Searching for Watchdogs: Investigating Journalistic Role Performance Using Latent-Class Analysis

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ABSTRACT

Empirical studies have repeatedly shown that journalists’ role orientations (i.e., their attitudes, values) are reflected in the news (i.e., their role performance). Methodologically, such studies either ask journalists whether they perceive their own professional role in accordance with common conceptualizations (e.g., being a watchdog), or they search for journalistic roles in the news through content analyses, or apply combined approaches. However, methodologically, this decomposition of news has been primarily confirmatory in nature with the goal to find journalistic roles in the news. We therefore develop and empirically explore an alternative bottom-up approach to news content. Applying latent class analysis to an existing dataset from 16 Western democracies that includes 23 different, role-independent content indicators for political news shows that news composition types correspond well with six journalistic roles (informational-instructive; analytical-deliberative; critical-monitorial; advocative-radical; developmental-educative; collaborative-facilitative). If combined with existing confirmatory approaches, this methodological alternative could triangulate pitfalls of this line of research.

KEYWORDS

Journalistic role performance; role performance; journalistic roles; content analysis; latent class analysis; political news; computational methods

The recently suggested process model of journalists’ roles (Hanitzsch and Vos 2017b) explains how journalistic roles can be found in the news, in theoretical terms. Actually finding them can however, be methodologically challenging. Studies have looked at how pre-defined journalistic roles are reflected in news using content analyses (Esser 2008; Mellado 2015), other studies combined content analyses with matched surveys of journalists (Mellado and Van Dalen 2014; van Dalen, de Vreese, and Albæk 2012). However, both approaches use specific news content as a proxy for presumed journalistic performance. In fact, one could exaggerate and say that researchers searched for the watchdog in the news by using the same words that have been used in surveys to classify journalists.

Methodologically, this is not an adequate operationalization of journalistic roles for content analysis (Krippendorff 2013), because it does not mirror how different text
elements correspond to different self-conceptual categories among journalists. Moreover, this has been criticized for excluding the institutional nature of journalism, (e.g., collective authorship, news editing) and for not addressing cross-country variance (Hanitzsch and Vos 2017b). Surprisingly, recent studies had trouble finding links between individual journalists’ roles and their role performance both across (Mellado, Hellmueller, Márquez-Ramírez, et al. 2017) and within countries (Raemy, Beck, and Hellmueller 2018); despite using a near-trivial operationalization of coding the presence of “watchdog” text elements as a proxy for watchdog journalists. To circumvent these caveats, a third approach solely relies on asking journalists about their (subjectively) most relevant job aspects, and how they believe to achieve them at work. By letting journalists speak for themselves, studies strive to make conclusions about journalistic news (Donsbach and Patterson 2004; Hanitzsch et al. 2011).

We suggest a methodological alternative that lets the text speak for itself. We suggest an inductive, bottom-up approach that builds on the theoretical argument that there is a core set of political journalistic roles reflected in the political news (Hanitzsch and Vos 2017a, 2017b). Without making a priori assumptions about what elements in the news constitute a specific journalistic role, we aimed at circumventing what we call the “news proxy” problem. This problem arises from the practice of pre-defining elements in the news content that would then be indicative of certain journalistic roles (Hanitzsch and Vos 2017b). We tested our approach using an existing content analysis dataset that captured political news regarding six core concepts (i.e., strategy and game framing, interpretative journalism, negativity, political balance, personalization, and hard and soft news; see Reinemann et al. 2017) in 14 European countries, Israel, and the United States (de Vreese, Esser, and Hopmann 2017a). We applied a probability-based, bottom-up statistical approach—latent class analysis (LCA)—to the 23 indicators of the previously mentioned core concepts. Across countries, we found that news composition types correspond well with the conceptualization of core journalistic roles in the political domain (see Hanitzsch and Vos 2017a). Hence, we suggest that inductive, bottom-up data-analytical techniques can help with triangulating the pitfalls usually involved in primarily confirmatory approaches that are the standard methodological approach today.

Political News and Journalistic Role Performance

Political news is shaped by the extent to which news media meet the societal expectations towards them. As pointed out elsewhere (de Vreese, Esser, and Hopmann 2017a; Hanitzsch and Vos 2017b; Humprecht 2016), these expectations might vary across political, economic, and media systems, but can be condensed into the four general dimensions: accountability, information, legitimation, and integration (Humprecht 2016, 164). However, political support, market regulations, and investments in the media systems reflect these expectations towards political news on different (i.e., macro, meso) levels. Political news is usually assessed in terms of how news media manage to inform citizens (Patterson and Seib 2005), interpret the actions of politicians (Salgado and Strömbäck 2012), scrutinize those in power (Van Aelst and Walgrave 2011), or engage the people in politics (McNair 2000). A recent, comprehensive assessment of political news across countries, media systems, and news organizations has been done as a content analysis of print/television news and the respective online news content using multiple indicators (de Vreese,
The study assessed political news by the degree to which it contained strategy and game framing (Aalberg, Strömbäck, and de Vreese 2012) of politics, negativity (Lengauer, Esser, and Berganza 2011), personalization (Van Aelst, Sheafer, and Stanyer 2012), political imbalance (Hopmann, Van Aelst, and Legnante 2012), interpretative journalism (Salgado and Strömbäck 2012), and soft news (Reinemann et al. 2012) in 16 Western democracies. For all of them, an excessive presence in the news would be considered contributing to an erosion of the democratic functioning.

