

# Modes of Authentication

## Realism Cues and Media Users' Assessment of Realism Across Media and Genres

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### Abstract

Media users' perception of the correspondence of media content to reality has significant consequences for media use and effects. At the same time, new media environments have been complicating the users' task of judging the realism of media information. Against that background, our study addresses the cues and criteria on which media users base their realism assessments using an online survey of a diverse population. Based on our respondents' assessments of a broad spectrum of realism cues, we first identify fundamental criteria underlying users' realism judgments across media and media genres. Second, using cluster analysis, we identify homogenous groups of users based on the criteria they perceive as enhancing or reducing media realism. And third, we investigate how these perception

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1 This article aims to reconstruct what was, to our knowledge, the only presentation at a major conference that Wolfram Peiser submitted and prepared together with researchers at his chair at LMU Munich. The study was presented on 29 May 2017 at the annual conference of the International Communication Association in San Diego by Felix Frey and Benjamin Krämer and is based on a study conducted in a master seminar the authors taught in 2015 to 2016 (we would like to thank the students for their contributions to the conceptual discussion, the development of the measurements, and the realization of the study). We planned to publish the contribution in the form of a journal article but unfortunately never elaborated a full text before Wolfram Peiser passed away.

The present contribution is based on an extended abstract submitted for review for the conference as well as the slides and notes for the presentation. It therefore mostly reflects the state of research and of our scholarship at that time. However, we think that the theoretical framework and empirical findings are more relevant than ever today. In the main text, we mostly rely on literature that had been published before the study was conducted. Where it seems necessary or interesting, we add remarks based on more current developments in our footnotes. We present the results in a more elaborate way than it had been possible in the original presentation and have therefore conducted further analyses.

patterns relate to users' realism assessments and use of various media and genres, media skepticism, and sociodemographic variables.

Media trust recently has reached a new low in the U.S. (Swift, 2016); and in Europe, media skeptics are voicing their hostility towards 'mainstream media' more aggressively than before (Haller, 2015).<sup>2</sup> One of the reasons for this "credibility crisis" (Carr, Barnidge, Lee, & Tsang, 2014, p. 453) is the perception among a part of the population that reality is not reflected accurately by ('mainstream') media portrayals. The perceived relationship of media content to reality has been the object of communication research under various terms and in various contexts, such as perceived media bias (e.g., Eveland & Shah, 2003), perceived realism (e.g., Busselle & Greenberg, 2000; Hall, 2009), (media) authenticity (e.g., Duffy, 2013; Enli, 2015), source, message, or media credibility (e.g., Metzger, Flanagin, Eyal, Lemus, & McCann, 2003; Self, 1996), media trust (e.g., Gunther, 1988), media skepticism (e.g., Tsfaty & Peri, 2006), and the hostile media phenomenon (e.g., Vallone, Ross, & Lepper, 1995).<sup>3</sup> Integrating some of these terms, Austin defines "apparent reality assessments" of media users as the "degree to which an individual believes media portrayals of issues or people reflect reality" (Austin & Dong, 1994, p. 974). These apparent reality or realism assessments of media users can be assumed to have significant consequences for media use and media effects (Tsfaty & Ariely, 2014;

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- 2 Since the time of the presentation, trends in media trust in different countries have been discussed extensively, sometimes complicating the picture with regard to the conceptual and empirical aspects of media trust, but mostly leading to the same diagnosis that a substantial but not overwhelming part of the population in Western democracies distrusts the media (see Fawzi et al., 2021, for a recent overview of research on media trust). Since then, skepticism or hostility toward the media has also often been treated in the context of populism (e.g., Fazwi, 2019). However, we think that it would still be wise to broaden the perspective and to consider a multitude of judgments concerning the realism of media content and a wide variety of potential factors.
  - 3 Today, we would add that research often refers to the catchwords of "fake news" or "disinformation" not only as labels for substantial phenomena but also as categories with which politicians, other communicators, and users express their skepticism or radical distrust toward certain categories of media outlets (not always clearly with regard to the correctness of claims proper but all kinds of concerns and accusations regarding alleged biases and manipulations); for example, see Egelhofer and Lecheler (2018) on these two perspectives on "fake news" as genre and label. However, again, we think that the analysis of such discourses or attitudes should be complemented by studies with a wider focus on different kinds of perceptions of media content in terms of their realism.

Carr et al., 2014, p. 455). At the same time, the task of judging the realism of media information has become more challenging for users, since new media environments with new types of information providers outside of professional journalism, the convergence of media and hybridization of genres, and digital editing technologies have been complicating the users' task of judging the realism of media information (Metzger, Flanagin, Eyal, Lemus, & McCann, 2003). Against that background, one important question concerns the cues and criteria on which media users base their realism assessments. Building on existing research in this field, our study aims at, first, empirically investigating how various established or proposed "authenticity markers" (Dickerson, 2012) and realism criteria across various media and genres relate to each other and, second, whether media users can be differentiated based on to their preference and reliance on certain realism criteria and disregard of others. We thus investigate the diversity of realism assessments and criteria, going beyond the most ideology-driven and hostile distrust and thereby aim to contribute to a broader picture of judgments of realism that is relevant to media practitioners and audience researchers alike and that can inform public debates that often focus on the most extreme accusations of untruthfulness toward the media.

