



# Examining the digital renewal of news communication: A categorization of presentation modes in digital journalism

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## Abstract

Our daily dealings with media products are shaped by the use of generic designations such as journalistic presentation modes, for example, news, commentary, and Instagram-story. Yet, scholarship has examined presentation modes only selectively and lacks empirical investigations in this domain. Based on literature and a quantitative content analysis of jury protocols of the German online journalism award “Grimme Online Award,” this article explores how presentation modes are constructed and further develops a framework for a categorization of presentation modes with eight dimensions: Content and Function, Author, Sources, Periodicity, Material Substrate, Structure, Media, and Interactive-Engagement Elements. This study is the first to empirically assess journalistic presentation mode dimensions and manifestations.

## Keywords

Content analysis, digital journalism, media typology, presentation modes

Long-reads, chat-bot-systems, and stories format as well as reports, news, commentaries, and portraits: These are but a few examples of modern and traditional ways to communicate content to an audience. The presentation of media as well as the communication about media obviously does not forego without generic descriptors. Those partaking in

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media production and consumption make use of these genres, categories or presentation modes that act as explicit descriptors but “every disciplinary paradigm . . . contains elements that are less conscious” (Bates, 1999: 1043). This phenomenon is well described in traditional information studies as well as communication science (see, for example, Schmidt and Weischenberg, 1994) and yet needs to be empirically revealed. Furthermore, the existing knowledge about presentation modes lacks a digital perspective as well as the impact visual characteristics have (Boomgaarden et al., 2016).

This is surprising because (media) organizations around the world are trying to increase their reach and deliver content that is optimized to their users. In fact, every journalistic website is based upon ideas of how content is presented best to an audience and for every information that needs to be communicated; a journalist decides which presentation mode he or she will use.

For this research, we understand a presentation mode as the way through which (format) and the manner in which (form) an information is communicated. This first definition is derived from a rich body of mostly theoretical literature that repeatedly points out the importance of format and form when describing presentation modes (e.g. Bucher et al., 2010; Hiippala, 2017). We discuss this body of literature in more detail later.

Instead of providing only theoretical concepts, it has been demanded to provide observational tools that can evolve over time and allow to study journalistic communication relationally (Loosen et al., 2020). It is therefore a necessary undertaking of research activity to form a medium-independent framework for categorizing presentation modes (Coddington, 2015; Michael, 2017; Shapiro, 2014; Wagner, 1988; Yang and Grabe, 2011) and in fact to provide “dimensions” (Widholm and Appelgren, 2020).

We try to address this research gap by providing a thorough and inclusive categorization framework of presentation modes. We draw on theoretical considerations and on an empirical approach to develop dimensions and respective manifestations. While manifestations will evolve over time, the goal is to develop stable dimensions so that the framework provides a basis for systematic analyses of presentation modes in the future.

In order to do so, we apply the following four research steps: (1) literature analysis, (2) inductive content analysis of protocols of the jury meetings of the Grimme Online Award (GOA, Germany’s most renowned quality award for online journalism), (3) triangulation of literature analysis and inductive content analysis to form a preliminary set of presentation mode dimensions and manifestations, and (4) application of this set of dimensions through a deductive content analysis of the protocols.

The final framework comprises eight central dimensions with specified manifestations. Some of the dimensions are very similar to those of analogue media, but differ in their manifestations.

The relevance of this contribution is twofold: First, this article provides grounds for theory building in the communication and information sciences. Second, it identifies ways in which we can meaningfully study novel journalistic media, their use on digital platforms and effects on recipients as well as content creators and society. In concrete terms, such a tool can help researchers and practitioners to (1) improve the understanding of presentation modes impact on the audience, (2) improve distribution of news in purposefully applying a presentation mode in line with the journalistic goals each outlet has, and (3) optimize websites and resource allocation in newsrooms.

## Theoretical context

In communication science, presentation modes are conceptualized as modes that result from organizational, technical, and professional procedures. They are schemata (Luhmann, 1994; Schmidt and Weischenberg, 1994) and communicative patterns that fulfill functions and place a focus (unlike text in linguistic) on both text and visual design. A mode is a “persisting visible structure” (Barnhurst and Nerone, 2001: 3). These structures guide the design of the content that journalists deem worthy of publication. They are deemed the channel of professional communicators to speak (German: *Sprechmöglichkeiten*) (Wagner, 1988) and are therefore a descriptor of communicative intentions (Bucher et al., 2010; Schmidt and Weischenberg, 1994; Wagner, 1988).

In media practice, the term presentation mode has been popularized because it refers to the presentation as well as the function of an offering (see, for example, Neuberger and Kapern, 2013).

In its most original form, the latin “modus” (Hoad, 2003), it is used to describe the way through which (that is format) and the manner in which (which is form) an information is communicated. This brings into focus the relationship between its external and internal structure.

This is, for instance, reflected in Bucher et al. (2010), who reference a threefold division of terms: media genre (print media, Radio and TV broadcasting, film, Internet), media formats (newspaper, magazine), and presentation forms (commentary, report, interview). Hence, a media format describes the structure of a journalistic piece (Schmidt and Weischenberg, 1994). The term presentation form goes back to the linguistics of a journalistic piece (Simmler, 1993). Theorists like Roloff (1982) and Püchel (1992) categorized the presentation of news based on linguistics into reporting, interpreting, or commenting pieces. These concepts provide relevant characteristics to be considered in a typology, but do not cover all relevant aspects of a presentation mode (Bucher et al., 2010).

A presentation mode, in comparison, combines relevant aspects of format and form, which is important, because in the digital world a distribution platform (e.g. twitter or an app) can be just as important for the presentation of content as the presentation form itself (Hiippala, 2017).

The term *presentation mode* will hence be used foremost, even when literature occasionally refers to related concepts such as presentation forms.

Finally, as presentation modes stand under the influence of ever-changing social, technical, and economic conditions, they are a fluid concept (Bucher et al., 2010; Heijnk, 2014; Schmidt and Weischenberg, 1994). In contrast to an ontological approach to journalistic practice (see, for example, Simmler, 1993), we intend to derive stable dimensions of presentation modes but not a fixed arsenal of manifestations or specific presentation modes that give room for future developments.

## Research design and data source

Our research process is made up of four research steps: (1) literature analysis, (2) inductive content analysis of protocols of the journalistic jury meetings regarding the GOA,

(3) triangulation of literature analysis and inductive content analysis to form a preliminary set of presentation mode dimensions, and (4) application and verification of this set of dimensions through a deductive content analysis of the protocols. The final result will be a codeable framework with presentation mode dimensions, sub-dimensions, and manifestations.

In the data source, GOA nomination and award jury meetings from the years 2003–2018 and accompanying documents, for example, on nomination processes and GOA statutes, discussed media offerings meet the basic assumption that they are both professional and journalistic. This selected time span is mainly due to data availability. While the award was established in 2001, jury protocols were available to us from 2003 on.

Naturally, award juries, such as the ones for GOA, only observe a subsample of all available journalistic work. This could potentially lead to an incomprehensive data set for our empirical study. At the same time, we observe a time span of 16 years which comprises essential parts of the digital era of journalism. Consequently, even though the award juries potentially have a bias toward new and innovative presentational aspects, we feel confident that the resulting data set represents a comprehensive sample of the relevant aspects associated with presentation modes and can yield a dataset characterized by high validity and reliability.

