

## RESEARCH ARTICLE

# Media framing and attitudinal bias toward the elderly: A Comparative study of US and Chinese media discourse

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## ABSTRACT

Against the backdrop of global ageing, the portrayal of the elderly in the media reflects societal attitudes towards this senior group and influences public perceptions of ageing. This study focuses on the term “elderly” and employs quantitative corpus-assisted approach, qualitative framing analysis, and semantic prosody analysis to compare how Chinese and American mainstream news media construct older adults. The corpus was sourced from *China Daily*, *South China Morning Post*, *The Washington Post*, and *The New York Times* throughout the entire year of 2023. A total of 359 concordance lines from China news media and 22 from American news media were examined for media framing and semantic prosody of the term “elderly”. The results showed that Chinese outlets more frequently employed “elderly” to refer to older adults, predominantly constructed them within the frame of institutional support, and tended to exhibit positive attitudes. In contrast, American media seldom utilized “elderly” and framed older people within negative societal contexts linked to challenges and difficulties. Specifically, 59.09% of the mentions in American contexts highlighted problematic aspects, whereas in China, 44.29% of the references depicted the elderly as beneficiaries of diverse institutional supports and volunteer efforts. This US-China comparative study of the term “elderly” revealed different dominant media frames and overall attitudes between China and American news outlets, which guide media professionals to rethink the power of language used to describe the elderly.

**Keywords:** The elderly; frequency; framing; attitude

## 1. Introduction

Amid rapid global aging, it has become increasingly significant to explore how different societies perceive, assist, and accommodate their senior members<sup>[1,2]</sup>. The media offers a good window to display different countries’ attitudes towards older people, which serves as a primary source to reflect social reality and constructs public perceptions of older people<sup>[3-6]</sup>. However, the media depict older adults as less and less representative and characterized, which adds further to the stereotypes about vulnerability and dependence that were fueled during the COVID-19 pandemic<sup>[7-13]</sup>. These portrayals not only influence public opinion but may also impact on the physical and mental health of older adults<sup>[14-18]</sup> and shape the youth’s perceptions of

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aging<sup>[19-23]</sup>. Media language is a powerful tool that subtly and overtly shapes societal values, attitudes, and stereotypes<sup>[24-28]</sup>. In the context of global aging, various forms of address for older people have been observed and discussed, with the term “elderly” receiving continuous attention.

This complicated and confusing term was at first considered as a neutral term without stereotypical qualities<sup>[29]</sup>, but two years later, he defined this term as a term that appears neutral but carries implicit negative connotations because media reporters often used it “in a negative and derisive fashion”<sup>[30]</sup>. In 1991, one United Nations initiative also criticized this term for perpetuating stereotypes of passivity, disempowerment, and homogeneity among older adults<sup>[31]</sup>, labeling seniors as a negative social group in a depersonalized and patronizing way<sup>[32]</sup>. The term “elderly” had been firmly rejected, and “older persons” was recommended to avoid generalizing older people as a homogeneous group<sup>[33]</sup>. Similarly, “older adults” instead of “senior” or “elderly” are suggested by the head of the International Longevity Center, Robert Butler<sup>[34]</sup>. Avers et al.<sup>[35]</sup> clearly indicated that “elderly” was an ageist term, with prejudice on older people, which “needs to disappear”, although “elderly” was once found as the most often employed to refer to senior citizens, not only in major three medical journals<sup>[36]</sup>, but also in British National Corpus (1980s–1993) and Corpus of Contemporary American English (1990–2008+), with a frequency rate of 22.2 per million, higher than other synonymous expressions<sup>[37]</sup>. But the usage frequency of “old” and “older” surpassed that of “elderly” in enTenTen20 (2019–2021)<sup>[38]</sup>. Furthermore, the collocations of “elderly” used to modify older adults were found associated with unfavorable stereotypes and ageism<sup>[35,39]</sup>, which have also been supported by the negative semantic prosody of “elderly” and the unfavorable framing of older images<sup>[38-40]</sup>. Prior criticism of the term “elderly” highlighted its problematic nature as it fails to recognize the diversity, agency, dynamism, and varying experiences that characterize different cohorts of older individuals<sup>[41]</sup>.

The American Psychological Association<sup>[42]</sup> advises against using the word elderly as a noun in preference to older person, a guideline that is supported by the global effort to minimize the use of ageism language, such as the campaign Dame Peggy Koopman-Boyden launched in New Zealand to use the term Don’t call us elderly<sup>[43]</sup>.

More so, professional organizations like the Gerontological Society of America and the American Association of Retired Persons (AARP) have clearly supported the adoption of terms like older people and older adults instead of elderly and seniors on the assumption that they are propagating harmful stereotypes<sup>[44-46]</sup>. All these efforts are summarized by the Reframing Aging Project, which assumes that the lexical choices play a significant role in shaping the way society perceives aging and, therefore, the way policy can be formulated and workplace practices. More recently, the campaign Disrupt Ageism by AARP has encouraged the use of age-inclusive language, relying on the evidence that linguistic ageism can either be inclusive or marginalizing<sup>[47]</sup>. The data of Google Books Ngram Viewer, which includes the years 1930–2022, reveal that the frequency of both the elderly and the older adult was the highest around 1987 and then there is a sharp decrease. Between 2006 and 2013, there was a brief period of slight increase, but a subsequent and sustained decrease thereafter<sup>[48]</sup>. Although such data provides a useful trend, further investigation is needed to determine how these trends are reflected in influential media outlets today.

Age and aging are shaped and defined by society and culture<sup>[49]</sup>, which implies that the media representations of older people may be different in eastern and western cultures. Compared with the existing ageism in western media, there has been a controversy over whether the respect for senior citizens in the Asian media declines or not. More respect for older adults was shown in the TV advertisements of South Korean and Taiwan than American and the UK<sup>[50-51]</sup>, partly due to the deep influence of Chinese Confucianism emphasizing Xiao (filial piety). On the contrary, stronger negative attitudes toward older

people are found in East Asia than in North American and English-speaking Western areas in modern times<sup>[52]</sup>. Even China, the birthplace of Xiao culture (meaning ‘filial piety’), is facing a big challenge. The images of older people transfer from wisdom to burden and threat<sup>[14, 53-55]</sup>, especially after the stigma of an older woman in 2006 PengYu case. Peng Yu assisted a fallen old woman, Xu Shoulun, but was sued for causing this accident and sentenced to pay compensation of RMB 40,000 in the first court decision, leading to controversy in China, with public opinion shifting from truth-seeking to abusing older people, even though the collision was proved true and publicly<sup>[56]</sup>. Word choice is an effective framing device<sup>[57]</sup>. A comparative study of the term “elderly” between China and American media can offer new clues to reveal whether these two societies differ in framing older adults.

China and America are two ageing societies, respectively reflect some eastern and western cultural values, and must face a lot of ageing issues. National Bureau of Statistics of China showed that there are 296.97 million older people aged 60 and above (21.1% of the total population) in 2023<sup>[58]</sup>, making China a super-aged society with the largest number aged population. American media is home to one of “the largest media conglomerates with tremendous power to shape public opinion”<sup>[37]</sup>, and compared to other countries, the United States exhibits a significant focus on the media representation of older individuals, as evidenced by the highest number of journal articles on this topic published in the Web of Science<sup>[59]</sup>.

