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**DOI**

[10.1080/08838151.2022.2164282](https://doi.org/10.1080/08838151.2022.2164282)

**Publication date**

2023

**Document Version**

Final published version

**Published in**

Journal of Broadcasting and Electronic Media

**License**

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**Citation for published version (APA):**

Brugman, B. C., Burgers, C., Beukeboom, C. J., & Konijn, E. A. (2023). Frame repertoires at the genre level: An automated content analysis of character, emotional, and moral framing in satirical and regular news. *Journal of Broadcasting and Electronic Media*, 67(1), 90-111. <https://doi.org/10.1080/08838151.2022.2164282>

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# Frame Repertoires at the Genre Level: An Automated Content Analysis of Character, Emotional, and Moral Framing in Satirical and Regular News


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## ABSTRACT

Previous research suggests that, compared to regular news, satirical news has its own *frame repertoire*, which differs by outlet characteristics (e.g. medium type, political leaning). We analyzed two large corpora of satirical and regular news: television show episodes (8,925,180 words) and online written articles (64,301,669 words) of liberal and conservative outlets for character, emotional, and moral framing. Contrary to expectations, findings revealed consistent framing differences between the satirical and regular news genres, which were not moderated by medium type or political leaning. Thereby, this study shows how genre-level frame repertoires can offer deeper insights into cross-genre differences in news coverage.

A widely recognized way of improving scholarly understanding of news coverage is through framing analysis (e.g., D'Angelo, 2018). According to framing theory (e.g., de Vreese, 2005; Entman, 1993; Scheufele, 1999), frames in news coverage can be defined as central organizing ideas about current affairs. News frames are the result of the selection and emphasis of certain aspects of news items over others by those who cover the news (e.g., journalists, Entman, 1993), the process of which can be called frame building (Scheufele, 1999).

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 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/08838151.2022.2164282>.

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Frame building in news coverage is influenced by multiple factors, including characteristics of the media system (e.g., organizational routines and pressures) but also characteristics of journalists (e.g., perceptions of professional aims and norms; Scheufele, 1999). How these factors influence news frames has received much attention in previous research, especially at the level of individual outlets (e.g., Klawier et al., 2022). News outlets are often distinctly associated with the use of certain frames for certain issues, which can be summarized to say that they have their own *frame repertoire* (e.g., Klawier et al., 2022).

In this paper, we propose that, to further improve scholarly understanding of news coverage, frame repertoires should be studied more at a higher level of analysis than the level of individual outlets. That is, we argue that frame repertoires can also be studied well at the level of genre,<sup>1</sup> where differences in frame repertoires between groups of outlets provide valuable information for systematic cross-genre investigations of news coverage. The current paper focuses on the comparison of framing in the genres of satirical and regular news.

Satirical news (e.g., *The Daily Show*, *The Onion*) presents entertaining commentary on current affairs (Baym, 2005). Satirical news' core characteristic is that it blends information, entertainment, and opinion elements through humor (Baym, 2005). The result of this specific combination of communicative functions is a humorous news genre that is distinct from regular, non-humorous news in discourse features (e.g., Brugman et al., 2021, 2022). Greatly unexplored is whether and how both genres also differ in issue content such as in the form of frames (but see Fox et al., 2007; Ödmark, 2021, for exceptions), even though such investigations help to situate satirical news within the wider news media landscape (Fox et al., 2007).

For this reason, this paper's novel contribution is that it answers a call to more closely examine differences between satirical and regular news in news reporting (Ödmark, 2021) by investigating to which extent the genres have their own frame repertoires. Results will additionally be compared between outlets that differ in medium type (i.e., television shows, online blogs) and political leaning (i.e., liberal, conservative) to assess the generalizability of findings. Our findings will reveal to what extent the concept of genre-level frame repertoires is a valuable analytical tool for identifying and describing differences in news coverage between genres in general, and between satirical and regular news in particular.

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<sup>1</sup>Genres can be defined as communicative events that share certain communicative functions and, consequently, certain discourse features (e.g., Swales, 1990).

## Frames in Satirical and Regular News

There are several reasons to expect differences between satirical and regular news in framing. At the level of the media system, satirical news often represents a direct response to regular news, both in reporting style and content (e.g., Baym, 2005). Through imitating regular news, satirists have developed their own specific way of humorously criticizing both current affairs and news reporting practices by regular news media (e.g., Baym, 2005). In terms of framing, this seems to be most evident in how satirical news engages with frames employed in regular news (e.g., Feldman, 2013; Young, 2013). In satirical news, these frames are often challenged and altered in support of a satirical critique (Young, 2013). In doing so, satirists construct new and different representations of the news and journalism.

At the level of journalistic role orientations, there are also differences between satirists and journalists in professional aims and norms. Whereas journalists prioritize objective and balanced reporting, satirists prioritize being funny (e.g., Baym, 2005; Lichtenstein et al., 2021). Satirists generally primarily want to provide audiences with fun and, if applicable, enlightening perspectives on current affairs. Even though satirists and journalists do share a genuine concern for reporting factually accurate information, satirists often deviate from journalistic standards because they first and foremost identify as entertainers (e.g., Lichtenstein et al., 2021).

