News of Noam: Unpacking Media Coverage of Chomsky

Jeanne M. Fox, Ross A. Jackson*, and Kevin R. Crawford

Abstract—Media inform and obfuscate. Corporate motives influence how news is neglected, reported, and contextualized. It is informative to examine the extent to which news content varies based on source and period. As a longstanding critic of news media, and a leading public intellectual, Noam Chomsky is a worthy case study. Three author-created, corpora of news articles referencing Noam Chomsky were created. The corpora contained articles from Agence France-Presse (AFP; n = 54), The Associated Press (AP; n = 48), and the Cable News Network Wire (CNNW; n = 6), from the years 2012 to 2022. Number and length analyses, along with hypothesis tests, established the degree of similarity existing among the articles of the three news wire services and periods. Analysis of variance showed that news source was significant in terms of both the number of articles (H2), F(2,6) = 5.916, p = 0.038., and article length (H4), F(2,105) = 23.936, p = 0.000 ($\alpha = 0.05$). Little commonality in content or framing was established among the three news sources or periods in terms of top words or bigrams of merit. Whereas there were differences in the absolute values and degree of change, each of the three news sources contained a slightly negative average sentiment score when using the AFINN lexicon. The results of this study, while limited to a single case, are illustrative of broader concerns and are potentially useful for those engaged in media studies, politics, rhetoric, organizational management, and the social sciences.

Index Terms—Analytics, public intellectual, rhetorical icon

I. INTRODUCTION

Making sense of what is going on is challenging [1–4]. Accurate news is useful for social constructions of reality [5]. Media inform and obfuscate understanding [6–8]. Given the role of corporations in the creation and propagation of news, it is useful to acknowledge the possibility that coverage is influenced by considerations of profit [9]. Examining the extent to which news content varies, based on source and period, reflects choices made by news corporations in how they neglect, report, and contextualize people and events. Concern over this aspect of news coverage is established.

Research within the field of news media has examined media consolidations [10–12], infotainment [13–15], fake news [16–18], sensationalism [19–21], and bias [22–24]. Each contributes insight into how news is presented and consumed. Within the space of media studies there is focus on the treatment of public intellectuals [25–27]. More narrowly, the concept of rhetorical icons could be useful in exploring the variation of news coverage and contextualization of a given individual. Kenny explained, "the concept of the rhetorical icon craves attention in public

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discourse...because it reminds one of the manner in which a speaker loses autonomy as a speaking agent when the individual moves from being a private to a public figure" [28]. Given his engagement as a public intellectual, media coverage of *Noam Chomsky* provides a case study for exploring this phenomenon.

Noam Chomsky is a complex, public figure. His contribution to society could be subdivided into his roles as linguist [29–31], activist [32-34],and intellectual [35-36]. These elements potentially blur in media coverage of Chomsky as a rhetorical icon. In that capacity, Chomsky becomes more of a character than a person. It is at this confluence that this examination becomes most relevant for those engaged in the study of language, literature, and linguistics. As indicated, Chomsky's career was as a linguist. This study is a mixed-methods textual analysis of the language contained in news wire articles of Chomsky, examined as a rhetorical icon which has traces of literature as much as news. It is international both in terms of the news sources used, and the potential relevance of the findings. This point is substantiated by a closer examination of the study itself.

This research study, examining news wire coverage of Noam Chomsky from 2012 to 2022, used a mixed-method approach consisting of both formalized hypotheses, quantitative descriptive results, and qualitative interpretation. The four hypotheses were as follows:

H1: The mean number of articles for the early years = the mean number of articles for the middle years = the mean number of articles for the late years

H2: The mean number of articles from AFP = the mean number of articles from AP = the mean number of articles from CNNW

H3: The mean length of articles for the early years = the mean length of articles for the middle years = the mean number of articles for the late years

H4: The mean length of articles from AFP = the mean length of articles from AP = the mean length of articles from CNNW

The approach is described in the methodology in Section III. Additionally, this study examines the top words and bigrams of merit [37], and the average sentiment using the AFINN lexicon [38]. This introduces the research focused on unpacking media coverage of *Noam Chomsky*. Context is developed through research related to public intellectuals, media, and *Noam Chomsky* in Section II. The methodology in Section III is presented, followed by the results in Section IV. The paper concludes with a summary of the research, limitations, and extensions in Section V. Situating this research effectively is facilitated by examining the survey of

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literature first. This is presented in the following sections.

II. NEWS MEDIA, PUBLIC INTELLECTUALS, AND CHOMSKY

As presented in the introduction in Section I, this examination of news wire coverage of Noam Chomsky was aided by an examination of research related to news media coverage, the role and treatment of public intellectuals in news, and the work and treatment of Noam Chomsky as a public intellectual and rhetorical icon. Each of these areas is constrained to a summary examination. Even in this form, these elements converge to situate this case study as uniquely informative of the type and degree of ambiguity potentially induced through selective news coverage of people and events. Because of its central role in defining the context of this study, research on news media is presented first.

A. News Media

News media are complex and varied. With the advent of the telegraph, news wire services were established in the United States during the mid-nineteenth century to provide content to local newspapers [39]. Such a service is inherently risky. Concerns associated with news wire services have included topics ranging from foreign news coverage [40–41], to news accuracy [42, 43], and political motivations [44–45]. Such concerns of news wire service coverage are related to but distinct from the concerns associated with news media in general. Whereas the focus of this study is on coverage from news wire services, it is beneficial to situate these concerns within a broader sense of news media in its economic context.