Compared with other media outlets, news media is considered as more accurate and objective<sup>[5]</sup>, and provides a glimpse into public opinion, cultural trends, political affairs, and society<sup>[60]</sup> and plays a significant role in shaping the topics and opinions that dominate public discourse and contribute to the formation of attitudes<sup>[61]</sup>. Analyzing how Chinese and American news outlets use the term “elderly” provides valuable insights into the cross-cultural narratives around aging. Therefore, this comparative study aims to investigate whether “elderly” is used widely in both Chinese and American news media, to uncover the media frames used to describe older adults using “elderly”, and to explore the attitudinal tendencies of news media in two countries towards the use of this term. Research questions are as follows:

RQ1: How does the frequency of the term “elderly” differ in usage between Chinese and American news media?

RQ2: What are the differences in news framing of “elderly” between Chinese and American news media?

RQ3: How does the semantic prosody of the term “elderly” differ between Chinese and American news media?

This study helps widen the research scope of discourse and ageing, because such a comparative study between China and American media does add a cultural dimension to discuss a key linguistic expression representing older people. It also emphasizes the importance of avoiding ageist language in today’s youth-oriented society. The media frames and evaluative meaning of elderly in diverse cultures are the core of this study, which will better guide the reporters’ lexical choices. In addition, the corpus-based research method offers solid evidence for the frequency analysis.

## **2. Literature review**

Owing to the large casualties among older people during COVID-19 pandemic, older people gained an increasing media attention. However, ageism, negative characterization, and ageing stereotypes flooded in the news reports<sup>[62-65]</sup>. For example, five mainstream Chinese media outlets discursively constructed older people as vulnerable “passive recipients” waiting for assistance from “families, public institutions, and governments”<sup>[12]</sup>, and in Hong Kong, older people were also portrayed as frail, dependent, and deprived of

every facet of life in the three most popular newspapers with diverse political inclinations<sup>[13]</sup>. Amundsen<sup>[40]</sup> collected New Zealand online news articles during the COVID-19 pandemic, codified 6690 phrases with “the elderly”, and found that the word “elderly” and its collocations construct “the powerlessness frame” (accounting for 74% of all data) using the following three negative stereotypes: “vulnerable (34%), declining (21%), and burden (19%)”<sup>[40]</sup>. “The elderly” has dominant semantic preferences of “disability, illness, care, and vulnerability to crime”<sup>[38,39]</sup>; however, the connotations for “the elderly” are not as negative as previously thought<sup>[38]</sup>. It is still unstudied whether “the elderly” has similar negative semantic prosody in the English media of China.

Comparative studies on media representation of older people focus on advertising or commercials, which can be divided into two types. The comparative studies are conducted between the countries with similar cultural values, such as Korea and Malaysia<sup>[66]</sup>, among Hong Kong, Japan and South Korea<sup>[67]</sup>, or between western and eastern societies, such as the US and South Korea<sup>[50]</sup>, UK and Taiwan<sup>[51]</sup>. Lee et al.<sup>[50]</sup> conducted a cross-cultural content analysis of 2,295 prime-time television ads and found that under-representation and stereotypes of older people persist in both the US and South Korea. Compared with US ads, Korea ads tend to depict older people more favorably and emphasize their positive attributes, which verifies the impact of distinct cultural values on the contents of their ads. Chen’s cross-cultural study<sup>[51]</sup> noticed that in Asian advertisements, although Xiao culture persists, western cultures and globalization have begun to challenge filial piety. The public are more likely to believe the news media coverage, which do not passively describe or record news events in the world, but actively (re-)construct them<sup>[3]</sup>. It may become an issue if the term “elderly” used widely in the news media to contain negative connotations, just as the increasing public opposition happened in New Zealand, and the gerontologist Dame Peggy Koopman-Boyden appealed for not calling older people elderly<sup>[40]</sup>. It is of significance to explore whether it is still used widely in the news media of China and American, and how it is used to frame older adults.

The previous studies either focus on the media frames of “elderly”<sup>[40]</sup> or its semantic preference and semantic prosody<sup>[38,39]</sup>. This study combines media framing and semantic prosody analyses. The justification for this decision lies in that word choice (“elderly”) is a tool of media frames<sup>[57]</sup>, and that semantic prosody refers to the consistent meaning that a form (“elderly”) acquires from the words it frequently appears with<sup>[68]</sup>. Therefore, the core of media framing and semantic prosody analyses rests on the term “elderly” and the context it occurs.

Recent studies have shown that media framing has a great influence on how aging and other marginalized groups are viewed. In their corpus-based discourse analysis, Meng, Shaari, and Ng<sup>[69]</sup> discovered that the Chinese and Hong Kong newspapers tend to associate the word elderly with care and vulnerability, although the meaning of the word is context-specific. Zhao and Xia<sup>[70]</sup> demonstrated that negative news title framing of older adults make people more engaged, but may reinforce ageist stereotypes, whilst Xu et al.<sup>[71]</sup> and Deng and Ahmed<sup>[72]</sup> established in other areas that framing can alter public support and increase anxiety between focusing on risks and opportunities. Likewise, Yangxia and Mengdan<sup>[73]</sup> found vulnerability framing in methods of reporting disabled women and Guo, Su, and Chen<sup>[74]</sup> found cumulative framing influences on opinion about immigration. But framing can also be used to gain power: Bogado<sup>[75]</sup> discovered that generational frames could make older people support climate action, whereas Tian, Liang, and Huang<sup>[76]</sup> discovered that political influencers on Twitter could make audience rearrangements. Lastly, Tumino et al.<sup>[77]</sup> also concluded that crises like COVID-19 increase negative depiction of stigmatized groups, including older adults. Collectively these different studies highlight the two-fold nature of framing in order to either perpetrate stereotypes or to foster positive, inclusive discourse.

According to Goffman<sup>[78]</sup>, the idea of media framing states that frames are the schema of interpretation that provide people with the means of organizing and understanding the world around them and their lived experiences. This conceptualization was further narrowed down by Meng, Shaari, and Ng<sup>[69]</sup> who defined media framing as the selective focus of certain aspects of perceived reality in order to make them more salient in communicative situations. He has outlined four major elements of framing, which include problem definition, causal attribution, moral evaluation, and treatment recommendation<sup>[79,80]</sup>. In theory, media organizations have the power to shape dominant worldviews by strategically altering the language they employ to appeal to their viewers' emotions and perceptions<sup>[40]</sup>. In the study of language, frames are mainly recognized using the systematic examination of both lexical units and discourse syntactic structures that represent basic building blocks of discourse sense, thus enabling the creation of a coherent argumentative fabric<sup>[81-83]</sup>. Such analyses emphasize the role of linguistic devices—including syntax, script, theme, and rhetoric—in frame identification, adhering to the detailed methodological approach developed by Pan and Kosicki<sup>[83]</sup>. They propose a framework for frame analysis that involves constructing a data matrix for each news text, wherein the elements of each proposition are analyzed to expose the underlying semantic structures. The data for this study were specifically chosen based on news headlines that include the term “elderly”. The syntactical structure is an important indicator to identify media frames, because van Dijk emphasized it as “macrosyntax,” which plays a pivotal role in news discourse, primarily characterized by the inverted pyramid format which organizes content into sequential elements like headlines, leads, episodes, background, and closure<sup>[84]</sup>. The headline, being the most salient feature, serves as a powerful framing device that primes semantic associations and establishes the narrative's initial tone<sup>[83]</sup>. In addition, some professional news writing conventions aimed at demonstrating balance or objectivity<sup>[85]</sup>, are integral to the syntactical structure of news composition and serve as effective framing devices. They enhance empirical credibility by citing experts or data, associate perspectives with authority through official quotes, and marginalize viewpoints by linking them to socially deviant sources<sup>[83]</sup>.