These differences in role orientations could be reflected in how often certain frames are used in satirical and regular news. In previous research, it has been argued that satirical news contains frames that “[a] reflect, [b] refract, and [c] create political realities” (Peifer, 2013, p. 157). Frames of types [b] and [c], especially, suggest that satirical news provides unique interpretations of current affairs and their discussion by mainstream regular news media. Following previous satirical framing research (e.g., Feldman, 2013; Peifer, 2013; Young, 2013; Ödmark, 2021), this paper examines three of such types of interpretations or frames.

First, satirical news seems to be more person-oriented than regular news (Ödmark, 2021). With a particular focus on politicians and other powerful societal actors (i.e., the political elite), satirical news often exploits stereotypical traits of targets for humorous purposes such as how clever they may (not) look, or how (un)trustworthy they may be (e.g., Matthes & Rauchfleisch, 2013; Niven et al., 2003). This suggests that satirical news contains more frames that highlight personal aspects of societal actors (i.e., character frames) than regular news.

Satirical news also seems to differ from regular news is that it contains more emotional interpretations of current affairs (Ödmark, 2021). A reason for this could be that, through presenting entertaining commentary, satirical news typically aims to evoke an emotional reaction from audience members

(Skurka et al., 2019). Depending on the target or topic, this may be positive emotion (e.g., laughter) and/or negative emotion (e.g., indignation; Skurka et al., 2019). Such findings point to satirical news containing more frames that highlight emotional aspects of news issues and events (i.e., emotional frames) than regular news.

Finally, news coverage in satirical news seems to be more normatively driven than in regular news (e.g., Ödmark, 2021). The former has been found to be more thematic (vs. episodic) and on a societal level (vs. individual level) than the latter (Ödmark, 2021). Satirical news often aims to contribute to public debate (Lichtenstein et al., 2021). Through humorous criticism of current affairs, satirists share with their audiences their normative views on society and politics (Lichtenstein et al., 2021). Accordingly, it is possible that satirical news contains more frames that highlight moral concerns (i.e., moral frames) than regular news.

### **Character, Emotional, and Moral Subframes**

In the framing literature, these types of frames are classified as generic frames, meaning that they can be used to describe news in general and can therefore be identified regardless of a specific issue (e.g., Borah, 2011). An advantage of studying generic frames is that their use can be compared across a wide variety of news issues and events as well as news outlets (e.g., Borah, 2011). This study will thus contribute to deeper insights into framing differences between satirical and regular news that generalize beyond specific issues and outlets.

A potential disadvantage of studying generic frames is that they may not capture the complexities of journalistic reality (e.g., de Vreese, 2005). In this study, we mitigate this by focusing on subframes of character, emotional, and moral framing to provide as much of a comprehensive picture of the genres' generic frame repertoires as possible.

Character subframes are based on traits associated with a group or an individual (politicians; e.g., D'Angelo et al., 2005; Shen, 2004). Which traits are emphasized can be predicted through the stereotype content model (Fiske et al., 2002). This model proposes that people mostly judge other people based on warmth (e.g., friendly, sincere) and competence (e.g., capable, confident). In subsequent research, the dimension of warmth has been divided into sociability and trustworthiness, and competence into ability and assertiveness (Abele et al., 2016). Status (e.g., wealthy, powerful) has been proposed as a fifth dimension (Koch et al., 2016). Satirical and regular news can be said to contain these character subframes when one or more of these dimensions are highlighted.

Emotional frames can be divided into subframes based on specific emotions that are expressed (Kühne & Schemer, 2015; Lee & Chen, 2021).

Following the emotion-as-frames hypothesis (Nabi, 2003), expressed emotions can serve as frames because they are an important source of information about beliefs, issues, events, and other people. For instance, when exposed to a message containing anger, individuals more likely think about threats than when the message contains a different type of negative emotion such as sadness or anxiety (e.g., Lee & Chen, 2021). In this way, different emotional subframes in satirical and regular news can be used to suggest different interpretations of current affairs (Nabi, 2003).

Finally, regarding moral frames, we can differentiate subframes based on moral foundations theory (e.g., Wolsko et al., 2016; Xu et al., 2020). This theory provides a classification of five concerns that underlie people's intuitions about what is right and wrong: (Graham et al., 2009): (1) care: protecting others from harm, (2) fairness: preventing the unfair and unequal treatment of others, (3) loyalty: meeting the obligations of group membership, (4) authority: respecting benevolent hierarchies, and (5) sanctity/purity: avoiding moral, spiritual, and physical contamination. When these so-called moral foundations are highlighted, they can be used as subframes in satirical and regular news (Wolsko et al., 2016).

## Outlet-Specific Framing Differences

How useful examining genre-level frame repertoires is to study how satirical news differs from regular news in news coverage depends on the repertoire's consistency. In line with the concept of frame building (Scheufele, 1999), we therefore also consider how differences between outlets in terms of newsroom dynamics may influence frame use. We do this by comparing results between satirical news outlets that differ in medium type (Berkowitz & Schwartz, 2016; Michaud Wild, 2019) and political leaning (Dagnes, 2012; Young, 2019).

Satirical news can be produced for different types of media, including television shows and online blogs. These medium types allow satirists to create different kinds of content. Television logic requires a high pace to maintain the audience's attention, which is why satirical news shows tend to be associated with a high density of topics and jokes (Lichtenstein et al., 2021). Due to this high pace, satirical show hosts are able to alternate between humorous and serious bits, such as when exposing issues that are underreported by the traditional press (e.g., Jennings et al., 2019). Online logic, however, is aimed at fostering audience interactions (Berkowitz & Schwartz, 2016). Satirical news writers therefore typically focus on one topic each article, seldomly interrupting the humor to make a serious point (Berkowitz & Schwartz, 2016). This difference in satire production routines could be reflected in frame use.