Arguably, the underlying notion is that the journalists’ way of performing their work is fundamental for democratic functioning (Donsbach and Patterson 2004). The term “journalistic role performance” (JRP) contains two main elements: journalistic roles and role performance. Journalistic roles can be understood as journalists’ perceptions of their situation, their individual aims, wishes, and motives behind their contributions, as well as their behavioral alternatives, restrictions, and subjective evaluations of the consequences (Hanitzsch 2007; Mellado and Van Dalen 2014; Weaver and Wilhoit 1986). Professional typologies and dimensions of journalistic roles either emphasize normative expectations or deal with the functional contributions of journalism to the political system (Scherr and Baugut 2016). For instance, journalistic roles can be differentiated by either what degree journalists prefer to fulfill an “active” vs. “passive” role (i.e., being a participant, interpretative and adversarial, or rather stay more passive), to what degree they like to see themselves as “adversarial” vs. “deferrential”, or to what degree journalists want to take political sides by being “impartial-neutral” vs. “partisan” (Donsbach and Patterson 2004; Johnstone, Slawski, and Bowman 1976). More recent concepts condensed the body of research into the three dimensions “interventionism”, “power distance” and “market orientation” (Hanitzsch 2007).

Hence, JRP is understood as a “collective outcome of concrete newsroom decisions and the style of journalistic reporting, considering different constraints that influence and enable journalism” (Mellado, Hellmueller, and Donsbach 2017, 5). Importantly, both elements are deemed discursive and renegotiable in nature, and therefore generally malleable over time (Hanitzsch and Vos 2017a, 2017b; Mellado and Van Dalen 2017). However, they are also remarkably stable regarding some of their functions (e.g., giving people a chance to express their views, being a watchdog of the government, disseminating news quickly) ultimately contributing to the democratic legitimacy of journalism. In sum, political news and JRP share the normative expectations toward them (regarding democratic functioning), and they are conceptually equivalent in that both describe what audiences get in touch with: political news.

**Top-Down Approaches: How Journalistic Roles Translate into Political News**

How journalists define their role, what normative ideals they have, and how these beliefs and ideals translate into news content has been hotly debated (Donsbach 2010; Hanitzsch and Vos 2017b; Mellado 2015). The abundance of research on understanding journalistic roles cannot be summarized here. Instead, we refer to an excellent overview on this topic (Hanitzsch and Vos 2017b, 116–118). Most of the work follows a motivation-based “gap model”. It is argued that a mismatch between pre-defined, journalistic ideals and journalistic practices yield cognitive gaps, i.e., inner tensions within journalists. Hence, the “gap
model” predicts journalistic performance through the mismatch between how journalist would like to work, versus how they actually perceive themselves to be working as journalists (e.g., Hellmueller and Mellado 2015; Mellado and Van Dalen 2014; Tandoc, Hellmueller, and Vos 2013; van Dalen, de Vreese, and Albaek 2012; Willnat and Weaver 2014). This primarily deductive and cognitively driven conceptualization assumes that journalist wish to minimize such gaps in order to achieve inner coherence. It is argued that pre-defined sets of attitudes, normative beliefs, and values shape journalists’ behaviors, and as such should be reflected in the news (see “role enactment”; Hanitzsch and Vos 2017b). These sets reflect typical journalistic roles, such as the “service role”, the “watchdog role”, or the “information (spectator-oriented) role” (Mellado and Van Dalen 2014, 867). Methodologically, such gaps are usually identified through surveys and content analyses. A growing body of research has yielded several important insights into how journalistic roles translate into news. For instance, journalists with an interpretative and adversarial, or an entertainment-oriented role, in fact produced news that corresponded to their roles (Tandoc, Hellmueller, and Vos 2013; van Dalen, de Vreese, and Albaek 2012). These were interpreted as attempts to minimize their cognitive “gap”.

Other studies, however, could not find this relation (Raemy, Beck, and Hellmueller 2018). Newsroom policies or reporting practices are likely to alter the gap-mechanism as suggested by the hierarchical influences model (Shoemaker and Reese 1996). For instance, Hellmueller and Mellado (2015) concluded that journalists’ survey-based disclosures on their role conceptions should not necessarily be extrapolated to their role performance. Especially given restrictions to journalistic performance autonomy, and role multiplicity (e.g., being a detached observer of politics, but highly adversarial in environmental issues). Moreover, we believe in two alternative psychological explanations. First, values, attitudes, and beliefs only translate into actual behavior (i.e., JRP) to some extent (Ajzen and Fishbein 1973; Glasman and Albarracin 2006). Second, stable patterns of behavior do vary across different situations (Mischel and Shoda 1995). Particularly the latter explanation sees behavioral variability not as an “error”, but as reflecting situational expressions of personality traits. Hence, for journalism, a gap between role conception and role performance might not be indicative of a “broken link”, but describe a general model of human behavior.

