

China in Africa: Representation of Chinese Investments in Africa by Western, Chinese, and African Media

FRANKLINE MATANJI¹
University of Iowa, USA

This study is grounded in framing theory to understand tones and frames adopted by media from various regions when covering Chinese investment in Africa. Relying on news articles collected from Factiva and Nexis Uni databases, the study focuses on four tones (positive, negative, neutral, and mixed) and five generic frames (conflict, human interest, attribution of responsibility, morality, and economic consequences). The results of this quantitative content analysis indicate that Chinese, Kenyan, South African, and Nigerian media reported on Chinese investment in Africa using a positive tone, while media in the United States and Britain adopted a negative tone. Furthermore, each generic frame was adopted with varying levels of intensity across the countries investigated in this study. The conclusion is discussed in terms of how each country's economic and political interests involved in the Chinese investments debate influence the tone and frame of the news media coverage.

Keywords: Africa, Chinese investment, public diplomacy, Chinese influence

Chinese investments in Africa, referred to by some scholars as the “new scramble for Africa” (Ayers, 2013, p. 227), have received a lot of media and public attention (Umejei, 2020; Wasserman & Madrid-Morales, 2018). The scramble for African resources started with slavery, followed by the Berlin Conference of 1884–1885, held in Germany; there, its first chancellor, Otto von Bismarck, came up with the rules of how the continent Africa would be divided for colonization (Pakenham, 1991). Unlike in the 18th and 19th centuries, in the 21st century, Africa has become a strategic region for business, especially for established and emerging powers. For instance, China has, in the last two decades, adopted a soft power approach when engaging with Africa, establishing peer-to-peer relations with Africa as a continent and at the state level—different from the top-down approach implemented by the West. These relations have often been in the form of aid and investments, loans, and infrastructure development bolstered by its Belt and Road Initiative) policy (Ajibo, Anozie, Umahi, & Nwatu, 2020; Calzati, 2020; Gagliardone, 2019). This China–Africa multilateral cooperation, with its main objectives focusing on trade, investment, and other related

Frankline Matanji: frankline-matanji@uiowa.edu
Date submitted: 2020-12-30

¹ I would like to thank Drs. Yanqin Lu, Louisa Ha, Srinivas Melkote, Melissa Tully, and Saif Shahin, and the three anonymous reviewers for their immense contribution to this article.

Copyright © 2022 (Frankline Matanji). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

areas of cooperation, was first established in 2000, when China held the first Forum on China-Africa Cooperation (FOCAC) in Beijing (Yalew, 2019).

As Chen, Dollar, and Tang (2018) have posited, China's engagement with Africa has boosted Africa's economic growth, but has also generated diverse opinions, especially from the West; proponents hail the engagement as mutually beneficial to the parties involved, and critics report considerable controversies. Therefore, this study focuses on media coverage of Chinese investment in Africa, an underexplored area in the scholarship of comparative international communication studies. The study focuses on varying tones and frames adopted by media from Africa, China, Britain, and the United States. The findings of this study indicate that media from the three selected African countries—Kenya, Nigeria, and South Africa—and China report on Chinese investment in Africa using a positive tone, while those from the United States and Britain report using a negative tone. The findings of this study are in line with Fernando's (2014) findings: She observed that Chinese investments in Africa result in Africa's gain and a loss to the West, while China's gain from Africa also results in a loss to the West. This could explain why the "winning" countries adopt a positive tone, while the "losing" countries adopt a negative one. I also observed that media from the select countries frame Chinese investments in Africa differently based on their strategic interests.

By applying framing theory, this study explains how media from various parts of the world frame their news coverage of Chinese investments in Africa. It focuses on four tones (positive, negative, neutral, and mixed) and five generic news frames proposed by Semetko and Valkenburg (2000; human interest frame, economic consequence frame, morality frame, conflict frame, and the attribution of responsibility frame).

Literature Review

Media Framing

According to Entman's (1993) definition of the term *media framing*, "to frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation" (p. 52). Goffman (1974) first termed frames as "schemata(s) of interpretation" that make it possible for individuals "to locate, perceive, identify, and label" (p. 21) issues, topics, and events. Since this theory's intellectual origin, media scholars applying its concept to mass media research have used a wealth of different approaches and definitions in the application of framing theory (D'Angelo & Kuypers, 2010; Reese, Gandy, & Grant, 2001).