The concept of semantic prosody takes centre stage in the discussion of the evaluative undertones associated with the lexical unit of elderly, and thus sheds some light on how these linguistic disposition tendencies are used to create images of old people. Similarly, semantic prosody allows exploring the evaluative semantics of the word elderly and helps to obtain useful information about how such collocational patterns influence the attitude to aging<sup>[86,87]</sup>. According to the definitions provided by Sinclair<sup>[86]</sup> and pursued by Stubbs<sup>[87]</sup>, semantic prosody refers to attitudinal meanings that come about as a result of the frequent co-occurrence of a word with specific sets of words. This minor aspect of language may have significant influence on the definition and understanding of the target word. In the current study, the concept of semantic prosody is extended to discourse prosody, which is not limited to the evaluative meaning that the collocates produce<sup>[68]</sup> but extends across the more than one unit in a linear string, as shown in Stubbs's analysis of the lemma CAUSE, which predominantly appears with words denoting negative events<sup>[88]</sup>. Because that is dominantly co-occurring with lexical items that represent negative events<sup>[88]</sup>. This highlights that collocates do not need to be directly next to the key term to affect its meaning, broadening the scope of semantic influence in discourse<sup>[89]</sup>. Stubbs's<sup>[87]</sup> framework categorizes semantic prosody into three types: positive, neutral, and negative. Negative prosody occurs when a node word predominantly attracts collocates with strong negative semantic characteristics. Neutral prosody arises when both negative and positive collocates coexist, creating a mixed or balanced evaluative tone. Positive prosody, on the other hand, is identified when collocates are mainly positive. The determination of semantic prosody in this study involves two key steps: first, collocational meanings are analyzed by examining the collocates of “elderly” and initially categorizing them as positive, neutral, or negative; second, the collocations are evaluated within a

broader context to examine whether the overall contextual meaning impact their prosodies. It is important to consider a larger context when determining the semantic prosody of “elderly” collocates.

Entman’s<sup>[79]</sup> four framing components and one of Pan and Kosicki’s<sup>[83]</sup> four framing devices — syntactical structure constitutes the theoretical framework of this study. By providing a framework for a comprehensive analysis of the term “elderly” in Chinese and American news media, semantic prosody analysis helps to close knowledge gaps in the literature on public views on aging in China and the US. There are significant knowledge gaps between media studies and gerontology that this study will help to fill.

### 3. Methodology

In this study, the mixed-methods design was used to support the investigation of the differences in the frequency, thematic frames, and semantic prosody related to the word elderly in Chinese and American news media. The research will seek to explain what lies behind the news frames and the semantic prosody that informs the portrayal of the elderly in the two nationalities. The study will aim at determining the media frames and semantic prosody associated with the word elderly and finding any differences between the Chinese and the American media context through the comparative analysis. The derived results will likely shed light on the role of news framing in the use of the term elderly in cross-cultural settings, thus providing the clarification of how media frames and semantic prosody interact and affect the general attitude of people towards the elderly.

#### 3.1. Design

This study did not necessitate ethical approval, as news media is extensively accessible to the public. Search words contain “elderly” and “the elderly”. Factiva was used to search for news articles reported from January 1, 2023 and December 31, 2023 for analysis. Factiva is an up-to-date global news database created by Dow Jones, a prominent source of economic and financial information worldwide. This database integrates more than 33,000 sources, offering students, educators, and librarians with access to high-quality information from 200 countries, available in 32 languages (<https://www.dowjones.com/professional/factiva/>). The year 2023 is identified as a crucial period for studying the media representation of the “elderly” due to significant developments in COVID-19 management that potentially influenced shifts in media narratives about this demographic. Firstly, on January 8, 2023, novel coronavirus infections were downgraded to Category B management, signaling a major shift in China’s COVID-19 policy<sup>[90]</sup>. Later, on May 5, 2023, the World Health Organization declared the end of COVID-19 as a Public Health Emergency of International Concern<sup>[91]</sup>. These milestones marked the transition from emergency health measures to more standard health governance, providing a unique context to explore whether media representations of older people moved from portraying them primarily as a vulnerable group during the pandemic to more balanced and normalized depictions in the post-pandemic period. This study mainly focuses on English-language news coverage throughout 2023 to capture how media depictions of older individuals are framed in the context of normalized society.

The search was conducted on English-language online news articles, specifically targeting those with headlines that included “elderly” or “the elderly” from four notable newspapers, two based in China (*China Daily*, *South China Morning Post*), and two in the United States (*The Washington Post* and *The New York Times*). These four newspapers are English-language representative daily newspapers in China and America. Headlines are crucial in news articles, designed to attract readers’ attention, provide the context, and show main topics and keywords that reflect the core content<sup>[92,93]</sup>. They can quickly set a positive, negative, or neutral tone, making them essential tools for framing<sup>[94]</sup>. News reports with headlines containing “elderly”

form the corpus of this study. On the one hand, the topics of these news reports will be closely related to older people; on the other hand, “elderly” shown as a keyword in the headlines may indicate its relatively high frequency in the news texts, which provides larger linguistic representations of “elderly” for comparison. This study focuses on whether the cultural factor impacts the use of “elderly”, so the news articles were only chosen in the context of Greater China and America, excluding news reports about other countries or regions, which better compare the differences in the usage of “elderly” between Chinese and American cultures. Those four popular news outlets spread information containing some eastern and western cultures. *China Daily* is widely read in over 200 countries and areas outside China<sup>[95]</sup>, and the most frequently quoted China newspaper by international news media<sup>[96]</sup>. *South China Morning Post*, an English-language newspaper based in Hong Kong, was named the winner of the Online News Association’s 2020 General Excellence in Online Journalism award for large newsrooms (<https://awards.journalists.org/winners/2020/>). By 2023, *the Washington Post* holds the third-largest print circulation in the U.S., with 135,980 print subscribers and 2.5 million digital subscribers. *The New York Times* is a widely read and influential newspaper in the U.S., boasting more than 10 million paid subscribers and having received over 120 Pulitzer Prizes<sup>[97]</sup>. News operates inside a social framework that includes generally accepted social ideas, commonly regarded as common sense or traditional wisdom<sup>[83]</sup>. The attitudes toward older people in the Chinese and American cultures may be inferred from the media representations of the “elderly”.

To answer the first research question, a quantitative analysis is conducted through AntConc 4.3.0 software, which is “a freeware corpus analysis toolkit for concordancing and text analysis”<sup>[98]</sup>. It can offer the statistical evidence for the normalized frequency and extract the concordance lines of the term “elderly” in a corpus. Frequency comparison can be effectively conducted using plot analysis. It is a visual tool that is used in corpus linguistics to visualize the frequency and distribution of particular lexical items or phrases in a textual corpus<sup>[98]</sup>. It produces a graphical representation- a plot- which represents the occurrence of these linguistic units, and hence the determination of patterns or clusters which can represent thematic or structural attributes. The method is useful in cross-corpus comparisons or in the analysis of usage differences in different parts of a document. Key Word in Context (KWIC) analysis also results in a better understanding of the contextual environment of the chosen keywords (e.g., the elderly) in the corpus<sup>[98]</sup>. KWIC offers an unquestioned picture of how the target term is employed in different contexts by showing the predetermined number of surrounding words on both sides, as well as the target term. The analytic approach reveals collocational and semantic relations, which are needed to understand the lexical patterns. By using KWIC, researchers are able to discover repetitive themes, rhetorical devices and focus changes in the content. Four newspaper corpora were analyzed by KWIC and the concordance lines related to the elderly were obtained.