While the quality of journalism has been a subject of much debate (e.g. Wellbrock and Klein, 2014), in media practice the award explicitly aims at “journalistic excellence” (GOA, n.d) and is well accepted in German-speaking countries (Wellbrock and Wolfram, 2019). Therefore, it is assumed that the offerings discussed can be used as a state-of-the-art-portrayal of digital journalism, so that the data obtained can be considered representative.

The GOA procedures follow the same structure every year. Websites, parts of websites, specific articles or journalistic pieces, journalistically meaningful single achievements, and cross-platform apps are nominated. For example, in 2018, over 900 offerings were suggested for the award. A nomination committee looks through all submissions and chooses 28 offerings in different categories that they assess to hold highest journalistic values. Following, a jury determines 8 winners out of these 28 nominated offerings. They use the content-oriented categories “information,” “knowledge and education,” “culture and entertainment,” and “special” to classify offerings. The nomination commission and jury consist of a wide variety of experts in the field ranging from scholars, journalists, and designers to general journalism and communication experts, who are highly skilled and used to employing a professional vocabulary.

We conduct the analysis of the jury protocols in a two-step process based upon inductive and deductive category building, following guidelines from social science research (Ericsson and Simon, 1993; Krippendorff, 1980; Mayring, 2015) and a corresponding quantitative analysis. The inductive research will later be followed by a triangulation of our findings (research step 3) with the findings from the literature analysis (research step 1). Data triangulation has been described as one of the best tools to investigate the “same phenomenon in order to strengthen the validity of inquiry results” (Greene et al., 1989). In the final step 4, the found dimensions are applied and verified through a deductive content analysis of the protocols.

Recent methodological developments of content analysis suggest to incorporate the fact that deductive and inductive analysis rarely occur in isolation, and that they are rather approaches “employed with different dominance during the process of any qualitative content analysis” (Armat et al., 2018, Introduction). The proposition is to respond to this by explicitly labeling the respective research steps. Therefore, we will, as recommended, call the processes “inductive-dominant analysis” and “deductive-dominant analysis.”

## Research step I: literature analysis

Reviewing all existing theories has always been a powerful tool to move forward, hence one part of our research is a literature analysis based on the structured approach of Webster and Watson (2002). We consulted major databases (EBSCOhost, ProQuest, Web of Science, Google Scholar) using keywords, manually looked through relevant journals (e.g. *New Media & Society*, *Digital Journalism*, *Journalism & Mass Communication*) and further used backward and forward search of literature with already identified articles. Our keywords comprised *presentation modes*, *presentation forms*, *presentation of journalism*, *presentation + journalism*. Through this search, we collected 90 potentially relevant articles.

These were reduced to 25 based on a several criteria. First, we reviewed titles and abstracts and excluded obviously irrelevant items. In a second step, we looked more closely at the literature and deleted studies that did not correspond with our research focus. For this purpose, we searched for implicit and explicit descriptions of presentation modes within the whole article or book.

Our final set of 25 articles can be placed mostly into three literature streams: journalism studies, communication science, and practical journalism literature. The difference between journalism studies and practical journalism is that the former has a stronger focus on methodologically sound approaches, while the latter is rather concerned with implications and advice for practitioners. We further follow the definition of journalism studies as outlined in Carlson et al. (2018), especially with its commitment to methodological pluralism. This means that practical journalism literature has a focus on transferring established knowledge into journalism practice and usually does not rely on original research.

Based on the results of our review, we analyze which dimensions need to be included in a framework stemming from literature only.

### *Presentation modes in journalism studies and communication science literature*

There have been several attempts at categorizing presentation modes. Most of these categorizations place their origin in Anglo-Saxon news agencies in the 19th century—the cradle of contemporary objective reporting. Objective reporting was, at the time, thought to be the most economically successful journalism through its ability to sell to people with different political views. Objective reporting was further used to valorize and

preserve journalism as a professional occupation (Carey, 1969; Janowitz, 1975) and is thus far, as vague it is, widely used as a fundamental principle of journalism.

Therefore, a description of presentation modes has mostly used the dialectic account of objective reporting versus all other reporting and was foremost connected to the linguistics field. After all, initially all journalism took place through written and printed means only. So, the textual was the only way of differentiation next to article length and placement.

Roloff (1982) was one of the first to identify 19 different presentation modes based on their respective text genre and studied whether they were reporting, interpreting, or commenting forms. Also, linguist Lüger (1983) looks at language use in the press and sees a difference between information (e.g. report), opinion/persuasion (e.g. commentary), bicentricism (e.g. interview), and initial contact (e.g. cover pages). Alike, communication scholar Püschel (1992) finds only six different presentation modes: notice and report as presentation of news, editorials and commentary as presentation of opinion, and report or feature as presentation of entertainment. All three authors unite in the view that journalistic presentation modes can be divided according to their communicative intent or purpose.

Yet, in all three systematizations, the focus on the purpose omits possible other presentation aspects such as content structure and periodicity.

Digital journalism, or digitization per se, poses a challenge to the longevity of the above-explained system and introduces changes that have not been empirically covered before.

The more digital the world became, the less clear became the term presentation mode and the more re-description instead of development took place (Bateman et al., 2017).

The term presentation mode is not only used more frequently and inconsistently, but also disconnected to its original meaning. For example, Kim and Sundar (2016) research presentation modes and their effects on trust and Berger et al. (2015) try to understand willingness to pay in its relation to content formats. Yet, the only characteristic both studies utilize is whether audio, video or text modes are employed or through which technology the content is made accessible. And not only that: sometimes technological advancements are described as a presentation mode in a journalistic sense, such as virtual reality (Biocca and Levy, 1995; Steuer, 1992), immersive journalism (Kang et al., 2018), and storytelling (Hardee, 2016; Pavlik and Bridges, 2013). These do not correspond to the original meaning of presentation modes but are potentially manifestations of modern presentation mode dimensions.

There are also some attempts to categorizing *digital* presentation modes. Deuze (2003) classifies them along website systems and differentiates between four: moderated and unmoderated participatory communication, concentration on editorial content or public connectivity. Chapman and Chapman (2009) suggest a differentiation between page-based model (PBM) and time-based model (TBM), wherein in the former images are combined and spatially arranged resembling traditional publishing layout and in the latter other audiovisual elements are used. Schumacher (2009) deduces a classification model that distinguishes digital texts from texts of other media. He calls the former interactive, multimedia presentation forms. To find a common ground, Schumacher (2009) suggests to focus on the (journalistic) function of a piece and the communicative means

used. Schäfer-Hock (2018) explains that six characteristics make up each and every presentation mode: content, function, periodicity, layout/position, source/author, and text structure. Yet, many of these suggested presentation mode categorization attempts appear to only partially reflect important characteristics of digital presentation modes, in particular interactivity and engagement elements.

All of these classifications signal that a modern classification of journalism content cannot be just about the text intent, but needs to include content structure, sources, user engagement, and mediality. Furthermore, the classifications indicate that modern presentation modes need to be researched through different or additional dimensions due to a multimodal, dynamic experience (Bateman et al., 2017; Püchel, 2019).