There is wisdom to be found in the politico-economic adage to follow the money. In terms of the underlying economic model confronted by news service providers, McManus described that "for both newspapers and television, having advertising rather than consumers as the primary source of income means that the way to increase profit is to produce a product that has a minimal threshold appeal to the maximum number of demographically desirable consumers in the signal or circulation area. Because consumers pay little or nothing directly for the news, it would be inefficient to produce content that a smaller number of consumers used but valued more highly" [46]. This economic reality potentially informs the decisions of major media corporations. One point of intersection among these three foci of literature, is that Noam Chomsky has critiqued this aspect of the news media [47-49].

As indicated, news media coverage, to include that of the news wire services, is shaped by corporate concerns [50–52]. A specific concern is understanding how news media coverage creates, portrays, or ignores individuals considered to be public intellectuals. Before progressing to research related to Noam Chomsky as a leading, American, public intellectual, it is useful to examine the socially constructed phenomenon of public intellectuals in general.

B. Public Intellectuals

What is a public intellectual; what is the relationship between one and the news media? Crick defined public intellectuals as "those who respond to their philosophical situation by producing a work that conceptualizes and provides direction for solving longstanding and pervasive problems and are then successful in helping change the habits and practices of a public" [53]. Such a view is useful as it focuses upon context, person, product, and consequence. Frequently, public intellectuals emerge from academia. Cushman examined this confluence by noting that, "public intellectuals can use their service, teaching, and research for the benefit of those inside and outside the university. Their knowledge...can have political implications in contexts beyond the university...public intellectuals can enact the kind of civic-minded knowledge-making that engages broad audiences in pressing social issues" [54]. Whereas there is power associated with the work of public intellectuals, their contribution to society has been devalued [55]. Such social valuations are (in)formed through news media.

News media contribute to the public perception of intellectuals and their work, and public intellectuals operate in and through news media. Townsley explained, "journalists (re-)produce the trope [of public intellectuals] in many different ways...the formulation of the article as a review of events, programs and persons surrounding the idea of the 'public intellectual' associates all the speakers quoted in the article with the idea of the 'public intellectual'—either as public intellectuals themselves, or as attributors with the power to nominate public intellectuals (which is very close to the same thing)" [56]. One might reasonably consider Noam Chomsky to be such a public intellectual and rhetorical icon.

C. Noam Chomsky: Public Intellectual & Rhetorical Icon

Any person with as productive and visible of a career and level of political engagement as Noam Chomsky is bound to be known for a variety of things, by different people in different contexts. As mentioned in the introduction in Section I, Noam Chomsky is primarily known as a linguist [29–31], activist [32–34], and public intellectual [35, 36]. Within the context of this study, it was Chomsky as a public intellectual who was of primary interest. In the role of public intellectual, Giroux indicated that being "rooted in the fundamentals of anarcho-syndicalism and democratic socialism," Chomsky has "incessantly exposed the gap between the reality and the promise of a radical democracy," and has "attempted to refigure both the promise of democracy and develop new ways to theorize agency and the social imagination outside of the neoliberal focus individualization, privatization, and the assumption that the only value that matters is exchange value" [57]. Such a focus is consequential as Marshall and Atherton noted, "Noam Chomsky is often identified as the number one living public intellectual," and "his discussion of the dissident public intellectual as the more authentic, or only true, public intellectual is supported by this argument about the suppression of dissident voices in public" [58]. Given that Chomsky is established as a public intellectual, it is useful to extend this by examining him as a rhetorical icon.

Starting with the work of Kenny quoted in the introduction [28], a rhetorical icon is talked *about* to justify or substantiate a position. This conceptualization is not unique, as 1960's radical Jerry Rubin has been analyzed as a rhetorical icon as well [59]. As explained by Kenny a rhetorical icon is an "icon of the public sphere" and "has no subject status, but is an object chosen because of its capacity to signify aspects of the rhetorical situation which it

represents" [60]. In the context of this research, the supposition is proffered that Chomsky could be considered a rhetorical icon for political dissent [61–63]. Such an approach provides a basis for interpreting the various conceptualizations of Noam Chomsky made by news wire services in their coverage of him.

Previous research on news media, public intellectuals, and Noam Chomsky as a public intellectual provided a basis for this study. Through a mixed-methods, corpus linguistic analysis of news wire coverage of Chomsky, one can unpack these concerns and fill a portion of the gap in existent research. The approach used is presented next in Section III.

III. METHODOLOGY

Rigorous understandings are facilitated by robust methodologies [64-66]. This study was conducted as a mixed-method approach based on a collection of qualitative and quantitative data. Creswell and Creswell defined mixed methods research as a form of inquiry involving the collection and integration of quantitative and qualitative data [67]. Sentiment analysis was used qualitatively to identify potential shifts in the tone or mood of the articles. Text analysis was used to analyze news content, detecting frequencies and significant correlations among words and bigrams of merit. The methodology described here consists of three major foci: collection of data and statistical analyses, data processing and corpora creation within RStudio, and the thematic analysis approach. These areas influence the approach taken to communicate the results [68]. Since data must be collected to be analyzed that step is presented first.

This study was based on the collection and analysis of news wire articles from three organizations (abbreviation, country): the Agence France-Presse (AFP, France), the Associated Press (AP, United States of America), and Cable News Network Wire (CNNW, United States of America). News articles were collected via a computer search of the Nexus Uni database for all text articles by these three agencies from 2012 to 2022 that contained the name Noam Chomsky. No audio or video files were collected. The articles from these three news wire services were partitioned into three date ranges: 2012–2015, 2016–2018, and 2019–2022. These date ranges are not explicitly tied to American Presidential administrations but rather cross administrations to capture macro-system influences. Count and length data were then input into Excel for statistical analysis. Since H1-H4 were comparisons of more than two means, single factor ANOVA tests were used for all four hypotheses [69]. The processing of article content was conducted in RStudio.