Moreover, satirical news often is produced for audiences with particular political views (e.g., liberal vs. conservative; Young, 2019). To achieve high ratings or a high enough number of clicks, satirists tend to face organizational pressure to satisfy the needs and meet the expectations of their audiences (Lichtenstein et al., 2021). According to previous research, audiences who identify as liberal may enjoy and appreciate certain satirical content differently than those that identify as conservative, and vice versa (e.g., Dagnes, 2012; Young, 2019). For instance, from psychological standpoint, liberals find ambiguous humor more gratifying than conservatives (e.g., Young, 2019) and, from an ideological standpoint, liberals find it more acceptable than conservatives to mock those in power (e.g., Dagnes, 2012). To please their audiences, liberal and conservative satirists may thus create different content, both in terms of (aspects of) news selection and aesthetics (Young, 2019), which is likely reflected in frame use.

In short, to examine the analytical value of the concept of genre-level frame repertoires for providing more insight into how satirical news relates to regular news in news reporting, this study compared framing in various outlets for satirical and regular news: both television shows and online blogs that aim at liberal or conservative audiences. We asked:

*RQ: How does satirical news differ from regular news in the use of several (1) character frames, (2) emotional frames, and (3) moral frames, and to what extent is this consistent across (a) television shows and online blogs and (b) liberal and conservative outlets?*

## Method

### *Selection Criteria for the Outlets*

To compare frames in satirical and regular news, we conducted an automated content analysis of television show transcripts and written online articles. Styles of news coverage have been shown to differ between countries (Van Dalen et al., 2012) and across time (Esser & Umbricht, 2014). For this reason, we analyzed data from only one country in only one calendar year. The United States was chosen because this country has received extensive scholarly attention for its large satirical news tradition (Becker & Waisanen, 2013). Two corpora of American data from 2018 were compiled: one on television shows and one on written online articles.<sup>2</sup> See Appendix A for more corpus details.

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<sup>2</sup>Parts of the data used in this paper have been used in previous research, but for a very different type of analysis (Brugman et al., 2021, 2022).

### **Collection of Television Show Transcripts**

Many satirical news shows are broadcast weekly whereas most regular news shows are broadcast daily on weekdays. We therefore included as many satirical news shows as possible and only included a limited number of regular news shows to ensure comparable corpus sizes. We found seventeen satirical news shows that were broadcast at the time of data collection. Of these, sixteen shows addressed a liberal audience (e.g., *The Daily Show with Trevor Noah*; *Last Week Tonight with John Oliver*) Only one show addressed a conservative audience: *The Greg Gutfeld Show* on Fox News. The regular news shows that were selected were (a) the evening-news programs of the three largest US television networks ABC, CBS, and NBC, (b) four prime-time shows of liberal network MSNBC (e.g., *The Rachel Maddow Show*) and (c) four prime-time shows of conservative network Fox News (e.g., *Tucker Carlson Tonight*). The selected regular news outlets span the political spectrum to match satirical news in political leanings. Moreover, given differences in journalistic approach between liberal and conservative regular news media (e.g., Young, 2019), this broad selection of outlets enhanced the generalizability of findings across journalistic outlets. In terms of topics, most show episode segments focused on political issues and events.

Show transcripts of the ABC, CBS, and NBC news shows were collected by means of *NexisUni* (available at: <https://www.lexisnexis.com>). Other show transcripts were collected from YouTube in the form of automatic captions using the command-line program *youtube-dl* (available at: <http://yt-dl-org.github.io/youtube-dl/>). Both previous research (Ziman et al., 2018) and a visual inspection performed by the first author of this paper demonstrated that the captions were sufficiently accurate. Unfortunately, no captions were available for the satirical news shows *Conan with Conan O'Brien* and *The Greg Gutfeld Show*. This meant that with regard to television shows we could analyze fifteen liberal satirical news outlets but no conservative equivalents. This was different in case of online written satirical news (see next). To generalize to the level of entire shows, we merged transcripts of individual show segments. The final corpus of show transcripts consisted of 2,319 transcripts comprising a total of 8,925,180 words.

### **Collection of Written Online Articles**

Given differences in the amount of available content between the genres, we again selected as many satirical news websites as possible. We used the satirical news websites' "About" pages to determine political leaning. Eleven liberal satirical outlets (e.g., *The Onion*, *The Borowitz Report*, *Humor Times*) and five conservative satirical outlets (e.g., *The Babylon Bee*, *Clickhole's Resistance Hole*, *Scrapple Face*) were identified.



With regard to the regular news websites, we again selected a limited number of outlets that span the political spectrum. We relied on three independent sources for media bias classifications: (1) a Harvard paper by Faris et al. (2017) that presents both a content analysis and network analysis of social media news sharing, (2) fact checking website *Media Bias Fact Check* (<http://www.mediabiasfactcheck.com>), and (3) bias rating website *All Sides* ([www.allsides.com](http://www.allsides.com)). We selected eight liberal outlets (e.g., *Huffington Post*, *Washington Post*)<sup>3</sup> and eight conservative outlets (e.g., *Breitbart*, *Washington Examiner*). Finally, the three largest news agencies (i.e., *Associated Press*, *Reuters*, and *United Press International*) were selected to represent nonpartisan regular news outlets. To ensure topic comparability between outlets, we only included articles under website headers related to politics.