## Conceptions of Media Realism

How media content relates to reality can be captured by a number of concepts that are not always clearly defined and demarcated, such as truth, truthfulness, realism, plausibility, credibility, authenticity, and others.

There is of course no scholarly consensus on what constitutes truth (see, e.g., Glanzberg, 2018, for different theories). We may assume that for most media users, truth will probably mean that individual factual claims are correct or correspond to reality or that one has good reasons (such as arguments or evidence) to believe them. However, we prefer the broader concept of realism over that of truth proper.<sup>4</sup> Realism can encompass a wider variety of judgements that we assume recipients do not always

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4 Of course, like truth, "realism" has various meanings. We do not refer to the meaning usually implied in philosophy, i.e., the existence of certain entities, properties, or facts independently of statements or the mind (see, e.g., Brock & Mares, 2007). What we have in mind is closer to the everyday understanding of something being realistic or to artistic or literary realism: a fit with reality that does not necessarily amount to factual truth proper in every aspect (see, e.g., Morris, 2004, for a discussion of different meanings and literary realism in particular).

clearly distinguish or that, taken together, contribute to their overall idea of how media content relates to reality.

To begin with, something can be “realistic” in someone’s eye even if they are not sure whether the claim is literally and positively true. It may be plausible or credible based on certain preexisting knowledge or certain cues, or because a communicator is sufficiently trustworthy. It may be somewhat speculative or difficult to verify but reasonable. “Realistic” representations may also paint the broader picture recipients expect them to, i.e., select or highlight the aspects that they consider most relevant, reflect a broader worldview of “how things really are,” or strike the right sober tone. All of these types of criteria and judgements matter in particular with regard to media reception because users are most often unable to establish the correctness of a claim in a way that they would consider necessary in other contexts to judge something as true in the strictest sense (such as direct observation, personal expertise or experience, or access to reliable primary data or documents). This is one of the aspects where relying on the media is most often a matter of trust, not independent verification.<sup>5</sup>

Certain aspects of our conception of realism are also often captured by different understandings of authenticity. First, it sometimes stands for the uncompromised transmission of information or meaning. Here, the focus is less on the representation of certain facts but on the absence of manipulation or compromising influences along a chain of communication that usually originates with an authoritative source (Lethen, 1995).<sup>6</sup> Second, authenticity is often understood as the preservation, realization, or expression of some positive essence, either of an aspect of culture or a person (although such essentialism has often been deconstructed and criticized, see, e.g., Ferrara, 2009; Handler, 1986). In this sense, the media

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5 This is a point in our argument where it is or used to be customary in parts of German communication research to cite Luhmann’s (2000, p. 1) dictum “Whatever we know about our society, or indeed about the world in which we live, we know through the mass media. [...] On the other hand, we know so much about the mass media that we are not able to trust these sources.”

6 While many today are still concerned with the faithful transmission of the statements by political or epistemic authorities, citing, for example, ideological biases, sensationalism, foreign propaganda, or digital manipulation of source material as dangers to authentic news, this is exactly what others fear: the media as a mouthpiece of the elites, not of ordinary people with their everyday experience and concerns. While the discussion of the second, “populist” criticism of the media’s authenticity has received increasing attention over time, we should not underestimate the demand in the population for what people consider “reliable” media (whatever this sometimes naive realism implies in each case).

can “keep it real” in the eyes of their audience with its cultural standards of authenticity, for example, by focusing on ordinary life and people instead of things or people that are seen as fake, staged, corrupted, or out of touch. Third, authenticity can be defined as truthfulness or sincerity in communication. What is expressed is actually believed or felt, and presented without any hidden motives or agenda.<sup>7</sup>

Based on these general ideas of realism as plausibility or authenticity, we can then turn to the more specific criteria recipients may use to determine how “real” media content is and review previous findings on the effects of such cues.

### Realism Assessments by Users

Several characteristics of the source or the message have been proposed or empirically demonstrated to affect users’ realism assessments. One group of ‘immanent’ factors are characteristics of the source or the media message, which also can be employed strategically by communicators. First, professional news journalism traditionally features figures and statistics (Koetsenruijter, 2011), experts as sources (Steele, 1995), or direct quotes (Sundar, 1998) to authenticate news reports. These cues convey the impression that a report is based on solid evidence or close observation of events. Second, rendering content production more transparent by disclosing sources and detailing the process of information acquisition has been suggested to further credibility (e.g., Chadha & Koliska, 2015; Gilpin, Palazzolo, & Brody, 2010; Karlsson, Clerwall, & Nord, 2014). The idea behind such attempts is to counter the idea of compromising influences or manipulation, and to convey an idea that the process of content production is thorough and reliable. Similarly, live on-the-scene reporting (Scannell, 1996), undercover reporting, and no or only limited editing of footage attests to the immediacy and fidelity of a media representation to reality and therefore might result in assessments of content as more rea-

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7 However, some authors differentiate between sincerity or truthfulness and authenticity (Trilling, 1971). Habermas (1987) defines truthfulness as one aspect of his concept of communicative action—the claim implied in many utterances that one expresses what one actually thinks, feels, believes to be true or morally right etc., and that one does not pursue different, hidden aims other than the one to make others understand and rationally accept one’s explicit claims. Relatedly, but with an emphasis on form instead of content, he reserves “authenticity” for the accomplished expression of experiences that makes them relatable.

listic (Enli, 2015). Third, media skeptics ascribe more credibility to citizen journalism than to professional journalism (Carr et al., 2014). Therefore, contributions from ‘ordinary people’ could also enhance perceived social realism of media content. Similarly, reducing social distance between the media and its public by featuring ‘real’, ‘ordinary’ people in the media, or allowing reporters, presenters, journalists or hosts to present themselves as ordinary, feeling human beings might also further realism (Coleman & Moss, 2008; Coupland, 2001; Duffy, 2013; Enli, 2015, p. 137).

