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A contrastive study on the representation of "Made in China" in Chinese and U.S. newspapers

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The label "Made in China" (MIC) is an essential communication tool in the economic rise of China, marking its increasing prominence in international markets with labor-intensive products and also some knowledge-intensive products. This contrastive study adopts a corpus-based critical discourse analysis approach to illustrate how the major English-language newspapers in China and the United States represented MIC between 2006 and 2018. By categorizing the high-frequency noun lemmas in the two corpora of articles on MIC, we identify seven main topics that are shared by Chinese and U.S. newspapers, but differ in frequency and in trends across time. Through examining the collocates and concordances, we find that the overall attitude regarding MIC in U.S. newspapers is more negative than that in Chinese newspapers, where the dominant attitude shifts from negativity to positivity in 2013, while negativity dominates throughout in U.S. newspapers. We argue that the ideological differences evidenced in language patterns reflect the two countries' conflicting economic interests. This study makes a contribution to the existing literature on MIC by aligning with the prior findings of a negative portray of MIC around 2007, primarily due to product safety issues, and addresses a gap by examining the repidly evolving representation of MIC in the 2010s, which is characterized by the intensified trade relations between the two countries.

KEYWORDS

Made in China, corpus-based critical discourse analysis, Chinese newspaper, U.S. newspaper, ideology

1. Introduction

Since the market-oriented economic reforms carried out in 1978, China's economic performance has been impressive. From 1978 to 2018, the average annual gross domestic product growth rate was 9.4% (Yang, 2020; The World Bank, 2023). This facilitated the transformation of China from a planned economy to a socialist market economy. The economic growth has been mainly driven by the manufacturing sector, characterized by rapid industrialization and expanding exports. Some scholars have investigated the news coverage of "Made in China" (MIC) in international newspapers, but few have done so in a comparative context (e.g., Zhou, 2019). News-based texts can be influenced by journalistic positions, media objectives, political trends, and other factors (Gamson et al., 1992; Baker et al., 2013). Accordingly, the comparison of news coverage on the same events across different countries is a valuable exercise because it can highlight the similarities and differences in language use and the underlying ideologies. In the contrastive studies of Chinese and American newspapers related to China, much attention has been paid to Chinese crisis (Feng et al., 2012; Zeng et al., 2015; Qi and Ye, 2020; Wang and Ma, 2021), disease (Wu, 2006), and policy (Zhang and Wu, 2017). All of these authors found that the attitude toward China in U.S. newspapers is more negative than that in Chinese newspapers. The following sub-sections will introduce the extant studies of MIC in the newspapers and the development of MIC.

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1.1. MIC in Chinese and U.S. newspapers

Searching with Google Scholar and China National Knowledge Infrastructure,¹ we found extremely little research on MIC in Chinese newspapers. A contrastive study (Zhou, 2019) investigated the news frames and a constructed image of MIC in 2015 in *China Daily*. There are five frames in the articles—product, politics, innovation, cooperation, and Chinese manufacturing, the first two of which are the main frames. They contribute to a positive MIC image that is innovation-oriented, supported by the government and beneficial to people worldwide.

Regarding its representation in U.S. news publications, Wang and Han (2010) examined four major newspapers from 1979 to 2008 using a content analysis. The 30-year span was divided into three periods-the initial period of the U.S.-China trade relationship (1979-1989), the rapid development period (1990-2001), and the deepened relationship period after China's integration to WTO (2002-2008). They found an intermittent upward reporting trend in articles, with a slight rise in 1992 and then a boom in 2007. The variation between reports was closely connected to the trade relationship and also to crisis events. For example, the toy recall in 2007 led to 194 articles centering around this event, accounting for 28% in all collected articles during 1979 and 2008, and the toxic milk in 2008 also contributed to a large number of articles (n = 165; 24%). The former scandal is closely related to American consumers-Mattel recalled 2 million toys due to Chinese manufacturers' use of hazardous lead paint and 18 million toys due to Mattel's design flaw of loose magnets. The latter one caused more than 290,000 Chinese babies to be damaged in the kidneys, resulting from the melamine that contaminated infant milk powder (Xiu and Klein, 2010; Ye and Pang, 2011). When describing MIC, the U.S. newspapers tended to hold an increasingly negative attitude, from using "inexpensive" and "cheap" in the first two periods to "tainted" and "dangerous" in the third period. Apart from word choice, news frames also reflect the shift in attitude. Among the 10 news frames, though some reflect the positivity of MIC (e.g., globalization, economical products, cultural legacy), most frames carry a negative tendency (e.g., product risk, ethnocentrism, market rules, China threat, and human rights). The study concluded that the deterioration of the MIC image resulted from not only product quality concerns but also the fraught U.S.-China trade relationship and the influence of media. The negative representation of MIC was also found in the other studies, especially regarding the reports on the 2007 toy recall. Pan and Liu (2013) conducted a content analysis by combining framing theory and attribution theory, aiming to explore how different causal attributions and dimensions of the toy recall were presented in thematic and episodic frames by mainstream U.S. newspapers. They revealed that causal attributions were frequently associated with the thematic framing "incompetent authority" and the episodic framing "dishonest Chinese business."

Additionally, news articles with stable external attributions were the most published.

Based on the above studies, we found that scholars tend to do a content analysis using framing theory, showing that MIC is represented more positively in Chinese than U.S. newspapers. In this study, we endeavor to use the CDA framework for a systematic analysis of the language patterns through which the ideologies are discursively deployed in order to legitimize their claims.

1.2. The development of MIC

The development of MIC was shaped by the support of the Chinese government and the global economic and political environment. As industrial revolutions had already taken place in modernizing Western countries, China had long been trying to catch up in matching their productivity. However, since its accession to the World Trade Organization (WTO) in 2001, China has overtaken them to become the main engine of the world economy and the base of global manufacturing. This event marked a new phase of globalization in which China engaged in direct trade with other countries in domestic and international markets. By this time, the volume of exports had increased by 5.37 times, to reach \$1.43 trillion between 2002 and 2008, compared with the period 1979-2001 (Yang, 2020). Nevertheless, the reputation of MIC faced challenges when a string of product safety incidents occurred in the first decade of 2000s. It was suggested that Chinese manufacturing should enhance product quality and differentiate itself by reducing dependency on resources such as cheap labor (Zhang and Su, 2009). A series of industrial policies was then proposed for the upgrading and the integration of Chinese manufacturing within global value chains (GVC), represented by the Made in China 2025 Plan (MIC 2025), devised in 2015. The Plan proved significant in helping Chinese manufacturing become world-leading in a number of cutting-edge fields and secure more autonomy for the nation's economy. In general, as a major driving force of China's economic development, the label "Made in China" became synonymous with China's exponential growth in manufacturing-the greatest since the industrial revolution in Great Britain in the late-eighteenth and early-nineteenth century. This growth attests to the transformation of China from an agriculture-based economy into a global leader in manufacturing operations (Li, 2013).

Situated in broader socio-political contexts, the rise of MIC can be seen to be influenced by various factors, such as national interest and foreign policy. For China, MIC is an essential part of the great blueprint for "Chinese national rejuvenation." This notion was first proposed by President Xi in the 18^{th} National Congress of the Communist Party of China in November 2012. To form a favorable international environment for the rejuvenation, the foreign policy *fèn fā you wéi* (striving for achievement, hereafter "SFA") was subsequently proposed by the President in a speech in October 2013. The transition from *tão guãng yǎng huì* (keeping a low profile, hereafter "KLP") to SFA was not unexpected, as the experience in previous years had shown that a policy of "being moderate and cautious" (the official interpretation of the KLP) faced increasing international challenges (Yan, 2014). The Belt and Road Initiative (BRI) proposed in 2013 is a good example of China's

¹ China National Knowledge Infrastructure is an authoritative and comprehensive platform that integrates significant Chinese knowledgebased information resources, which is available at: https://oversea.cnki.net/ index/.

adoption of a more proactive position, in that it was an attempt for China to exercise more influence in the global economy.