Articles of these outlets were collected through web scraping using the *rvest* package (version 0.3.5; Wickham, 2019) for R (version: 3.5.2). The online article corpus consisted of 95,636 articles comprising a total of 64,301,669 words.

### **Content Analysis**

In line with previous research that aimed to analyze frames in large corpora of news texts (e.g., Lawlor & Tolley, 2017), we conducted our content analysis of frames by means of dictionary analysis. This computer-automated approach to framing analysis encompasses matching lists of words (i.e., “dictionaries”) that potentially indicate the presence of a particular frame to the collected texts. The more frame-related word matches occurred in a transcript/article, the more that particular text was considered to contain the corresponding frame.

Counts for each dictionary category were standardized by dividing the number of word matches by the total number of words in the text, and by subsequently multiplying these numbers by 1,000. Frequency counts in our analysis therefore represented the number of dictionary matches for every 1,000 words. Means and standard deviations of these frequency counts can be found in Appendix B, per genre as well as per individual outlet.

### **Presence of Character Frames**

The presence of character frames was determined by means of the Stereotype Content Dictionary (SCD; Nicolas et al., 2021) which captures explicit attention in texts to the fundamental dimensions of stereotypes: sociability, trustworthiness, ability, assertiveness, and status. The dictionary contains

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<sup>3</sup>In case the bias classification of a specific outlet differed between sources (e.g., as was the case for *CNN*), the outlet was not included in our study.

**Table 1.** Examples of Words Belonging to Each Dictionary Category.

Category	Example words
Character frames (Stereotype Content Dictionary)	
Sociability	friendly, liked, cold
Trustworthiness	sincere, fair, intolerant
Ability	competent, intelligent, unable
Assertiveness	confident, independent, doubtful
Status	wealthy, powerful, unsuccessful
Emotional frames (Linguistic Inquiry and Word Count)	
Positive emotion	happy, pride, love
Negative emotion	hurt, ugly, worthless
Anger	hate, annoyed, pissed
Anxiety	nervous, worried, fearful
Sadness	sad, crying, grief
Moral frames (Moral Foundations Dictionary)	
Care	nurture, empathy, hurt
Fairness	honesty, justice, inequality
Loyalty	solidarity, patriots, betrayal
Authority	respect, hierarchy, illegality
Sanctity	purity, worship, disgust

both relevant positive and negative words to measure attention to each stereotype dimension (see [Table 1](#) for example words).

### ***Presence of Emotional Frames***

The presence of emotional frames was measured using the 2015 edition of the Linguistic Inquiry and Word Count (LIWC) dictionary (Pennebaker et al., 2015). Among other things, the LIWC dictionary distinguishes between positive emotion words and negative emotions words to measure explicit attention in texts to emotional interpretations. For positive emotion words, only the umbrella category is available. For negative emotion words, the LIWC dictionary contains, in addition to the umbrella category of negative emotions, three sub-categories of negative emotion words: (1) anger, (2) anxiety, and (3) sadness (see [Table 1](#) for example words).

### ***Presence of Moral Frames***

The presence of moral frames was examined using the revised version of the Moral Foundations Dictionary (MFD 2.0; Frimer et al., 2019) which is recommended over the original version (1.0; Haidt & Graham, 2007) because it contains more words that capture each category (Frimer et al., 2019). The MFD is a well-established dictionary that identifies explicit attention to each moral foundation in texts: care, fairness, loyalty, authority, and sanctity (Wheeler et al., 2019). The word lists contain words that indicate both compliance (i.e., virtue) and noncompliance (i.e., vice) to the moral foundations (see [Table 1](#) for example words).

## Analysis Strategy

We used the *lme4* package (version 1.1–23; Bates et al., 2015) for R (version: 3.6.3) to fit linear mixed-effects models per frame as the dependent variable. We included a random intercept for outlets to take into account that the data were nested (e.g., we analyzed fifteen satirical news shows). To answer *RQ1*, *RQ2*, and *RQ3* (differences in frame use between genres), we only included the variable of genre (satirical vs. regular news) as a predictor in the multilevel models. To answer *RQ1a*, *RQ2a*, and *RQ3a* (medium type effects), we added the variable of medium (television shows vs. online blogs) as well as the interaction between genre and medium as predictors to the models we used to test *RQ1-3*. To answer *RQ1b*, *RQ2b*, and *RQ3b* (political leanings effects), we added the variable of outlet leaning (liberal vs. conservative) and the interaction between genre and outlet leaning to the models we used to test *RQ1-3* as predictors. Because the television show corpus did not contain conservative satirical news outlets, the analyses for *RQ1-3b* were conducted on the online article corpus only. In only this analysis, we excluded the news agency outlets from analysis since they did not have a sufficient liberal or conservative bias. This means that *RQ1-3* and *RQ1-3a* were answered using both corpora, while *RQ1-3b* was answered using (a proportion of) the online article corpus.