In addition, users draw on external information to judge the realism of a message. First, messages diverging from the user’s own opinion are perceived to be less credible and biased against the user’s opinion (Metzger et al., 2003). Second, discrepancies between media portrayals and information from friends or acquaintances perceived as similar (Eveland & Shah, 2003) or from other users’ online comments (Lee, 2012) might impair perceived realism. Third, the consonance of a message with ‘mainstream’ or ‘alternative’ media, respectively, influences realism assessments (Tsfati & Peri, 2006). Whereas certain media users trust established institutions such as legacy media outlets, others are receptive to the claims of alternative media as a corrective, supplement, or substitute to these outlets. Both sides can then distinguish themselves by being “critical” and thus more “realist” because they are not gullible either to the disinformation of fringe outlets or the affirmative portrayals by the naive or corrupt mainstream media.

Whereas the effects of many of these realism cues—examined in isolation—are empirically established, their relationship to each other remains unclear since most of the relevant studies used experimental designs and included only a small number of factors at a time. Also, the question of whether and how users differ in the criteria on which they base their realism assessments on has received little scholarly attention. Finally, important strands of empirical research (e.g., research on perceived realism) focus on fictional content, hampering the generalizability of their results to media as a whole, and to nonfictional, journalistic information in particular.

We therefore lack an inter-individual, cross-category (in terms of the types of cues), cross-media, cross-genre perspective on realism judgements. Our study therefore aims to fill these gaps using an online survey to investigate three research questions:

RQ1: Which fundamental criteria underlying users’ realism judgments across media and media genres can be identified based on their assessments of realism cues?

RQ2a: Are there groups of users differing in the criteria they perceive as enhancing or reducing media realism?

RQ2b: How do these perception patterns relate to the respective users' realism assessments and use of various media and genres, their media skepticism, and sociodemographic and personality variables?

## Method

Data was collected from a quota sample among members of a convenience online access panel (Leiner, 2012) using a standardized online questionnaire. For 17 message characteristics and external cues discussed above, participants were asked how much they perceive them to enhance the realism of media content, answering two questions („Please indicate whether the following features enhance or reduce a media portrayal's realism [German: „Wirklichkeitsnähe“] in your personal view“ for 10 cues, and „To what extent do the following situations make you skeptical with regard to the accuracy of a media report's portrayal of reality?“ for 7 cues). In addition, data on perceived realism of the media in general, specific media, and media genres (question: „How close do media portrayals in general/in genre XY approximate reality in your personal view?“), news media skepticism (4 items,  $\alpha = .81$ , e. g., „News coverage serves the interests of the Big Boys and the powerful in politics, economy and society“), participants' media use (print newspapers, TV in general and various genres, Internet in general and online newspapers, social media, and blogs), the personality traits neuroticism (Satow, 2012; 4 items,  $\alpha = .81$ ), conscientiousness (Satow, 2012; 4 items,  $\alpha = .73$ ), and ambiguity tolerance (Radant & Dalbert, 2003; 4 items,  $\alpha = .69$ ), and sociodemographic variables (age, education, gender) was collected. A quota sample was used to ensure sufficient demographic heterogeneity. A total of 928 German, Austrian and Swiss respondents completed the survey at least partially (response rate: 24.4 %). 53 cases were removed due to implausibly short completion times (< 5 minutes total), high overall item non-response rate (> 15%), missing data in the realism cue variables used for factor and cluster analyses or because they were detected to be multivariate outliers ( $n = 4$ ). The resulting sample used in the following analyses ( $N = 875$ ) was 50,1 percent female with age ranging from 18 to 86 ( $M = 42.4$ ,  $SD = 14.6$ ). 57.1 percent of the respondents had a university entrance diploma.

Table 1: Factor Analysis of Realism Cue Items

Items	Evidence	Coherence	Common sense	Intra-media congruence	No human interference
Enhances realism (ER), when information is substantiated with figures and statistics.	.70				
ER when sources & information acquisition process are indicated.	.57				.23
ER when direct quotations are used.	.54				
ER when expert sources are cited/shown.	.52				
ER when reporters/journalists are reporting directly from the scene.	.44		.29	-.23	
Become skeptical (BS), when friends evaluate the topic differently than the report.		.64			
BS when user comments on the Internet contradict the report.		.48			
BS when voices outside established media (e.g., activists, bloggers, advocacy groups) advocate otherwise.		.46			
BS when media content contradicts my personal opinion.		.46			-.20
ER when photos or video footage created by ordinary citizens is used (e.g., cell phone camera).			.61		
ER when those affected or ordinary citizens have their say.			.60		
BS when created not by professional journalists but by ordinary citizens.	.32	.29	-.44		
ER when media content relies on undercover research.	.28		.29		
BS when the media content deviates from what many other media report.		.37		.35	
BS when topic is presented in much the same way by most of the media.		.23		-.64	-.54
ER when media content is recognizably edited (e.g., background comments, cuts) or are prerecorded (not live).					
ER when reporters/journalists react emotionally to extraordinary events.			.28		-.39
<i>Variance explained:</i>	13.6 %	8.7 %	6.4 %	3.6 %	3.5 %

Notes. Pattern coefficients for PFA w. direct oblimin rotation. Total variance explained: 35.8 %, KMO = .73, N = 875.

