, up to elaborate analytic strategies, was represented in the interviews, as illustrated by the following quote.

> Yes, I do research quite often. At home in my standard literature, but also in scientific publications. I also do research on the Internet. Or, if I'm very interested, and I have the feeling that the truth is distorted and there is a historical misrepresentation, then I also get appropriate literature. (ID05, 68)

Seeking supporting contextual information

Participants also reported that they sought further information on the topic. At the heuristic end of the spectrum, curiosity about the persons and events portrayed may bring up supporting or disconfirming information. At the analytical end, some interviewees reported intensive background research about a whole domain of knowledge inspired by, but not limited to the content of a given work of fiction.

> Sometimes, like in the case of The Big Short, I start to talk with people and to get information otherwise, like I started to watch economics lectures, just because I was interested. It was actually like, I watched several finance movies, including other, less realistic ones, like The Wolf of Wall

> Street, and that led me to get mentally involved with the topic, and in the next step to get actually informed about it. (ID13, 149)

It is important to note, however, that social verification was not a standard practice for most participants. Although a majority remembered some or even regular situations when they extended the boundaries of their own knowledge by consulting knowledge provided by others, social verification strategies required motivation and access to social resources.

RQ1–6: Sub-sample considerations

Across the set of research questions, the epistemic goals and practices reported by our three groups of participants were largely comparable. Although space limitations preclude detailed analysis here, Supplementary Appendix 2 gives the frequency counts of statements per subsample. Of particular interest from a social epistemology perspective, social heuristics, such as reputation, endorsement, and consistency with other trusted sources were mentioned by lay and expert audiences alike—meaning that both relied on a network of trusted epistemic authorities to extend the boundaries of their own knowledge. What was qualitatively different between groups, however, was the privileged access of experts to personal and social resources for epistemic vigilance, including advanced background knowledge, professional research skills, and high-quality sources (e.g., scientific literature and well-informed colleagues). Therefore, despite the structural similarities of knowledge acquisition processes, the quality of outcomes likely differed between lay and expert audiences.

It is important to note that our interview sample was not representative of the general population. Experts with first-hand experience and knowledge-related professions were oversampled to gain insight into a spectrum of strategies for epistemic vigilance, including strategies that may go beyond the motivation and resources of lay audiences. Using a qualitative approach, we were able to observe important similarities of knowledge acquisition and verification practices across subsamples. However, our interview sample was inadequate to assess the frequency and efficacy with which such practices are used. Further quantitative research is needed to examine their prevalence and outcomes in the general population.

Social epistemology of knowledge acquisition from fictional entertainment: discussion, research implications, and future directions

Our theoretical and empirical investigation set out to explore the process of knowledge acquisition from fiction with a special focus on social practices for epistemic vigilance toward fictional content and sources. Overall, our findings are consistent with and suggest important extensions to the research literature on perceived realism (Busselle & Bilandzic, 2008; Hall, 2003), entertainment education (Moyer-Gusé, 2008; Slater & Rouner, 2002), and dual process models of entertainment (Bartsch & Schneider, 2014). By integrating this literature with work on social epistemology (Goldmann, 1999; Sperber et al., 2010; Zagzebski, 2012), information processing (Lang, 2000), credibility assessment (Metzger et al., 2010), and inductive findings from our qualitative study, knowledge acquisition from fiction can be conceptualized as a complex process with important social dimensions. Figure 2 provides a visual summary of our proposed social epistemology framework. Instead of reiterating all the theoretical assumptions that informed our model, we focus our explication on novel findings from the inductive phase of theory building and discuss how the emergent constructs can be operationalized for further research testing the proposed processes and boundary conditions.

Epistemic functions of fiction

The interviews provided new insight into the diversity of perceived knowledge functions of fictional entertainment, including topic interest in domains comparable to information media (e.g., history, politics, war, crime, medicine, and science). In some cases, fiction was sought intentionally as a vivid and easily comprehensible source of knowledge, but participants also reported that learning often occurred as an unexpected byproduct of entertainment. The knowledge types discussed were not limited to factual information but also included knowledge of practical use and generalized interpretive knowledge concerning the authentic experience of inaccessible or unknown situations, and knowledge about the self and human nature. Such complex knowledge structures that enable meaningful integration and interpretation of information beyond individual facts were emphasized by many participants as a particular strength of fiction compared to information media. They seem to bear resemblance with concepts from the epistemology of art and fiction such as mimesis and catharsis (Aristotle, 1968; Golden, 1969).