## Results

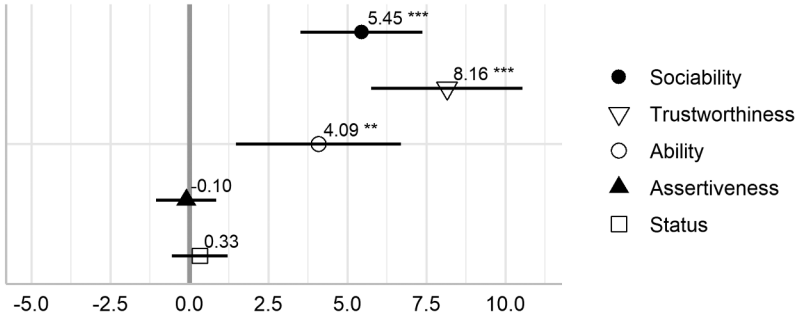
Datasets, syntax, and output are made available on Open Science Framework (OSF): <https://osf.io/gsf49>. Results are reported in this paper by means of regression plots. Full model results are shown in Appendix C.

*RQ1* asked about differences in character framing between satirical and regular news. Results showed differences in three out of five character frames (see [Figure 1](#)): satirical news contained significantly more sociability frames, more trustworthiness frames, and more ability frames. Differences in the use of assertiveness and status frames were not significant. With regard to the consistency across medium types (*RQ1a*), we found only one significant interaction effect of medium with genre: on sociability frames. Pairwise contrast analysis demonstrated that the difference in sociability frames between satirical and regular news was larger in case of television shows ( $b = 7.08$ ,  $SE = 0.90$ ,  $p < .001$ ) than blog articles ( $b = 3.37$ ,  $SE = 0.67$ ,  $p < .001$ ). No interaction effects of leaning with genre were found, meaning that findings were consistent across the political leanings of outlets (*RQ1b*).

*RQ2* asked how satirical news differs from regular news in terms of emotional framing. Differences were found in four out of five frames (see [Figure 2](#)).

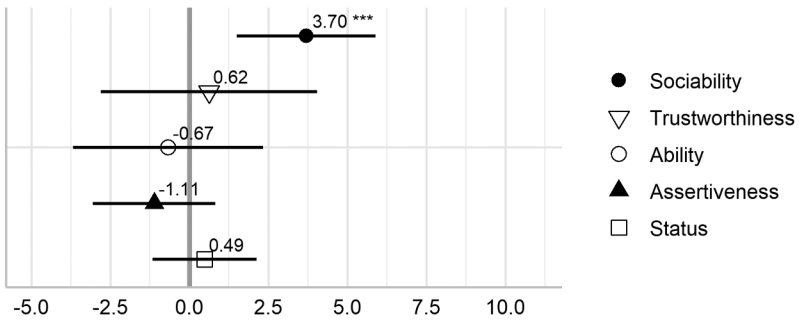
**Direct effects of genre**

(satirical vs. regular news)



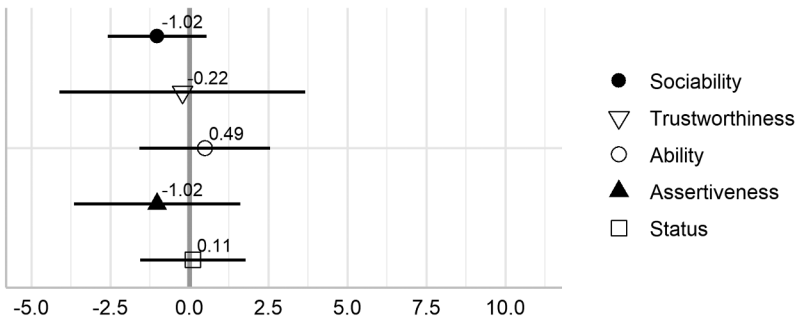
**Interaction effects with medium type**

(shows vs. online blogs)



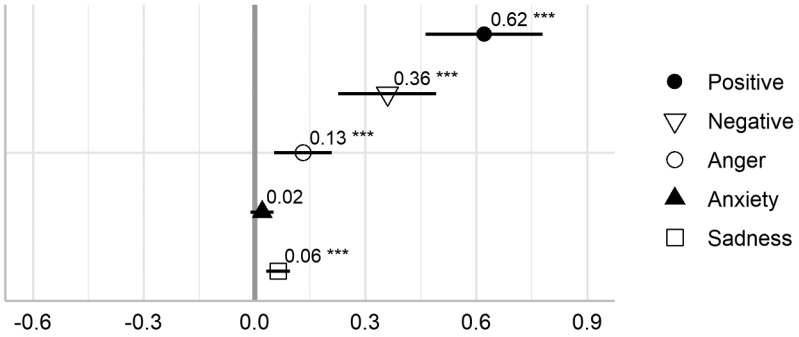
**Interaction effects with political leaning**

(liberal vs. conservative)

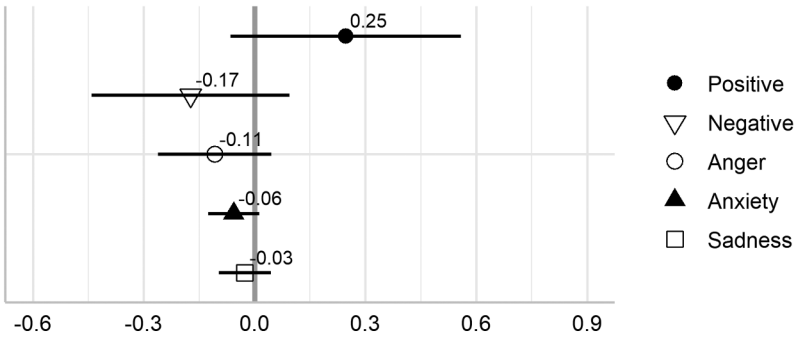


**Figure 1.** Standardized Regression Coefficients with Confidence Intervals for the Character Framing Models. \* $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