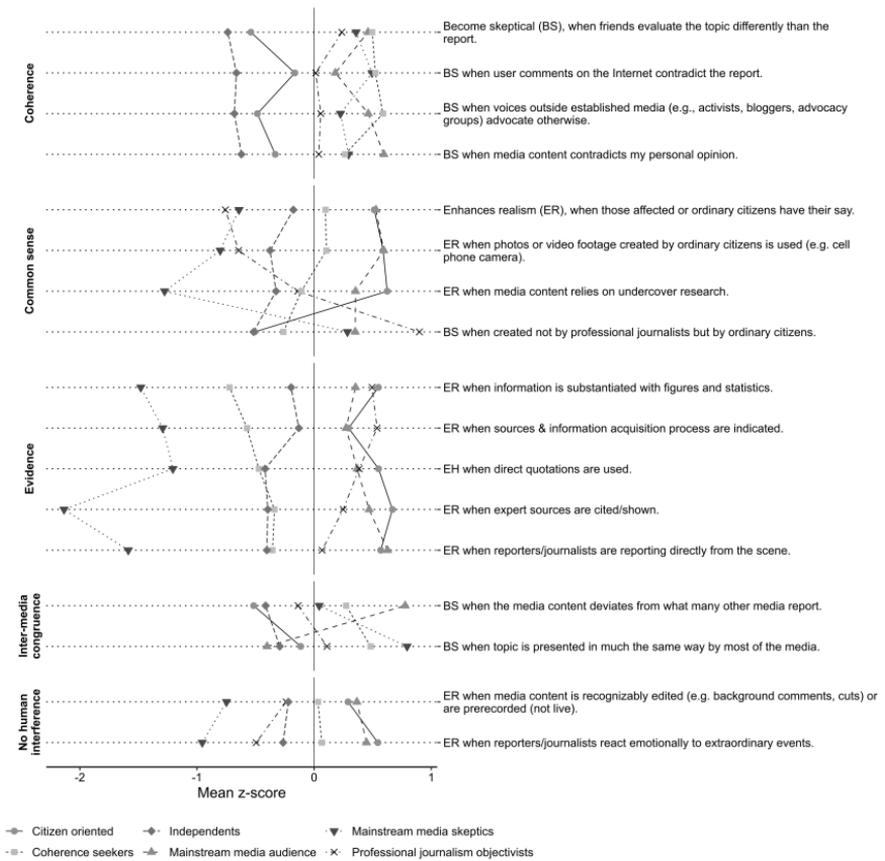
## Results

To identify broader criteria underlying users' realism assessments (RQ1), a principal factor analysis with direct oblimin rotation on the 17 realism factor evaluations was used (see Table 1 for detailed results).

Horn's parallel analysis, Kaiser criterion and scree plot suggested a solution with five factors explaining 36.0 percent of total variance. The first factor, 'Evidence', comprises five items measuring users' perceived contribution of figures and statistics, quotes, expert sources, disclosure of sources and the information acquisition process, and on-the-scene-reporting. The second factor, 'Coherence', includes four items concerning the consistency of media content with the users' own opinion, knowledge and experiences, and with opinions expressed by friends and acquaintances, in online user comments, and alternative media (blogs, activists, interest groups). The third factor, 'common sense', is described by items measuring the perceived authenticating impact of including footage, statements or entire reports authored by 'ordinary people'. Two items measuring the impact of perceived consonance of a media message with messages from other media characterize the fourth factor, labeled 'inter-media congruency'. And the fifth factor, labeled 'No human interference', includes two items measuring the effect of noticeable editing and emotional commenting (by journalists) on perceived realism of media content. This factor and the factor 'Evidence' are the only two factors correlated more strongly than  $r = .20$ .

To identify groups of users using similar criteria for assessing realism (RQ2a), we applied k-means clustering using squared Euclidean distances to the same set of 17 items. Indices for determining the optimal number of clusters implemented in the R-Package NbClust (Charrad, Ghazzali, Boiteau & Niknafs, 2014) suggested optimal cluster numbers of 3 (proposed by 9 indices), 5 (4), 6 (4) or 3 (3) clusters; we selected the 6 cluster solution because it allowed the most plausible and productive interpretation of the groups (see Figure 1 for an overview).

Fig. 1 Average z-scores for cluster items per cluster



Then, we explored whether these six clusters differed in various other respects, most importantly their realism assessments and use of various media and genres, media skepticism, and sociodemographic and personality variables (RQ2b). In the following, we describe the six clusters based on results of both analyses combined; in the case of the context variables, only variables significantly differing between the clusters (see Table 2) are discussed.