The U.S. regards its national interest as the priority when dealing with China. Since the advent of the post-Cold War era in the 1990s, the U.S. has endeavored to legitimize its economic dominance in the name of globalization (Gowan, 1999). China has been engaged with and become integrated into the global economy over recent decades (Mastanduno, 2019), a development that for a long time attracted the U.S. to China's enormous market, its low-cost labor force and favorable foreign investment policies (Chen and Wang, 2020). However, this process gradually came to pose threats to U.S. economic interests. For example, China became the third and then the second largest economy worldwide, by overtaking Germany in 2007 and Japan in 2010, respectively. It became the largest exporter of goods in 2009 while the U.S. trade deficit with China exponentially rose, reaching over \$418 billion in 2018 (U.S. Census Bureau, 2022). Some scholars have argued that the ideology and legitimacy of the U.S. hegemonic order has begun to be challenged (Drezner, 2019). To maintain U.S. national interests, the ideology of protectionism and nationalism has been increasingly embraced since the presidency of George W. Bush (Swenson and Woo, 2019). Under Donald Trump's presidency, the "America first" foreign policy was proposed, which started a process of de-globalization. When faced with the MIC 2025 initiative that highlights 10 strategic sectors, the U.S. became worried about its market share of high-tech products and subsequently banned the sale of chips and other electronic components to Chinese telecommunications companies, which eventually initiated a trade war in 2018. Foreign policy can influence the news coverage and thus national interest-a key factor of foreign policy-can also play an essential role (Lee and Yang, 1996; Kim, 2000). Accordingly, the assertiveness of SFA and the threat of MIC to U.S. economic interests can be seen to have influenced the direction of reporting MIC in Chinese and U.S. newspapers, respectively.

1.3. Research questions

The motivation for this study is to enrich the existing comparative research on MIC and to explore whether the news coverage on MIC is more negative in the U.S. than the Chinese newspapers as was found in the other studies. To this end, we adopt a corpus-based critical discourse analysis (CDA). CDA is an interdisciplinary approach to the study of language and power that aims to understand how language is used in sociopolitical contexts and the impact it has on people's perceptions and understanding of the world. It is considered to be an appropriate way to investigate media discourse, and one important reason is that CDA provides insight into power dynamic. To be more specific, it allows researchers to identify the power relationships between different groups in society and how they are represented in media discourse. This study reveals the similarities and differences in the use of language patterns in representing MIC through corpus techniques, and also explores the dominant ideologies reflected in those representations dependent on socio-political contexts. The research questions are as follows:

- RQ1: What are the topics associated with MIC in Chinese and U.S. newspapers and how do they vary across time?
- RQ2: What are the attitudes identifiable from the lexical combinations MIC+Noun (N) in Chinese and U.S. newspapers and how do they vary across time?
- RQ3: What are the ideologies discernible in Chinese and U.S. newspapers?

In the following sections, we will present the theoretical background of Chinese and U.S. media, CDA, and corpus-based approach. Then data collection and methods will be described, followed by the analysis of RQ1 and RQ2 that is based on the quantitative results from a corpus tool. The discussion section focuses on RQ3 that compares the ideologies evidenced in news language. Finally, the conclusion summarizes the main findings and the contributions to the corresponding fields.

2. Theoretical background

This section first illustrates the features of Chinese and U.S. newspapers and the underlying ideologies. Then it considers the advantages of using CDA to explore topics and ideologies in media discourse, and the appropriateness of using semantic prosody, the concept originated from corpus linguistics, to reveal the attitudes associated with the lexical combinations MIC+N.

2.1. Chinese vs. U.S. media and ideology

News media are an embodiment of power that can represent events from the perspective of vested interests (Shoemaker and Reese, 1996). Members of powerful elites with symbolic capital such as journalists, editors, or their institutions attempt to control the specific opinions of individuals and the generic knowledge, attitudes, and ideologies shared by whole groups (Van Dijk, 2015), by deciding what and how they report (Don et al., 2010). In this way, the professed goals of objectivity and authenticity pertaining to the media are likely to be violated for specific aims, which makes it hard for the public to be able to distinguish construction from reality.

The Chinese media and journalists are regarded as instrumental to helping government maintain political stability and build a harmonious society (Beaudoin, 2007; Feng et al., 2012). With the commercialization of the media in China, there is a loosening grip of government control and more space for journalistic engagement (Akhavan-Majid and Ramaprasad, 1998; Gleiss, 2016). Party ideology is now expressed through the marketized media, which makes its profits by fulfilling political functions (Liu and Yao, 2015). Both forces-party control and market drive-contribute to news production in China. Western media, especially the U.S. media, are referred to as a "watchdog" or "the fourth estate" that carries out the responsibility of supplying the public with information to prevent the abuse of power (Zeng et al., 2015). They aim to guard the democracy and defend the public interest. Geography is an important influential factor, as the media reports focused on the countries where they are produced sometimes apply different evaluative criteria when dealing with same issues in

other geographical locations. Their coverage of foreign countries contains more value judgments (Gans, 1979), and international news coverage often reflects capitalist and anticommunist values (Akhavan-Majid and Ramaprasad, 1998; Wu, 2006; Zeng et al., 2015). Zhang and Wu (2017) summarized the dynamic image of China in the Western media from the eighteenth century. The Age of Uncertainty (2001 to the present) indicates that "the depiction of China is not distinctively negative or positive, but rather mixed and varied, bound by media producers' knowledge and experiences of China." Two noticeable negative representations of China appear around 2008 and the end of 2010s. In the year leading up to the 2008 Beijing Olympics, China was targeted with increasing criticism, from various perspectives, regarding its low-quality products, inequitable economic practices, and human rights violations (Syed, 2010). After the hosting of the Olympic Games, fear-laden terms such as "threat" and "wealth and power domination" were adopted by Western media to cause alarm regarding the rise of China. At the end of 2010s, there were more intense criticisms and expressions of Sinophobic sentiments (Tang, 2021) against the backdrop of the worsening U.S.-China trade conflict. Thus, when reporting the same issue, such as MIC and the events around it, the Chinese and U.S. media that operate within different political and economic contexts may present diverse or completely contradictory information with different choices of words, collocations, tones, and manners. These linguistic phenomena demonstrate the underlying ideologies driving their use and thus reflect the positions of journalists and the institutions they represent, which can generate specific attitudes tending to shape readers' social awareness and judgments (Van Dijk, 1995).

2.2. CDA

CDA is "a type of discourse analytical research that primarily studies the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in the social and political context" (Van Dijk, 2015). It provides a framework dedicated to the relationship between language, power, and ideology (Fairclough, 1995), which takes a critical stand to reveal and interpret the hidden power and ideologies in language. CDA scholars regard discourse as a social practice, and in particular look into media discourse. According to Fowler (1991), news is not a reflection of reality but a product shaped by political, economic, and cultural forces. Facing the value-laden description of the facts (Van Dijk, 1988; Fowler, 1991), CDA is regarded as the most suitable framework, as it enables the exploration of how media practitioners use their freedom to exercise press power to construct social issues (Fairclough, 1995; Richardson, 2004) and how the systematic investigation of discourse reveals the various ideologies at work (Wodak and Meyer, 2015).

Based on the interactive relationship between language, power, and ideology, the investigation of the latter term can be carried out using the perspectives of the former terms. This issue has been explored extensively in the work of Van Dijk (1995, 1998, 2006). Let us now consider how his work can inform this discussion by starting with a definition of ideology. Essentially, ideology hinges on two main points: (i) a systematic set of ideas; and (ii) the ideas are shared by specific social groups and that are used to establish and maintain power and dominance of other social groups (Wang, 2017). An exemplary definition can be seen in Van Dijk (1995) whereby ideologies are "basic frameworks of social cognition, shared by members of social groups, constituted by relevant selections of sociocultural values, and organized by an ideological schema that represents the self-definition of a group." Ideology can be elaborated from the perspectives of discourse and society. Interpreted from the perspective of discourse, ideologies get expressed, reproduced, changed, and perpetuated (Van Dijk, 2006). Topic has a prominent effect on the formation of ideologies by highlighting what is most important or relevant to the text. It allows readers to more easily understand surrounding text and thereby effectively shape corresponding ideologies by means of hierarchical conceptual structures (Van Dijk, 1998). From the dimension of society, ideologies can reflect group identities and group relations (Van Dijk, 1998). A good illustration of the effective imparting of ideology can be found in the group dynamics of journalism. Journalists are enabled by their discursive power to develop ideologies by getting involved with other powerful groups and elites. Hence, their articles will be subject to outside influence (e.g., the quotations from powerful groups) and the underlying ideologies will correspondingly be reproduced to the readers.