Article processing and corpora generation were conducted in RStudio, a free, integrated, computer coding environment for the programming language R [70–71]. The following packages were used to analyze the three Chomsky corpora as reported by AFP, AP, and CNNW from 2012 to 2022: dplyr [72], ggplot2 [73], textdata [74], tidyr [75], tidytext [76], tidyverse [77], tm [78], readxl [79], stringr [80], and xlsx [81]. Collectively, these packages allow one to ingest the content of the news articles, process the data by removing common, English stop words (e.g., a, the, and), and conduct sentiment analysis. The AFINN sentiment lexicon [38] was used to calculate average sentiment values. In total, with

three sources and three periods, there were nine points of observation and content comparison. The top words and bigrams of merit were the primary basis of comparison [37].

As indicated, the words and bigrams of merit formed the core of the subsequent thematic analysis of the coverage of Noam Chomsky by the AFP, AP, and CNNW news wire services. The approach taken was emergent themes based on aggregation categories. A couple of examples are provided here to illustrate how the emergent thematic categories could be used to aggregate key words and bigrams. The terms United Kingdom, United States, and Canada might be aggregated under the theme geopolitics. The terms Al Qaeda and Bin Laden might be aggregated under the theme terrorism. It is beneficial to understand the primary goal associated with utilizing thematic analysis in this fashion. This approach provided an interpretative layer to news wire coverage, as there is a risk of erroneously concluding that news coverage differs because the exact words used vary. It is possible that whereas the words being used vary, the overarching theme is consistent. This approach allowed for insight into the degree to which this occurred among the three, author-created corpora, and points to a concern related to the validity of analytic results [82].

The methodology explained the approaches used for data collection and statistical analysis, the use of RStudio for data processing and corpora creation, and the approach for the thematic analysis of key words and bigrams of merit. With the methodology established, it is possible to turn attention to the results of this study in Section IV.

IV. RESULTS

As indicated in the methodology, the focus of this research was on understanding the extent to which the coverage of Noam Chomsky changed as a function of news source and period. Such an interrogation was examined in terms of the total number of news articles (Table I), the average number of articles (Table II), and the average article length, in words (Table III). Once these data were established it was possible to conduct the four ANOVA tests to determine the degree of statistical significance in the observed variation (Table IV). The focus of results then transitioned from structure to content. The top words of merit (Fig. 1) are presented prior to the top bigrams of merit (Fig. 2), and an assessment of the average sentiment by news source (Fig. 3). Collectively, these results are suggestive of how news coverage varies in terms of source, period, and content. Attention can now be given to the results of the assessment of the number of news articles by source and time (Table I).

TABLE I: NUMBER OF NEWS ARTICLES BY SOURCE AND TIME

Source	Early (2012–2015)	Middle (2016–2018)	Late (2019–2022)	Total
AFP	17	23	14	54
AP	18	20	10	48
CNNW	5	0	1	6
Total	40	43	25	108

There were 108 news articles referencing *Noam Chomsky* in the three news services from 2012 through 2022. Of those 108, the most were from AFP (n = 54) and the fewest were

from CNNW (n = 6). In terms of period, most were in the middle period from 2016 to 2018 (n = 43), and the fewest in the late period from 2019 to 2022 (n = 25). Because the time periods do not contain the same number of years, it was useful to also analyze the data in terms of the average number of articles per year to adjust for that structural anomaly. Those results are presented in Table II.

TABLE II: AVE. NO. OF NEWS ARTICLES PER YEAR BY SOURCE AND TIME

Source	Early	Middle	Late
AFP	4.25	7.67	3.50
AP	4.50	6.67	2.50
CNNW	1.25	0.00	0.25

In terms of the average number of news articles per year (Table II), CNNW had fewer than either AFP or AP. The average number of articles for CNNW in the early period (M = 1.25) was fewer than either AFP (M = 4.24) or AP (M =4.50). A similar finding was observed for the late period, where the value for CNNW (M = 0.25) was fewer than that of AFP (M = 3.50) or AP (M = 2.50). There were no news articles referencing Noam Chomsky in the middle period from CNNW. The number of articles, along with the average number of articles convey one aspect of news coverage. The number of articles (or average number of articles) denotes frequency of coverage. Extent of coverage is also important and can be measured by the average article length. Since it is possible for an article to be less frequent but more extensive, it is useful to assess both. The results of the assessment of the average article length are presented in Table III.

TABLE III: AVERAGE ARTICLE LENGTH (IN WORDS) BY SOURCE AND TIME

Source	Early	Middle	Late
AFP	394.53	547.43	530.36
AP	617.50	675.35	872.60
CNNW	1,363.00	0.00	1,179.00

There was a difference among the three news sources in terms of the average article length. The average article length, in words, for CNNW in the early period (M=1,363) was longer than either AFP (M=394.53) or AP (M=617.5). A similarly scaled difference was observable for the late period, in which the average article length, in words, for CNNW (M=1,179) was longer than either AFP (M=530.36) or AP (M=872.6). The middle period did not contain an observation for CNNW. Collectively, the previous results (Tables I–III) are suggestive of potentially statistically significant differences. A summary of the results from the four hypothesis tests are presented in Table IV.