Table 2: Significant Differences Between Clusters in Socio-Demographic and Personality Characteristics, Realism Assessments, and Media Use

	MMA		PJO		CO		MMS		CS		IN		$\chi^2$	df	p	N	V
	%	SD															
<b>Socio-demographics &amp; traits</b>																	
Gender (percentage female)	59.5		49.1		49.0		32.6		48.3		49.4		20.88	10	.020	874	.11
	M	SD	F'	df <sub>2</sub>	p	N	$\omega^2$										
Media skepticism	3.3	0.8	3.0	0.8	3.3	0.8	4.0	0.8	3.7	0.7	3.2	0.8	21.87	280.2	<.001	875	.107
Education (years)	12.1	3.1	14.4	2.7	13.0	3.2	11.6	2.8	12.0	2.9	13.5	3.2	18.37	276.5	<.001	856	.092
Positive attitude asylum & refugees	4.5	1.7	5.3	1.6	4.8	1.7	3.4	2.0	4.1	1.8	4.6	1.7	13.01	277.7	<.001	873	.064
Age (years)	45.9	16.3	39.7	14.5	45.8	14.7	39.1	13.8	42.1	13.6	40.0	12.8	5.95	281.0	<.001	871	.028
Ambiguity tolerance	-0.2	0.9	0.2	0.8	0.1	0.8	0.3	0.9	-0.2	0.8	0.1	0.9	5.88	265.8	<.001	858	.028
Involvement creation of media content	1.9	1.1	2.1	1.2	2.2	1.4	2.3	1.3	1.8	1.1	1.9	1.2	2.79	275.0	.018	874	.010
<b>Media realism assessments &amp; expectations</b>																	
Realism: news public TV	4.1	0.8	4.0	0.8	4.0	0.8	2.5	0.9	3.3	0.8	3.8	0.8	34.08	279.2	<.001	875	.159
Realism: informational content general	3.6	0.7	3.6	0.7	3.6	0.6	2.6	0.8	3.0	0.6	3.4	0.7	26.95	277.9	<.001	874	.129
Realism: political TV news magazines	3.8	0.8	3.6	0.8	3.9	0.7	2.5	1.0	3.2	0.8	3.5	0.8	25.09	276.7	<.001	871	.121
Realism: online quality newspapers	3.5	1.0	3.5	0.8	3.6	0.9	2.3	0.8	2.9	0.8	3.4	0.7	24.01	274.9	<.001	865	.117
Realism: political TV features & documentaries	3.8	0.7	3.7	0.7	3.8	0.7	2.6	0.9	3.2	0.8	3.5	0.8	23.94	273.5	<.001	868	.117
Realism: media content (general)	3.2	0.7	3.0	0.8	3.3	0.8	2.3	0.8	2.7	0.7	2.9	0.7	22.05	279.4	<.001	874	.107
Realism: print newspapers	3.7	0.8	3.6	0.7	3.6	0.7	2.7	0.9	3.1	0.8	3.5	0.7	21.65	278.0	<.001	871	.106
Realism: news commercial TV	3.3	0.8	2.7	0.9	3.1	1.0	2.0	0.8	2.8	0.8	2.9	0.8	19.58	281.4	<.001	874	.096
Realism: TV (general)	3.2	0.8	2.8	0.7	3.1	0.8	2.1	0.8	2.6	0.7	2.8	0.8	18.50	274.4	<.001	867	.092
Realism: TV crime drama/series	2.2	0.8	1.9	0.7	2.3	0.8	1.7	0.9	1.9	0.8	1.8	0.6	10.34	276.5	<.001	874	.051
Realism: TV casting shows	1.5	0.7	1.2	0.5	1.5	0.7	1.1	0.4	1.5	0.7	1.3	0.6	8.46	297.9	<.001	870	.041

	MMA	PJO	CO	MMS	CS	IN											
Realism: online tabloid newspapers	2.3	0.9	1.9	0.8	2.2	0.8	2.1	0.8	2.0	0.7	7.05	280.0	<.001	869	.034		
Realism: social networks	2.3	0.9	1.9	0.7	2.4	0.9	2.0	0.9	2.3	0.8	2.1	0.8	6.39	272.6	<.001	859	.030
Realism: TV soap operas	1.6	0.8	1.3	0.5	1.6	0.9	1.2	0.5	1.4	0.8	1.4	0.6	6.40	285.2	<.001	871	.030
Realism: reality TV	1.4	0.7	1.2	0.4	1.4	0.7	1.1	0.4	1.4	0.7	1.2	0.5	5.60	289.0	<.001	871	.026
Expectations realism of informational content	4.4	0.6	4.5	0.6	4.4	0.6	4.4	0.6	4.3	0.7	4.2	0.7	4.38	283.3	.001	873	.019
Realism: TV news satire/comedy	2.9	1.1	3.1	1.1	3.0	1.1	2.7	1.4	2.6	1.0	2.8	1.0	4.34	276.2	.001	872	.019
Expectations realism of media content (general)	4.1	0.8	4.2	0.8	4.3	0.7	4.3	0.8	4.1	0.8	4.0	0.8	3.32	282.8	.006	875	.013
Realism: blogs	2.6	1.0	2.5	0.8	2.7	1.0	2.2	1.0	2.6	0.9	2.6	0.8	2.48	270.4	.032	851	.009
<b>Media consumption (days/week)</b>																	
Commercial news broadcasts	2.4	2.3	1.3	1.5	1.8	2.0	2.2	2.3	2.3	2.2	1.7	1.9	8.01	276.5	<.001	869	.039
Online quality newspaper	1.8	2.5	2.6	2.6	2.2	2.7	2.1	2.7	1.3	2.2	2.2	2.2	5.73	275.3	.001	871	.026
TV casting shows	0.8	0.8	0.6	0.3	0.7	0.4	0.6	0.4	0.7	0.5	0.7	0.5	4.09	281.8	.001	868	.017
TV soap operas	1.4	1.8	0.8	1.0	0.9	1.1	0.8	0.8	0.8	0.9	0.9	1.2	3.65	289.9	.003	871	.015
TV crime drama/series	2.2	1.8	1.5	1.2	1.7	1.5	1.9	1.9	1.7	1.6	1.7	1.4	3.31	272.3	.006	870	.013
Public news broadcast	4.1	2.4	4.0	2.4	3.8	2.4	3.0	2.4	3.3	2.4	3.6	2.5	3.09	282.3	.010	874	.012
Print newspapers	3.1	2.8	2.0	2.6	2.8	2.8	2.2	2.3	2.4	2.6	2.4	2.7	2.80	276.6	.017	869	.010
TV general	5.2	2.4	4.2	2.8	4.7	2.6	4.9	2.7	4.6	2.6	4.5	2.6	2.75	280.5	.019	872	.010
Internet general	6.2	1.7	6.7	1.0	6.7	1.1	6.7	1.1	6.5	1.4	6.6	1.0	2.71	281.3	.021	874	.010
Reality TV	0.7	0.8	0.5	0.2	0.6	0.6	0.7	0.9	0.7	0.7	0.6	0.5	2.55	259.8	.028	868	.009
Online tabloid newspapers	1.1	1.9	0.7	1.7	1.0	2.0	1.3	2.2	1.3	2.2	1.1	2.0	2.44	278.7	.035	871	.008