CDA is characterized by interdisciplinary endeavors. Among the common approaches to CDA (see Wodak and Meyer, 2015), each has its own theoretical orientation and relies on a variety of linguistic approaches (Hart and Cap, 2014). CDA used to be criticized for its qualitative approach to data collection. The data are usually in small quantities or fragments such that the linguistic features under consideration are analytically insufficient (Koller and Mautner, 2004; Clark, 2007). As Hardt-Mautner (1995) proposed to integrate corpus techniques to CDA, many scholars adopted a corpus approach to address such criticism by expanding the scale of data and using corpus techniques. The large-scale corpora used for discourse analysis can mitigate the impact of personal bias to some extent, while also enabling researchers to identify recurrent patterns within the texts being analyzed (Li and Zhu, 2019). Stubbs (2001) states that "repeated patterns show that evaluative meanings are not merely personal and idiosyncratic, but widely shared in a discourse community" (p. 215). The quantitative results of the emerging patterns, such as high-frequency words and collocates, pinpoint the focus for further close analysis (e.g., Gabrielatos and Baker, 2008; Baker et al., 2013). The patterns are observed in the original contexts in which they were produced and consumed, and are considered under the real-world sociopolitical backdrop.

2.3. Semantic prosody in corpus linguistics

Semantic prosody is a concept from corpus linguistics. It is differently defined in different studies, based on the relationship of the node item (the word/phrase unit in central position in concordance listings) and its surrounding environment. Louw (1993) first published work on semantic prosody and defined it as a "consistent aura of meaning with which a form is imbued by its collocates." The use of "imbue" incurred criticism, as it presupposes that the node item is devoid of meaning (Whitsitt, 2005). Sinclair (1996), who originally suggested the concept to Louw, defined semantic prosody "[as] attitudinal, and on the pragmatic side of the semantics/pragmatics continuum." To emphasize the pragmatic function of semantic prosody, Stubbs (2001) preferred to use the term "discourse prosody," the reason being "in order to maintain the relation to speakers and hearers, but also to emphasize their function in creating discourse coherence." Furthermore, Partington (2004) defined it as an aspect of evaluative meaning that is implicit, finding the following: "Semantic prosody describes the same kind of evaluative meaning but spread over a unit of language which potentially goes well beyond the single orthographic word and is much less evident to the naked eye." Here, we adopt Sinclair's definition, as his model of extended lexical units is the basis of our semantic prosody analysis.

There are four aspects in the Sinclarian model. They show the ascending orders of abstraction from observed word forms (1) to hypothesized communicative functions (4) (Stubbs, 2001, 2009).

- COLLOCATION is the relation of co-occurrence between an obligatory core word or phrase (the node) and individual COLLOCATES.
- (2) COLLIGATION is the relation of co-occurrence between the node and abstract grammatical categories (e.g., past participles or quantifiers).
- (3) SEMANTIC PREFERENCE is the relation of co-occurrence between the phrasal unit and words from characteristic lexical fields. Recurrent collocates provide observable evidence of the characteristic topic of the surrounding text (e.g., typical subjects or objects of a verb).
- (4) SEMANTIC PROSODY is the function of the whole extended unit. It is a generalization about the communicative purpose of the unit—the reason for choosing it (and is therefore related to the concept of illocutionary force) (Stubbs, 2009, p. 124–125).

Semantic prosody shows the highest level of abstraction. It is such a complex concept that it should not be determined just as positivity and negativity (Bednarek, 2008), though they are the heart of an attitudinal meaning or evaluation (Morley and Partington, 2009). Semantic prosody emerges from the interactions of the other three aspects. The terms semantic preference and prosody have occasionally been confused, as they have sometimes been used for the same phenomenon while at other times for different but closely related phenomena (Bednarek, 2008). Semantic preference indicates the collocation between a particular lexical item and a set of semantically related words (Stubbs, 2001), which emphasizes the feature of the preferential set of collocates, whereas semantic prosody highlights the extending effect of the association between the item and its collocates over a considerable stretch of text. Semantic preference helps form semantic prosody, and semantic prosody contributes to the environment that confines the preferential choices of the node (Partington, 2004). It's noticeable that their attitudes centering around the same item can be antithetical. In Example 4, the positive semantic preference for the lexical combination "made in China brand" is shown from the co-occurring words semantically related to "ameliorate" (e.g., improve, rebuild, and refurbish). However, TABLE 1 Number of articles on MIC per newspaper.

Chinese newspapers	N	U.S. newspapers	Ν
China Daily (CD)	3,760	The New York Times (NYT)	805
South China Morning Post (SCMP)	1,358	The Wall Street Journal (WSJ)	746
Global Times (GT)	436	The Washington Post (WP)	572
Xinhua Financial Agency (XFA)	244	USA Today (USA-T)	127
Shenzhen Daily (SD)	236		
The China Post (CP)	25		
Total	6,059	Total	2,250

the negator "nothing" in the concordance leads to the negative semantic prosody "frustration" that reflects the incapability of governments and companies to save the damaged MIC image during product scandals. Thus, in the process of determining the semantic prosody, there can be contradictions between the attitudes of semantic preference and prosody, and reading the extended sentences is necessary.

Reviewing the CDA studies that adopted semantic prosody, the research topics range from R.A.S.I.M., that is, Refugees/Asylum Seekers/Immigrants/Migrants (Gabrielatos and Baker, 2008), Muslims (Baker et al., 2013), to Chinese leftover women (Yu, 2019), which are concerned with collective identities rather than objects or phenomena. Semantic prosody contributes to illustrating newspapers' representations of the above subjects, e.g., the moral panic around R.A.S.I.M., the distinct Muslim community that easily gets offended and otherized, and the stereotyped Chinese leftover women that are old (older than 27), single, and successful. Thus, to address the second research question, we adopt semantic prosody to explore the attitudes expressed in connection with the lexical combinations MIC+N.

3. Data and methodology

This section introduces the process of data collection and corpora building, and illustrates the analytical procedures based on the quantitative results using the corpus tool #LancsBox.

3.1. Data collection

We collected the relevant articles with the phrase "Made in China" between 2006 and 2018 (see Table 1). The articles collected through the database LexisNexis cover six Chinese Englishlanguage newspapers and two U.S. newspapers (*NYT* and *USA-T*), and the articles from *WSJ* and *WP* were manually collected. The Chinese corpus involves 6,059 articles with 4,525,136 tokens, mainly contributed by *CD* (62%); and the U.S. corpus consists of

TABLE 2	Overview	of the	Chinese	and U.S	. newspaper	corpora.
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Sub-corpus	Number of texts		Word	tokens	Mean length of texts (tokens)		
	CN	U.S.	CN	U.S.	CN	U.S.	
Period 1 (60 months)	299	891	225,838	868,939.5	755.3	975.2	
Period 2 (50 months)	933	508	745,189	531,736.8	798.7	1,046.7	
Period 3 (46 months)	4,827	851	3,554,109	953,289.3	736.3	1,120.2	
Total	6,059	2,250	4,525,136	2,353,965.6	763.4	1,047.4	

2,250 articles with 2,353,966 tokens, represented by *NYT* (36%). We cleaned the metadata and saved the articles as UTF-8 text files.

For a clear view of the change with time, we divided each corpus into three sub-corpora (see Table 2)-Period 1 (January 1, 2006-December 31, 2010), Period 2 (January 1, 2011-February 28, 2015), and Period 3 (March 1, 2015-December 31, 2018), based on the time when the 11th (2006) and 12th (2011) Five-Year Plans (FYP) and MIC 2025 (March 2015) were enacted. The Chinese and U.S. corpora differ in the total number of articles (6,059 vs. 2,250), in mean length of the articles (763.4 vs. 1,047.4), and in the distribution across the three periods. The Chinese articles show an increase from 299 in Period 1 to 4,827 in Period 3. The U.S. articles, by contrast, are about equally frequent in Periods 1 (n = 891) and 3 (n = 851), but lower in Period 2 (n = 508). This can be seen more clearly in the annual numbers (see Figure 1). The initially scarce Chinese articles outnumber the U.S. articles in 2013 and rise sharply from 2014 onwards, while the U.S. articles show a peak in 2007 and an increase from 2015.