TABLE IV: HYPOTHESIS RESULTS

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Hypothesis	Test	Result	p Value			
H1: Number-Time	ANOVA	Fail to Reject	0.534			
H2: Number-Source	ANOVA	Reject	0.038			
H3: Length-Time	ANOVA	Fail to Reject	0.594			
H4: Length-Source	ANOVA	Reject	0.000			

Hypotheses one and two focused on the number of articles, first in terms of a comparison of the early, middle, and late periods (H1) and then in terms of news wire source (H2). In terms of the first hypothesis (H1), the analysis of variance failed to show a significant different among the average number of articles for the three periods, F(2,6), p = 0.534. When examined in terms of the respective news sources (H2), an analysis of variance showed that the news source was significant, F(2,6) = 5.916, p = 0.038. Similar findings were determined when the length of the articles was examined. More specifically, in terms of the third hypothesis (H3), the average length of articles was not significantly different among the three periods, F(2,105), p = 0.594. When examined in terms of the respective news sources (H4), an analysis of variance showed that the news source was significant, F(2,105) = 23.936, p = 0.000. Collectively, these results suggest that in terms of period, the number and length of articles referencing Noam Chomsky are similar among the three periods, but that there is significant variation in terms of coverage by news source. These results are useful for understanding form but provide little insight for content.

To understand the degree to which content varies in terms of source and period, it is useful to examine the most frequent words of merit. This was accomplished by determining the most frequent words, excluding stop words, by news source and period. The results are presented as shown in Fig. 1.

Among the three news sources examined in three periods, there were a total of nine potential lists of top words of merit to examine. There were no articles referencing Noam Chomsky in the CNNW middle period. As a result, the maximum number a given word appeared in common was eight. Among the eight lists, there were 50 unique words (~80%) and 13 words shared among some of the respective lists (~20%). The 13 words (number of lists on which the term appeared) were Chomsky (n = 4), Noam (n = 4), people (n = 4), U.S. (n = 4), President (n = 3), Assange (n = 2), court (n = 2), Israel (n = 2), Kurdish (n = 2), military (n = 2), singer (n = 2), time (n = 2), and Turkish (n = 2). In terms of news source, the term Chomsky was used by both AFP and AP, as was *Noam*, and *people* (n = 4). The term *U.S.* was the only one used in AFP, AP, and CNNW. In general, except for the name Noam Chomsky, there was little similarity among the respective top words of merit lists by source and time (Fig. 1). The maximum observed commonality was words showing up on 4 of the 8 lists (50%). The greatest commonality in terms of source was observed between AFP and AP. CNNW was the least common, with the CNNW list for the late period being the most unique focusing predominately on Trump (n =10), sexual (n = 9), and allegations (n = 9). A focus on single word frequencies is potentially overly sensitive to idiosyncratic differences. To account for this, it was useful to also examine the top bigrams of merit. The results of that analysis are presented graphically as Fig. 2.

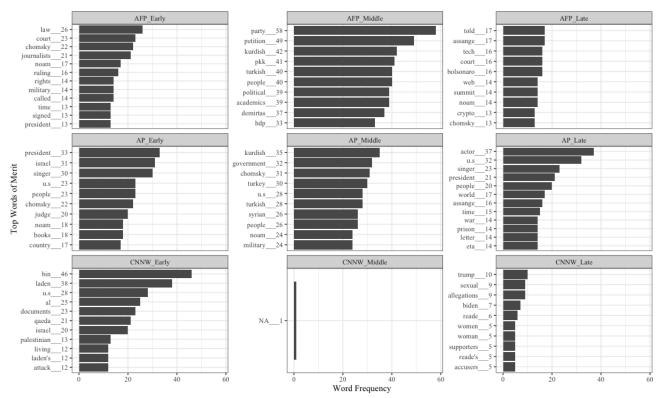


Fig. 1. Top words of merit from corpora of news articles referencing Noam Chomsky by source and period.

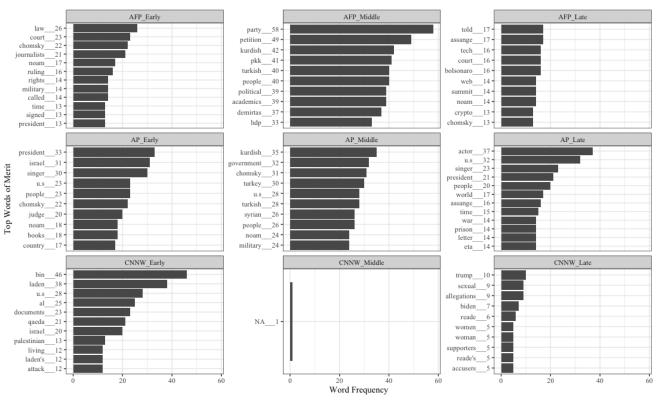


Fig. 2. Top bigrams of merit from corpora of news articles referencing Noam Chomsky by source and period.

Because bigrams tend to be less frequent than single word frequencies, it was useful to make a minimum threshold for inclusion. The bigrams of merit for this study had to occur at least five times to be included in the lists. With this threshold in place, the CNNW list for the late period failed to generate any bigrams of merit. Consequently, there were seven lists for the bigrams of merit instead of the eight lists for the words of merit. This finding, in and of itself, was of potential interest as a lack of significant coverage is as informative as

observed differences in the coverage itself. Examining the bigrams of merit of the seven lists provided insight into those differences.