Notes. <sup>1</sup> Welch tests,  $df_1 = 5$ , variables sorted by effect size. Results for 13 variables with no significant group differences are not reported.

*Mainstream Media Audience (MMA, 18.6 %)*

A first group of users, representing 18.6 percent of the sample, is overall characterized by a rather favorable evaluation of most of the realism criteria surveyed and a lack of extreme preferences or aversions. These people become somewhat, but not too skeptical about the realism of a media message when friends, user comments on the Internet, voices outside the media and, above all, they themselves evaluate or present a topic differently than the message (factor “Coherence”). Also, they perceive realism to increase to a certain degree, when persons affected by the respective issue or ordinary citizens have their say, when picture or video footage created by citizens is used, and when undercover research was involved; however, they perceive it as a risk to realism if content was produced entirely by laypeople, not by professional journalists (factor “Common sense”). In addition, the traditional means of verification and authentication in journalism, i.e., the presentation of statistics and figures, quotes and experts, the transparency of sources and the research process, or (most clearly) reporting directly from the scene of an event (factor “Evidence”), also increase the realism of an article; other user groups, however, attribute a stronger influence on their realism assessment to these means. They rate editing contributions as less damaging to realism than all other groups and emotional reactions from reporters as more enhancing to realism than most other groups except for the citizen oriented (see below, factor “No human interference”). The most marked difference compared to the other groups is the perceived detrimental effect of incongruent presentations across different media on the realism assessment of these persons: If a message presents a topic differently than many or most other media, this group of people becomes more skeptical with regard to the realism of this message than all other groups. In sum, individuals in this group are (mildly) sympathetic to both the established means of authentication in journalism and the representation and participation of lay people in the creation of media content; the greatest threat to the assessment of a media message as “realistic” comes from incongruence—in different media or between the media representation and one’s own opinion. Both because of their favorable and non-extreme assessments of realism criteria and their compatibility with the conventional means of presentation in traditional mass media, we propose to call this group the mainstream media users.

Apart from the realism criteria used for clustering, this group is characterized by the highest percentage of female users (59.5%), the highest average age ( $M = 45.9$  years) and a medium education ( $M = 12.1$  years). In terms of media skepticism, this group ranks in the middle between

the other groups, but in comparison gives the highest realism ratings for many categories of media content surveyed. Specifically, this applies to the realism of media content in general and informational content in general, to TV in general, news broadcasts in public and commercial TV, political TV features/documentaries, TV casting shows, TV soap operas, reality TV, print newspapers, and online tabloid newspapers, the latter few categories suggesting overall a certain leaning toward popular media and especially television formats. This leaning also manifests itself in the pattern of media consumption of the mainstream media users: They are the most frequent users of TV in general, commercial news broadcasts, TV casting shows, reality TV, TV soap operas, TV crime dramas/series, and print newspapers, but second to last in the frequency of online quality newspaper consumption. In general, across genres and groups, we can observe significant weak or moderate positive correlations between realism ratings and frequency of consumption. Finally, this group is on average the least ambiguity-tolerant among the six clusters, explaining the negative effect of incongruent representations on realism judgments.