The distinction between these different types of knowledge has implications for the conceptualization and measurement of knowledge outcomes from fiction. Factual knowledge is well-operationalized (Lang, 2000) in terms of both cued recall (e.g., multiple-choice items) and free recall (e.g., open-ended answers). However, the assessment of practical knowledge for dealing with real-life situations might require additional indicators such as perceived usefulness, actual application of knowledge, and outcomes of such application. Similarly, generalized interpretive knowledge still awaits systematic operationalization to measure what viewers learn about the meaning and lived experiences of depicted situations, or about the self and human nature. Assessing such complex interpretive knowledge structures may require an initial step of gathering open-ended responses (e.g., thought-listing, essay-writing), which can then be coded or translated into standardized items to generate quantitative measures. Research on eudaimonic entertainment (Bartsch et al., 2020; Oliver & Hartmann, 2010) has experimented with such measures, but their operationalization is still in its infancy.

Conceptual and operational progress concerning the types of knowledge derived from fiction could facilitate research on downstream, persuasive effects. For example, factual knowledge can serve as a corrective for error and ignorance, which can change the argument base for attitudes and behavioral intentions. Practical knowledge can add an element of self-efficacy to attitudes and intentions that may otherwise remain inconsequential (Moyer-Gusé, 2008). Interpretive knowledge can change the perceived relevance and evaluation of facts. For example, stories that illustrate the meaning and emotional significance of facts from the perspective of people affected have been found to stimulate information seeking, political participation, and attitude change towards stigmatized social groups (Bartsch & Schneider, 2014; Oliver et al., 2012). Further refinement of knowledge variables can help elucidate

the array of persuasive effects of fiction, and the preconditions needed for them to occur.

Proposed epistemic processes

As shown in Figure 2, our model describes a sequence in which audience members pass through an initial stage of narrative comprehension and tentative epistemic trust and then may engage in varying levels of epistemic vigilance toward the source and content, which in turn give rise to more or less informed judgments to accept or reject the information.

The narrative comprehension part of our model is one area that was already relatively well-researched (for overviews, see Busselle & Bilandzic, 2008; Moyer-Gusé, 2008; Lang, 2000). As summarized earlier, emotional involvement, compelling imagery, and narrative consistency can foster a state of transportation associated with unreflective epistemic trust, knowledge acquisition and persuasion. Our interviewees also mentioned attitude consistency as a factor of initial epistemic trust, although prior work indicates that mistrust and resistance to attitude-inconsistent information can be mitigated by transportation (Moyer-Gusé, 2008).

Less is known about the process of epistemic vigilance in which relatively "weak" and unjustified knowledge from the narrative comprehension stage can be transformed into "stronger", more justified knowledge or rejection of the content. Below, we explicate the inductive findings and testable propositions we derived concerning the ways in which motivations and resources for epistemic vigilance interact in predicting credibility judgments, verification strategies, and knowledge outcomes.

In a nutshell, effortful, time-consuming credibility assessments and verification strategies require more motivation than simple heuristics, but access to resources can lower the motivational threshold, such that the same strategies require less time and effort. In particular, verification processes can be facilitated and accelerated with the help of epistemic authorities who offer pre-processed information, arguments and interpretations. Therefore, our model proposes that motivations and resources for epistemic vigilance should interact to predict the quantity and quality of (a) judgments of content credibility; (b) judgments of source credibility; and (c) verification strategies employed. These three factors should in turn predict the accuracy and justification of viewers' decisions whether to accept or reject knowledge presented in fictional media. Thus, indirectly, motivations and resources for epistemic vigilance should also predict the quantity and quality of (d) knowledge items learned. Below, we walk through the components of the model including possible operationalizations.

Motivations for epistemic vigilance

Consistent with the LC4MP (Lang, 2000, 2006), our interviewees reported intentional, goal-directed motivations for reallocating cognitive resources to epistemic vigilance (topic interest, verification of claims that the content was based on a true story) as well as automatic resource allocation (aroused by emotions and discrepancies). Future research to assess the impact of these motivations may operationalize intentional epistemic vigilance through instructions and learning goals, and may prompt automatic forms of epistemic vigilance by stimulus features that arouse epistemic emotions such as surprise, curiosity, and confusion (Vogl et al., 2020).

Resources for epistemic vigilance

Also consistent with the LC4MP (Lang, 2000), our participants described using their background knowledge as a resource to assess the veracity of information. Additionally, the social epistemology perspective (Goldman, 1999; Zagzebski, 2012) suggests that individuals' resources for epistemic vigilance may be enlarged by their networks of trusted epistemic authorities. Consistent with this, our interviewees reported that they relied on online resources such as Wikipedia, traditional information media like news and documentaries, as well as interpersonal communication with well-informed family members, friends, and colleagues. Personal knowledge resources can be operationalized in further research via self-report or by experimental assignment to background information conditions. Access to social knowledge resources could be assessed via (self-)observation or be manipulated by allowing vs. restricting the use of communication technologies.