A qualitative framing analysis and a semantic prosody analysis is to be performed in answering the second and the third research questions. Two coders carry out these analyses, which they are assigned to vivo code, summarize narrative topics, condense implicit media frames and other related keywords under various media frames, and assess semantic prosody. Framing process is usually associated with selectivity of information being included or excluded and thus how the audience interprets it<sup>[99]</sup>. Semantic prosody emphasizes the fact that language participants often assign an evaluative tone to lexical words, thus showing their position; it therefore is an essential instrument of examining subjective aspects of the text. Discourse prosody extends this idea by demonstrating how a word’s meaning can be influenced by collocates that are not necessarily adjacent but occur within the same linear string<sup>[88]</sup>. This broader context allows for a deeper understanding of how words contribute to the construction of meaning across a text. Because media frames present how information is presented to the public, they may influence how the “elderly” is portrayed. For

example, whether they are framed as beneficiaries of some policies or services or powerless people who need the government's subsidies, different media frames may have an impact on the semantic prosody of "elderly".

### 3.2. Data collection

According to Reppen<sup>[100]</sup>, a corpus "is a large, principled collection of naturally occurring language stored electronically". It is extensive electronic compilation of genuine spoken and written texts that are systematically collected in accordance with certain standards, including any literary genre but not limited to "newspapers, Facebook posts, recipes, novels, speeches, scripts, friends chatting, letters, books, magazines, lectures, compositions, memos, etc."<sup>[101]</sup>. This study built specialized corpora, which refers to a certain kind of text, including editorials in newspapers, scholarly papers, etc.<sup>[102,103]</sup> After preliminary screening, excluding duplicated articles in Factiva and manually screening, 308 news articles (94 from *China Daily*, 143 from *South China Morning Post*, 55 from *the Washington Post* and 16 from *the New York Times*) whose headlines or leading paragraphs include the term "elderly", among which only 75 headlines contain the term "elderly" (68 China news, 7 American news, shown in Table 1). As shown in the Table 1, the self-built specialized corpus of this study includes 30 China news articles from *China Daily* and 38 from *South China Morning Post* with 42783 tokens in total; and 5 American news articles from *the Washington Post*, 2 from *the New York Times* with 7291 tokens in total. One news article titled "Popular elderly panda dies at Chengdu base" in *China Daily* was excluded, because "elderly" in this study has the semantic connotation [+HUMAN], and panda has the connotation [+NON-HUMAN]. Only 7 American news articles seem very small for a corpus, but this scenario is typical in corpus construction and is generally acceptable. As Baker<sup>[104]</sup> notes, when building a specialized corpus to examine the discursive construction of a particular topic, the focus may not be as much on the corpus's size as on the expected frequency of that topic's occurrence within it. That is to say, the quality and relevance of the content may be more important than the corpus's size under some circumstances.

To ensure the accuracy of word counts in AntConc, further manual data processing was conducted, such as expanding contractions with apostrophes into their complete forms (can't → cannot, don't → do not, it's → it is, we're → we are, etc.), restoring the abbreviated form "U.S." to its full form "United States". The final corpora contain 67 news articles (5958 types, 42371 tokens) from China news media and 7 news articles (2273 types, 7290 tokens) from American news media. In sum, 74 news articles remained as the data for further analysis. All the remaining news articles were transferred into plain texts (txt. format) for AntConc analysis. To ensure the reliability of the corpus, further text clean-up was conducted. Each news text was thoroughly and carefully read to exclude unwanted information, such as "the marketing information or advertisements, social media information and news section labels"<sup>[105]</sup>. Bylines, publication dates, page numbers, author names, and any embedded links or metadata were also removed.

**Table 1.** Basic information of the two corpora

| Corpora       | Corpora                         | Starting Time              | Ending Time                 | News articles | Types | Tokens |
|---------------|---------------------------------|----------------------------|-----------------------------|---------------|-------|--------|
| China news    | <i>China Daily</i>              | Jan 1 <sup>st</sup> , 2023 | Dec 31 <sup>st</sup> , 2023 | 29            | 3536  | 17960  |
|               | <i>South China Morning Post</i> | Jan 1 <sup>st</sup> , 2023 | Dec 31 <sup>st</sup> , 2023 | 38            | 4239  | 24411  |
| American news | <i>The Washington Post</i>      | Jan 1 <sup>st</sup> , 2023 | Dec 31 <sup>st</sup> , 2023 | 5             | 1701  | 5065   |
|               | <i>The New York Times</i>       | Jan 1 <sup>st</sup> , 2023 | Dec 31 <sup>st</sup> , 2023 | 2             | 986   | 2225   |

Following the KWIC analysis, 458 hits of "elderly" concordance lines were identified. However, since some of these concordance lines belong to a single sentence—meaning a complete sentence may contain two

or more instances of the expression “elderly”. Given that both media frames and semantic prosody studied in this study are closely linked to the context, these concordance lines have been merged, resulting in a total of 419 complete sentences containing the term “elderly.” in China news corpus and 22 sentences in American news corpus. To clarify that these sentences include the term, these 419 sentences are still referred to as concordance lines. This study only focuses on the noun use of “elderly” which refers to the senior group or older individuals, so the 60 concordance lines containing its adjective use were removed, such as “elderly care” (30 times), “elderly-care” (7 times) + “homes/beds/facilities/infrastructure”, etc. Ultimately, 359 sentences containing the term “elderly” from Chinese news media and 22 from American news media were respectively compiled into two separate worksheets in an Excel spreadsheet. Each worksheet was organized with columns that catalogued various details, including the date, the source, the headline of each article, concordance lines, and media frames. An extract of data was shown in Appendix 1. This structured approach facilitates a comprehensive analysis of how the term “elderly” is framed within the media landscapes of China and the United States, allowing for a detailed examination.

#### Acknowledgment of US Corpus Limitation

It should be noted that the American news corpus contained only 22 concordance lines with the term “elderly,” which is considerably smaller than the 359 concordance lines identified in the Chinese corpus. While this limited number is consistent with the observed decline in the use of “elderly” across English-speaking media, it inevitably constrains the comparative reliability of the findings. The small sample size may reduce the representativeness of attitudinal tendencies in American media and makes cross-cultural contrasts more sensitive to individual textual instances. Therefore, the comparative conclusions drawn in this study should be understood as indicative rather than definitive, and future research with a larger and more diverse American corpus would help validate and extend these observations.

### 3.3. Procedure

Owing to a small size of data (381 in total), the qualitative framing analysis chooses a linguistic and hermeneutic approach<sup>[106]</sup>, which can more deeply interpret how China news media and American media select some issues of a perceived reality (ageing issue) and make them more salient through lexical choices.