#### *Professional Journalism Objectivists (PJO, 18.6%)*

A second group, similar to the mainstream media audience, is characterized by a favorable assessment of the classic authentication strategies of journalism (“Evidence”); unlike the MMA, however, this applies in particular to “hard” evidence in the form of figures/statistics and the transparency of sources and the research process. Regarding the perceived effect of congruence in representations and evaluations on the realism assessment, this group lies in the average of the six groups: The congruence of a media portrayal with the portrayal or evaluation of the same topic by friends, user comments on the Internet, voices outside the media and one's own opinion, as well as with other media, are neither perceived as particularly beneficial nor particularly detrimental to realism. The most distinguishing characteristic of this group of people, however, is their high regard for professionalism in the production of “realistic” media content: Compared to the other groups, the participation or contributions of lay people in the production of media content are perceived as most clearly detrimental to realism. This is matched by the second most pronounced disapproval of human intervention in the form of recognizable editing of material or emotional involvement on the part of reporters or moderators. Due to the emphasis on professionalism and objectivity in ensuring the realism of media content, we refer to this group as *professional journalism objectivists*.

In terms of contextual variables, PJOs are on average the least media-skeptical among the six groups, have the highest level of education ( $M = 14.4$  years), the second lowest average age ( $M = 39.7$  years), and the most positive attitudes toward asylum and refugees. While they have the highest expectations for the realism of informational content among the six clusters, they make a clear distinction between informative and pseudo-informative content and between high-quality and lower-quality outlets when evaluating the realism of different genres: PJOs rate the realism of informational content in general, online quality newspapers, print newspapers, political TV features, public news broadcasts, and TV news satire shows higher than all or most of the other groups, but have fairly low or even the lowest ratings of the realism of news in commercial TV, TV casting shows, online tabloids, social networks, TV soap operas, and reality TV shows. Their media repertoire reflects these evaluations in conjunction with a greater openness to online media compared to the MMA: PJOs use online quality newspapers, public television newscasts, and the internet in general more frequently than most or all of the other groups, but are generally well below all or most other groups in the mean frequency of commercial television newscast, online tabloid, general TV, TV casting show, TV soap opera, TV crime drama show, reality TV, and also print newspaper use.

#### *Citizen Oriented (CO, 17.7%)*

Like the two groups described above, a third group of media users perceives traditional journalistic means of authentication as enhancing realism, in the case of the use of direct quotations and the inclusion of experts even to the greatest extent compared to the other groups (“Evidence”). In contrast, this group rates discrepancies in the portrayal or evaluations of a topic between some media representation and other sources (including other media representations) as significantly less damaging to the perceived realism of that representation than MMAs, PJOs and indeed all but one group (“Coherence”, “Inter-media congruence”). Even more clearly positive than MMAs (and all six groups on average) and in marked contrast to PJOs, this group of people evaluates the contribution of laypersons to media content: Contributions like viewpoints, opinions, pictures and videos, but also the production of entire articles by non-professional persons, increase their assessed realism significantly more in the perception of these persons than in the perception of the other groups (“Common sense”). In line with this appreciation of non-professional contributions, this group of people

also shows the most positive assessment of the effect of subsequent editing and emotional reactions by moderators or reporters on realism. Because of these perceived positive effects of the “human factor” and especially contributions by “ordinary” citizens on the realism of media portrayals, we refer to this group as the *citizen oriented*.

In terms of sociodemographic variables and realism assessments, citizen-oriented users are very similar to MMAs: they are on average the oldest ( $M = 45.8$  years), slightly more educated, but more balanced in gender than the MMA group. They are neither particularly media skeptical nor particularly trusting compared to the other groups, and have very favorable and sometimes the highest realism ratings for media in general and many genres. In terms of media use, however, the citizen oriented fall between the MMA and the PJO groups: Apart from a more frequent use of online quality newspapers and the Internet in general, they use media less overall and with a somewhat greater distance from television in general and popular TV formats in particular than the MMA.

#### *Mainstream Media Skeptics (MMS, 4.9%)*

While the three groups of media users just described rate the classic journalistic means of authentication above average, the other three groups believe that these means do not increase the realism of media content. One group in particular even sees them as reducing realism, with the role of experts being rated as the most detrimental to realism. Statistics, transparency of the research process, quotes and live reporting from the crime scene are also most clearly rejected in a comparison of all groups (“Evidence”). Although less extreme, but in comparison still most strongly among the six groups, this group regards both the presence of human actors (“No human interference”) and contributions by laypersons (“Common sense”), as reducing realism. Finally, this group of media users also evaluates it more critically than average if a media representation deviates from representations and evaluations in other sources, including the personal views of friends, comments by Internet users and the users themselves (“Coherence”, “Intermedia congruence”). However, with the exception of the most critical attitude toward uniform portrayals of an issue in most media, these ratings are not the most negative among the six groups. Because of the extremely skeptical attitude towards the means of authentication used by traditional news journalism, we refer to this group as the *mainstream media skeptics* (MMS).

The mainstream media skeptics are on average the least educated ( $M = 11.6$  years), youngest ( $M = 39.1$  years), most male (67.4 %), and most media skeptic among the six groups and also report the least positive attitude towards asylum and refugees. This group consistently has lowest average realism ratings of all groups, not only for media content and information content in general, but also for virtually all more specific media genres surveyed. Only the content of social networks is perceived as slightly less realistic by the PJOs. Tellingly, MMSs rate TV satire/comedy shows as the most realistic among all genres surveyed, on par with print newspapers.

However, the media use of the MMS seems to be decoupled from their realism ratings to some extent: While the lowest realism scores of all six groups go hand in hand with the lowest usage frequencies for public news broadcasts and print newspapers (PJOs use print newspapers even less frequently but use them online instead), and low consumption of TV casting shows and soap operas is on par with other groups, MMS do not use commercial news programs, online quality newspapers, TV crime shows and reality TV shows the least frequently of the six groups. Online tabloids and TV in general, which MMS also perceive as very unrealistic, are even used more frequently than by almost all other groups.