3.2. Methodology

The corpora were analyzed using the corpus tool #LancsBox (Brezina et al., 2018). To identify the topics associated with MIC, we first got the list of top 100 high-frequency noun lemmas from each sub-corpus. The lemmatization approach is provided by the tool Tree Tagger. The lemmas were then categorized into topics and sub-topics according to dictionary definitions and their use in the co-texts. Take the topic of Economy in the U.S. corpus as an example. It includes four sub-topics that involve different lemmas—Entity (e.g., company_n, group_n, store_n), Finance (e.g., investment_n, money_n, dollar_n), Market (e.g., consumer_n, price_n, sale_n), and Trade (e.g., cost_n, export_n, tariff_n). Appendix C shows the composition of topics, which specifically highlights the differences between two corpora and will be illustrated in Section 4.1. We identified two polysemes among the noun lemmas. They were categorized into different topics based on different contextual meanings. Instances of the lemma *time_n* were identified as belonging to the topic *Time* or to the sub-topic Quantity of the topic Development, and those of the lemma *part_n* were categorized into the sub-topic *Product* of the topic Production or into the sub-topic Quantity of the topic Development. For identifying and tracing the attitudes attributed to the lexical combinations MIC+N that consistently appeared across three periods, we first examined the R1 consistent collocates (ccollocates) of the term "Made in China" (the word in the first

slot to the right of the central word) across periods. Frequency was chosen as the collocation measure, with a minimum of five occurrences. There are four R1 c-collocates of MIC [brand(s), goods, label(s), and product(s)] in the Chinese articles and two [label(s) and product(s)] in the U.S. articles. Figure 2 is a screenshot of the consistent collocations (c-collocations) situated in the concordances of #LancsBox. Through examining the collocates of these lexical combinations and reading the concordances, we identified the semantic prosodies based on the Sinclarian model using the mixed-method corpus tool MAXQDA (VERBI Software, 2021). In cases where the concordance line was insufficient to identify the semantic prosody, we extended the reading to a larger text window. Table 4 shows the categorization of semantic prosodies and the corresponding attitudes, which will be explained in more details in Section 4.2.1. The categorization of topics and semantic prosodies were finished by the first author. She did the categorization repeatedly over time, three times in total, to make sure the categorization is stable and reliable. Any problems were discussed in the research team. Finally, we embrace the tenet of CDA-the interaction of discourse, ideology, and society-to explore the similarities and differences between newspapers in the representation of MIC and the underlying ideologies.

4. The representation of MIC in Chinese and U.S. newspapers

This section deals with the first two research questions. In Section 4.1, we compare the topics in terms of the frequency of lemmas and their change across periods; and in Section 4.2, we compare the attitudes of the lexical combinations MIC+N based on their semantic prosodies across periods.

4.1. Comparison of the topics

Two corpora share the same topics: *Development, Economy, Geography, Politics, Production, Society,* and *Time.* However, the topics are different in frequency and trend across periods. From Appendices A–C we can see the most frequent topic in the Chinese corpus is *Geography* (27.6%), mainly consisting of the lemmas related to country and continent. The U.S. corpus focuses on *Economy* (24.2%), explaining the U.S. companies in the Chinese market and trade with China. These two topics score high in both corpora: *Geography* (23.9%) is the second most frequent topic in the U.S. corpus and *Economy* (19.3%) is the third most frequent



	Node	
lead might cause to their children avoided anything bearing a	"made in China"	label. But, after recent forays into toy stores, I can't
may be publicity. Wholesalers, retailers and consumers who equate a	"made in China"	label with a skull-and-crossbones may cross anything bearing that label
looks down at the package she's holding and notices a	"Made in China"	label. She traces a circle around it with her fingernail
trade, he notes that "at my house I see a	'Made in China'	label on everything but the kids and the dogs. And
Japanese, South Korean and other countries' goods and slapping a	"Made in China"	label on them. To argue that a stable exchange rate
has warned consumers to avoid using any toothpaste with a	"made in China"	label because the agency found 3% to 4% of the
depend on each other. The American and Chinese peoples benefit:	"Made in China"	labels which indicate high quality and favorable price increase American
depend on each other. The American and Chinese peoples benefit:	"Made in China"	labels which indicate high quality and favorable price increase American
recently checked and found all of her dog toys had	"Made in China"	labels. After going to a Petco and searching in vain
take advantage of the country's low labor costs, resulting in	"Made In China"	labels on goods previously made in their own countries. As
as a cheap filler by food suppliers in China. The	"Made in China"	label came under further scrutiny after an ongoing rash of
do the brands get away with this? Some hide the	"Made in China"	label in the bottom of an inside pocket or stamped
Informed Reader China's Exporters Cultivate Luxury Market The	"Made in China"	label isn't limited to the bottom end of the consumer
spurring a debate in China over how to protect the	"Made in China"	label from becoming synonymous with poor quality. "The Chinese governmen
Electronic gadgets are all made in China. In reality, the	"Made in China"	label means that products were assembled there, while the supply
general public, as well as a war to safeguard the	'Made in China'	label and the country's image," Vice Premier Wu Yi, one
The result has been an aggressive campaign to save the	"Made in China"	label by presenting an alternate view on consumer safety and
said that a few small rogue companies shouldn't tarnish the	"made in China"	label, insisting that it takes effective action to ensure safety.
supervision and controls will be significantly improved and that the	"Made in China"	label will be even more popular with consumers across the
Beijing's campaign illustrates how worried the Chinese are that the	"Made in China"	label not be tarnished further by the controversies over the
is growing that significant damage has been done to the	"Made in China"	label. The product-quality issue came up during a meeting between
reports of dangerous food and other products exported under the	"Made in China"	label. After initially seeking to play down the problem, they
manufacturers, the study claims. "It's not the problem with the	'Made in China'	label," says Bapuji of the Asper School of Business at
wife and I do not buy any toys with the	"Made in China"	label. China is making billions of dollars, and it's costing

Screenshot of KWIC of the lexical combination MIC+N in the sub-corpus Period 1 in the U.S. corpus.

topic in the Chinese corpus. However, the two corpora focus on different aspects. Take *Geography* as an example, both corpora show the greatest interest in the sub-topic *Country and continent* (63% and 80%, respectively). The Chinese corpus emphasizes models of industrial upgrading (e.g., Germany and Japan), while the U.S. corpus highlights major U.S. trading partners (e.g., China, Europe, Japan, South Korea, and Mexico). It is noteworthy that China was represented as the outgroup member while the others were represented as the ingroup members, namely, the U.S.'s allies. In Example 1, China was the target of U.S. tariff

punishment, while by contrast, the U.S. allies were excluded from the levies.

Example 1: The administration's increasing focus on punishing China was evident in its decision to exempt **allies** like the European Union, South Korea, Brazil, Canada, and Mexico from what were supposed to be worldwide tariffs on steel and aluminum imports. The levies, which go into effect on Friday, will largely hit China. ("Trump hits China with stiff trade measures," *NYT*, March 22, 2018).



The differences are also reflected in the other topics. In *Development*, both corpora highlight the sub-topic *Implementation* (47% and 43%, respectively). The Chinese corpus centers on innovation capability and international cooperation, represented by the lemmas of *innovation_n*, *reform_n*, *research_n*, and *cooperation_n.*, whereas, the U.S. corpus stresses Chinese trade practices. The involved lemmas of *rule_n* and *practice_n* are predicated with the adjectives of *unfair* and *abusive*, or the verbs of *violate* and *break*, thus correlating China with a tricky partner that destroys the trading standards for its own interests. Regarding *Politics*, there is a higher proportion in the U.S. corpus in each period. The first main difference lies in the role of the Chinese government. The Chinese articles described it as contributing to promoting Chinese manufacturing, while the U.S. articles

presented it as being inclined to intervene in companies' affairs. For example, when reporting the Qualcomm joint venture with Chinese firms for chip manufacturing, the Chinese government was presented as the ultimate beneficiary with the predicates of *control* and *reap* (Example 2). The second difference was found in the description of MIC 2025. While the occurrence of the policy increased remarkably in Period 3 in both corpora, the Chinese articles explained its content and influence, while the U.S. articles constructed it as a threat to U.S. interests. In Example 3, *WP* journalists used a perspectivization strategy by indirectly quoting an authoritative official with the marker "according to" to emphasize that the U.S. motivation for imposing tariffs on Chinese products mainly resulted from the challenge from MIC 2025's domination in the field of technology.