Among the seven lists, there were 39 unique bigrams (\sim 81%) and 9 bigrams shared among some of the respective lists (\sim 19%). The 9 bigrams (number of lists on which the phrase appeared) are *Noam Chomsky* (n=6), *human rights* (n=4), *linguist Noam* (n=3), *Al Qaeda* (n=2), *Bin Laden's* (n=2), *country singer* (n=2), *Dec* 7 (n=2), *news agency* (n=1)

2), and *Prime Minister* (n = 2). In terms of source, like the results of the top words of merit, the top bigrams of merit exhibited more similarity among the AFP and AP sources than with the CNNW lists, however, the bigrams Al Qaeda and Bin Laden's were on the CNNW list as well. Some of the common bigrams (e.g., Dec 7, country singer) were potentially odd at first. Upon review of the source material, it turned out that *December* 7th is Noam Chomsky's birthday, a birthdate he shares with country singer Sunny Sweeney. Enough of the news articles were simply a yearly republished birthday announcement that those phrases appeared on the top bigram of merit lists. Whereas these bigrams appear only on the AFP list for the middle period, the bigrams military operations (n = 14), terrorist propaganda (n = 13), and human rights (n = 13) were frequent and consistent enough with the work of Chomsky that the source and period might be considered the one that most closely conveys *Chomsky* as a rhetorical icon. With these results established, attention can be given to the results of the sentiment analysis (Fig. 3).

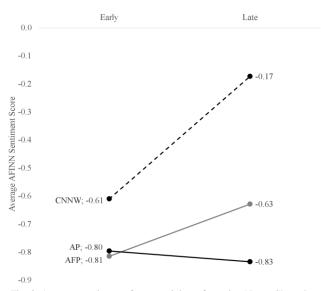


Fig. 3. Average sentiment of news articles referencing Noam Chomsky.

To place the average sentiment scores depicted in Fig. 3 into context, it is useful to reiterate a few key points presented in Section III. The AFINN sentiment score was used. That scale ranges from -5 (highly negative) to +5 (highly positive) with zero being neutral. Words in the AFINN lexicon with a sentiment value of -1 include anti, apology, attack, battle, cancel, curse, and demonstration. All the average sentiment scores, irrespective of source or period were between -1 and 0 indicating a slightly negative sentiment. When assessed on that level, there was no discernable difference between the three news sources. However, as indicated in Fig. 3, there were observable differences in the direction and degree of sentiment movement within that narrow space. Specifically, CNNW had the most positive average sentiment score in the early period (-0.61), and the score which was closest to neutral in the late period (-0.17). Consistent with earlier findings, there was a degree of similarity between the AFP and AP news sources in terms of their average sentiment scores, with a score of -0.81 for AFP and -0.80 for AP. However, the directionality between these two sources differed, with the average sentiment score for AFP improving (-0.63), whereas that of AP (-0.83) declined slightly. When viewed on the scale of the AFINN sentiment score, such movements in average sentiment might be considered relatively minor fluctuations. Conversely, one might attune subconsciously to such subtle variations in sentiment and be left with different impressions based on one's news source. This concern is pursued further in the following section.

V. LIMITATIONS AND EXTENSIONS

Among the limitations of this study, the first is the period analyzed. Noam Chomsky's career as a linguist started in the 1950s and he has been engaged as a public intellectual since in the 1960s. With such a long career, this study is limited by its focus on the years 2012 to 2022. The results from the study are useful for understanding current variations in coverage but are limited to a narrow portion of Chomsky's work. Another limitation of this study is that it is a case study focused on a single individual. Constrained to the insights of a single case, it is unclear the extent to which (if at all) the results are generalizable or if media coverage of Chomsky is idiosyncratically different from the norm. Lastly, the focus of this study was on a comparison of coverage from three, major news wire services. Such a focus provides coherence but is limited by the lack of perspective established from a wider aperture including various media (e.g., alternative, network broadcasting, newsmagazines). Each limitation provides a potential basis for future research.

Future studies could address the limitations of this study. Specifically, one could extend the timeframe of analysis to the 1960s to gain a more holistic appraisal of print news service media treatments of *Noam Chomsky*. Additionally, one could move beyond this single, case study, by pursuing research of a cohort. This would produce greater context and allow for more refined interpretations. Lastly, future studies could incorporate various media to determine the relative influence of source, time, and medium for the frequency, length, and sentiment of respective news coverage of public intellectuals. Addressing these limitations through future research will improve understandings of this phenomenon. With these limitations and extensions established, it is possible to turn attention now to a summary of the key points established through this analysis.

VI. CONCLUSION

Research from this study focused upon understanding the extent to which news media coverage of *Noam Chomsky* changed as a function of news source and period by examining articles from three news services (AFP, AP, CNNW) in three periods from 2012–2022. There were 108 articles, with CNNW accounting for only ~5% (Table I). In terms of the average number of articles per year, by period, CNNW had the fewest, ranging from 1.25 per year in the early period and 0.25 per year in the late period (Table II). However, in terms of article length, the articles in CNNW were observably longer (Table III). The ANOVA tests comparing the early, middle, and late periods (H1 & H3) resulted in no statistically significant difference, whereas the ANOVA tests examining the three sources (H2 & H4) did (α = 0.05). In the eight lists of words of merit, there were 50

unique words (~80%) and 13 words shared among some of the respective lists (\sim 20%). The words *Chomsky* (n=4), *Noam* (n = 4), *people* (n = 4), *U.S.* (n = 4), *President* (n = 3)were among the most frequently shared between source and period (Fig. 1). Of the seven bigram lists, there were 39 unique bigrams (~81%) and 9 bigrams shared among the lists (~19%). The bigrams *Noam Chomsky* (n = 6) and *human* rights (n = 4) were relatively common among source and period (Fig. 2). The average sentiment scores, irrespective of source or period were between -1 and 0 indicating a slightly negative sentiment, with the scores of CNNW being the most neutral of the negative scores (Fig. 3). In terms of number, length, and sentiment, the articles from AFP and AP were more similar than those from CNNW. These results are informative and constructive for an understanding of media coverage in general and coverage of *Chomsky* in particular.