### *Presentation modes in practical journalism literature*

The above-described dichotomy of objective and informing versus non-objective and opinionated reporting has formed the underlying concept of presentation modes—also in journalism practice. La Roche et al. (2013) differentiate between informing and opinionated presentation modes. In television research, a similar divide has been used when it comes to storytelling: descriptive and narrative (Machill et al., 2007). In another text book, Sturm (2013) divides presentation modes in medium- (e.g. text, photo, audio) and function-oriented presentation modes (e.g. hypertext, aggregation, curation). Hernandez and Rue (2016) describe the blend of presentation modes as a digital news package. They classify them in a triangle of continuous stories, comprehensive stories, and immersive stories. Hooffacker (2016) divides between interactive formats designed by journalists and in which a user interacts with a server and communicative formats in which at least two humans interchange. Among the communicative formats in online journalism, Hooffacker (2016) classifies formats such as blogs, social media channels, communities, and forums. Godulla and Wolf (2018) describe scrollytelling, web documentary, and selective multimedia story as the substantial presentation forms in online journalism.

Conclusively, through the practical literature it becomes clear that a definition and a suiting schemata for modern journalism is needed for the sake of a journalist's routine and work pace, production of journalism, and suiting division of labor (Godulla and Wolf, 2018; Hernandez and Rue, 2016; Sturm, 2013) and needs to include multimodality, hypertextuality, thematic closure, interaction, technology, usability, participation, and interactivity. Especially the last notion, that of interactivity and corresponding dynamics of modern-day journalism, will likely be central to presentation mode theory.

### *Results: the state of presentation mode theory in literature*

Existing literature varies in terms of definitions of presentation modes, its dimensions, and identified presentation modes. Table 4 in Appendix 1 reviews all literature along these aspects and serves as a foundation for the triangulation of literature and empirical research.

Recurring themes in the definition of presentation modes are the text function and intent (e.g. informing), multimodality, hypertextuality, and multimodality. Many authors describe presentation modes as a (macro-)structure, as patterns, or as organizational

procedures. These appear as different names for what is the same, namely that a presentation mode is an underlying structure that guides production and reception processes.

In total, 84 presentation modes are named in theory. We see growth in the number of different presentation modes since they were last identified in the 1980s (see, for example, Roloff, 1982, he identified 19 presentation modes). Key dimensions are very much related to the definitions, as the suggested classifications systems mostly divide between text functions and medium. But also publishing speed, rhythm, interactivity, selectivity, and narrative elements are suggested as classification dimensions.

In summary, the following candidates for dimensions crystallize and should be included in a presentation mode framework: Communicative Intent, Gamification, Author Centricity, Number of Authors, Source (People or Data), Periodicity (Frequency of offering and Temporality), Linearity, Thematic Closure, Structure, Layout, Length, Media, Hypertextuality, Moderated or unmoderated, Interactive, and non-interactive elements.

## Research step 2: inductive-dominant analysis

During the inductive analysis, the transcripts of the nominee and jury sessions from all years are scanned chronologically. Every time one of the following words—news, presentation mode, presentation form, narrative form, presentation, presentation format (since the protocols are in German, we used the German terms “Darstellungsform,” “Darstellungsmodus,” “Darstellung,” “Darstellungsformat”)—is mentioned; the whole text fragment was looked at to search for words that potentially describe a presentation mode, a dimension, or a manifestation. For example, in a jury protocol from the year 2017 the word “presentation mode” was found 10 times. In one of the examples, the words data presentation and live-ticker were identified.

Through the identification and counting of keywords, the aim is to first identify relations among them and then second establish categories from within the material (Mayring, 2015). Hence, the keywords are placed into nameless categories based upon informed judgment. Finally, these categories receive descriptions. The results of the inductive process are to aid in establishing a presentation mode model in triangulation with the literature.

## Results

During the first round of the inductive analysis, 1612 data points were obtained. Among the most frequent keywords were the terms news, information/informative, video, blog, multimedia, interaction. This indicates that they play a key role in the presentation of digital journalism and it confirms that multimediality, interactivity, and moving images are key characteristics to be mirrored in presentation mode theory.

A closer look at the temporal distribution of keywords reveals that some keywords remain quite stable over time, while others are subject to temporal aspects. “Video” and “audio,” for instance, are mentioned throughout the entire timespan and reach a peak between 2004 and 2006. “Blogs” reached a small peak from 2010 (7) to 2011 (11). Keywords that have shown a decrease in mentions over time are “forums,” “online



portals,” “photo compilations,” and the provision of “background information.” Keywords that have only started to appear in recent years are “multimedia-reports,” “scrollreports,” “360 degree video,” “apps,” “data-research,” and “social media formats.” Mentions of the latter have risen exceptionally. The rather stable presence of keywords like “interview,” “report,” “portrait,” or “commentary” indicates that traditional presentation forms are still present in digital journalism.

This illustrates the fast-evolving environment of presentation modes while simultaneously pointing to the fact that the basic production tools (text, audio, video, picture) as well as communicative intents (information, opinion) persist.

When looking at the keywords, it indeed becomes evident that a one-dimensional categorization along function (like suggested in earlier theory, e.g. by Lüger (1983)) is difficult because the media and medium used for a presentation as well as the possibility to interact with it are also important.

When placing the keywords into categories, seven candidates for dimensions crystallize: Content intent and category (e.g. information or entertainment, incl. irony and gaming), author and self-portrayal, sources used (e.g. data), periodicity (incl. one-time offerings and time between data collection and publication, archive), media used (e.g. picture or video), medium used (incl. device and social media platform), storytelling (incl. the flow and processing of information, e.g. whether it is organized chronologically), and technology (code, inclusion, interaction of the user, media discontinuity, its relation to old media).

### Research step 3: presentation modes in triangulation with literature

Results from research steps 1 and 2 are then triangulated. The keyword allocation as well as the suggested dimensions is shown in Table 1. The main subject themes are quite comparable. However, small differences appear in terms of sub-dimensions and in the importance that is placed on each.

In literature, the communicative intent was the most valued and most coherently identified dimension of a presentation mode. To provide an example, the communicative intent of a commentary is to provide one side of an argument. In the inductive analysis it becomes clear that the function of a piece is important, but so are the utilization of fictional, gamified, and humoristic elements. They all relate to the content itself. Hence, in conclusion, the dimension will be called *Content and Function* with the sub-dimensions *communicative intent, fiction or non-fiction, gamification, comedy/humor*.

The author’s identity as well as the number of authors appears to play a more important role in the empirical analysis. Only author centrality was mentioned in theory, which relates to the prominence of the author within the offering. Together, identity, centrality, and number of authors form the dimension of *Author*.

Finally, one noteworthy difference is the importance placed on social media as part of a presentation mode in the empirical results. For example, an Instagram Story was described as its own presentation mode. Hence, this will be given its own sub-dimension. The overall dimension will be called “Material Substrate,” following the idea that the underlying material is part of a presentation mode (Bateman, 2011; Hiippala, 2017).