As such, a different methodological approach is to investigate journalistic behavior by the means of content analysis. The current gold standard is to operationalize pre-defined journalistic roles in the news as follows: Mellado, Márquez-Ramírez, et al. (2017) captured an interventionist journalistic role (see Hanitzsch 2007) if “an opinion”, “an interpretation”, “a proposal/demands”, “adjectives”, or the “first person” were mentioned (vs. not mentioned) in news articles. A service role (see Hanitzsch 2007) would be indicated by mentioning an “impact on everyday life”, “tips and advice (grievances)”, “tips and advice (individual risks)”, or “consumer advice”. Journalistic roles are then modeled as latent factors, based on these indicators, as part of confirmatory factor analyses.

An Alternative Bottom-Up Approach: How Political News Translates into Journalistic Roles

More recently, Hanitzsch and Vos (2017b) provided a rationale for leaving these well-worn paths of top-down research when it comes to very basic journalistic roles. They argue that
news media content reflects journalistic roles through role negotiation and appropriation. Expectations towards journalism are discursively shaped through the journalists’ public work (i.e., their output), and established as e.g., objective, detached, or balanced news reporting. Through a process that Hanitzsch and Vos (2017b, 128) named role negotiation, journalists adjust their reporting to what they perceive their work environment expects from them (e.g., as newsroom policies, and/or regarding reporting styles); they adapt to the actual journalistic practices through appropriation, or quit their job. Hence, by looking at how news is composed, one should be able to identify universal journalistic roles in particular. For instance, following the argument of appropriation (Hanitzsch and Vos 2017b), journalists assimilate to “good journalism” by being part of a newsroom and being exposed to their colleagues’ work (e.g., Tandoc and Takahashi 2014). As such they adopt standards of journalistic work, and adjust their own work to it, in order to reduce a dissonance that arises when their own professional ideals cannot be met in their daily work. This provides us with a rationale to explore core journalistic roles by focusing primarily on the news content using bottom-up statistical techniques. These complement the typically confirmatory approaches that investigate whether “watchdog journalists” also report like a watchdog (e.g., Mellado, Márquez-Ramírez, et al. 2017d).

The six core journalistic roles formed through appropriation were coined as (1) informational-instructive, (2) analytical-deliberative, (3) critical-monitorial, (4) advocative-radical, (5) collaborative-facilitative, and (6) developmental-educative (Hanitzsch and Vos 2017a). To be very clear: in order to test these complex theoretical assumptions empirically, one would need complex longitudinal content analysis data, ideally combined with survey data of journalists. In the absence of such data, a proof of concept for an alternative bottom-up approach would start with the news content (not the journalists) and would be a valuable first step in this new research direction. We therefore explain our study and its contribution in more detail in the following section.

The Present Study

The present study aims at identifying political journalistic roles in political news coverage. We follow the recent conceptualization of JRP as a bottom-up process made by Hanitzsch and Vos (2017b) and argue that political news will reflect core journalistic roles. Given the universal nature of their conceptualization that operates across countries, media systems and media organizations, we thereby address recent requests for new theoretical and methodological impulses in order to better understand the universality of journalistic cultures across countries (Hallin and Mellado 2018; Mellado, Hellmueller, Márquez-Ramírez, et al. 2017b). Following Hanitzsch and Vos (2017a), we understand universal journalistic roles in the political domain (i.e., across countries and media organizations) based on their democratic functions as informational-instructive, analytical-deliberative, critical-monitorial, advocative-radical, developmental-educative, and collaborative-facilitative.

Informational-instructive journalists want citizens to have “all” the relevant information needed for political participation. Such detached, neutral reporting should manifest in thematically framed news articles, high in substance, and low on comment. However, Hanitzsch and Vos grouped together neutral “disseminators”, “curators” and “storytellers”. Especially the latter type of journalists would be more likely to use more episodic than
thematic news framing to tell their stories, which, for example, links with the political communication concept of hard and soft news (Reinemann et al. 2012).

Analytical-deliberative journalists would want the audience to engage in political conversations and empower them to participate. They are described as “analysts”, “access providers”, or “mobilizers”. Their news is likely to explain and comment on the reasons behind and consequences of politics to the audience, which is related to the concept of interpretative journalism (Salgado and Strömbäck 2012).

Critical-monitorial journalists, manifested as “monitors”, “detectives”, or “watchdogs” of politicians (Hanitzsch and Vos 2017a) support citizens being critical thinkers and holding politicians responsible for their conduct. Therefore, these journalists are likely to use critical or even conflicting language to tell the truth about those politically in charge. This is associated with the concept of political balance and personalization (Hopmann, Van Aelst, and Legnante 2012; Van Aelst, Sheafer, and Stanyer 2012).

Advocative-radical journalists are “adversaries”, “advocates”, and “missionaries” (Hanitzsch and Vos 2017a). They participate in the political discourse themselves. They are a voice for the poor, and somewhat hostile towards the government, while promoting values, and ideals. Their news is likely to be emotional and negative and not necessarily tied to the political substance, but instead to the multifaceted incapability of politicians and their performance in representing the people. This is reflected by the concepts of strategy and game framing of politics, negativity and personalization in political news to some degree (Aalberg, Strömbäck, and de Vreese 2012; Lengauer, Esser, and Berganza 2011; Van Aelst, Sheafer, and Stanyer 2012).

Developmental-educative journalists are “change agents”, “educators”, and “mediators”. They are involved, participate and intervene, not only in the public discourse, but also actively promote real-world change. This journalistic role conception is strongly defined by its goals to improve societal developments, whose achievement can be reached in a wide variety of presentational news styles, and therefore touches several political communication concepts.