TABLE 3 C-collocations in the two corpora (raw frequency and percentage).

Lexical unit	Period 1		Period 2		Period 3		Total	
	CN	U.S.	CN	U.S.	CN	U.S.	CN	U.S.
MIC brand(s)	16 (18.4)	-	13 (10.7)	-	58 (12.5)	-	87 (13)	-
MIC goods	5 (5.7)	-	14 (11.6)	-	28 (6)	-	47 (7)	-
MIC label(s)	46 (52.9)	29 (74.4)	31 (25.6)	9 (52.9)	47 (10.2)	17 (70.8)	124 (18.5)	55 (68.8)
MIC product(s)	20 (23)	10 (25.6)	63 (52.1)	8 (47.1)	330 (71.3)	7 (29.2)	413 (61.5)	25 (31.3)
Total	87	39	121	17	463	24	671	80

TABLE 4 Semantic prosodies in the two corpora (percentage).

Attitudes	CN semantic prosodies	P1	P2	Ρ3	U.S. semantic prosodies	P1	P2	Р3
Negative	Frustration	48.3	24	12.3	Scorn	7.7	35.3	50
	Pity	8	14	13.6	Worry	30.8	5.9	12.5
	Worry	21.8	0	1.9	Grudge	23.1	5.9	0
					Hostility	2.6	17.6	16.7
Neutral	Neutrality	0	8.3	8.9	Neutrality	2.6	0	4.2
Positive	Confidence	3.4	33.1	34.1	Confidence	28.2	29.4	16.7
	Pride	17.2	20.7	23.8	Praise	5.1	5.9	0
	Praise	1	0	5.4				

Example 2: The Chinese government will **control** the chips and **reap** most of the profits. ("How this U.S. tech giant is backing China's tech ambitions," *NYT*, August 4, 2017).

Example 3: The ultimate cause, **according to** Mr. Trump's top trade adviser, Peter Navarro, is China's economic "aggression," specifically Beijing's "Made in China 2025" plan to **dominate** cutting-edge industries. ("Trump is playing a risky game of chicken," *WP*, June 25, 2018).

Through examining the topics across periods (see Figures 3A, B), we found similar trends in two topics, (i) *Geography* with increasing lemmas, and (ii) *Society* with decreasing lemmas. As for *Production*, the corpora only share the decreasing trend from Period 1 to 2; and regarding *Development*, *Economy*, and *Politics*, the corpora only share the increasing trend from Periods 2 to 3. *Time* shows no parallel trends—the Chinese corpus presents decreasing frequencies, while the U.S. corpus demonstrates relatively stable numbers of lemmas. In the Chinese corpus, *Geography* always ranks first across periods. The U.S. corpus shows a shift in top topic, from *Production* (24.7%) in Period 1, *Geography* (24.7%) in Period 2, to *Economy* (25.9%) in Period 3, which reflects the change of media attention from product scandals in Period 1 to trade war in Period 3.

4.2. Comparison of the c-collocations and semantic prosodies

The lexical combinations MIC+N enable us to know how MIC is defined with the following noun. From Table 3, we can see that the Chinese corpus includes a much larger number and more types of c-collocations. There are 671 occurrences of the four types of c-collocations—*MIC brand(s), goods, label(s),* and *product(s)* in the Chinese corpus, and 80 occurrences of the two types of c-collocations—*MIC label(s)* and *product(s)* in the Chinese articles often used *MIC product(s)* (61.5%, n = 413), especially in Periods 2 (52.1%) and 3 (71.3%), and *MIC label(s)* (18.5%, n = 124), which was favored in Period 1 (52.9%). In the U.S. articles, *MIC label(s)* (68.8%, n = 55) was most frequently used in all three periods.

4.2.1. Semantic prosodies in two corpora

There are seven types of semantic prosodies associated with the c-collocations in each corpus, with four present in both corpora— *Worry, Neutrality, Confidence,* and *Praise* (see Table 4). *Confidence* is the most representative positive prosody in both corpora, *Worry* shows a larger proportion in the U.S. corpus in each period, and *Neutrality* is more common in the Chinese corpus. Besides, there are exclusive prosodies in each corpus: For example, the negative prosodies of *Frustration* and *Pity* and the positive prosody *Pride* in

TABLE 5 Proportion of three attitudes in each period (percentage).

Attitude	P1		F	2	P3		
	CN	U.S.	CN	U.S.	CN	U.S.	
Negative	78.2	64.1	38	64.7	27.9	79.2	
Neutral	0	2.6	8.3	0	8.9	4.2	
Positive	21.8	33.3	53.7	35.3	63.3	16.7	

the Chinese corpus, and the negative prosodies of *Scorn*, *Grudge*, and *Hostility* in the U.S. corpus.

The semantic prosodies contribute to three attitudes-negative, neutral, and positive, and they vary across periods (Table 5) and years (Figure 4). In the Chinese corpus, there are about 56.2% (n = 377) prosodies indicating positivity, which increase over time and peak in Period 3 (63.3%). An increasing trend is also found in neutrality, the attitude with the lowest proportion (7.6%, n =51). The negative prosodies present an opposite trend. Accounting for 36.2% (n = 243) in the corpus, they decrease remarkably from Period 1 (78.2%) to Period 3 (27.9%). Overall, there is a shift of the dominant attitude from negativity in Period 1 to positivity in Periods 2 and 3, with the reversal occurring in 2013. In the U.S. corpus, the negative prosodies dominate in all three periods (68.8%, n = 55) and only the years of 2010 and 2014 take on larger proportions of positive prosodies. The proportions of both positivity (28.8%, n = 23) and neutrality (2.5%, n = 2) are lower than those in the Chinese corpus. Negativity shows an increase from Period 1 to 3, while positivity increases and then decreases and neutrality remains proportionately low. In general, the overall attitude of the semantic prosodies is more negative in the U.S. articles than the Chinese ones, and the variation over time is different.

4.2.2. Semantic prosodies associated with each c-collocation

The semantic prosodies associated with each c-collocation vary across periods (see Figure 5A). In the Chinese corpus, in Period 1, all four c-collocations take on the negative prosody Frustration to present the frustration at the detriment caused by the toxic lead and the incapacity to restore the damaged reputation of MIC. In Example 4, though the terms "improve" and "restore" indicate a positive semantic preference-"ameliorate"-the negations "did nothing to" and "have failed to" lead to a negative semantic prosody referring to the inability to improve the situation. MIC brand(s) and label(s) are also featured with the negative prosody Worry, which reflects the worries about the adverse effects of product scandals on consumer confidence and the MIC image. All four c-collocations show a weakened negativity in Period 2 but to different extents. MIC brand(s) and label(s) still present the majority of negative prosodies (61.5% and 46.7%), represented by Frustration and Pity, that imply shortcomings with MIC constituted by stereotyped perceptions and the lack of high-end products. Nevertheless, MIC goods and product(s) demonstrate more positive prosodies (92.9% and 54.7%) centering around Confidence and Pride, in terms of the constant progress in manufacturing and

competitive prices in global markets. In Period 3, the shift to the majority of positive prosodies is completed. All c-collocations show more positive prosodies than other prosodies, with the largest proportion in MIC brand(s) (77.6%). The representative prosodies are Confidence and Pride. Apart from the contexts mentioned in Period 2, they are specifically derived from good performance in high technologies and good quality. In Example 5, the terms "redefine" and "used to" were adopted to mark a complete break with the previous MIC image of "low cost and low quality," and the term "breakthrough" was used to indicate major progress in markets. These terms are embedded in an indirect quotation from a university professor, connoting objectivity and thus enhancing the reputation of MIC. Overall, except MIC goods, all three ccollocations share an increasingly positive trend. MIC brand(s) and *label(s)* that stand for the abstract reputation of MIC tends to take on more negative prosodies than MIC goods and product(s) that indicate concrete entities.

Example 4: The recent execution of two men for their role in the tainted milk scandal **did nothing to improve** the sullied image of the "*Made in China*" brand [...]. Beijing's reassurances about the reliability of its export inspection regime **have failed to restore** it. ("Ad campaign a small step in building China brand," *SCMP*, December 1, 2009).

Example 5: These [leading technologies in China] would **redefine** the "*made in China*" *label* that many used to perceive as synonymous with low cost and low quality, and represent a **breakthrough** in business knowhow, said Xu Jianguo, a professor of the National School of Development at Peking University. ("Web gives economy a new boost," *CD*, April 18, 2017).