**Table 1.** Presentation mode classification based on literature review and inductive analysis.

Dimension	Sub-dimension	Keywords from literature (from Table 1)	Literature	Keywords from study (from Table 2)	Suggested in literature (research step 1)	Suggested in inductive analysis (research step 2)
Content and Function	Communicative Intent	Communicative purpose, communicative role, content, function, functionality, intent, nature of the text, semiotic mode	Bucher et al. (2010), Engesser (2014), Hippala (2017), Hooffacker and Meier (2017), La Roche et al. (2013), Lüger (1983), Machill et al. (2017), Michael (2017), Püschel (1992), Roloff (1982), Santini (2007), Schäfer-Hock (2018), Schmidt and Weischenberg (1994), Schumacher (2009), Sommer and van Rimscha (2014), Sturm (2013), Veglis (2012) and Wolf and Godulla (2015)	Anecdotal, Archive, Background Information, Collection, Commentary, Content, Documentation, Entertaining, Facts, Forum, Function, Information/Informational, Intent, Interview, News/News-ish/ News Character, Newsletter, Newsportal, Online Magazine, Overview, Portrait, Proximity, Report, Reportage, Research, Review, Text, Variety, Web-Special Storytelling	✓	✓
	Fiction or Non-Fiction Gamification	Play, reference to reality	Michael (2017) and Müller and Stewens (2017)	Avatar, Game Elements/Playful	✓	✓
Author	Comedy/Humor Author Identity			Humor, News-Comedy Author, Chat-bot journalism, public service author Self-Portrayal	✓	✓
	Author Centricity	Constellation of authors, organizational, Author centricity	Schäfer-Hock (2018)		✓	✓
Sources	Number of authors People	Author number	Bucher et al. (2010)		✓	✓
	Data	Source Collaborative computing news	Santini (2007) and Schäfer-Hock (2018) Santini (2007)	User Content Data Journalism	✓	✓
Periodicity	Frequency of offering	Periodicity, publishing rhythm, seriality	Bucher et al. (2010), Schäfer-Hock (2018), Sommer and van Rimscha (2014) and Veglis (2012)	Thematic Closure	✓	✓

(Continued)

**Table 1.** (Continued)

Dimension	Sub-dimension	Keywords from literature (from Table 1)	Literature	Keywords from study (from Table 2)	Suggested in literature (research step 1)	Suggested in inductive analysis (research step 2)
Material Substrate	Temporality	Automization, live blog, publishing speed, technologization, temporality	Engesser (2014), Hippala (2017) and Veglis (2012)	Actuality, Archive, Live-Coverage	✓	✓
	Medium	Accessibility, channel, material substrate, medium, platform, point of access	Hernandez and Rue (2016), Furnham et al. (1990), Hippala (2017), Lassila-Merisalo (2014), Sturm (2013) and Veglis (2012)	App, Channel, Crossover, Extension, Hashtag, Transmediality, Media discontinuity	✓	✓
	System /Code	Technical base	Chapman and Chapman (2009) and Sturm (2013)	Pageflow	✓	✓
Structure and Composition	Social Media Associative organization	Linearity, non-linearity	Bucher et al. (2010) and Godulla and Wolf (2018)	Platform, Social Media, Youtube Insta-Storytelling-Format, Linearity, Pageflow, Presentation Technique, Processing of Information, Scroll Report/Scrollytelling	✓	✓
	Closure	Thematic closure, cluster	Schumacher (2009) and Sturm (2013)	Thematic Closure	✓	✓
Layout	Structure	Actant, dramaturgy, inverted pyramid, narration, narrative, storytelling, structure, text structure	Hooffacker and Meier (2017), Kleeman et al. (2017), Lassila-Merisalo (2014), Machill et al. (2017), Schäfer-Hock (2018), Schmidt and Weischenberg (1994)	Narrative Form, Protagonist, Storytelling	✓	✓
	Layout	Customization, fragmentation, individualization, interface, layout, modularization, organizational, position, visual organization	Bucher et al. (2010), Hippala (2017), Santini (2007), Schäfer-Hock (2018) and Schumacher (2009)	Layout, Visuality	✓	✓
Length	Length	Length	Lassila-Merisalo (2014), Schmidt and Weischenberg (1994) and Wolf and Godulla (2015)	Longform	✓	✓

(Continued)

**Table 1.** (Continued)

Dimension	Sub-dimension	Keywords from literature (from Table 1)	Literature	Keywords from study (from Table 2)	Suggested in literature (research step 1)	Suggested in inductive analysis (research step 2)
Media	(Multiple) Media	Hypertextuality, multimodality, media used	Bucher et al. (2010), Chapman and Chapman (2009), Deuze (2003), Furnham et al. (1990), Hernandez and Rue (2016), Hippala (2017), Kang et al. (2018), Lassila-Merisalo (2014), Müller and Stewens (2017), Santini (2007), Schäfer-Hock (2018), Schumacher (2009) and Wolf and Godulla (2015)	Animation, Audio Elements, Banner, Infographic, Multimedia, Multimedia Report, Podcast, Snofall, Transmediality, Web(Video), 360 Degree	✓	✓
Interactive—engagement elements	Hypertextuality	Hypertextuality	Deuze (2003), Santini (2007), Wolf and Godulla (2015) and Schumacher (2009)	Inter-Linking, Links,	✓	✓
	Communication/Feedback Interaction	Moderation, Participation Interaction, interaction, interface, multimodality, push-pull orientation, selectivity, shareability, transition pattern, usability, workable user interface	Deuze (2003), Engesser (2014) and Wolf and Godulla (2015)	Community, Unilateral/Two-Dimensional Interaction, Multimodality, User Content, User Friendliness, Wiki	✓	✓
	Disinteraction	Degree of control over information flow	Deuze (2003), Engesser (2014), Hernandez and Rue (2016), Hippala (2017) and Lassila-Merisalo (2014)	Navigation	✓	✓

The dimensions *Sources*, *Periodicity*, *Structure and Composition*, *Media*, and *Interactive-Engagement Elements* came up equally in both research steps 1 and 2. In summary, the result is an eight-dimensional presentation mode model to be re-tested in a deductive-dominant analysis.

## Research step 4: deductive-dominant analysis

Deductive-dominant analysis can be used to retest the data and enrich and nuance the existing dimensions (Mayring, 2015).

During the deductive-dominant categorization of results, the eight dimensions derived in research step 3 form the coding scheme for a re-analysis of the GOA protocols. The coding steps follow the standards of media content analysis (Krippendorff, 1980; Mayring, 2015). The GOA data were coded for correspondence with the identified manifestations/dimensions. For this purpose, the data were sorted per year and then again per submission. For most manifestations, we construct an individual dummy variable and code in a binary manner (0 for no and 1 for yes). If an element cannot be assigned to one of the dimensions, it was put into an unnamed new category and brought up in discussion. If it was still not suitable for one of the existing dimensions, it stayed within the unnamed new category (however, as will be seen later in the results, no meaningful data were left over).