Unpacking media coverage of Chomsky provides one with a sketch of news variation, in terms of frequency, depth, and sentiment, depending on source. This is useful for those engaged in media, politics, rhetoric, the social sciences, and those tasked with managing them [83]. News of Noam varies from *military operations* and *terrorist propaganda* to *birthday candles* and *Captain Fantastic*, and from the quintessential to the incidental. Chomsky admonished that the responsibility of intellectuals is "to speak truth and to expose lies" [84]. Media neglect, report, and contextualize news consistent with their corporate motives and not those of the public, a point Chomsky himself critiqued [85].

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Conceptualization, J.M.F., and K.R.C.; methodology, J.M.F. and R.A.J.; analysis, J.M.F. and R.A.J.; writing—original draft preparation, R.A.J.; writing—review and editing, J.M.F., and K.R.C.; All authors have read and agreed to the published version of the manuscript.

REFERENCES

- S. Maitlis and M. Christianson, "Sensemaking in organizations: Taking stock and moving forward," *Academy of Management Annals*, vol. 8, no. 1, pp. 57–125, 2014.
- [2] K. E. Weick, *The Social Psychology of Organizing*, 2nd ed. New York: McGraw-Hill, 1979, ch. 6, pp. 147–169.
- [3] K. E. Weick, *Sensemaking in Organizations*. Thousand Oaks: CA: Sage Publications, 1995, ch. 3, pp. 63–82.
- [4] J. S. Bois, *The Art of Awareness: A Textbook on General Semantics and Epistemics*, 1966, ch. 2, pp. 12–42.
- [5] P. L. Berger and T. Luckmann, The Social Construction of Reality: A Treatise in the Sociology of Knowledge, New York: Anchor Books, 1967, ch. 2, pp. 47–128.
- [6] C. Happer, and G. Philo, "The role of the media in the construction of public belief and social change," *Journal of social and political* psychology, vol. 1, no. 1, pp. 321–336, 2013.
- [7] S. Dunwoody, "The media and public perceptions of risk: How journalists frame risk stories," *The Social Response to Environmental Risk: Policy Formulation in an Age of Uncertainty*, pp. 75–100, 1992.
- [8] EC. Tandoc, C. Edson, L. Darren, and R. Ling, "Diffusion of disinformation: How social media users respond to fake news and why," *Journalism*, vol. 21, no. 3, pp. 381–398, 2020.
- [9] D. P. Baron, "Persistent media bias," *Journal of Public Economics*, vol. 90, no. 1–2, pp. 1–36, 2006.
- [10] D. Champlin and J. Knoedler, "Operating in the public interest or in pursuit of private profits? News in the age of media consolidation," *Journal of Economic Issues*, vol. 36, no. 2, pp. 459–468, 2002.

- [11] D. E. Ho and K. M. Quinn, "Viewpoint diversity and media consolidation: An empirical study," Stan. L. Rev., vol. 61, p. 781, 2008.
- [12] D. Gomery, "Mass media merger mania," American Journalism Review, vol. 17, no. 10, pp. 46–47, 1995.
- [13] R. Surette and C. Otto, "A test of a crime and justice infotainment measure." *Journal of Criminal Justice*, vol. 30, no. 5, pp. 443–453, 2002.
- [14] P. Vorderer, C. Klimmt, and U. Ritterfeld, "Enjoyment: At the heart of media entertainment," *Communication Theory*, vol. 14, no. 4, pp. 388–408, 2004.
- [15] L. M. Ward, "Understanding the role of entertainment media in the sexual socialization of American youth: A review of empirical research," *Developmental Review*, vol. 23, no. 3, pp. 347–388, 2003.
- [16] Y. Tsfati, H. G. Boomgaarden, J. Strömbäck, R. Vliegenthart, A. Damstra, and E. Lindgren, "Causes and consequences of mainstream media dissemination of fake news: literature review and synthesis," *Annals of the International Communication Association*, vol. 44, no. 2, pp. 157–173, 2020.
- [17] J. L. Egelhofer, and S. Lecheler, "Fake news as a two-dimensional phenomenon: A framework and research agenda," *Annals of the International Communication Association*, vol. 43, no. 2, pp. 97–116, 2019.
- [18] L. E. Mason, D. Krutka, and J. Stoddard, "Media literacy, democracy, and the challenge of fake news," *Journal of Media Literacy Education*, vol. 10, no. 2, pp. 1–10, 2018.
- [19] K. R. Ahern and D. Sosyura, "Rumor has it: Sensationalism in financial media," *The Review of Financial Studies*, vol. 28, no. 7, pp. 2050–2093, 2015.
- [20] B. Arbaoui, K. De Swert, and W. Van der Brug, "Sensationalism in news coverage: A comparative study in 14 television systems," *Communication Research*, vol. 47, no. 2, pp. 299–320, 2020.
- [21] J. D. Stevens, "Sensationalism in perspective, "Journalism History, vol. 12, no. 3, p. 78, 1985.
- [22] J. D. McCarthy, C. McPhail, and J. Smith, "Images of protest: Dimensions of selection bias in media coverage of Washington demonstrations, 1982 and 1991, "American Sociological Review, pp. 478–499, 1996.
- [23] A. C. Gunther, "Biased press or biased public? Attitudes toward media coverage of social groups," *Public Opinion Quarterly*, vol. 56, no. 2, pp. 147–167, 1992.
- [24] R. Puglisi and J. M. Snyder Jr., "Empirical studies of media bias," in *Handbook of Media Economics*, 2015, vol. 1, pp. 647–667.
- [25] M. B. Johansen, "Public intellectuals on new platforms: constructing critical authority in a digital media culture," *Rethinking Cultural Criticism: New voices in the Digital Age*, pp. 17–42, 2021.
- [26] D. W. Park, "Public intellectuals and the media: integrating media theory into a stalled debate," *International Journal of Media & Cultural Politics*, vol. 2, no. 2, pp. 115–129, 2006.
- [27] A. McKee, "Public Intellectuals: An introduction to Continuum's new series of interviews," *Continuum: Journal of Media & Cultural Studies*, vol. 16, no. 2, pp. 221–223, 2002.
- [28] R. W. Kenny, "A cycle of terms implicit in the idea of medicine: Karen Ann Quinlan as a rhetorical icon and the transvaluation of the ethics of euthanasia," *Health Communication*, vol. 17, no. 1, pp. 17–39, 2005.
- [29] B. Barman, "The linguistic philosophy of Noam Chomsky," *Philosophy and Progress*, pp. 103–122, 2012.
- [30] J. S. Falk, "Turn to the history of linguistics: Noam Chomsky and Charles Hockett in the 1960s," *Historiographia Linguistica*, vol. 30, no. 1–2, pp. 129–185, 2003.
- [31] B. Aarts, "Corpus linguistics, Chomsky and fuzzy tree fragments." In Corpus Linguistics and Linguistic Theory, pp. 5–13, 2000.
- [32] P. W. Orelus, and N. Chomsky, "Noam Chomsky and the linguistic, political, and activist world: A critical analysis," *Counterpoints*, vol. 458, pp. 23–41, 2014.
- [33] N. K. Blomley, "Activism and the academy." *Environment and planning D: Society and Space*, vol. 12, no. 4, pp. 383–385, 1994.
- [34] M. J. Goddard, "Upon further reflection—The affinity of Noam Chomsky and BF Skinner," *Review of General Psychology*, vol. 19, no. 2, pp. 140–145, 2015.
- [35] R. T. McCutcheon, "A default of critical intelligence? The scholar of religion as public intellectual," *Journal of the American Academy of Religion*, vol. 65, no. 2, pp. 443–468, 1997.
- [36] C. Hitchens, "The plight of the public intellectual," *Foreign Policy*, vol. 166, pp. 62–64, 2008.
- [37] R. A. Jackson, and B. L. Heath, "Freedom delimited: An analysis of humanist manifestos," *International Journal of Languages, Literature* and Linguistics, vol. 9, no. 2, pp. 116–123, 2023.
- [38] F. Å. Nielsen, "A new ANEW: Evaluation of a word list for sentiment analysis in microblogs," in Proc. for the ESWC2011 Workshop on