First, 381 concordance lines were first coded. Headlines and quotes are important framing devices<sup>[83]</sup>. The research team consisted of 3 members, who manually and respectively identified the story topics concerning the term “elderly”, then carefully analyzed 67 headlines and 148 direct or indirect quotations carrying “elderly”. After that, the members discussed different codes and reached an agreement. They decided on two tentative frames: government support frame and social issues frame. These two frames identify the issues related to the “elderly” under government accountability or as societal issues. Some descriptions of the elderly attribute related ageing issues to the government or relevant institutions, while others attribute them to the elderly themselves, often accompanied by moral evaluations. Moral evaluations can be reflected in the semantic prosody analysis, and the proposed solutions vary accordingly. The government support frame calls for more optimized services or care from the government, while the societal issues frame tends to emphasize the challenges faced by various aspects of society due to the ageing problems. Second, a codebook of media frames was generated, which indicates the key lexical choices in these two tentative frames. Third, 381 concordance lines were again analyzed and grouped into government support frame or social issue frame. Some concordance lines carrying multi-topic coding or ambiguity were reviewed further by the three members based on larger contexts. Three sub-frames were found and compiled into the codebook. Third, two members of the research team undertook an evaluation of the semantic prosodies of each concordance. They independently assessed the overall sentiment of the context

surrounding “elderly”: positive, neutral or negative. An extract of the assessment process was shown in Appendix 2. Upon completion of their independent assessments, the inter-coder reliability was calculated using Cohen’s Kappa, which resulted in a coefficient of 0.716. Cohen’s Kappa statistics are a measure of the degree of agreement between two raters beyond what would be expected by chance alone. A Kappa value of 0.716 indicates substantial agreement, suggesting that the evaluations of semantic prosodies by the two raters are highly consistent with each other. This level of reliability is considered robust in academic research, affirming the dependability of the coding process.

While the coding process achieved substantial inter-coder reliability (Cohen’s Kappa = 0.716), it is important to acknowledge that annotators’ cultural, linguistic, and disciplinary backgrounds may have influenced polarity judgments in some concordance lines. For instance, terms such as “*underprivileged*” in Excerpt 17 may be interpreted more negatively by an annotator highly attuned to ageist discourse, whereas others may place greater emphasis on positive contextual elements such as “*joy*” or “*companionship*.” Similarly, readers’ perspectives—whether policymakers, media scholars, or members of the general public—can also shape how polarity is understood. Recognizing this inherent subjectivity does not undermine the validity of the findings but instead highlights the interpretive dimension of semantic prosody analysis. Including this reflection ensures a more nuanced understanding of how evaluative tendencies are identified and acknowledges that polarity shifts may occur depending on the emphasis placed on different linguistic cues.

## 4. Results

Overall, American media doesn’t use the term “elderly” as frequently as China media. After the further analyses of news framing and semantic prosody, there are two major news frames used in both American and China media outlets: institutional support frame and societal context frame, and three polarity types of semantic prosody, positive, neutral and negative polarities.

### 4.1. Frequency comparison

First, the frequency of using the term “elderly” in the English-language news media of China and America are totally different, shown in Table 2. Based on the plot analysis in AntConc 4.3.0.2, the frequency of using “elderly” in China news is 458 times, and its frequency in American news is 22 times. Owing to different sizes of China and American news databases, the frequency needs to be normalized to compare. As Normalized Frequency displayed, the term “elderly” in the China news appears 3.58 times (10809.280/3017.833) its frequency in the American news. The high dispersion values of both China news data (0.916) and American news data (0.777) mean that the term “elderly” is evenly distributed throughout the corpus, and appears consistently across different sections, especially its more even distribution in the context of China news media. It can be inferred that China news tend to use the term “elderly” more often to address older adults than American news, and the media staff in China possibly haven’t realized this difference.

**Table 2.** Frequency of using “elderly”

| Corpora       | Tokens | “elderly” frequency | Normalized frequency | Dispersion |
|---------------|--------|---------------------|----------------------|------------|
| China news    | 42371  | 458                 | 10809.280            | 0.916      |
| American news | 7290   | 22                  | 3017.833             | 0.777      |

### Recurrent topics

The research adopted vivo coding to summarize the story topics of “elderly” concordance lines in American and China media. American media involves three main areas: elder care, health and population, and China media is around nine main aspects: elder services (including food services, health services, social services, care services), crime and law (including fraud, regulation, policy), transport, leisure activities, housing, health problems, daily life, economy and contributions. A further in-depth interpretation of all these concordance lines with the research team about “what” and “how” the term “elderly” is framed when it refers to the senior group. Two abstract and higher-level media frames are condensed: institutional support frame and societal context frame. The former means that all support provided by formal organizations, professional groups or systemic institutions, including but not limited to governments, authorities, enterprises, social institutions (such as hospitals, universities, non-profit organizations, community service centers, etc.), and related groups (such as doctors, volunteers). These agencies and professionals help older people address challenges or meet needs through policies, resources, or professional services. The latter frame refers to media narratives about health issues, leisure activities, daily life, housing, transport, and other social aspects related to old age, which contains the narratives not covered by the institutional support frame and is specifically divided into three sub-frames: challenges/problems/difficulties sub-frame, description sub-frame and contributions or participation sub-frame. Challenges/problems/difficulties sub-frame not only includes the challenges and difficulties faced by all elderly people in all aspects of society but also consists of various social problems created by the elderly themselves. Description sub-frame denotes objective descriptions of all facts related to the elderly and does not contain any evaluative expressions. Contributions or participation sub-frame comprises all social activities in which older people actively participate (including expressing personal views or delivering their personal emotions) as well as their positive impacts and contributions to society.

**Table 3.** Framing Coding for “elderly” concordance lines

| Media Frames                | Sub-frames                                 | key codes                                       | Examples                                                                                                                                                                                                                                                                                                   |
|-----------------------------|--------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Institutional support frame |                                            | government, experts, authorities, doctors, etc. | The central government said there were 1.58 million beds for dependent elderly in 2020 and it aimed to have 9 million such beds by 2025. (Source: <i>South China Morning Post</i> , April 21, 2023)                                                                                                        |
|                             | challenges/problems/difficulties sub-frame | struggling, problems, abandoned, shortage, etc. | Elderly couples abandoned by family or unknown to neighbors went hungry inside overheated and damaged homes. (Source: <i>The Washington Post</i> , January 14, 2023)                                                                                                                                       |
| Societal context frame      | description sub-frame                      | percent, account for, show, become, etc.        | The United Nations forecasts that the number of elderly citizens in the country will rise to 280 million in 2025, accounting for one-fifth of the population. By 2050, that number will rise to 480 million, or 37 percent of the country's total population. (Source: <i>China Daily</i> , June 12, 2023) |
|                             | contributions/participation sub-frame      | play a part, potential, boon, etc.              | Finally, we should not lose sight of the fact that our elderly people have each played a part in Hong Kong's transformation over the decades into one of Asia's most vibrant and dynamic cities. (Source: <i>South China Morning Post</i> , March 24, 2023)                                                |

## 4.2. News framing comparison

As Table 4 demonstrates, both China media and American media adopted institutional support frame and societal context frame. Among the few 22 concordance lines of “elderly”, only 13.64% used institutional support frame, which indicates that “elderly” is rarely used by American media and less likely to relate to institutional support. “Elderly” is most likely to appear in the challenges/problems/difficulties sub-frame,

which account for nearly three fifth (59.09%) in American media. In China, although the challenges/problems/difficulties sub-frame has the largest proportion (35.10%) under the societal context frame, 44.29% of the “elderly” concordance lines frame the older individuals or senior group as the targets of support and care of different institutions, professional, and volunteers.