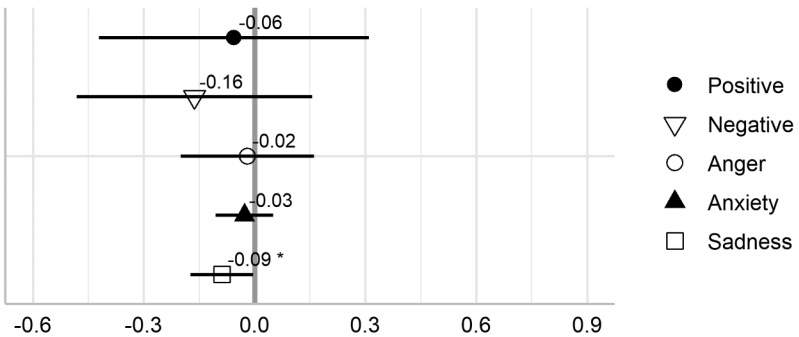
**Direct effects of genre**  
(satirical vs. regular news)



**Interaction effects with medium type**  
(shows vs. online blogs)



**Interaction effects with political leaning**  
(liberal vs. conservative)



**Figure 2.** Standardized Regression Coefficients with Confidence Intervals for the Emotional Framing Models. \* $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Satirical news contained more positive emotion frames, more negative emotion frames, more anger frames, and more sadness frames than regular news. Results demonstrated no significant difference for anxiety frames. Findings were consistent across medium types (*RQ2a*) given that we observed no significant interaction effects of medium with genre.<sup>4</sup> Only one interaction effect for leaning with genre was found (*RQ2b*). According to a pairwise contrast analysis, the difference between satirical and regular news in the presence of sadness frames was only found for conservative outlets ( $b = 0.13$ ,  $SE = 0.03$ ,  $p < .001$ ), but not for liberal outlets ( $b = 0.05$ ,  $SE = 0.03$ ,  $p = .09$ ).

*RQ3* asked how satirical news differs from regular news in terms of moral framing. Results showed differences in three out of five moral frames (see [Figure 3](#)). Compared to regular news, satirical news contained significantly fewer loyalty frames<sup>5</sup> and fewer authority frames, but more sanctity frames. No significant differences were found in case of care frames and fairness frames.<sup>6</sup> These findings were consistent across medium types (*RQ3a*) and the political leanings of outlets (*RQ3b*), except in case of authority frames for which we found significant interaction effects of medium with genre and of leaning with genre. Pairwise contrast analysis revealed that, while there was no difference in authority frames between regular news shows and articles ( $b = 0.99$ ,  $SE = 0.52$ ,  $p = .06$ ), satirical news articles contained more authority frames than satirical news shows ( $b = 2.75$ ,  $SE = 0.65$ ,  $p < .001$ ). Furthermore, the difference between satirical and regular news in authority frames was only found with conservative outlets ( $b = -2.38$ ,  $SE = 0.75$ ,  $p = .002$ ), but not with liberal outlets ( $b = 0.22$ ,  $SE = 0.59$ ,  $p = .71$ ).<sup>7</sup>

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<sup>4</sup>Some main effects of medium type and outlet leaning were also found. Television shows in this study, regardless of genre, contained significantly fewer loyalty frames ( $b = -1.05$ ,  $p = .02$ ), more sociability frames ( $b = 4.24$ ,  $p < .001$ ), more trustworthiness frames ( $b = 6.47$ ,  $p < .001$ ), more ability frames ( $b = 9.02$ ,  $p < .001$ ), more assertiveness frames ( $b = 1.60$ ,  $p = .02$ ), more status frames ( $b = 1.85$ ,  $p < .001$ ), and fewer anger frames ( $b = -0.11$ ,  $p = .03$ ) than the online blogs. With regard to main effects of the political leaning of outlets on frame use, results showed only one significant difference. Regardless of genre, liberal outlets contained significantly fewer authority frames than conservative outlets ( $b = -1.86$ ,  $p = .01$ ).

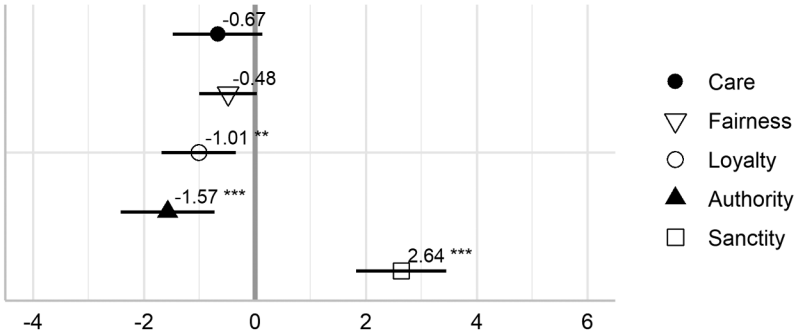
<sup>5</sup>This main effect on loyalty frames was also present in the model that tested *RQ3a*, but not in the one that tested *RQ3b*. An explanation could be the smaller corpus that was used to test *RQ3b* (see the heading Analysis Strategy in the method's section for more information).