- 'Making Sense of Microposts': Big things come in small packages 718 in CEUR Workshop Proceedings, pp. 93–98, 2011.
- [39] S. R. Brooker-Gross, "News wire services in the nineteenth-century United States," *Journal of Historical Geography*, vol. 7, no. 2, pp. 167–179, 1981.
- [40] G. C. Wilhoit and D. Weaver, D. "Foreign news coverage in two US wire services: An update," *Journal of Communication*, vol. 33, no. 2, pp. 132–148, 1983.
- [41] D. Riffe and E. F. Shaw, "Conflict and consonance: Coverage of third world in two US papers," *Journalism Quarterly*, vol. 59, no. 4, pp. 617–626, 1982.
- [42] J. R. Cote, "A study of accuracy of two wire services," *Journalism Quarterly*, vol. 47, no. 4, pp. 660–666, 1970.
- [43] J. V. Pavlik, "A sea-change in journalism: Convergence, journalists, their audiences and sources," *Convergence*, vol. 10, no. 4, pp. 21–29, 2004
- [44] M. A. Baum and T. Groeling, "New media and the polarization of American political discourse," *Political Communication*, vol. 25, no. 4, pp. 345–365, 2008.
- [45] M. Roberts and M. McCombs, "Agenda setting and political advertising: Origins of the news agenda," *Political Communication*, vol. 11, no. 3, pp. 249–262, 1994.
- [46] J. H. McManus, "What kind of commodity is news," Communication research, vol. 19, no. 6, pp.787–805, 1992.
- [47] E. Herring and P. Robinson, "Too polemical or too critical? Chomsky on the study of the news media and US foreign policy," *Review of International Studies*, vol. 29, no. 4, pp. 553–568, 2003.
- [48] G. N. Brahm Jr, "Understanding Noam Chomsky: A reconsideration," Critical Studies in Media Communication, vol. 23, no. 5, pp. 453–461, 2006.
- [49] A. Mullen and J. Klaehn, "The herman—Chomsky propaganda model: A critical approach to analysing mass media behaviour," *Sociology Compass*, vol. 4, no. 4, pp. 215–229, 2010.
- [50] J. Dunaway, "Media ownership and story tone in campaign news," American Politics Research, vol. 41, no. 1, pp. 24–53, 2013
- [51] W. B. Blankenburg and G. W. Ozanich, "The effects of public ownership on the financial performance of newspaper corporations," *Journalism Quarterly*, vol. 70, no. 1, pp. 68–75, 1993.
- [52] D. P. Demers, "Corporate newspaper structure, profits, and organizational goals," *Journal of Media Economics*, vol. 9, no. 2, pp. 1–23, 1996.
- [53] N. Crick, "Rhetoric, philosophy, and the public intellectual," Philosophy & Rhetoric, vol. 39, no. 2, pp. 127–139, 2006.
- [54] E. Cushman, "The public intellectual, service learning, and activist research," *College English*, vol. 61, no. 3, pp. 328–336, 1999.
- [55] L. M. Alcoff, "Does the public intellectual have intellectual integrity?" Metaphilosophy, vol. 33, no. 5, pp. 521–534, 2002.
- [56] E. Townsley, "The public intellectual trope in the United States," The American Sociologist, vol. 37, no. 3, pp. 39–66, 2006.
- [57] H. A. Giroux, "Noam Chomsky and the public intellectual in turbulent times," *Truthout*, 2014.
- [58] P. D. Marshall and C. Atherton, "Situating public intellectuals," *Media International Australia*, vol. 156, no. 1, pp. 69–78, 2015
- International Australia, vol. 156, no. 1, pp. 69–78, 2015.
 [59] R. J. Jensen, and A. Lichtenstein, A., "From yippie to yuppie: Jerry Rubin as rhetorical icon," Southern Journal of Communication, vol. 60, no. 4, pp. 332–347, 1995.
- [60] R. W. Kenny, "The rhetoric of Kevorkian's battle," *Quarterly Journal of Speech*, vol. 86, no. 4, pp. 386–401, 2000.
- [61] G. Greenwald, How Noam Chomsky is Discussed, 2013.
- [62] T. J. Knapp, "Meeting the enemy: An essay review of Noam Chomsky: A life of dissent by Robert F. Barsky," The Analysis of Verbal Behavior, vol. 14, p. 105, 1997.