**Table 4.** News Framing Comparison

| Media Frames                | Sub-frames                                 | China media |            | American media |            |
|-----------------------------|--------------------------------------------|-------------|------------|----------------|------------|
|                             |                                            | Number      | Percentage | Number         | Percentage |
| Institutional support frame |                                            | 159         | 44.29%     | 3              | 13.64%     |
|                             | challenges/problems/difficulties sub-frame | 126         | 35.10%     | 13             | 59.09%     |
| Societal context frame      | description sub-frame                      | 38          | 10.58%     | 6              | 27.27%     |
|                             | contributions/participation sub-frame      | 36          | 10.03%     | 0              | 0%         |

#### 4.2.1. Institutional support frame

In the following first two cases, “elderly” was constructed as a whole group supported by China and American society. The linguistic expression “for the elderly” signifies that elderly people are the beneficiary group. But given the larger context, “optimized”, “expanding” in China context seems a little more positive than “minimum” in American context, especially when “the young” was mentioned to question the inter-generational equality of American society.

##### Excerpt 1

According to the civil affairs ministry’s report, **the nation** has **optimized** services **for the elderly** by **expanding** pension services facilities such as nursing homes and barrier-free facilities in more city-level residential communities and setting up pension service majors at vocational schools.

(Source: *China Daily*, December 15, 2023)

##### Excerpt 2

**American society** long ago committed to **ensuring minimum** living standards **for the elderly**—whatever the cost. What, I wonder, would it take to secure the same sort of commitment to **the young**?

(Source: *The Washington Post*, November 22, 2023)

##### Excerpt 3

Kuwanam Imin was among **the doctors** paying home visits, **providing the elderly** patient with **free** medicine and physical checkups over the following week.

(Source: *China Daily*, January 30, 2023)

##### Excerpt 4

Joy filled a recent lunch party for a group of **underprivileged elderly** residents as **volunteers** from a law firm warmed their hearts with care, companionship and entertainment.

(Source: *South China Morning Post*, December 24, 2023)

Excerpt 5

In the wake of tropical cyclones, older adults took charge of their communities. They **volunteered** to care for and provide **for elderly and bedridden neighbors**. They coordinated with **local governments and nonprofits** to meet needs.

(Source: *The Washington Post*, January 14, 2023)

Excerpt 3, 4 and 5 mentioned volunteers, Chinese volunteers from doctors and a law firm, American volunteers from older adults of a community. In China, the elderly were cared by professionals and social volunteers, while in America, the volunteers turned out to be older adults themselves, who helped the elderly and bedridden neighbors, and also “coordinated with local governments and nonprofits to meet needs”.

It can be inferred that China media tended to highlight the initiative and willingness of various institutions to support the senior group, but American media only mentioned institutional support, which was not the focus of the whole context.

#### 4.2.2. Societal context frame

Societal context frame in China media cover several story topics, such as crime, digital society, transport, fraud, leisure activities, housing, daily life, health problems, etc., while America media mainly focuses on elder care under this frame. The above topics can be summarized into three sub-frames.

##### *Challenges/problems/difficulties sub-frame*

Under this sub-frame, the elderly are sometimes constructed as a vulnerable group who had to face some challenges or difficulties. For example, they were lonely because they were left behind in a wave of emigration and sometimes lacked food.

Excerpt 6

The recent wave of emigration also leaves **elderly** relatives behind, adding to their loneliness.

(Source: *South China Morning Post*, August 5, 2023)

Excerpt 7

He demurred but then said he had some **elderly** neighbors who had not eaten in some time.

(Source: *The Washington Post*, January 14, 2023)

But it is worth noting that in China media, “problems” under this sub-frame denotes two meanings: one refers to health/mental/social problems older people may have, and the other represents the problems caused by older adults themselves. For example, tooth loss “in the elderly” was a health problem, and “some elderly people” badly behaved in public transportation.

Excerpt 8

Given the importance of social connection for good well-being, **tooth loss** may not only affect cognitive function in **the elderly** but contribute to the prevalence of mental health problems in this population.

(Source: *South China Morning Post*, July 8, 2023)

Excerpt 9

Even on planes and trains, **some elderly people** occupying the seats of other passengers **refuse** to shift to their assigned seats.

(Source: *China Daily*, April 6, 2023)

### **Description sub-frame**

This sub-frame objectively describes a fact without assessment or emotions. For example, the identity of Carmen Delia Sánchez was “Puerto Rico’s special advocate for elderly and retired adults”, a fact statement. And it is also a factual description about the rate of vaccination in the elderly on the mainland. Such a sub-frame does not present any evaluative tendency of the media staff.

#### **Excerpt 10**

We have been sounding the alarm for years. It was no secret that this would happen, said Carmen Delia Sánchez, Puerto Rico’s special advocate for elderly and retired adults.

(Source: *The Washington Post*, January 14, 2023)

#### **Excerpt 11**

He said the vaccination rate among the elderly has risen to 80 percent on the mainland.

(Source: *China Daily*, January 10, 2023)

### **Contributions/participation sub-frame**

This sub-frame only appears in China media, which emphasizes older people’s active role in the society, for example, their contributions to “families and local communities”, and their influence for “younger generations”.

#### **Excerpt 12**

It is important to remember the contributions that **the elderly** make within their families and local communities, although these are typically a reflection of their general health and well-being, which has a tendency to deteriorate with age.

(Source: *South China Morning Post*, May 24, 2023)

#### **Excerpt 13**

Therefore, as **elderly people**, we should be thankful to society and exercise more self-discipline to become role models for the younger generations.

(Source: *China Daily*, April 6, 2023)

Furthermore, elderly people can make more contributions to society, as the following example shows. Silver economy has been a hotspot in China. It has contributed about 7 trillion yuan (US\$982 billion), accounting for around 6% of its total GDP<sup>[107]</sup>.

#### **Excerpt 14**

He said a growing economy meant **the elderly** were “becoming more financially and physically capable than ever before”, presenting opportunities for the private sector.

(Source: *South China Morning Post*, November 22, 2023)

### **4.2.3. Semantic prosody comparison**

Table 5 demonstrated three polarity types of semantic prosody and typical examples. The different distributions of positive, neutral and negative semantic prosody between American and China media are shown in Table 6.

**Table 5.** Semantic Prosody Coding for “elderly” Concordance Lines

| Polarity types | Examples                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| positive       | <p>Authorities in Beijing released a guideline on Thursday, pledging to <b>improve</b> services <b>for the capital’s elderly</b> population in line with the broader national strategy. (Source: <i>China Daily</i>, December 8, 2023)</p> <p>They volunteered to <b>care for and provide for elderly</b> and bedridden neighbors. (Source: <i>The Washington Post</i>, January 14, 2023)</p> |
| neutral        | <p>The most common options for the elderly are living with families in residential buildings or in care homes. (Source: <i>South China Morning Post</i>, May 17, 2023)</p> <p>My elderly mother-in-law is moving in with us next month. (Source: <i>The Washington Post</i>, January 9, 2023)</p>                                                                                             |
| negative       | <p>Michelle Cottle writes about the financial and psychological <b>burdens</b> of caregiving for the elderly. (Source: <i>The New York Times</i>, September 24, 2023)</p> <p>“Many elderly residents are ‘<b>hidden</b>’, <b>lacking</b> family or community support,” she said. (Source: <i>South China Morning Post</i>, July 6, 2023)</p>                                                  |

There are some complicated concordance lines with more than one polarity type, and it is necessary to clarify which one is primary and which one is secondary. There are three examples given as follows.