Finally, collaborative-facilitative journalists are “facilitators”, “collaborators”, and “mouthpiece”. They consider themselves partners of the government, and supporting politicians in fulfilling their political goals with high political agreeableness. Indicators of this style are reporting in a positive tone, reflecting the capabilities of politicians, and speaking to the public opinion by the absence of negativity in their news (Lengauer, Esser, and Berganza 2012; Van Aelst, Sheafer, and Stanyer 2012).

We draw on a dataset that captured political news in 16 Western democracies, in public and private media organizations, including print and television news, as well as the respective online news (de Vreese, Esser, and Hopmann 2017a) to answer our main research question:

**RQ1:** Is there a correspondence between political news and journalistic roles in the political domain?

Again, the structure of our dataset only allows us to look at the outcome of the process that Hanitzsch and Vos sketched. We cannot put any of these processes to test, but believe that they mark conceptual progress in this research field, and therefore used them for our interpretation of the findings.
Method

We present a secondary analysis of a dataset provided by the NEPOCS network. The national political news in 16 Western democracies was content analyzed by its members as a collaborative effort. Serving as the background for the present analyses, we briefly describe how the data were gathered and focus on those aspects and focus on those aspects that are important for the current article. We will also describe our preparation of the dataset and explain the logic of our data-analytical approach, of which the syntax and replication information is provided as a supplement. For a more detailed description of the project and dataset, see Hopmann, Esser, and de Vreese (2017).

Country and Media Sample

A large-scale comparative content analysis of political news from 16 Western democracies (Austria, Belgium, Denmark, France, Germany, Greece, Israel, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States) was conducted by the NEPOCS network. The sample included three newspapers, two television news broadcasts, and their respective news websites. In each country, the two most popular broadsheet newspapers with different political orientations were chosen. Typically, for most European countries, specific broadsheets have represented a specific political leaning. The largest tabloid newspaper in each country was also added to the dataset. The two most widely watched television news shows were included in the sample, representing one public and one private broadcaster from each country. The respective websites of these media outlets were included as well, yielding in a total sample of 10 media outlets per country (see Table 1 for an overview).

Sampling Period

The sampling period took place during routine political times (i.e., no elections) and consisted of a constructed fortnight sampled between 15 April 2012 and 15 July 2012. An alternative sampling period from 15th of September to 15th of December 2012 was used for France, Greece, and the Netherlands, where elections were held during the main sampling period.

Units of Analysis

Only news items that verbally or visually referred to at least one domestic political actor, party, or institution were coded. For newspapers, each article represented a separate news item. For websites, a news item typically consisted of text, such as text with visualization, or text with a video behind the headline link on the landing page. For television, a news item was defined by its topic or format: a topic change or a change in format (e.g., from street interview to studio discussion) marked a new news item. If at least one domestic political actor was included, the news item was coded. If all the news on one sample day contained more than five news items with a domestic political actor (or more than three news items for websites), five (or three for websites) news items were randomly chosen from all news. The total sample included more than 7500 news items.
Table 1. News outlets by country and type of outlet included in the content analysis.