### *Coherence-Seekers (CS, 19.8%)*

Like the MMSs, a fifth group of media users also considers the classic journalistic means of authentication to be below average in terms of realism compared to the other groups (“Evidence”) and is in the average of all six groups when evaluating the effect of human intervention and non-professional contributions (“Common sense”) on the realism of media content. However, this group attributes clearly above-average positive effects on realism to the congruence of media portrayals with portrayals and evaluations by other sources such as friends, user comments on the Internet, voices outside the established media, other media and their own opinions (“Coherence”, “Inter-media congruence”). Therefore, we refer to this group of media users as *coherence seekers* (CS).

In terms of their sociodemographic and personality characteristics as well as realism assessments, Coherence Seekers are the less extreme neighbors of MMSs: They are second to last when it comes to education ( $M = 12.0$  years), share of women (48.3 %), media skepticism and (positive) attitude towards asylum and refugees. Also, their negative assessment of the realism of media content in general, informational content in general, TV in general, and print newspapers, political TV documentaries, political TV

news magazines, online quality newspapers, and public news broadcasts is exceeded only by MMS, commercial news broadcasts are also rated more negatively only by one group, the PJOs. And their realism ratings of TV news satire programs are actually the lowest of all six groups. In contrast, the CS's realism ratings of TV casting shows and reality TV shows are (among) the highest of all six groups. The coherence seekers' media use is quite average, with a few exceptions: They are (among) the most avid users of commercial news broadcasts, reality TV shows, and online tabloids. And consistent with their respective realism ratings, they use public newscasts only slightly more often than the MMSs and online quality newspapers least often of all groups.

### *Independents (IN, 20.3%)*

Finally, a sixth group of media users shows below-average appreciation for all of the realism criteria examined, acting as a negative counterbalance to the MMAs' mildly benevolent ratings. However, this group particularly clearly rejects being negatively impressed in their realism judgment by a media portrayal not matching other portrayals and opinions—those of friends, user comments, other media or voices outside established media, or their own opinion (“Coherence”, “Inter-media congruence”). Especially in view of the further characteristics of the cluster members (see below) it seems plausible to interpret this cluster as a group of people who do not believe or want their realism assessments to be dependent on some rather superficial characteristics of the report. A more far-reaching interpretation could be that these people are generally skeptical of the idea of the “one” reality or truth, which is why they are not particularly impressed by contradictory portrayals or evaluations of the same topic. This is why we refer to this group as the *independents*; somewhat more boldly, we could also call them constructivists or (epistemic) relativists.

In their other characteristics, Independents are very similar to the group of PJOs: They are among the least skeptical of the media, the second most educated, relatively positive about asylum and refugees, and comparatively young ( $M = 40.0$  years). The pattern of reality assessments is also quite similar to that of the PJOs, but somewhat less pronounced: Their realism ratings are medium to high, with positive assessments especially for quality journalistic offerings and rather negative ones for popular entertainment formats. Interestingly, they have the lowest realism expectations for media content in general and information content, which supports our interpretation of their realism criteria above. The pattern of their media use is

also similar to that of the PJO, but with less extreme swings: They keep a certain distance from commercial news broadcasts and television in general and are relatively Internet-savvy. For example, they use printed newspapers comparatively rarely, but online quality newspapers second most frequently among the six groups.

## Conclusion

In sum, our study's original contribution to the field are the identification of (a) five rather independent criteria which media users apply to assess the apparent realism of media content (Coherence, Common sense, Evidence, Inter-media congruence and No human interference), and (b) six groups of users who differ in their relative (self-reported) reliance on these five criteria as well as socio-demographic and personality characteristics, realism assessments and media repertoire: Mainstream media audience, Professional journalism objectivists, Citizen oriented, Mainstream media skeptics, Coherence-seekers, and Independents. These results are based on a field study with a heterogeneous quota-based sample surveying a set of items covering a wide array of potential message and social realism cues instead of focusing on a single or a few realism factors. These findings may help contextualize or explain diverging reality assessments of the same media content by different (groups of) individuals. Regression models predicting the realism assessments in our study by the factor scores of the five realism criterion factors explained between 26 percent (public newscasts) and 13 percent (online quality newspapers) of the respective realism ratings in the case of (quality) journalism or rather broad content categories such as media content in general, informational content or TV content in general, and between 3 and 6 percent (online tabloids) in the case of popular media categories or online content like blogs and social networks.

One limitation of our study is the use of single item self-report measures for the realism criteria—a methodological concession that allowed us to cover the widest possible range of criteria and context variables. Thus, reliability cannot be adequately demonstrated, and our results are confined to the *perceived* impact of message factors and external cues on realism judgments. A second limitation is the use of a non-representative online access panel for sampling. The mostly correlational analyses we conducted are less affected by sample characteristics; however, the cluster structure and sizes obtained in our analysis should be replicated and possibly extended in further studies. Other possible next steps would be to develop the items used in our study into a proper scale for preferred modes of authenti-

cation as a trait, thereby expanding it to include items and criteria more relevant to realism judgments in online media, and to further explore the implications of preferred realism criteria for media effects and media selection.

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