Training sessions for coders were held previous. During these trainings, disagreements were settled through discussion. No information on the objectives of this study was given to the coders beyond what was necessary for their task. To account for data skewness, which can occur due to binary-coded variables, we identified all variables that were coded >60% with either 0 or 1 and looked at these variables in more detail (Di Eugenio and Glass, 2004). As a reliability check on the primary coder, a secondary coder examined 10% (randomly selected) of the responses. We tested for inter-coder reliability through computing Krippendorff's alpha index (Kalpha). Kalpha is one of the few indexes that accounts for chance agreements (De Swert, 2012; Hayes and Krippendorff, 2007; Lombard et al., 2002). Lombard et al. (2002) suggest that the calculation should be based upon at least 10% of all studied units. With  $N=947$  it means that 94.7 cases should be coded by at least two coders, which was herein done with  $N=99$ . Kalpha was at all times well within the range of "substantial" agreement (Landis and Koch, 1977).

## Results

Also, through the deductive-dominant analysis all dimensions are measurable and can thereby be verified. The measurement rate ranges from 3.3% (which means that in 31 cases this dimension was measured) to 99.9% (946 cases). Table 2 shows all descriptive results. The high magnitude of the dimension "function" stresses its importance for presentation modes, which specifically aligns with theory (see, for example, Lüger, 1983; Michael, 2017; Schmidt and Weischenberg, 1994).

Regarding the definition of function, one discrepancy between theory and practice becomes clear. In practice, presentation modes clearly identified as carrying entertainment elements are also assigned to the function of information. This contrasts previous

**Table 2.** Descriptive statistics and Krippendorff's alpha.

Dimension	<i>n</i>	%	<i>std(X)</i>	<i>Alpha</i>
Communicative Intent	947	99.9	.032	.956
Fiction/Non-Fiction	946	79.3	.406	1
Comedy/Humor	944	7.1	.257	1
Gamification	945	12.3	.328	.967
Author Centricity	946	3.3	.178	.904
Number of Authors	945	21.7	.416	.978
People	944	19.1	.393	1
Data	943	13.1	.338	.967
Frequency of offering	945	6.8	.251	1
Temporality	944	11.2	.316	.929
Medium	947	68.1	.466	.974
Code/System	946	11.2	.319	.886
Social Media	946	6.2	.378	1
Associative Organization	946	28.8	.453	.886
Closure	946	13.6	.343	.901
Structure	945	8.5	.401	.918
Layout	946	29.3	.573	.935
Length	946	6.2	.378	1
Media	946	73.5	.348	1
Hypertextuality	946	9.0	-.286	.942
Communication/Feedback	944	18.0	.384	.948
Interaction	945	30.5	.433	.977

suggestions to divide media genres or presentation modes along the lines of entertainment versus information. Adhering, online journalism presents more elements of judgments, such as emojis, that especially blurs the line between information and opinion—a line Püschel (1992) and other former researchers suggested to be a necessity of journalism. Also anew is the increasing use of satirical, comical, and thereby opinionated elements. For any of these observations, we will provide a codeable table in our conclusion chapter.

## Overall results

We suggest eight dimensions to describe and categorize journalistic pieces and to distinguish presentation modes: *Content and Function, Author, Sources, Periodicity, Material Substrate, Structure, Media, Interactive-Engagement Elements*.

The dimensions, sub-dimensions, as well as examples for manifestations are presented in more detail in Table 3.

### *Dimension 1: content and function*

Dimension 1 consists of four sub-dimensions. The meaning, function, intention that is given to a presentation mode through its communicator remains an important feature of

**Table 3.** Presentation mode dimensions.

Dimension	Sub-dimension	Manifestation	Question
Content and Function	Communicative Intent	Advice (y/n)—Aggregation (y/n)—Bicentric (y/n)—Commentating (y/n)—Controversy (Pro/Contra)—Curation (Organizing) (y/n)—Dialogical (y/n)—Education (0-1)—Entertainment (0-1)—Explanation (y/n)—Illustration (y/n)—Initial Contact (y/n)—Information (0-1)—Instructive (y/n)—Monitorial (y/n)—Orientation (Incl. Poll) (y/n)—Persuasion (Opinion) (y/n)—Service (y/n)—Stimulation (y/n)	From the point of view of the producing unit: What is the function of the text (e.g. initial contact, persuasion, information)?
		Fiction or Non-Fiction Gamification Comedy/Humor Author Identity Author Centricity Number of authors People	Are fictional or non-fictional elements used? Is the journalism gamified? Are humorous elements used? Who is the author? How prominent is the author in the publication? How many authors are involved? From whom stems the information originally? Which sources are used in the creation process?
Periodicity	Data	None, publicly available, inside Info	Is the source a data source only?
	Frequency of offering	One time—several times a day, daily, weekly, monthly, yearly	Through a periodically published offering, recipients can gain experience. How could it change the perception of the presentation mode?
Material Substrate	Temporality	Live—Minutes—Hours—Days—Months	Time between publication and happening/data collection?
	Printed (Static)	Yes/No	What is the main point of access to the offer (e.g. Smartphone, stationary devices, wearables)?
Structure	Television (Static)	Yes/No	"
	Browser (Website—Dynamic)	Yes/No	"
	App (Dynamic)	Yes/No	"
	Social Media (Dynamic)	Email (y/n), Facebook (y/n), Instagram (y/n), Twitter (y/n), Youtube (y/n), Snapchat (y/n)	Which social media platform is it on?
	Code/System	*Name* (e.g. RSS, HTML)	Which system is used (e.g. www, RSS, PDF, or Social Media)?
	Associative organization	Linear—nonlinear—chronological order—spatial order, encyclopedic order	Linearity/Non-linearity, e.g. Chronological order, Order of reception, spatial, encyclopedic.
	Closure	Yes/No	Is it an offering with thematic closure or open ended? Is it a cohort of topics?

(Continued)

**Table 3.** (Continued)

Dimension	Sub-dimension	Manifestation	Question
Media	Structure	Embedded—ChristmasTree—Pyramide—None	Does the journalistic offering utilize the traditional W-Pyramid or narrative? Which dramaturgic composition governs the journalistic offer?
	Layout (Position of the offering)	Main page—other	What is the layout? Position of the article within the whole offering? Modulization? How many components can the website include?
	Length	Short, Medium, Long	Which length?
	Oral Audio	Yes/No	Which media is used?
	Visual Text	Yes/No	"
	Visual Image	Yes/No	"
	Visual 2D Video	Yes/No	"
	Visual 3D	Yes/No	"
	Visual Augmented	Yes/No	"
	Visual Emojis	Yes/No	"
Other Senses	Yes/No	"	
Interactive—Engagement Elements	Hypertextuality	Yes/No	Internal and external hypertextuality
Engagement Elements	Communication/Feedback	No—one-way—two-way—three-way unmoderated—three-way moderated	Is the participatory communication moderated? Is it possible to participate? How participative is the offering (e.g. through the use of surveys)?
	Interaction (Click, Click-to-Download, Mouseover, Scroll, Wipe, Zoom)	Yes/No	Which transitions are used (e.g. scroll and dissolve)? Are these Dynamic or static? Click, Scroll, Wipe, Zoom, Mouseover, Click-to-download. Is there a possibility to change the order of reception to influence the way through the news? Is there a flow of activities within the media offering?
Engagement Elements	Disinteraction (Dissolve, None)		Are there no interaction possibilities? E.g. automatic scroll?



modern presentation modes and has been highlighted both in theory (e.g. Bucher et al., 2010; Deuze, 2003; Hiippala, 2017; La Roche et al., 2013; Lüger, 1983; Michael, 2017; Püschel, 1992) as well as in practice in our study. The corresponding sub-dimension is called *communicative intent*.