<table>
<thead>
<tr>
<th>Country</th>
<th>Newspaper</th>
<th>Upmarket</th>
<th>Television, news bulletin</th>
<th>Upmarket</th>
<th>Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td><em>Der Standard</em></td>
<td><em>Die Presse</em></td>
<td><em>Kronenzeitung</em></td>
<td>ORF1, ZIB</td>
<td><em>ATV, Aktuell</em></td>
</tr>
<tr>
<td></td>
<td><em>Die Presse</em></td>
<td><em>Die Standaard</em></td>
<td><em>Het Laatste Nieuws</em></td>
<td>VTM, <em>Het Nieuws</em></td>
<td><em>diepress.com</em></td>
</tr>
<tr>
<td></td>
<td><em>Kronenzeitung</em></td>
<td><em>Ekstra Bladet</em></td>
<td><em>TV-Avisen</em></td>
<td>TV2, <em>Nyhedene</em></td>
<td><em>politiken.dk</em></td>
</tr>
<tr>
<td>Belgium</td>
<td><em>De Morgen</em></td>
<td><em>De Standaard</em></td>
<td><em>Voetbalnieuws</em></td>
<td>Mega, News Channel 1, Evening News</td>
<td><em>teanea.gr</em></td>
</tr>
<tr>
<td></td>
<td><em>Het Laatste Nieuws</em></td>
<td><em>RTL, RTL Aktuell</em></td>
<td><em>RAI1, TG1</em></td>
<td><em>espoinews.it</em></td>
<td><em>ilgiornale.it</em></td>
</tr>
<tr>
<td>Denmark</td>
<td><em>Politik</em></td>
<td><em>Jyllands-Posten</em></td>
<td><em>Denmark</em></td>
<td><em>TV2, Nyhedene</em></td>
<td><em>telonis.org</em></td>
</tr>
<tr>
<td></td>
<td><em>Jyllands-Posten</em></td>
<td><em>Dr, TV-Avisen</em></td>
<td><em>TV2, Nyhedene</em></td>
<td><em>telenor.no</em></td>
<td><em>dagsavisen.no</em></td>
</tr>
<tr>
<td>France</td>
<td><em>Le Monde</em></td>
<td><em>Le Figaro</em></td>
<td><em>Le Parisien</em></td>
<td><em>TF1, Journal de 20h</em></td>
<td><em>lemonde.fr</em></td>
</tr>
<tr>
<td>Germany</td>
<td><em>Süddeutsche Zeitung</em></td>
<td><em>Frankfurter Allgemeine Zeitung</em></td>
<td><em>Bild</em></td>
<td><em>RTL, RTL Aktuell</em></td>
<td><em>sueddeutsche.de</em></td>
</tr>
<tr>
<td></td>
<td><em>Ta Nea</em></td>
<td><em>Espresso</em></td>
<td><em>Kathimerini</em></td>
<td><em>Ydiot Aharonot</em></td>
<td><em>tanea.gr</em></td>
</tr>
<tr>
<td>Greece</td>
<td><em>Haaretz</em></td>
<td><em>Espresso</em></td>
<td><em>Kathimerini</em></td>
<td><em>Ydiot Aharonot</em></td>
<td><em>tanea.gr</em></td>
</tr>
<tr>
<td>Spain</td>
<td><em>El País</em></td>
<td><em>El Mundo</em></td>
<td><em>20Minutos</em></td>
<td><em>TVE, Telediario de la Noche</em></td>
<td><em>elpais.com</em></td>
</tr>
<tr>
<td></td>
<td><em>Correio da Manhã</em></td>
<td><em>Tele5, Informativos</em></td>
<td><em>RTP1, Telejornal</em></td>
<td><em>elpais.com</em></td>
<td><em>elmundo.es</em></td>
</tr>
<tr>
<td>Sweden</td>
<td><em>Dagens Nyheter</em></td>
<td><em>Svenska Dagbladet</em></td>
<td><em>SVT, Rapport</em></td>
<td><em>TV2, Nyheterna</em></td>
<td><em>dn.se</em></td>
</tr>
<tr>
<td>Switzerland</td>
<td><em>Tages-Anzeiger</em></td>
<td><em>Neue Zürcher Zeitung</em></td>
<td><em>Blick</em></td>
<td><em>SRF, Tagesschau</em></td>
<td><em>nzz.ch</em></td>
</tr>
<tr>
<td>United Kingdom</td>
<td><em>Guardian</em></td>
<td><em>Daily Telegraph</em></td>
<td><em>The Sun</em></td>
<td><em>BBC, News at Ten</em></td>
<td><em>telegaurl.co.uk</em></td>
</tr>
<tr>
<td>United States</td>
<td><em>New York Times</em></td>
<td><em>Los Angeles Times</em></td>
<td><em>USA Today</em></td>
<td><em>NBC, Nightly News</em></td>
<td><em>nbcnews.com</em></td>
</tr>
</tbody>
</table>

Note: For more information on the sample of media outlets, see Hopmann, Esser, and de Vreese (2017, 11–14).
**Coding and Reliability**

The different languages in the sample were a particular challenge in assessing the coding reliability. To assess the quality of the coding, the same English-language material was coded by all countries to measure the common understanding of the coding instructions before the coding process started. All coders were native speakers with sufficient knowledge of English. They were locally recruited and trained so as to properly understand the codebook. However, in some countries the codebook was translated into the local language. After the main coding in each country, inter-coder reliability was assessed across countries using identical English-language material coded by those coders who performed the main coding using five news items. Overall, country-specific inter-coder reliability was sufficient with Fretwurst's lotus (2015) ranging from 0.72 to 0.89 and a country average of 0.81. The coefficient considers the distribution of variables assuming that variables with only few categories usually achieve a higher reliability. Thus, it controls for chance, and acknowledges a skewed distribution of e.g., a dichotomous variable.

**Measures**

*Content analysis.* We used a total of 23 dichotomous indicators in our analysis (see Table 2). The indicators were originally conceived to measure six key concepts of political communication (see Esser, Strömbäck, and de Vreese2012): strategy and game framing, interpretative journalism, negativity, political balance, personalization, and hard and soft news. At the level of the news items, 21 indicators were measured. The two indicators of personalization (appearance of political actors and personal life of politicians) were measured for up to five political actors per news item, and then aggregated to the level of news items. If the appearance or the personal life of at least one political actor was mentioned, the indicator was taken to be present in the news item.

We used these content indicators for political news to investigate in how far their co-occurrence in the news allows us to draw conclusions about journalistic role appropriation regarding six journalistic roles. To reflect our theoretical rationale we applied a bottom-up, exploratory statistical approach.

**Data Analysis**

Political news can be understood as being composed (see Reinemann et al. 2017). Hence, journalistic role appropriation includes combinations of indicators for political news that co-occur. Notably, news composition is not deterministic and not every news story is a perfect reflection of just one idealized type. To reflect this nature of news story composition, LCA (McCutcheon 1987) is most adequate. LCA estimates a multi-categorical latent variable (here: type of news composition) from manifest indicators (here: indicators of key political communication concepts, see Table 2). For each news story, a posterior class membership probability is estimated; that is the probability that a news story is composed according to each type. This probability therefore reflects the prevalence of appropriated journalistic roles.