Excerpt 15

Michelle Cottle gets it right at every turn, as have many others writing for decades about the **failure** in the US. to institute respectful, safer, well-staffed and well-paid health care for **elderly Americans**.

(Source: *The New York Times*, September 24, 2023)

In this example, all the adjective and noun collocations of “elderly Americans”, including “respectful”, “safer”, “well-staffed”, “well-paid”, “health care”, are positive, but the only one word, “failure” in the previous context, denied all the positive discourse prosody of “elderly Americans”. We can say that negative prosody is the primary one.

Excerpt 16

Given that **many victims of fraud are elderly**, the law on telecom and online fraud, which took effect in December, requires government departments and relevant service providers to help enhance awareness among **the elderly**, to stop them from being cheated.

(Source: *China Daily*, February 13, 2023)

This example is constituted by a conditional adverbial clause and a main clause. The main clause clearly presents the positive discourse prosody through the positive words “help” and “enhance”, but it is very important to notice the premise is that “many victims of fraud are elderly”. Therefore, the elderly in this sentence are regarded as a group who are easily cheated and defrauded. The primary prosody is also negative.

Excerpt 17

Joy filled a recent lunch party for a group of underprivileged **elderly residents** as volunteers from a law firm warmed their hearts with care, companionship and entertainment.

(Source: *South China Morning Post*, December 24, 2023)

If we only focus on the direct collocates of “elderly residents”, “underprivileged” shows an obviously negative polarity. But given the whole context, volunteers “warmed their hearts”, and “joy” filled with the party. “The elderly” here are the beneficiary group, especially when it was Christmas Eve. “Underprivileged” may be just to signify their lower income level. The primary prosody of “elderly” is positive. Each confusing concordance line has been discussed by the research team and reached an agreement.

**Table 6.** Semantic Prosody Comparison

| Polarity types | China media |            | American media |            |
|----------------|-------------|------------|----------------|------------|
|                | Number      | Percentage | Number         | Percentage |
| positive       | 190         | 52.92%     | 1              | 4.55%      |
| neutral        | 38          | 10.59%     | 4              | 18.18%     |
| negative       | 131         | 36.49%     | 17             | 77.27%     |

The descriptions of the elderly in China media tends to be positive, just over 50%, while more than three fourth (77.27%) of the “elderly” concordance lines in American media turns to be negative. Although a big difference of corpus size exists between China news corpus and American news corpus, it can also represent the various distribution within the same corpus. In China media, negative semantic prosody (36.49%) clearly surpasses neutral one, more than three times. On the contrary, the proportion of neutral semantic prosody (18.18%) is larger than that of negative one, which might be not very accurate because of the small sample size. But in the news articles of 2023, it is safely concluded that the positive descriptions of the “elderly” in American media is very rare.

Excerpt 18

They volunteered to care for and provide for **elderly** and bedridden neighbors. They coordinated with local governments and nonprofits to meet needs.

(Source: *The Washington Post*, January 14, 2023)

Excerpt 19

Authorities in Beijing released a guideline on Thursday, pledging to improve services for the capital’s **elderly population** in line with the broader national strategy.

(Source: *China Daily*, December 8, 2023)

There is only one case of positive semantic prosody in American media. If set in a larger context “In the wake of tropical cyclones, older adults took charge of their communities”, we know that “they” refer to “older adults”. It means that older people helped “the elderly and bedridden neighbors” after a natural disaster. It strikes a sharp contrast with the case in China media. “Authorities” pledged to “improve services” for the “elderly” in Beijing. On the surface, these two cases seem to be similarly positive. But the level and intensity of support are indeed distinct.

Excerpt 20

Luo Xueyi, an 83-year-old who lives by herself, said the canteen has made eating more convenient for **the elderly**.

(Source: *China Daily*, December 27, 2023)

This example showed an old woman expressed her opinion on the canteen. She assessed the convenience for “the elderly”. Such narrative strengthens the positive polarity of “elderly” term. An indirect quotation from an 83-year-old woman about the canteen affirmed the convenience provided by the canteen to elderly people.

Excerpt 21

The state’s elderly population, much of it well-off, continues to boom.

(Source: *The Washington Post*, February 13, 2023)

Excerpt 22

Residents living alone aged 65 and over account for 13 percent of the total elderly population, according to the 2021 by-census.

(Source: *South China Morning Post*, July 6, 2023)

The above two examples objectively stated the factual information: one is about the increase of rich elderly, and another reported the proportion of the elderly residents living alone, which carry no positive or negative evaluations.

Excerpt 23

Since then, each subsequent disaster has unveiled another facet of the social safety net's inadequacies as stories about Puerto Rico's **elderly** living in **subhuman** conditions become frequent segments of local newscasts and tabloids.

(Source: *The Washington Post*, January 14, 2023)

Excerpt 24

And when two **elderly** women were caught trying to **steal** two geese from a park in Beijing earlier this year, people severely criticized them for it.

(Source: *China Daily*, April 6, 2023)

Negative semantic prosody is often linked with some negative lexicon, such as “subhuman”, “steal” in the above two examples, respectively proves the bad living condition of “Puerto Rico's elderly”, and the declining morality of “two elderly women” in Beijing.

Based on the comparison of frequency, news framing and semantic prosody, it is obvious that “elderly” is still in active use in China media, which is significantly different from its use in American media.

## 5. Discussion

It is important to clarify the distinction between findings that are directly supported by the data and those that rely on broader contextual interpretation. The corpus analysis provides empirical evidence of key differences: Chinese media used “elderly” 458 times (normalized frequency = 10,809.28 per million words) compared to 22 instances in American media (normalized frequency = 3,017.83 per million words); institutional support frames were more prevalent in Chinese reporting (44.29%) than in American reporting (13.64%); and semantic prosody was predominantly positive in China (52.92%) but overwhelmingly negative in the United States (77.27%). These results are directly grounded in the data. By contrast, the explanations attributing Chinese portrayals to collectivist traditions or welfare-oriented political ideology, and American portrayals to individualist or critical discourses, should be read as contextual interpretations. These interpretations are informed by existing scholarship on media, culture, and political communication, but they do not emerge from the corpus data alone. Making this distinction allows the analysis to remain empirically rigorous while situating linguistic findings within broader cultural and ideological frameworks.

The findings of this study reveal significant cross-cultural differences in the media portrayal of the elderly. Chinese media employed the term “elderly” 458 times in 2023, representing a normalized frequency of 10,809.28 per million words, whereas American media used the term only 22 times, with a normalized frequency of 3,017.83 per million words. This indicates that Chinese media employed the term 3.58 times more frequently, with more even dispersion across the corpus (0.916 in China vs. 0.777 in the United States). Beyond frequency, differences were also evident in framing: 44.29% of Chinese concordance lines fell

within the institutional support frame, while American media relied overwhelmingly on the challenges/problems frame (59.09%) and included only 13.64% under institutional support. Similarly, semantic prosody showed sharp divergence: Chinese media described the elderly with positive polarity in 52.92% of cases, compared to just 4.55% in the American sample, where negative portrayals dominated (77.27%).