Nowadays, journalistic content can include fictional elements (e.g. through gamification or storytelling elements) and hence this needs to be included here (Michael, 2017; Müller-Stewens et al., 2017). The corresponding sub-dimensions shall be called *Fiction or Non-Fiction* and *Gamification*.

Finally, through the study it became clear that so-called “news-comedies” as well as the use of satire, parody, political memes, and gifs within a professional journalistic offering are an important part of discursive styles. Especially in news presented in social media, for example, Instagram Stories, news are presented in a rapid-fire fashion moving quickly between political references and jokes and are yet often backed up by an in-depth and investigative political research. Hence, *comedy/humor* also needs to be included in this section.

### ***Dimension 2: author***

This dimension consists of three sub-dimensions. First, whether the author is a machine or a human needs to be included and is named sub-dimension *author identity*. Second, the visibility of an author next to the respective journalistic piece has increased over the last decades (Klaß and Wellbrock, 2021) leading to *author centrality*. There is a surge in name dropping, moving away from initials to the mentioning of the author’s full name, and an increase in photos of an author next to an article or other offerings (Schäfer-Hock, 2018). This finding is mirrored in the content analysis of our study, where jury members described a journalistic offering as nearly being a “self-portrayal” (Grimme Online Award Protocols, 2017) potentially leading to a personal coloring of the content in order to (at best) engage the audience through personal writing or wording styles. Third, the *number of authors* is an integral part of a presentation mode (Bucher et al., 2010).

### ***Dimension 3: sources***

Dimension 2 consists of two sub-dimensions. The research methods used and information upon which a presentation mode is built differ between the modes and are hence part of it (Schäfer-Hock, 2018). Also, the jury members of our data source view the source as an attribute of presentation modes. For example, they talked about a piece in which user content was an integral part of the information process leading to *people* as a sub-dimension with several manifestations (Experts, Affected, Insiders, Users) of the *sources* dimension.

Second, *data* can also serve as a source leading to a different presentation mode (usually referred to as data journalism) than if only people or no sources were involved, thus constituting a second sub-dimension (Grimme Online Award Protocols, 2015; Santini, 2007).

#### *Dimension 4: periodicity*

D4 consists of two sub-dimensions. The *frequency of the offering* has been stressed as one of the definitional characteristics of a presentation mode (Bucher et al., 2010; Schäfer-Hock, 2018; Sommer and von Rimscha, 2014; Veglis, 2012). Unlike in theory journalistic pieces, that are only a one-time offering, were discussed in the GOA. Especially through the emergence of hypertextuality, one-time offers can prolong their significance.

Also, the *temporality*, the time between publication and happening or data collection, belongs to this time-related dimension. Differences in temporality can lead to different presentation modes, for example, live coverages vs historical pieces, and is therefore a sub-dimension that needs to be included.

#### *Dimension 5: material substrate*

A communication mode always includes a material substrate (Bateman, 2011; Hiippala, 2017), which is the underlying material device. For example, in the case of a digital longform the underlying materiality is that of a screen, likely a computer- or smartphone screen. Words like medium and channel have also been used to explain the same. Within this material substrate, there is the resource provider, for example, a social media platform, or an RSS Feed, that determines the available media resources used, for example, word amount, pictures, videos, moving images. The selections made here also contribute to the chosen type of presentation mode. Michael (2017) describes it as a feedback loop between content and medium allowing for the inclusion of the medium as an independent component of the formation.

The chosen social media platform is a characteristic that is especially important in the results of our empirical research, less in the literature. The jury members frequently referred to Facebook or Instagram-Formats. Each social platform carries unique patterns by which content is designed (e.g. Twitter's former rule of 140 characters only) and thereby this is a determining factor.

However, both literature and empirical results point to the importance of the technical base and system used for publishing. Chapman and Chapman (2009) suggest a differentiation between PBM (wherein text and images are combined and spatially arranged, resembling the layout known from books and magazines) and TBM (which includes sounds, animations, video clips, and other audiovisual sequences). Hybrid models of both are possible and often seen. This systematization is used to distinguish journalistic channels into static and dynamic ones.

#### *Dimension 6: structure and composition*

Certainly, the structure of a presentation mode has always been an important characteristic of presentation modes (Hooffacker and Meier, 2017; Kleemans et al., 2017; Lassila-Merisalo, 2014; Machill et al., 2007; Schäfer-Hock, 2018; Schmidt and Weischenberg, 1994). This, however, was often based on the textual composition of the journalistic offer, for example, when talking about the W-Pyramid.

More factors need to be taken into account to include digital characteristics. In the jurors' view, an integral part of modern presentation modes is its *associative organization*. In print media, information was organized linearly, while online information and content can be organized in an associative way. What they mean is that digital designs can be organized in a way that helps the audience understand connections between different content parts, that there can be a flow of information. This is mirrored in literature (Hiippala, 2017; van Cauwenberge et al., 2015). Godulla and Wolf (2018) analyze digital storytelling formats and find that 19% use central navigation elements linking to autonomous presentation parts. This also includes *closure*.

Looking at the *structure*, it further is important whether an offering is thematically inferred (Schumacher, 2009; Sturm, 2013). Also, the *layout* including the positioning (Bucher et al., 2010; Hiippala, 2017; Santini, 2007; Schäfer-Hock, 2018; Schumacher, 2009) and the *length* of the offering (Lassila-Merisalo, 2014; Schmidt and Weischenberg, 1994; Wolf and Godulla, 2015) are important features.

### **Dimension 7: media**

The type of media used is a characteristic often mentioned in presentation mode theory (Bucher et al., 2010; Chapman and Chapman, 2009; Deuze, 2003; Hernandez and Rue, 2016; Schumacher, 2009; Wolf and Godulla, 2015). Even historically, researchers looked at the type of media used (e.g. written text, video) when researching presentation modes. The simultaneous use of various media and communication tools (such as movement, postures) within one medium results in multimodality or multimodality<sup>1</sup> (Bateman et al., 2017; Bucher et al., 2010; Deuze, 2003; Schumacher, 2009).

### **Dimension 8: interactive-engagement elements**

The way in which the recipient's physical (e.g. through swiping, clicking, and through turning the page) as well as cognitive engagement (e.g. through commentary functions) takes place is an integral part of a presentation mode (Sturm, 2013), but is mostly viewed from the side of the recipient and user (Oh et al., 2018). However, also media can engage through the offerings within the media interface, which will be further called interaction (Yang and Shen, 2017). Hence, this dimension is called *Interactive-Engagement Elements* and not just engagement. A jury member describes it as "I have seen clearly an issue with the media with regards to its interaction with the user" (Grimme Online Award Protocols, 2016), describing that the media interacts but not the user. Summing up, the dynamic nature of journalism is at least a two-way nature that needs to be reflected in its own dimension of presentation mode theory.

*Hypertextuality* is the performative part within the website and allows users nonlinear reception and creation of their own utilization paths (Deuze, 2003; Schumacher, 2009). Hypertextuality thereby is connected to users' actions in a mediated environment and with an interface.