The class-conditional indicator probabilities quantify how likely each indicator is to occur depending on the latent news composition type. The class-conditional probabilities
Table 2. Indicators of six key concepts of political communication in the political news coverage.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political substance</td>
<td>Substance of a planned or realized political decision, measure, or program related to a political issue mentioned in a news item</td>
</tr>
<tr>
<td>Episodic vs. thematic framing</td>
<td>Political issue presented in an episodic (i.e., by offering a somewhat vivid, specific example, case study or event-oriented report) or thematic style (i.e., by putting issues into a broader context, using statistics, background information, or social development) (two dummies vs. neither episodic nor thematic)</td>
</tr>
<tr>
<td>Emotional news reporting</td>
<td>Predominantly emotional, or mixed/predominantly unemotional reporting using affective words, fast cuts, or explicitly addressing human emotion displays (two dummies, representing some or fully emotional style)</td>
</tr>
<tr>
<td>Strategic-game framing</td>
<td>Politics predominantly framed as a game, or strategy-oriented personality contest or rather focus on issues and issue positions</td>
</tr>
<tr>
<td>References to public opinion</td>
<td>News story references to public opinion, polls, or the standing of a politician or party</td>
</tr>
<tr>
<td>Winning vs. loosing</td>
<td>At least one reference to parties or politicians is made using game-related “winning”, “succeeding”, “achieving” etc. or “loosing”, “failing”, “giving up” etc. descriptions</td>
</tr>
<tr>
<td>Sports language</td>
<td>At least once a language of sports and war, such as “battle”, “race”, “fight” is used to describe politics</td>
</tr>
<tr>
<td>Focus on political tactics</td>
<td>At least one reference to politicians’ or parties’ tactics for political negotiations, debates, or forming partnerships</td>
</tr>
<tr>
<td>Performance of political actors</td>
<td>At least one reference to the performance of a politician, a party, a candidate, or so, even if it is only e.g., a small reference that some political actor is fulfilling their democratic role</td>
</tr>
<tr>
<td>Reference to the media</td>
<td>A reference to the media is made e.g., the media’s role in politics or campaigning, or a reference to the relationship between political actors and all kinds of media</td>
</tr>
<tr>
<td>Conflict vs. consensus</td>
<td>The whole news item conveys a predominantly conflicting- or consensus-centered depiction of politics, political records, conditions, or viewpoints. Both conflict and consensus had to be at least two-sided depictions (two dummies)</td>
</tr>
<tr>
<td>Incapability vs. capability of political actors</td>
<td>Political actors (i.e., politicians, parties, governments, etc.) depicted as being incapable or capable of handling politics. As indicators within the news items references such as “lack of skill”, “ineffectiveness”, or “expertise”, and “knowhow” were used (two dummies, representing incapability or capability; 0 = not applicable)</td>
</tr>
<tr>
<td>Negative vs. positive tonality</td>
<td>Overall tone of a news story predominantly negative or positive; negative tone is indicated by political failure, fiasco, or crisis, while a positive tone is indicated by references to political success, problem solutions, or accomplishments (two dummies, representing negative or positive tonality; 0 = neutral or mixed tonality)</td>
</tr>
<tr>
<td>Reasons behind political decisions mentioned</td>
<td>Story includes explanations or interpretations of the reasons behind political events or actions without verifiable facts or statements by news sources</td>
</tr>
<tr>
<td>Political consequences mentioned</td>
<td>Story includes speculations about future consequences of events</td>
</tr>
<tr>
<td>Commentary</td>
<td>Commentary included when covering events and actions</td>
</tr>
<tr>
<td>Appearance of political actors mentioned</td>
<td>Characteristics of a political actor’s appearance are mentioned; these might include references to the physical appearance, gaze, dress of a politician, or to their impression on public performances</td>
</tr>
<tr>
<td>Personal life of political actors mentioned</td>
<td>The personal life of politicians, i.e., their family, upbringing, leisure time activities, or love life is mentioned</td>
</tr>
</tbody>
</table>

Note. All items were coded 0 (not present) and 1 (present) unless noted otherwise in the description.

can therefore be used to describe which content indicators are typical for the different types of news composition. Importantly, LCA is an explorative probability-based statistical procedure. Hence, we do not formulate specific hypotheses about which indicators of political news will co-occur in the broadcast.²

One crucial step in LCA is the decision regarding the number of latent classes (here, the number of news composition types). It depends on the intended level of detail, a few latent classes might be sufficient for a broader typology. However, a detailed picture of news composition types requires a larger number of latent classes. We present an LCA solution with seven latent classes for empirical and substantial reasons. First, a range of plausible class numbers (2–14 classes) was assessed using BIC and adjusted BIC (aBIC).
information criteria in an eightfold random split of the complete data set ($n \approx 973$ per subset). A simulation study has shown that both information criteria perform well within samples of that size (Nylund, Asparouhov, and Muthén 2007). The BIC, which penalizes model complexity more strongly, indicated 5–7 classes as the best solutions. The $\text{aBIC}$ suggested 9 or 10 classes (see Figure A2 in the supplementary materials). Second, the authors discussed solutions from 5 to 10 classes, and agreed on the 7 classes solution as the best compromise between model parsimony and model complexity. The replication code for the LCA performed in this study is available as an appendix.