<sup>6</sup>This main effect on fairness frames was significant in the model that tested *RQ3a*, with satirical news containing less fairness frames than regular news. However, in the other two models the main effect was not significant, indicating that the finding may be unreliable.

<sup>7</sup>Additional moderator analyses for political leaning were conducted where regular news outlets with a strong political bias were filtered out and only those with a moderate bias were kept, which showed similar results (see Appendix D).

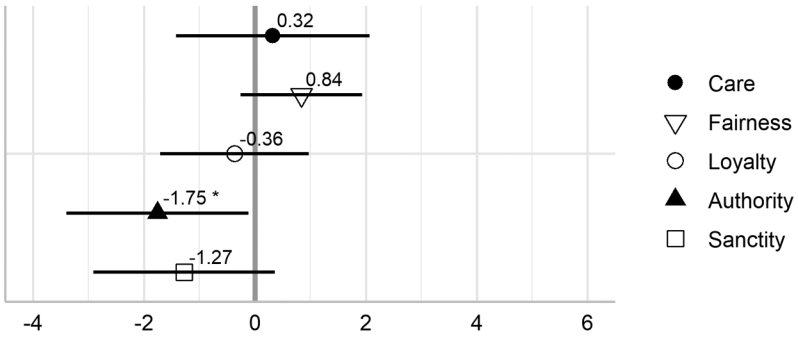
**Direct effects of genre**

(satirical vs. regular news)



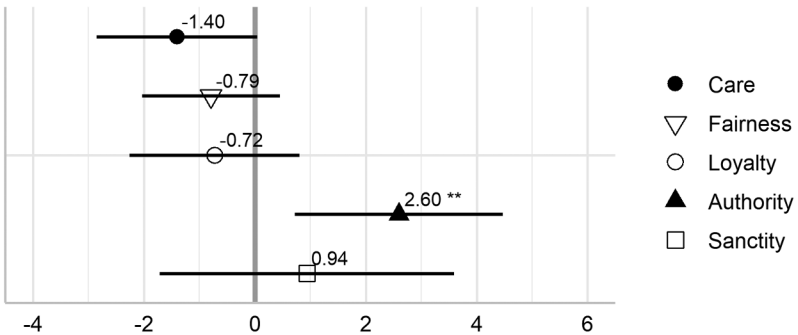
**Interaction effects with medium type**

(shows vs. online blogs)



**Interaction effects with political leaning**

(liberal vs. conservative)



**Figure 3.** Standardized Regression Coefficients with Confidence Intervals for the Moral Framing Models. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

## Discussion and Conclusion

This study examined framing differences between satirical and regular news at the genre level, and accordingly assessed to what extent the concept of genre-level frame repertoires can be used to improve scholarly understanding of differences in news coverage between these genres. We found differences between satirical and regular news for ten out of the fifteen frames analyzed. The patterns of results for character framing (*RQ1*) and emotional framing (*RQ2*) were strikingly clear: satirical news was characterized by an overall greater use of both, with seven of the ten individual frames being used more often in satirical news than regular news, while no difference was found for the remaining three frames. With regard to moral framing (*RQ3*), satirical news more often contained the sanctity frame than regular news and less often contained the loyalty and authority frames. No difference was found in case of the care and fairness frames. In terms of the consistency of findings across medium types and the political leanings of outlets, only two out of the fifteen tested interactions of genre with medium, and two out of the fifteen tested interactions of genre with political leaning were significant, respectively. Altogether, this means that, compared to regular news, satirical news seems to have a rather distinct and consistent frame repertoire across medium types (television show episodes vs. online articles) and across the political leanings of outlets (conservative vs. liberal).

### *Implications of Main Findings*

With regard to character framing (*RQ1*), we found that satirical (vs. regular) news contains more frames related to sociability, trustworthiness, and ability of (important) people in society. Previous research suggested that satirical news is more person-oriented than regular news (e.g., Ödmark, 2021). This study confirms this, and uncovers which specific personal characteristics, or stereotypes (Matthes & Rauchfleisch, 2013), of these persons are highlighted. That is, satirical news does not necessarily focus differently on targets' assertiveness or status, but does focus more than regular news on target characteristics that belong to the warmth dimension of the stereotype content model (sociability and trustworthiness; Fiske et al., 2002) as well as on the ability dimension. This means that satirical news mostly highlights perceptions of the warmth and ability of these individuals when addressing societal actors' personalities.

In terms of emotional framing (*RQ2*), we found that satirical news more likely contains both positive and negative emotional frames than regular news. This is also in line with previous research that indicates that satirical news contains more emotional interpretations than regular news (e.g., Ödmark, 2021). In case of negative emotional frames, however, satirical



news contained more anger and sadness frames than regular news, but no difference was found for the anxiety frame. A possible explanation could have to do with the entertaining nature of satirical news. Satirical news is known to reduce audiences' anxiety about current affairs because it makes people laugh about it (Becker, 2014). In this light, emotional interpretations of news based on anger and sadness are perhaps more humorous than those based on anxiety.