The U.S. corpus reflects a divergent pattern (see Figure 5B). In Period 1, the representative negative prosody is Worry, mainly derived from the unsafe Chinese products. It can be seen from the semantic preference for the "danger" of products (e.g., hazard/hazardous/toxic), and the "harm" to health (e.g., brain damage/cost American lives), and to public confidence (e.g., concern/scare/wariness/worried). In Example 6, the use of "worried about" and "avoided" reflects consumers' concerns about "brain damage" that can be caused by the hazardous lead in Chinese-made toys. Moreover, MIC label(s) is concerned with the negative prosody Grudge due to the popularity of MIC in the markets, while MIC product(s) focuses on the negative prosody Scorn, drawing an evaluative distinction whereby MIC products are deemed inferior in quality and value to those of advanced industrialized countries, e.g., MIC occupies a lower position than the products of the Western countries in GVC. In Period 2, the representative prosody of each c-collocation contradicts in attitude, with MIC label(s) featured with the positive prosody Confidence (44.4%) and MIC product(s) with the negative prosody Scorn (62.5%). Both of the c-collocations bear the utmost negativity in Period 3 (76.5% and 85.7%), represented by the negative prosody Scorn. Example 7 illustrates that Chinese people bought Australian products via a Chinese purchasing agent who coordinated purchasing and shipping of goods back



to China, which shows scorn toward Chinese consumers and products. According to Musolff (2017), sarcasm depends on contradicting the default version of a metaphor. The metaphor blind violates the default setting of "a healthy body," which derides Chinese people's indiscriminate obsession with foreign products. Chinese products are presented as despised in terms of quality by means of a rhetorical question serving as a persuasive function (Frank, 1990), highlighting the correctness of choosing Australian products. Furthermore, the direct quotation of a Chinese purchasing agent is also noteworthy. Direct quotation can distance the journalist from the extracted wording, thus the negative comments on Chinese consumers and products and the positive comments on Australian products are accredited to the quoted. In general, though both c-collocations reflect the majority of negative prosodies across periods, there is an increasingly negative trend in *MIC product(s)* and a fluctuation in *MIC label(s)*, with more negative prosodies in MIC product(s) than in MIC label(s) in each period. It is contradictory to what we found in the Chinese corpus.

Example 6: This holiday season, consumers who **worried about** the potential **brain damage** lead might cause to their children **avoided** anything bearing a "*made in China*" *label*. ("Trouble in toy land; Forget lead paint recalls. The real problem with toys these days—even the educational ones—is that they're brainless. Fortunately, some folks are wising up," USA-T, December 26, 2007).

Example 7: "The Chinese have always had **blind** adoration for foreign things," said Ms. Zhang, 25. "So rather than paying for expensive, *made-in-China products* that might lack safety, why wouldn't they buy high-quality Australian ones at lower prices?" ("China Craves Foreign Goods. Students in Australia Supply Them," *NYT*, May 2, 2017).

5. Discussion

Through examining the topics and semantic prosodies related to MIC from 2006 to 2018, we found the varying focuses in newspapers with time. In Chinese newspapers, the increasing lemmas in the topics of Development, Economy, Geography, and Politics reflect a thriving MIC that excelled in economic performance and became competitive world wide under the government support. The dominance of positive prosodies of MIC+N in Periods 2 and 3, represented by Confidence, conforms with this optimistic representation. The U.S. newspapers also show great interests in the above four topics. However, except Geography, the three topics reflect a decrease of the relevant lemmas in Period 2 followed by a remarkable increase in Period 3. The semantic prosodies are constantly negative, featured with Worry in Period 1 and Scorn in Period 3. It demonstrates that the U.S. media followed the development of MIC closely: The events of product scandals in Period 1 and the U.S.-China trade conflict in Period 3 were addressed in many articles and gave rise to negative prosodies. Accordingly, MIC was represented as being threatening and alerting in the U.S. newspapers.

The ideologies were embedded in the Chinese and U.S. news coverage and varied with the socio-political contexts. In Period 1, the ideology lay in the different ways of reporting Chinese product scandals. The Chinese newspapers gave much weight to the 2008 toxic milk scandal and tried to focus on the event itself.



They revealed the problem centering around the lemma *milk_n* in a tone of *Frustration*. The U.S. newspapers concentrated on the 2007 Mattel toy recall, which emphasized the problem of Chinese manufacturing with the lemma *lead_n* and associated MIC with the negative prosody *Worry*. Considering the status-quo sociopolitical contexts, the difference resulted from an underlying U.S. news agenda propagating a negative image of China before the 2008 Beijing Olympics (e.g., Syed, 2010). The Mattel product scandals were more related to the U.S. society and was used to satisfy the media agenda. Period 2 serves as a transitional period in both corpora. For example, the Chinese newspapers witnessed many articles and positive prosodies related to MIC since 2013 (Figures 1, 4), the first year of Xi's presidency. The ideological difference in Period 3 is particularly reflected in the semantic prosodies. The Chinese newspapers depicted a promising future

of an upgraded MIC with the positive prosody *Confidence*, while the U.S. newspapers badmouthed MIC using the negative prosody *Scorn* with the aim of setting in relief the U.S.'s own domestic advantages by contrast. The prosody *Worry* also illustrates the difference. Though both corpora reflect the worries about the Americans' financial burden due to the U.S.-imposed tariffs on Chinese products, the U.S. newspapers were additionally worried that the Chinese business profits could be transformed into military weapons targeting the U.S. The difference in this period resulted from the conflicting environments in China and U.S. According to Lams (2018), the international communication and the dissemination of "China story" abroad were emphasized in Xi's presidency. President Xi's key visions on promoting China's soft power were revealed early in his presidency. For example, the new slogan "the Chinese dream" of rejuvenating the country and

the proposal of a collaborative mechanism BRI on a global scale in 2013. At a national propaganda-working meeting in August 2013, President Xi emphasized to "tell the Chinese story and spread Chinese voice well." After the 19th Party Congress in 2017, the idea of "a community of shared future" became an essential part of Xi Jinping Thought and was adopted in the UN Human Rights Council Resolution. It is based on a worldwide perspective that attempts to connect countries through mutual collaboration instead of the outdated concept of a zero-sum game associated with Western Cold War mentality. He promotes multilateralism and often assures that China is a peaceful country without ambitions of hegemony or interests in power competition. Facing the U.S.-China trade conflict, he alluded to the need of U.S. to abandon protectionism and exclusive arrangement. Since Chinese newspapers are regarded as serving for the government and the Party, Xi's values and attitudes would influence the news coverage. In case of this study, the large number of articles and high proportions of positive prosodies related to MIC in Period 3 reflect the justification for the plan MIC 2025 as just an effort to improve Chinese manufacturing and not a threat to international community, and for the downplaying of the trade conflict with the U.S., highlighting that China pursues a peaceful understanding. The situation in the U.S. is quite different. President Trump advocated the foreign policy of "America First" in 2017, and released a series of sanctions toward Chinese companies, such as ZTE (Zhong Xing Telecommunication Equipment) and Huawei. Accordingly, we found that the U.S. newspapers played up the threat of MIC that it would supplant the U.S. products, so as to justify the necessity of protecting the U.S. interests. It is shown from the large proportions of negative prosodies related to MIC and the sudden increasing occurrences of references to the plan MIC 2025. The policy was proposed in 2015, but the references only became frequent in 2017 (4.5 per 10,000 words) with a sharp rise (to 8.94) in 2018.

Overall, the ideological differences in representing MIC mainly resulted from the conflicting economic and political interests between the two countries whereby China attempted to upgrade manufacturing and rejuvenate the country in a peaceful way, while the U.S. endeavored to maintain its economic advantage globally, e.g., by trying to reverse the unbalanced trade volume with China.