**Results**

Figure 1 summarizes the main results of the LCA. Each row corresponds to one news composition type in order of their prevalence in the news. Bar height represents the probability of the indicators to occur in that type of news story. Bar color highlights to what degree the indicators are likely to be present (brighter colors) or absent (darker colors) in one (relative to the other) composition types. Black dots represent the average probabilities of the indicators across all seven news composition types. A full numerical summary is provided in Table A1.

Following the theorizing by Hanitzsch and Vos (2017b), an informational-instructive journalistic role can be appropriated from two news composition types: *Procedural stories* (Figure 1, panel A) showed an above-average use of episodic framing on how political decisions are made. This in a vivid, person-oriented way that focuses more on politicians and their actions—with a notably high presence of political consensus between political actors (e.g., when an agreement is reached); other indicators were mainly absent. *Policy news* (Figure 1, panel B) was characterized by its focus on policy substance and the use of thematic framing. Personalization (as indicated by mentions of the appearance or the personal life of politicians) was mostly absent from these news stories, as were detailed examinations of consequences and evaluations. This news type was negative in tone and contentious in nature, regarding politicians. These indicators alone were, however, not characteristic of this particular composition type. Their high occurrence probabilities within this class likely reflect a more general tendency toward negativity (see Lengauer, Esser, and Berganza 2012). Together, procedural stories and policy news made up around 40 percent of all news.

A journalistic impetus to engage audiences in a public conversation about politics by providing arguments and evaluations for discourse and political participation can be appropriated from *evaluative commentary* news stories (Figure 1, panel F). In these stories (1) interpretations of the reasons behind political decisions and events, (2) speculations about and predictions of their possible consequences, and (3) overt evaluative commentary co-occurred. Their reporting style was relatively emotional, moderately negative in tone, and less focused on strategic-game frames.

Journalism’s function as a “Fourth Estate” and fulfilling a critical-monitorial function includes holding political actors accountable by scrutinizing current events and developments with a critical eye. This function can be appropriated from a news composition type we call *critical documentation* (Figure 1, panel D). This type of news composition included conflict, incapability, and negativity, which were strongly emphasized within episodically framed news items. Positive evaluations of any kind were almost completely absent in this
type of news. Critical documentations were mostly restricted to disapprovingly pointing out negative developments without engaging in overt commentary, comprehensive reasoning, or emotional appeals.

Appropriation of a journalistic role that embraces critical comment on and active participation in the game of politics could be achieved from **adversarial process commentary** pieces (Figure 1, panel G). These portrayed politics as a strategic game, both with the macro strategic-game frame and the frequent use of specific framing devices. Political actors and their “game” are predominantly presented negatively, in permanent conflict,
and mainly as incapable. Emotional style and personalized references to political actors’ appearances were relatively common.

Finally, a collaborative-facilitative journalistic role can be appropriated from politics success stories (Figure 1, panel E). In this news composition type, political actors are depicted in a comparatively positive and capable light in the strategic game of politics. Substantive political issues were less likely to take up as much space in this composition. Appearance and personal life of politicians were also present with above-average probabilities.

Similar to policy news stories, policy success stories (Figure 1, panel C) also seem suitable for appropriation of a collaborative-facilitative journalistic role. This news type showed a clear focus on political substance and thematic presentation, not political games and event-driven coverage. However, policy success stories were more likely to focus on consensus (not conflict), capability of political actors (not incapability), and positive messages (not negativity).

**Discussion**

This study explored JRP in 16 Western democracies using existing data from a comparative content analysis of key concepts in political communication. A recent conceptual update about the emergence and malleability of JRP (Hanitzsch and Vos 2017a) provided us with a rationale to explore the link between news content and journalistic roles by modeling the composition of news probabilistically. Importantly, it is suggested that particular journalists (depending on their role conceptions) might be more inclined to write stories of a particular type. In fact, journalism is a profession with many constraints that sometimes prohibits news from being written in a certain way. Thus, even journalists with a particular role conception will—through the process of appropriation—write a story in a certain way based on acceptable standards.

Methodologically, we used the news granulate, i.e., the basal indicators for political news (de Vreese, Esser, and Hopmann 2017a), and applied a LCA in order to identify how political news is composed in 16 Western democracies. Our study supports previous findings that were based on top-down theorizing (Mellado 2015; Mellado, Márquez-Ramírez, et al. 2017d), in that journalists combine different news elements that reflect their professional roles. However, in this study, a complementing theoretical perspective and a methodological bottom-up approach were used.

We found that procedural stories and policy news are a typical way of reporting on the day-to-day political business. Through appropriation, such news enhances an informational-instructive journalistic role that keeps audiences up-to-date about policy developments and the actions of politicians. These news composition types are especially informative for disseminators and storytellers of recent political events, who prefer more episodic or thematic ways of news reporting (Hanitzsch and Vos 2017a).

**Evaluative commentaries** are another news composition type that can be regarded to support the appropriation of an analytical-deliberative journalistic role. This role makes use of subjectivity and opinion, analyses causes and consequences for political developments to mobilize people, and supports political deliberation and engagement (Hanitzsch and Vos 2017a). **Adversarial process commentaries** might be especially informative for appropriating an advocative-radical role and being hostile toward the government and
a voice for the people. For developmental-educative journalists, this news composition type might be relevant, because it potentially shows how to raise public awareness about problems in political functioning without referring to the policy agenda. With politics success stories journalists can see how being collaborative-facilitative for politics and politicians works. By describing the functioning of the political system and offering first-hand insights in a more positive than negative tone, journalists can see what a role as partners of the government by defending and supporting its political plans looks like. Finally, policy success stories seem suitable to project the image of a working political system, which seems especially relevant for learning about a collaborative-facilitative journalistic role. In our Western context, this refers more to a general affirmative notion towards the political systems and its decisions. Some of the six elementary journalistic roles (Hanitzsch and Vos 2017a) might be appropriated through more than one form of news composition (see Table 3).