Our findings for moral framing (*RQ3*) somewhat contradict the hypothesis that there may be a stronger normative component to satirical news than regular news (e.g., Lichtenstein et al., 2021). Some moral subframes are used less often (i.e., authority and loyalty frames) and only one frame is used more often (i.e., sanctity frame) in satirical news. The genres thus differ in which moral foundations they prioritize. An important characteristic of satirical humor is that it promotes laughter at the expense of others (Hmielowski et al., 2011). In the moral foundation of sanctity, a sense of superiority also has a central place because, according to moral foundations theory, reasons for avoiding moral, spiritual, and physical contamination have their origin in the psychology of disgust (Graham et al., 2009). This similarity between concepts could explain why satirical news more often contained sanctity frames than regular news.

Another important characteristic of satirical humor is that it tends to be critical toward those in power (Dagnes, 2012). This criticism may well be conveyed through a focus on the other binding foundations, loyalty and authority, as both relate to order and status (Koszalkowska & Wróbel, 2019, p. 621). However, we found that these moral foundations were used *less* often as the basis of frames in satirical news than in regular news. While this finding may be surprising, it could be explained by genre differences in issue content. Previous research suggests that the amount of substantive information in satirical news from the United States is similar to that of regular news during presidential election years (Fox et al., 2007). Overall, however, satirical news seems to contain less issue content than regular news (Niven et al., 2003). It seems likely that concerns surrounding loyalty and authority are particularly prominent in case of functional discussions about politics (e.g., who supports/opposes who and why). Accordingly, the loyalty and authority frames may be less prominent in satirical news than regular news because in satirical news such discussions receive less attention (Niven et al., 2003).

In terms of the consistency of findings, previous research pointed to a potential impact of the medium type (*RQ1-3a*; e.g., Berkowitz & Schwartz, 2016; Michaud Wild, 2019) and political leaning (*RQ1-3b*; e.g., Dagnes, 2012; Young, 2019) of satirical news outlets on framing due to differences in newsroom dynamics. However, we almost found no interaction effects. The framing profile of the different types of satirical news outlets examined in this study deviated in nearly identical ways from the same types

of regular news outlets. This suggests that differences in newsroom dynamics do not necessarily change the essence of how news reporting and critique is treated in satirical news. Compared to regular news, similar aspects of current affairs seem to be selected and emphasized across satirical news outlets. There are likely still differences between them in other types of issue content (e.g., partisan opinions; Young, 2019). However, findings of this study indicate that audiences of satirical news are exposed to similarly amounts of character, emotional, and moral interpretations of current affairs across different types of outlets. Given how frames can shape public discourse (e.g., de Vreese, 2005), our findings indicate a shared way in which satirical news contributes to public deliberation about society and politics.

### ***Study Strengths and Limitations***

By using a computer-automated approach to content analysis, we were able to analyze vast amounts of show transcripts and online articles. We ensured sufficient confidence in our results by only using dictionaries that had been extensively validated previously (i.e., Frimer et al., 2019; Nicolas et al., 2021; Pennebaker et al., 2015). As a result, we were able to draw conclusions about framing in satirical and regular news that can be generalized from the outlet to the genre level. Nevertheless, the study also has its shortcomings.

First, to ensure comparability, we only analyzed data from one country (i.e., United States) and one calendar year (i.e., 2018). Mid-term elections took place in the United States in 2018. Given that news reporting styles can be a function of country context (Van Dalen et al., 2012) and election times often encourage more interpretative (vs. descriptive) news reporting (Falasca, 2014), future research may replicate this study in other countries as well as in non-election and general election years to check the robustness of our findings.

Furthermore, the dictionary method only allowed us to examine verbal framing in its manifest form without regard to valence. This means that we could only study explicit verbal attention to personality dimensions, emotional interpretations, and moral foundations as an indication of overall attention. To provide a complete picture, we recommend future research to also investigate differences between satirical and regular news in the use of visual frames and implicit frames (e.g., when a moral norm is implied rather than stated directly), and to take the valence of these frames into account. Given the complex interpretative nature of such research endeavors, manual content analysis seems to be a more appropriate method.

As a final caveat, topic diversity of the included texts can decrease the performance quality of dictionaries (González-Bailón & Paltoglou, 2015). This can be countered by tailoring dictionaries to the domain of interest (e.g., Soroka et al., 2015). The MFD was originally developed for political

discourse (Graham et al., 2009), but the SCD (Nicolas et al., 2021) and LIWC (Pennebaker et al., 2015) dictionaries were not. Future research could therefore test the consistency of results by comparing frame use between genres in regard to specific political issues (see Klawier et al., 2022, for an example of this approach).

To sum up, this paper reported an automated content analysis of differences in genre-level frame repertoires between satirical and regular news. Our findings support previous observations that the humorous genre of satirical news adds a level of interpretation to the discussion of current affairs that is unique compared to regular, non-humorous news (e.g., Feldman, 2013; Peifer, 2013; Young, 2013; Ödmark, 2021), and demonstrates that this is done in consistent ways across outlets with different medium types and political leanings. We found that, more than regular news, satirical news highlights both positive and negative emotional interpretations (except based on anxiety), perceptions of presence or – more likely – absence of warmth and ability of societal actors, and evaluations of moral sanctity rather than moral loyalty and authority. This study thus uncovered relevant differences in news coverage between satirical and regular news by studying their genre-level frame repertoires.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Funding

This work is part of the research program Contemporary Political Satire: Medium, Language, and Impact of Satiric News with project number 276-45-005, which is financed by the Dutch Research Council (NWO).

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## Data Availability Statement

The data that support the findings of this study are openly available on the Open Science Framework (OSF) repository at <https://osf.io/gsf49>.

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