6. Conclusion

This comparative study has unveiled the divergent representations of MIC in Chinese and U.S. newspapers between 2006 and 2018. There are three main results: (i) The Chinese and U.S. newspapers share seven topics which differ in frequency and in trend over time. The Chinese newspapers tend to mention the situation of manufacturing in domestic and international areas (*Geography*), while the U.S. newspapers pay attention to the U.S. economy under the influence of a burgeoning MIC and the perceived interference with its trade practices by the Chinese government (*Economy*). The two corpora share the same trends in the topics of *Geography* and *Society*, but differ in the other five topics. (ii) The lexical combination MIC+N across periods present the media preference of defining the nature of "made in China"—brand, goods, label, and product. The overall attitude

of it in the U.S. newspapers is more negative than that in the Chinese newspapers, represented by the semantic prosodies of Scorn and Confidence, respectively. There is a shift in the attitudinal majority from negativity in Period 1 to positivity in Periods 2 and 3 in the Chinese newspapers, and a constant majority of negativity across all periods in the U.S. newspapers. Moreover, the lexical combinations standing for the abstract reputation of MIC [i.e., MIC brand(s)/label(s)] are more negative than those concerning concrete entities [i.e., MIC goods/product(s)] in the Chinese corpus. The U.S. corpus shows the opposite pattern, with more negativity in MIC product(s) than MIC label(s). (iii) The ideological differences between newspapers mainly result from the conflicting interests of the two countries, which lead to the different topics and semantic prosodies. The difference in representing MIC is particularly obvious when newspapers cover the same social event. For example, in Mattel toy recalls, the U.S. newspapers were more concerned with the manufacturing practices of Mattel's Chinese contractors than the Chinese newspapers, rather than with Mattel's flawed design of small and loose magnets, although 90% of the recalls were due to this design.

The study illustrates the usefulness of integrating corpus analysis into CDA. We show the advantage of the emerging patterns (e.g., high-frequency words and collocates) in pinpointing the focuses of newspapers and the underlying ideologies evidenced in language, and demonstrate the utility of semantic prosody to enhance the explanatory value of the attitudinal meanings associated with a specific item. The study contributes to the richness of research on MIC. Our findings are in line with the previous studies regarding the negative representation of MIC around 2007 due to product quality problems, and a persistently more negative representation of MIC in the U.S. resulting from the conflicting interests between the two countries. We present the dynamic representation over 13 years of 2006 and 2018, which fills the gap of research on MIC in the late 2010s and captures the influence of major socio-political changes in China and the U.S., e.g., the presidential transitions in both countries, and the deterioration in the U.S.-China trade relationship.

A limitation of this study is that only one coder was involved in the categorization of topics and semantic prosodies. Though the coder achieved the stability and reliability of the results through examining the categorization repeatedly and consulting the research team members when facing problems, it would have been better to have a second coder and check the intercoder reliability.

Since we found that the Chinese and U.S. newspapers highlighted different aspects of MIC in the Chinese product scandals in Period 1 and in the U.S.–China trade conflict in Period 3, our future research will focus on a specific social event and compare the news coverage.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

YW collected the data, analyzed it, and summarized the findings as well as the literature on the topic. All authors contributed to manuscript revision and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships

References

Akhavan-Majid, R., and Ramaprasad, J. (1998). Framing and ideology: a comparative analysis of U.S. and Chinese newspaper coverage of the Fourth United Nations Conference on Women and the NGO forum. *Mass Commun. Soc.* 1, 131–152. doi: 10.1080/15205436.1998.9677853

Baker, P., Gabrielatos, C., and McEnery, T. (2013). Sketching muslims: a corpus driven analysis of representations around the word 'muslim' in the british press 1998–2009. *Appl. Linguist.* 34, 255–278. doi: 10.1093/applin/ ams048

Beaudoin, C. E. (2007). SARS news coverage and its determinants in China and the US. Int. Commun. Gaz. 69, 509-524. doi: 10.1177/17480485070 82839

Bednarek, M. (2008). Semantic preference and semantic prosody re-examined. Corpus Linguist. Linguist. Theory 4, 119–139. doi: 10.1515/CLLT.2008.006

Brezina, V., Timperley, M., and McEnery, T. (2018). *#LancsBox v.4.x [Software]*. Available online at: http://corpora.lancs.ac.uk/lancsbox (accessed January 01, 2019).

Chen, F., and Wang, G. (2020). A war or merely friction? Examining news reports on the current Sino-U.S. trade dispute in *The* New York Times and China Daily. *Crit. Discour. Stud.* 19, 1–18. doi: 10.1080/17405904.2020.1844252

Clark, C. (2007). "A war of words: a linguistic analysis of BBC embedded reports during the Iraq conflict," in *Discourse and Contemporary Social Change*, eds N. Fairclough, G. Cortese, and P. Ardizzone (Bern: Peter Lang), 119–140.

Don, Z., Knowles, G., and Fatt, C. (2010). Nationhood and Malaysian identity: a corpus-based approach. *Text Talk* 30, 267–287. doi: 10.1515/text.2010.014

Drezner, D. (2019). Counter-hegemonic strategies in the global economy. *Secur. Stud.* 28, 505–531. doi: 10.1080/09636412.2019.1604985

Fairclough, N. (1995). Media Discourse. New York, NY: Bloomsbury.

Feng, M., Brewer, P. R., and Ley, B. L. (2012). Framing the Chinese baby formula scandal: a comparative analysis of US and Chinese news coverage. *Asian J. Commun.* 22, 253–269. doi: 10.1080/01292986.2012.662517

Fowler, R. (1991). Languages in the News: Discourse and Ideology in the Press. London: Routledge.

Frank, J. (1990). You call that a rhetorical question? Forms and functions of rhetorical questions in conversation. *J. Pragmat.* 14, 723–738. doi: 10.1016/0378-2166(90)90003-V

Gabrielatos, C., and Baker, P. (2008). Fleeing, sneaking, flooding: a corpus analysis of discursive constructions of refugees and asylum seekers in the UK press, 1996–2005. *J. Engl. Linguist.* 36, 5–38. doi: 10.1177/0075424207311247

Gamson, W., Croteau, D., Hoynes, W., and Sasson, T. (1992). Media images and the social construction of reality. *Annu. Rev. Sociol.* 18, 373–393. doi: 10.1146/annurev.so.18.080192.002105

Gans, H. J. (1979). Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time. New York, NY: Pantheon Books. that could be construed as a potential conflict of interest.

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Supplementary material

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Gleiss, M. S. (2016). From being a problem to having problems: discourse, governmentality and Chinese migrant workers. J. Chin. Polit. Sci. 21, 39–55. doi: 10.1007/s11366-015-9356-0

Gowan, P. (1999). The Global Gamble: Washington's Faustian Bid for World Dominance. London: Verso.

Hardt-Mautner, G. (1995). "Only Connect": Critical Discourse Analysis and Corpus Linguistics (UCEL Technical Paper 6). Lancaster University. Available online at: http:// ucrel.lancs.ac.uk/papers/techpaper/vol6.pdf (accessed January 01, 2020).

Hart, C., and Cap, P. (2014). "Introduction," in *Contemporary Critical Discourse Studies*. eds C. Hart and P. Cap (London: Bloomsbury), 1–16.

Kim, S. T. (2000). Making a difference: U.S. press coverage of the Kwangju and Tiananmen pro-democracy movements. J. Mass Commun. Quart. 77, 22–36. doi: 10.1177/107769900007700103

Koller, V., and Mautner, G. (2004). "Computer applications in critical discourse analysis," in *Applying English Grammar: Functional and Corpus Approaches*, eds C. Coffin, A. Hewings, and K. O'Halloran (London: Hodder and Stoughton), 216–228.