**Implications of Probabilistic Modeling of Journalistic Roles**

Existing top-down research strategies to explore journalistic role conceptions and role performances can be seen as “executive orders” in which it is first defined what aspects of a journalistic role matter, and second, how they should be identified in the news. Therefore, there is a necessary compromise between the different perspectives on how journalistic roles translate into news. This means that some aspects are more prominently included in the definitions and operationalizations than others are. Moreover, top-down approaches naturally ignore some idiosyncrasies about how journalistic roles translate into news. This touches on the discussion about whether structural influences (e.g., newsroom policies) shape the news more than individual factors (e.g., role conceptions). A top-down argumentation following the prominent “gap model” requires researchers to weigh individual-level factors higher than structural factors to a certain extent. Even though this might not completely reflect journalistic job realities. In other words, the “gap model” might be a helpful conceptualization in theory, but fail in the practicality of the newsrooms’ working conditions.

A bottom-up approach, on the other hand, looks at the news and asks whether, despite all newsroom idiosyncrasies, the news reflects aspects of journalistic roles after all. Importantly, in the suggested bottom-up approach, one particular indicator does not necessarily have to be used to describe one particular role conception, but can be indicative of several roles at the same time—with a different probability whatsoever. Some news content elements might in fact primarily reflect the “style guide” of a newsroom policy. For instance, our approach would allow researchers to formulate sets of hypotheses about

<table>
<thead>
<tr>
<th>Table 3. Overview of news composition types and corresponding journalistic functions.</th>
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<tbody>
<tr>
<td><strong>Journalistic functions</strong></td>
</tr>
<tr>
<td>Informational-instructive</td>
</tr>
<tr>
<td>Informational-instructive</td>
</tr>
<tr>
<td>Analytical-deliberative</td>
</tr>
<tr>
<td>Critical-monitorial</td>
</tr>
<tr>
<td>Advocative-radical, developmental-educative</td>
</tr>
<tr>
<td>Collaborative-facilitative</td>
</tr>
<tr>
<td>Collaborative-facilitative</td>
</tr>
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</table>
“role adjustments” under varying structural conditions by using the same (larger) set of indicators for news performance, and making assumptions about their likelihood under different working conditions within and across newsrooms. These aspects have not yet been systematically investigated and could ultimately contribute to a significantly more fine-grained understanding of JRP.

**Limitations**

Undoubtedly, this study has several important limitations. Most importantly—besides the limitations inherent to the original study that our secondary data analysis relied on (de Vreese et al. 2017b, 179–180)—future studies could include contextual data about newsrooms and the journalistic situation that might have an impact on JRP as recently pointed out (Raemy, Beck, and Hellmueller 2018). Nevertheless, we were able to show that journalistic functions correspond plausibly with political news media—but only with political news. As pointed out clearly by Hanitzsch and Vos (2017a), future studies could therefore develop and explore sets of indicators that can be tested in other news sections such as entertainment news or sports news. Journalists who work in these fields are usually less in the research spotlight regarding their deliberative function for democracies. In order to gain a more nuanced understanding of JRP, and how the news is appropriated by journalists, other content analytical indicators could, for example, be derived from qualitative interviews with journalists. Ultimately, it would be interesting to see how far our findings could be replicated in societies that differ from Western democracies.

**Conclusion**

Journalistic role conceptions relevant to democratic functioning were largely reflected in the political news of 16 Western democracies. Using LCA, our study shows that single indicators for political news composition types co-occur along the lines of six journalistic functions for democracies as suggested by Hanitzsch and Vos (2017a). As the first of its kind, our study applies a probability-based approach to capture journalistic roles in the news content by relying on theoretically and empirically well-established characteristics of political news. Our study thereby also extends recent developments in political communication research (see, e.g., Reinemann et al. 2017) by looking beyond established concepts of political communication in isolation, and by focusing on the conceptual cross-loadings and ramifications instead. We offer theoretical arguments for how analyzing content analysis data with exploratory probability-based techniques (e.g., LCA) may help to refine our understanding of how individual and structural influences shape the news. This while providing a proof of concept complementing our understanding of JRP.

**Notes**

1. We can only echo the claims for preventing this research field from a terminological Babylonian confusion as recently put forward by Hanitzsch and Vos (2017b, 117), but will not be able to solve this issue here. Instead, we provide a rationale for our research terminology that is based on terms mainly used in the most recent work of this field (e.g., Mellado, Hellmueller, and Donsbach 2017b)
2. It has been shown that these indicators’ co-occurrence captures political news based on hierarchical clustering (see Reinemann et al., 2017). Importantly, this procedure maximizes the distances between clusters, independent of the actual prevalence of news indicators and is therefore more indicative of which political news indicators usually do not co-occur.

Disclosure Statement
No potential conflict of interest was reported by the authors.

References