- [63] P. Guerlain, "Robert Kagan and Noam Chomsky two ways of being a political intellectual," *Comparative American Studies an International Journal*, vol. 4, no. 4, pp. 446–458, 2006.
- [64] M. Patton, Qualitative Research & Evaluation Methods: Integrating Theory and Practice, Sage publications, 2014.
- [65] S. Herring, "Content analysis for new media: Rethinking the paradigm," in New Research for New Media: Innovative Research Methodologies Symposium Working Papers and Readings, 2004, vol. 2, no. 12, pp. 47–66.
- [66] M. Vaismoradi, H. Turunen, and T. Bondas, "Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study," *Nursing & Health Sciences*, vol. 15, no. 3, pp. 398–405, 2013.
- [67] J. Creswell and J. Creswell, Research Design: Qualitative, quantitative, and Mixed Method Approaches, 5th ed. SAGE Publications, Inc., 2018.
- [68] A. Reboulet and R. Jackson, "Effective communication approaches for decision analytics: An exploration of strategies," in *Effective Strategies* for Communicating Insights in Business, R. Jackson and A. Reboulet, Eds. Hershey, PA: IGI Global, 2021, pp. 13–31.
- [69] K. Black, Business Statistics for Contemporary Decision Making, 10th ed. Wiley, 2020, ch. 11, pp. 372–426.
- [70] K. Welbers, W. Van Atteveldt, and K. Benoit, "Text analysis in R," Communications Methods and Measures, vol. 11, no. 4, pp. 245–265, 2017.
- [71] B. C. Boehmke and R. A. Jackson, "Unpacking the true cost of 'free' statistical software," *OR/MS Today*, vol. 43, no. 1, pp. 26–27, 2016.
- [72] H. Wickham, R. François, L. Henry, K. Müller, and D. Vaughn, dplyr: A Grammar of Data Manipulation, R Package version 1.1.2.
- [73] H. Wickham, W. Chang, L. Henry, T. L. Pedersen, K. Takahashi, C. Wilke, K. Woo, H. Yutani, and D. Dunnington, ggplot2: Create Elegant Data Visualisations Using the Grammar of Graphics, R Package version 3.4.2.
- [74] E. Hvitfeldt and J. Silge, textdata: Download and Load Various Text Datasets, R Package version 0.4.4.
- [75] H. Wickham, D. Vaughan, M. Girlich, K. Ushey, PBC Posit, tidyr: Tidy Messy Data, R Package version, 1.3.0.
- [76] G. De Queiroz, C. Fay, E. Hvitfeldt, O. Keyes, K. Misra, T. Mastny, J. Erickson, D. Robinson, and J. Silge, tidytext: Text Mining Using 'dplyr', 'ggplot2', and Other Tidy Tools, R package version, 0.4.1.
- [77] H. Wickham, tidyverse: Easily Install and Load the 'Tidyverse', R package version 2.0.0.
- [78] I. Feinerer, K. Hornik, Artifex Software, Inc., Tm: Text Mining Package, R Package version 0.7-7.
- [79] H. Wickham, J. Bryan, PBC Posit, M. Kalicinski, K. Valery, C. Leitienne, B. Colbert, D. Hoerl, and E. Miller, readxl: Read Excel Files, R package version 1.4.2.
- [80] H. Wickham, stringr: Simple, Consistent Wrappers for Common String Operations, R package version 1.5.0.
- [81] A. Dragulescu and C. Arendt, xlsx: Read, Write, Format Excel 2007 and Excel 97/2000/XP/2003 Files, R package version 0.6.5.
- [82] B. L. Heath and R. A. Jackson, "Ontological implications of modeling and simulation in post-modernity," in *Ontology, Epistemology, and Teleology for Modeling and Simulation*, A. Tolk, Ed. Berlin, Springer, 2013, pp. 89–103.
- [83] R. Jackson, Management in Quandary: A Critique of Organizational Power, Tipp City, OH, 2022, ch. 5, pp. 91–121.
- [84] N. Chomsky, The Responsibility of Intellectuals, The New Press, 2017.
- [85] E. S. Herman, and N. Chomsky, Manufacturing consent: The political Economy of the Mass Media, Random House, 2010.

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