Lams, L. (2018). Examining strategic narratives in Chinese official discourse under Xi Jinping. J. Chin. Polit. Sci. 23, 387-411. doi: 10.1007/s11366-018-9529-8

Lee, C.-C., and Yang, J. (1996). Foreign news and national interest: comparing U.S. and Japanese coverage of a Chinese student movement. *Int. Commun. Gaz.* 56, 1–18. doi: 10.1177/001654929605600101

Li, L. (2013). The path to Made-in-China: how this was done and future prospects. Int. J. Prod. Econ. 146, 4–13. doi: 10.1016/j.ijpe.2013.05.022

Li, T., and Zhu, Y. (2019). How does China appraise self and others? A corpus-based analysis of Chinese political discourse. *Discour. Soc.* 31, 153–171. doi: 10.1177/0957926519880036

Liu, J., and Yao, Z. (2015). How to play the game of intellectual property rights in China: the impact of party affiliation and media location on the use of media frames. *Asian J. Commun.* 25, 371–392. doi: 10.1080/01292986.2014.968593

Louw, B. (1993). "Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies," in *Text and Technology: In honor of John Sinclair*, eds M. Barker, G. Francis and E. Tognini-Bonelli (Amsterdam; Philadelphia, PA: John Benjamins), 157–176. doi: 10.1075/z.64.11lou

Mastanduno, M. (2019). Partner politics: Russia, China, and the challenge of extending US hegemony after the Cold War. Secur. Stud. 28, 479-504. doi: 10.1080/09636412.2019.1604984

Morley, J., and Partington, A. (2009). A few frequently asked questions about semantic - or evaluative - prosody. *Int. J. Corpus Linguist.* 14, 139–158. doi: 10.1075/ijcl.14.2.01mor

Musolff, A. (2017). Metaphor, irony and sarcasm in public discourse. J. Pragmat. 109, 95–104. doi: 10.1016/j.pragma.2016.12.010

Pan, Q., and Liu, H. (2013). 归罪政府与商家: 美国主流报纸"中国制造" 产品质 量问题的报道(Blaming dishonest business and incompetent bureaucrats: a framing

analysis of Chinese product recalls in The New York Times and The Washington Post). 新闻与传播研究(*J. Commun*,) 20, 65–78, 126. Available online at: https://kns.cnki.net/ kcms2/article/abstract?v=ECJfaSgxqGdv5qF1uANzHjkP5sQ9sQlOggcosjrdgS6plEI-Z8tCFQB2/MdZLCK+bZhRbUSgs7-ViakgZ9ccQgTkuaRoddIFmuA6MwPl_ g9glnVTuYR--a88F6QUWloK&uniplatform=NZKPT&language=CHS

Partington, A. (2004). "Utterly content in each other's company": semantic prosody and semantic preference. *Int. J. Corpus Linguist.* 9, 131–156. doi: 10.1075/ijcl.9.1.07par

Qi, H., and Ye, F. (2020). Contrastive analysis of discursive constructions in terrorist attack reports between Chinese and British newspapers: case study of reports on Beijing and Barcelona terrorist attacks. J. Quant. Linguist. 27, 361–378. doi: 10.1080/09296174.2019.1595901

Richardson, J. (2004). (Mis)representing Islam: The Racism and Rhetoric of British Broadsheet Newspapers. Philadelphia, PA: John Benjamins.

Shoemaker, P. J., and Reese, S. D. (1996). Mediating the Message: Theories of Influences on Mass Media Content. New York, NY: Longman.

Sinclair, J. (1996). The search for units of meaning. Textus 9, 75-106.

Stubbs, M. (2001). Words and Phrases: Corpus Studies of Lexical Semantics. Oxford: Blackwell.

Stubbs, M. (2009). The search for units of meaning: Sinclair on empirical semantics. *Appl. Linguist.* 30, 115–137. doi: 10.1093/applin/amn052

Swenson, D., and Woo, W. T. (2019). The politics and economics of the U.S.-China trade war. *Asian Econ. Pap.* 18, 1–28. doi: 10.1162/asep_a_00710

Syed, N. (2010). The effect of Beijing 2008 on China's image in the United States: a study of US media and polls. Int. J. Hist. Sport 27, 2863–2892. doi: 10.1080/09523367.2010.508277

Tang, L. (2021). Transitive representations of China's image in the US mainstream newspapers: a corpus-based critical discourse analysis. *Journalism* 22, 804–820. doi: 10.1177/1464884918801116

The World Bank (2023). *GDP Growth of China (Annual %)*. Available online at: https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2018andlocations=CNandstart=1978andview=chart (accessed February 3, 2023).

U.S. Census Bureau (2022). *Trade in Goods with China*. Available online at: https:// www.census.gov/foreign-trade/balance/c5700.html (accessed December 19, 2022).

Van Dijk, T. A. (1988). News as Discourse. Hillsdale, NJ: Lawrence Erlbaum.

Van Dijk, T. A. (1995). Discourse semantics and ideology. Discour. Soc. 6, 243-289. doi: 10.1177/0957926595006002006

Van Dijk, T. A. (1998). Ideology: A Multidisciplinary Approach. London: Sage.

Van Dijk, T. A. (2006). Ideology and discourse analysis. J. Polit. Ideol. 11, 115-140. doi: 10.1080/13569310600687908

Van Dijk, T. A. (2015). "Critical discourse analysis," in *The Handbook of Discourse Analysis*, eds D. Tannen, H. E. Hamilton, and D. Schiffrin (Chichester; Malden: Wiley Blackwell), (466–485).

VERBI Software (2021). MAXQDA 2022 [Software]. Berlin: VERBI Software. Available online at: https://www.maxqda.com/ (accessed January 01, 2022). Wang, G., and Ma, X. (2021). Were they illegal rioters or pro-democracy protestors? Examining the 2019–20 Hong Kong protests in China Daily and The New York Times. *Crit. Arts* 35, 1–15. doi: 10.1080/02560046.2021.1925940

Wang, J. (2017). Representations of the Chinese Communist Party's political ideologies in President Xi Jinping's discourse. *Discour. Soc.* 28, 413–435. doi: 10.1177/0957926516687418

Wang, X., and Han, G. (2010). "中国制造"与国家形象传播: 美国主流媒体报 道30年內容分析("Made in China" and national image: a content analysis of 30 years' coverage in American mainstream media). 国际新闻界(*Chin. J. Commun.*) 32, 49–55. doi: 10.13495/j.cnki.cjjc.2010.09.010

Whitsitt, S. (2005). A critique of the concept of semantic prosody. Int. J. Corpus Linguist. 10, 283–305. doi: 10.1075/ijcl.10.3.01whi

Wodak, R., and Meyer, M. (eds) (2015). *Methods of Critical Discourse Analysis, 3rd Edn*. London: Sage.

Wu, M. (2006). Framing AIDS in China: a comparative analysis of US and Chinese wire news coverage of HIV/AIDS in China. *Asian J. Commun.* 16, 251–272. doi: 10.1080/01292980600857781

Xiu, C., and Klein, K. K. (2010). Melamine in milk products in China: examining the factors that led to deliberate use of the contaminant. *Food Policy* 35, 463–470. doi: 10.1016/j.foodpol.2010.05.001

Yan, X. (2014). From keeping a low profile to striving for achievement. Chin. J. Int. Polit. 7, 153-184. doi: 10.1093/cjip/pou027

Yang, Y. (2020). "China's economic growth in retrospect," in *China 2049: Economic Challenges of a Rising Global Power*, eds D. Dollar, Y. Huang, and Y. Yao (Washington, DC: Brookings Institution Press), 3–28. doi: 10.7864/j.ctvktrz58.4

Ye, L., and Pang, A. (2011). Examining the Chinese approach to crisis management: cover-ups, saving face, and taking the "Upper level line." *J. Market. Channels* 18, 247–278. doi: 10.1080/1046669x.2011.6 13318

Yu, Y. (2019). Media representations of 'leftover women' in China: a corpus-assisted critical discourse analysis. *Gender Lang.* 13, 369–395. doi: 10.1558/genl.36223

Zeng, L., Zhou, L., and Li, X. (2015). Framing strategies at different stages of a crisis: coverage of the 'July 5th' Urumqi event by Xinhua, Reuters, and AP. *Int. Commun. Gaz.* 77, 51–73. doi: 10.1177/1748048514556979

Zhang, L., and Wu, D. (2017). Media representations of China: a comparison of China Daily and Financial Times in reporting on the Belt and Road Initiative. *Crit. Arts* 31, 29–43. doi: 10.1080/02560046.2017.1408132

Zhang, S., and Su, X. (2009). Made in China at a crossroads: a recourse-based view. J. Public Aff. 9, 313-322. doi: 10.1002/pa.335

Zhou, Y. (2019). "中国制造"的报道框架与媒介形象研究—以China Daily, BBC, CNN为例(Research on the reporting framework and media image of "Made in China" - Taking China Daily, BBC and CNN as examples). 传媒论 坛(*Media Forum*) 2, 14-16. Available online at: https://kns.cnki.net/kcms2/article/ abstract?v=ECJfaSgxqGf5Ee81pKa0H8SVuPMIkNcyeSdM25UF9MW5tWpox80kDz_ mcC-Ft7GDvamn-V4Hif7Jl5tkVlDrqr7kv9GCSVMep-pff3VV3tNOqX_tw0p_ tqAVhIgZ5jA6&uniplatform=NZKPT&language=CHS