*Interaction* is performative at both ends of the communication spectrum. On the one hand, the recipient interacts with the presentation mode (e.g. through clicking) and on the other hand the presentation mode can include dynamic features (such as dissolving of

pictures), which perform but which do not require an active part on the side of the recipient (Hiippala, 2017).

*Communication/feedback* is the performative element on the side of the recipient. An example for the former would be commentating functions.

Portals, forums, communities, and networks in the earlier days of the online world and lately the evolution and relocation of communication-based aspects toward social media were often mentioned.

## Discussion

Table 3 summarizes the above-described aspects and provides a codeable model of presentation mode dimensions, sub-dimensions, and manifestations. Sub-dimensions can mostly be coded via dual or other numeric principles.

Some of the dimensions are similar to dimensions of analogue media, but vary vastly in their manifestation. *Interactive-Engagement Elements* has not previously occurred in any model. In combination with the empirical findings however, they can be established as dimensions of presentation modes in all journalism, which responds to research question one. In line with Mitchelstein and Boczkowski (2010) who say that in media research there has been the systematic limitation to divide between print, broadcast, and online media, we herein suggest a presentation mode classification that can be applied to all news media. We further answer to Bateman et al.'s (2017) request to find a meaningful research frame inclusive of multimodality in that "the contribution made in some modality can well depend on just which contributions it is combined with in other modes" (p. 17). It further answers to their call on combining existent research on modes rather than challenge them. Finally, while theory so far had it that the mode of distribution was not part of the presentation mode, we suggest to include it as a dimension.

Within the processes of the empirical study, it became clear that journalistic offers receive more than one presentation mode descriptor. For example, one offer was described as "commentary," as "news," and as "multimedia news" (Grimme Online Award Protocols, 2016). This observation stresses two notions in our opinion.

On the one hand, we suggest thinking in *presentation mode hybridism*. It seems that this hybridization occurs within one offering, for example, through the inclusion of gifs, which aim at entertaining, but are shown within a video that overall aims at educating or explaining. Artificially separating what is considered to belong together is an arbitrary operation and makes little sense. Especially considering that the design of the web is based on containing multiple presentation modes in what looks as one coherent area (Crowston and Williams, 2000). Critically speaking, the hybridization of presentation modes leads to dissolution of the concrete sharpness that so far constituted journalistic functions (Widholm and Appelgren, 2020).

On the other hand, one of the benefits that would follow from a dimensional conceptualization of presentation modes is that it accounts for the current just described classification intractability of presentation modes, for example, those that cannot be classified using a single-mode label. This is an argument shared in neighboring areas such as web genre classification (Santini, 2007).

## Conclusion

Of course, the reverberation for journalistic practice is manifold. In interviews media personnel say that organizations have latently been organized according to presentation modes (Schäfer-Hock, 2018). The clarity of dimensions is a subject worth exploring for media organizations in that regard and could aid in organization.

We find that in addition to established presentation mode dimensions such as content and function, several new ways of telling the news have occurred in recent years and demand the integration of new dimensions and manifestations into a comprehensive presentation mode framework. These include media sub-dimensions such as emojis and augmented visual components or interactive-engagement elements such as hypertextuality, interaction, and feedback elements.

As presentation modes have evolved from one-way to conversational forms of communication, one might question whether “telling” the news remains a fitting expression. While we would argue that the idea of “telling” the news is based upon regarding presentation modes to be the product of a conscious choice a journalist makes as a gatekeeper (Schmidt and Weischenberg, 1994; Schäfer-Hock, 2018), where a journalist chooses the mean and mode of *telling* even when conversational elements, like commentary functions, are enabled, this issue remains open for further debate.

The reverberation of this study for media theory is manifold. Regarding future research, some matters can be pointed out. The field of communication and media studies is dynamic and steadily evolving. When new technology or distribution channels arise, new ways of producing and presenting content emerge. While the model aims to bypass this problem with its open categorization, we expect the dimensions to be steady and only the manifestations to evolve. The persistence of the framework over time should be tested in the future. The resulting definition of a presentation mode reads: *That which depicts content and function, author, sources, periodicity, material substrate, structure, media, and interactive-engagement elements of a media offering.*

Besides the direct impact for theory, our findings raise questions about the audiences’ perceptions of presentation modes. Whether presentation mode dimensions are as distinctly perceived as research suggests them to be could therefore be an important next research step.

Some questions in relation to a presentation mode’s “quality” were raised in the extant literature as well as through the media personnel studied. Chapman and Chapman (2009) asked whether the medium fits the function and vice versa. And the jury members asked to which extent a recipient’s experience is similar no matter the device, which they deem good presentation, and whether device-switching costs are high. They referred to it as media discontinuity. While judging presentation modes in their quality was not focus of this research, this is worthwhile exploring and can be researched using the herein established model.

Finally, one of the limitations of this study is its empirical placement within German-speaking countries. Researchers could investigate whether the above-described dimensions can be confirmed across cultures.

In addition, while we believe that using the GOA jury protocols over a long time-span as a data basis for this research ensures validity and representativeness, we cannot

entirely rule out that this approach could lead to omitting certain types of presentation modes.

Notwithstanding this, we believe our study makes an important step into future research and theory building on presentation modes on- and offline. It lays the groundwork for systematic assessments of presentation modes and their effects on communication quality and the audience, and as often hoped for in the case of journalism, democracy.

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### Data availability statement

The data underlying this article were provided by the Grimme Institut by permission. Data will be shared on request to the corresponding author with permission of the Grimme Institut.

### Note

1. See Schumacher (2009) and Hiippala (2017) for a discussion about multimodality and multimodality.

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**Table 4.** Literature summary.

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Bucher et al. (2010)	Online	Communication Science	Defined as a mechanism that orders relations between producers and consumers; presentation modes create the environment for expected functions and are the results of functions	Function (information, education, entertainment, contact, opinion, orientation), constellation of authors, communication design, multimodality, interactivity, linearity, technical base such as software	Blog, Chat Format, Liveticker, Tweet	Multimodality, visual fragmentation/modulization, multimodality, technologization, communication design, function (information, education, entertainment, contact, opinion, orientation), constellation of authors, interactivity, linearity or non-linearity, technical base
Chapman and Chapman (2009)	Online	Communication Science	Relate to presentation modes in terms of them being influenced through modality	Classify along page-based model (PBM) and time-based model including media type	None	Multimodality, multimodality
Deuze (2003)	Online	Communication Science	Relates to PM and media formats technological components, multimodality needs to be included in media formats	Classifies along website system differentiates between four of them: Moderated and unmoderated participatory communication, concentration on editorial content or public connectivity	None	Multimediality, interaction, customization, hypertextuality, participation
Engesser (2014)	Online	Journalism Studies	Compares heuristic and empirical types of classification of news websites	Organizational, content, participation	None directly, but participatory news website	Organizational, content, participation, temporality
Furnham et al. (1990)	Offline	Psychology	Defines it as the medium or channel of communication	Channel of communication	Audiovisual or audio-only, print mode	Multimediality, media used (audio, visual, text), medium/channel (print or online)
Hernandez and Rue (2016)	Online	Journalism Practice	No definition offered	Via multimediality, interactivity, medium, platform	Continuous, comprehensive, immersive presentation mode, multimedia presentation, web scrolling, gallery, slide show, illustration	Multimediality, interactivity, medium, platform