Epistemic vigilance toward the content: assessment of external realism

As in the study of Hall (2003), our interviewees judged the external realism of fictional content not only by its factuality but also by its typicality and plausibility. These latter criteria seem to reflect a type of epistemic vigilance that probes the validity of generalized interpretive knowledge about the lived experience of people in the situations portrayed, rather than the accuracy of specific facts. Therefore, the number of facts evaluated provides only one indicator of external realism judgments which may be complemented with qualitative and/or quantitative assessment of details and arguments that informed typicality and plausibility judgments.

Epistemic vigilance toward the source: assessment of source credibility

Participants' discussion of source credibility provided initial qualitative evidence that the concept of epistemic vigilance toward the source (Sperber et al., 2010) can be meaningfully applied to fictional sources. Not all criteria of online credibility assessments observed by Flanagin and Metzger (2000) were mentioned by our interviewees, but their judgments of expertise, research practices, and pars-pro-toto judgments of the perceived (in)accuracy of insider knowledge seemed to reflect assessment of epistemic authority and source accuracy. Whether source credibility is evaluated at all provides a first indicator of epistemic vigilance. More detailed assessments may consider the number and quality of reasons given (e.g., using one vague criterion such as genre vs. using multiple specific criteria such as expert advisors, research effort, insider knowledge, or recommendation from well-informed others).

Verification practices

In addition to evaluating content and source credibility based on their own background knowledge, participants reported a broad range of social verification practices. As noted by Metzger et al. (2010), it is often difficult to empirically distinguish between analytic and heuristic strategies or to divide heuristics into mutually exclusive categories. In our interviews, fact-checking and seeking supporting information overlapped with checking for consistency with non-fiction sources. Moreover, social heuristics, such as reputation and endorsement, were sometimes mentioned in conjunction with elaborate strategies, such as reading multiple reviews or

extensive discussions with those who recommended the source. Further observational research is needed to better understand the social dimensions of verification strategies, but self-reported time, effort, and cross-verification of sources may be used as a first approximation to assess the intensity of verification behavior.

Knowledge outcomes

Motivation and resources are assumed to predict both processes and outcomes of information processing. Specifically, the LC4MP (Lang, 2000) assumes that the extent of resources allocated to encoding, reflection and storage of information predicts the ease of subsequent retrieval. Therefore, epistemic vigilance should not only increase the accuracy and justification of viewers' decisions whether to accept or reject knowledge presented in fictional media (the quality of knowledge outcomes), but it should also increase the probability that such knowledge can be remembered via free or cued recall (the quantity of knowledge outcomes).

It is important to note, however, from an epistemological standpoint (Goldman, 1999; Jäger, 2022), that knowledge outcomes are determined not only by the process of epistemic vigilance but also by the information quality of the source. The quality of information presented in fictional entertainment can vary widely, from realistic stories based on historical or scientific evidence (including entertainment education) to scripted reality, unrealistic fantasy, conspiracy fiction, or ideological propaganda stories. Thus, initial epistemic trust in the comprehension stage may result in "weak" but accurate knowledge or complete misinformation, depending on the accuracy of the content. The concept of epistemic authority (Jäger, 2022; Zagzebski, 2012) offers a lens through which the rationality of epistemic trust can be evaluated: Is the source adequately knowledgeable (e.g., via background research or expert advisors), and sincerely committed not to distort the truth (e.g., for the sake of drama or ideology)? Epistemic vigilance can be understood as viewers' attempt to answer these questions for themselves or with the help of well-informed others. However, a comprehensive understanding of the social epistemology of fiction also needs to consider the information quality of fictional entertainment by analyzing the content and how it is produced.

General conclusion

In the context of a changing media landscape where the lines between fact and fiction, information, misinformation, inaccuracy, error, and blatant lies are increasingly blurred, there are increasing demands on audiences' epistemic vigilance and responsibility to double-check the knowledge they have learned from media content. We propose that fiction is no different in this regard from other information sources with uncertain truth-value that already constitute a large and constantly rising share of individuals' present-day media diets (Ha et al., 2021). Indeed, our study highlights important similarities between the social epistemological processes already studied with regard to information media and those reported by our participants in evaluating fiction. By integrating research across these seeming divides of fact and fiction, our model may help elucidate critical audience skills that individuals use to resolve epistemic uncertainty in general—not only in the case of fiction but in the case of other types of media content as well. We hope that our model will help advance the theoretical and empirical integration of research on audiences' motivations, resources, judgment criteria and verification practices concerning the truth value of knowledge learned from the media, across the divide of entertainment and information media.

Supplementary material

Supplementary material is available at *Human Communication Research* online.

Data availability

The data underlying this article cannot be shared publicly for the privacy of individuals that participated in the qualitative interview study. The data will be shared on reasonable request to the corresponding author.

Conflicts of interest

None declared.

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