These results largely align with expectations from prior scholarship. Earlier studies<sup>[30,35,38,39]</sup> documented the decline of “elderly” in Western discourse due to its perceived ageist connotations. The limited frequency in the American corpus therefore confirms existing claims that English-speaking media increasingly prefer alternatives such as “older adults.” Conversely, the persistence of the term in Chinese media, often with positive prosody, was somewhat unexpected given international critiques of the word. Unlike Western practice, Chinese outlets appear to retain “elderly” as a neutral or even respectful label when embedded within institutional support or contributions frames. This reflects a linguistic environment where the term has not acquired the same stigmatization as in English-speaking contexts.

The explanation for these differences appears twofold. First, the quantitative data directly confirm that Chinese media provide more institutional support framing and more positive portrayals of the elderly, while American media rely disproportionately on negative depictions of vulnerability. Second, the cultural and political interpretations—such as the role of collectivist ideology in Chinese discourse and individualist orientations in American contexts—should be understood as contextual interpretations rather than direct outcomes of the corpus data. For example, the higher proportion of institutional support in Chinese news (44.29% compared to 13.64% in the United States) is an empirical finding. Interpreting this as evidence of collectivist cultural norms or welfare-oriented political discourse is a contextual reading supported by prior literature on Chinese governance and cultural traditions. This distinction ensures that claims remain firmly anchored in empirical evidence while acknowledging the interpretive frameworks used to situate the findings.

Some results were also unexpected. While Western literature often critiques “elderly” as an inherently negative and exclusionary label<sup>[35]</sup>, Chinese usage was frequently accompanied by positive institutional actions (e.g., expansion of pension services, volunteer activities, or recognition of contributions to the “silver economy”). This indicates that the negative semantic prosody documented in Anglophone corpora does not fully transfer to Chinese usage. Instead, a strong media frame can mitigate or even reverse negative collocational tendencies, as seen in examples where words like “underprivileged” co-occurred with positive prosody through contextual emphasis on joy, care, and support.

Nevertheless, several limitations of the study should be acknowledged. First, the American corpus included only 22 concordance lines across two newspapers, which constrains the reliability of cross-cultural comparisons and makes findings sensitive to a small number of textual instances. Second, although substantial inter-coder reliability was achieved (Cohen’s Kappa = 0.716), annotators’ cultural, linguistic, and disciplinary backgrounds may have influenced polarity judgments. For example, some evaluators may weigh terms like “underprivileged” more negatively, while others emphasize positive contextual cues such as “joy.” This subjectivity highlights the interpretive dimension of semantic prosody analysis. Third, the study is limited to one year (2023) and four newspapers, excluding other media genres such as television, social media, or local press, which could produce different portrayals.

Given these constraints, the generalizability of the findings must be treated with caution. The results provide strong evidence of divergent framing practices between Chinese and American elite media in 2023, but they cannot be assumed to represent all media within these countries, nor can they be extrapolated globally. Future research should incorporate larger and more diverse corpora across multiple years and

include synonyms such as “older adults,” “seniors,” or “retirees.” Cross-national studies beyond China and the United States would further clarify whether the differences observed here are unique to these two contexts or reflect broader East–West divides in aging discourse.

In sum, the study demonstrates that Chinese and American media diverge substantially in their linguistic treatment of the elderly: Chinese outlets maintain frequent and often positive use of the term, while American outlets use it sparingly and largely with negative prosody. These findings contribute to understanding how media language both reflects and reinforces cultural conceptions of aging, while also underscoring the need for more nuanced, culturally sensitive approaches to age-related terminology in global discourse.

## 6. Conclusion

To sum it up, this comparison of the use of the term elderly in Chinese and American news media highlights the presence of clear differences that seem to be rooted in the pre-existing cultural and ideological background. The portrayal of the elderly in the American outlets often refers to the challenges, problems or limitations, thus depicting a Western tendency to equate aging to decline or dependency on others. Chinese media, on the other hand, are more likely to portray a more moderate perspective with more positive images that are in tandem with the cultural values that respect the older generation and an ethos of collectivism that recognize the efforts of everyone towards society.

Different media frames and semantic prosody of “elderly” may influence public opinions and policies towards older persons as civilizations continue to age. Positive or negative semantic prosody may impact public opinions toward older persons and aging, and a node’s prosody can be altered by a powerful media framing. To be specific, if the negative semantic prosody of the term “elderly” accounts for much more than positive one, that is to say, people are more likely to be exposed to the news reports filled with negative descriptions of older people, the public, including older people themselves, may unconsciously implant the negative stereotypes into their minds. The more they are exposed to, the more pessimistic attitudes toward ageing they will have. That’s because people who are frequently exposed to inaccurate information about a particular social group may modify their opinions, assessments, and actions toward this group to conform to stereotypes<sup>[108]</sup>. Another interesting finding lies in that even if the same node like “elderly”, its media frames and semantic prosody differ a lot. 44.29% of “elderly” use in China news is constructed under the institutional support frame, and 52.92% of its concordance lines carry positive semantic prosody. In comparison, 59.09% of the descriptions about the elderly issues are framed as challenges, problems or difficulties, and the percentage of negative semantic prosody is as high as 77.27%. Such findings may remind media practitioners and news viewers to be more aware of the cultural dimension when reporting or reading the news about the elderly. Since the term “elderly” tend to be used as a positive node in China, it may not be applicable to reduce the use of “elderly” in the context of China news. “Elderly” or “the elderly”, framed as one whole in China, may present the cultural value of collectivism for international viewers. For example, when “elderly” is used under institutional support frame to emphasize Chinese political ideology of taking the whole group as a collective, the “elderly” group tend to carry positive semantic prosody, rather than the disadvantaged targets who need help and support. The media outlets want to emphasize the government’s concern and love for the elderly. In addition, although 36.49% of the concordance lines in China news carry negative semantic prosody, this proportion is much less than the negative connotations observed in American news (77.27%). Therefore, “elderly” can be suggested to be continually used in the English news of China.

Older adults are the most diverse and heterogeneous age group in the population<sup>[41,109,110]</sup>. Such understanding ensures that older adults are portrayed not merely as a vulnerable group but as valuable and

integral members of society, whose diversity and capabilities are acknowledged and respected. This study's insights into the variances in media portrayal across different cultures lay a foundation for further research on the global media's role in shaping societal attitudes toward aging. Such research could guide more culturally sensitive media practices and policies, ultimately leading to a better understanding of aging across global societies and contributing to a more inclusive and respectful discourse surrounding older individuals.

While this study does offer some important insights, the findings cannot be broadly generalized because of the short time span and small size of corpus, especially American news corpus. Future studies are needed to enlarge the time length and sample size, which may better increase statistical reliability and validity. Also, *China Daily* and *South China Morning Post* respectively belong to national and regional news media, which haven't been compared between them, which may be worthy exploring. Lastly, the studies on other synonymous expressions with "elderly" may be more comparable and valuable, given the resistance to the use of "elderly" in some western countries. Ultimately, this study sheds light on the framing power of the media and its implicit but profound impact on the readers' attitude toward older adults.

## Author Contributions

Conceptualization, H.M. and A.H.B.S.; methodology, H.M. and L.S.N.; software, H.M.; data collection, H.M.; data analysis, H.M., A.H.B.S., and L.S.N.; comparative analysis, H.M.; manuscript writing, H.M.; review and editing, A.H.B.S. and L.S.N. All authors have read and agreed to the published version of the manuscript.

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## Conflict of interest

The authors declare no conflict of interest.

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