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**Table 4.** (Continued)

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Hippala (2017)	Online	Journalism Studies		Amount of, type of semiotic modes; materiality	Digital long form, newsbite, editorial, opinion pieces, landing page, photo gallery, visual essay, feature story	Multimodality, semiotic mode, material substrate, transition pattern, interface, degree of control over information flow, layout, automatization
Hoofacker and Meier (2017)	Both	Journalism Practice	No definition but offers how-tos along dimensions	Divides between informing and opinionated/commentating modes	News, hard news, soft news, reportage, interview, feature, correspondent report, analysis, poll, review, lead	Function, storytelling, structure, inverted pyramid, usability
Kleemans et al. (2017)	Both	Journalism Studies	No definition offered but divides along narrative and inverted pyramid presentation	Structure: narrative and inverted pyramid presentation	Storytelling (narrative), inverted pyramid reports, audiovisual formats, social networking sites	Content structure (narrative, inverted pyramid)
La Roche et al. (2013)	Both	Journalism Practice	No definition but differentiates between informing and opinionated presentation modes	Function (opinion and informing)	News, report, notice, account, analysis, reportage, interview, poll, feature, correspondent feature, editorial commentary, user commentary, glossary, review	Function (informing, opinionated)
Lassila-Merisalo (2014)	Both	Communication Science	No definition but researches whether too much multimodality could lead to less immersion and/or more authenticity	Length, Narration, Multimodality, Accessibility, Interactivity, Shareability, Medium, platform	Narrative longform	Length, Narration, Multimodality, Accessibility, Interactivity, Shareability, Medium, platform
Lüger (1983)	Offline	Linguistic Studies	Defines it as the macrostructure of a text and differentiates between informing, commentating, instructive, bicentric, and contact initiative forms	Function of the text	Commentary, contact-oriented texts, critic, glossary, guide, interview, hard news, report, reportage, soft news, weather news	Function (informing, commentating, instructive, bicentric, contact initiative)

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**Table 4.** (Continued)

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Machill et al. (2017)	Offline	Communication Science	Looks at just one part of presentation modes: narrative presentation	Narrator, narrative, protagonist	Standalone narration, serial narration, explanatory narration	Storytelling, dramaturgy, function
Michael (2017)	Both	Communication Science	Defines media genre as function with an external and internal structure, their dissolution of boundaries, and their potential operationalization through function	Function (tell, reflect, argue, appeal, play), reference to reality, actant	Fake news show, soft news	Function (tell, reflect, argue, appeal, play), reference to reality, actant
Müller and Stewens (2017)	Online	Marketing	No definition offered but divides along a continuum of gamification	Gamification	Gamified format, text-, image-, videoformat	Gamification, media used (text, image, video)
Püchel (1992)	Offline	Communication Science	No definition but says that only six modes are the basis for all other modes	Function, communicative intent	Notice, report, editorial, commentary, reportage, feature	Function
Roloff (1982)	Offline	Journalism Studies	No definition but divides between opiated and informing (telling and interpretive) forms		News, report, documentation, press review, statement, magazine report, reportage, commentary, portrait, interview, discussion, letter, feuilleton, essay, picture subheading	Function (opinionated, informing, telling, interpretive)
Santini (2007)	Online	Information Science	Defines content websites as a visual organization of space with different communicative purposes and functions	None	Home Page, hotlists, interactive modes, news cybermode, search engine, game, how-to	Communicative purpose, function, visual organization, multimodality, functionality, interaction, interactivity, collaborative computing, individualization

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Table 4. (Continued)

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Schäfer-Hock (2018)	Both	Journalism Studies	Defines it as patterns that guide the design of the content that journalists deem worthy of publication and can concern content, text structure, sources, layout and position as well as periodicity and function	Content, text structure, sources; layout and position, periodicity, function (information, entertainment)	News, report, reportage, commentary, glossary, feuilleton, chronicle, timeline, anecdote, literary reportage, feature, interview, editorial, analysis, caricature, longform, blog, ticker, teaser, infographic, multimedia reportage, slideshows, immersive news, newsgames, pro and contra news, explanation box, short commentary, super leads	Content, function, periodicity, layout/position, source/author, and text structure; hypermediality, interactivity
Schmidt and Weischenberg (1994)	Offline	Communication Science	Define it as the design, layout and presentation of media offerings as the result of organizational, technical, and professional procedures	Nature of the text, function, information or entertainment, length, storytelling (e.g. inverted pyramid), information or opinion, placement, dramaturgy	Interview, report, notice, commentary, glossary, reportage, feature, short-news, single-columns, factual report, action report, citation report, editorial.	Function (information, opinion, entertainment), length, storytelling, placement
Schumacher (2009)	Both	Journalism Studies	No definition but describes modern presentation forms as always including multimodality, hypertextuality	Via hypertextuality, multimodality, interactivity and journalistic function (illustrate, explain, tell, organize, stimulate, motivate)	Multimedia presentation, interactive presentation, infographic	Multimodality, hypertextuality, interactivity

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**Table 4.** (Continued)

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Sommer and van Rimscha (2014)	Both	Media Management Studies	Relates to the technical characteristics of media offerings; not fully transferrable, because they look at genres in all media, yet, useful relationship to production processes as suggested in Schmidt and Weischenberg (1994)	Seriality (frequency of the offering) and function (information—entertainment)	None	Seriality (frequency of the offering) and function (information—entertainment) as intended by the producing unit
Sturm (2013) (based on Schumacher, 2009)	Online	Journalism Practice	Describes that no definition holds up in the online world, states that a new definition needs to include multimodality and interactivity	Divides between (1) medium- and (2) function-oriented forms	(1) Article, teaser, question-answer text, micoblog, breaking news, live ticker, short text gallery, photo gallery, slideshow, photo, audio slideshow, vuvox-collage, 360° panorama, ggapan, infinity photo, banner, timecapsule, audio-clip, audio-stream, voiced text, video-clip, video-blog, making of video, teaser-video, intro-video, video stream, 360° video, multimedia report, webspecial, infographic, animation, interactive live map, data mashup; (2) commentated list of links, interactive timeline, tag-cloud, live blog, public investigation, poll, quiz, newsgame, news simulation, curative news, dossier, multiperspective story, collaborative story	Medium, Function

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Table 4. (Continued)

Author	On- or offline	Literature stream	Definition or relation to presentation modes	Assessment via the following dimensions	Presentation modes named	Key characteristics to be considered in dimensions of presentation modes
Veglis (2012)	Online	Journalism Practice	Looks at the production of news content and its relation to the presentation mode	Medium, content (static/dynamic), publishing speed, publishing rhythm	Info-alerts, headlines, short story, full story, chat, rss, sms	Medium, content, publishing speed, publishing rhythm, push-pull orientation
Wolf and Godulla (2015)	Online	Journalism Practice + Studies	No definition of PM, characterizes along scrollyrelling abilities	Utility, multimodality, internal and external links, interactivity, participation, selectivity, usability	Multimediatory, scrollyrelling, webdoc, longform	Utility, multimodality, internal and external links, interactivity, participation, selectivity, usability, length, communicative role

PM: presentation mode.