Scholars from different disciplines have come up with the definition of the term *framing*, with some focusing on how media present news, and others focusing on the comprehension of the news by the audience (McCombs, Shaw, & Weaver, 1997). For instance, Tewksbury and Scheufele (2007) described media framing based on the notion that it is how an issue is featured and presented in news that impacts how the audience interprets the story being disseminated. Semetko and Valkenburg (1998) defined a media frame as a specific way in which journalists develop a news story to ensure optimized media audience accessibility. On the

other hand, psychologists define framing as variations in judgment caused by alterations to its definition of judgment or choice difficulties (Tversky & Kahneman, 1989).

While issue-specific news frames, which are defined by de Vreese, Peter, and Semetko (2001) as frames that make use of "specific topics or news events" (p. 108), are only applicable to specific topics or events, this study adopts generic frames. Generic frames, defined by Matorel (2021) as frames that go beyond thematic limitations, are broadly applicable frames that can be applied to various news topics and events over time, and sometimes over diverse cultural settings. Previous studies have adopted this framework to examine media coverage of society issues, such as economic issues in Switzerland (Guenduez, Schedler, & Ciocan, 2016), the launch of the Euro (de Vreese et al., 2001), climate change (Han, Sun, & Lu, 2017), and the immigration debate in the United States (Kim & Wanta, 2018). A disadvantage of studying issue-specific frames is that even though they give detailed information, they do not give room for examining patterns and testing hypotheses across issues within a study (Card, Boydston, Gross, Resnik, & Smith, 2015).

Like the study conducted by Semetko and Valkenburg (2000), this study also adopts five generic frames: human interest, economic consequence, morality, conflict, and the attribution of responsibility. In their analysis of television stories during the European heads of state meeting held in Amsterdam in 1997, they identified a story as having adopted a conflict frame if it emphasizes conflicts between individuals, groups, institutions, or nations, with the aim of capturing the audience's attention. Second, they identified the human interest frame if news stories brought an emotional angle to the presence of an issue, event, or problem being covered. The economic consequence frame was identified in a news story if the story covered events, issues, or problems in terms of economic outcomes for an individual, group, country, or region. The attribution of responsibility frame was depicted if the story attributed responsibility for the cause of a problem or issue to an individual, a group, or the government. Finally, the morality frame adopted moral prescriptions or religious tenets when covering events, issues, or problems. This frame is a result of journalists' professional norm of objectivity. These frames have implications for Chinese investments in Africa. The media's adoption of these varying frames can influence the public's and African nations' perceptions toward Chinese investments in Africa.

Framing Chinese Investments in Africa

While studying the increased influence of Chinese presence on the African continent, Ayodele and Sotola (2014) looked at China's economic interests, which have been under global scrutiny recently. They argued that while some people are optimistic about Chinese engagement in Africa, some have raised concerns that it is similar to the engagement of Western countries decades ago that led to the colonization of the African continent. Contrary sentiments were echoed by Gagliardone (2019), who looked at the narrative of Chinese investment in Africa. He argues that China is contributing to the "African rising" narrative by making investments on the continent with minimal conditions, while the Western countries' approaches toward engaging with African countries are still trapped between being proponents of human rights and freedom of expression, and emphasizing economic stability and service delivery to their citizens. These arguments have led to questions of whether Chinese investments in African countries are leading to exploitation, or are win-win bilateral engagements. Studies have also shown that different African countries

perceive Chinese investments differently (Afrobarometer, 2016). To understand these opposing arguments, one must explore how media from Africa, China, and the West report investments differently. Therefore, I studied media polarity and framing of Chinese investments in Africa across the globe.

This study first focused on African media (i.e., Kenyan, Nigerian, and South African) and explored the variation in their coverage of Chinese investment in Africa. These countries are comparable because they are major regional economic hubs in Eastern, Western, and Southern Africa and have all received substantial foreign investments. It is thus important to examine how their media covered Chinese investment in Africa differently in terms of tone. The following research question was studied.

RQ1: How do Kenyan, South African, and Nigerian media cover Chinese investments in Africa, in terms of tone?

In addition, this study explored the variation in coverage of Chinese investment in Africa by the Chinese, American, and British media. This is an important area because these three countries have been significantly involved on the African continent in terms of political power and economic investment. Previous literature has indicated that Chinese media are primarily controlled by the communist party and thus tend to praise government investment in Africa (Leung & Huang, 2007; Zhang & Fleming, 2005). On the contrary, media in the United States and Britain have a long tradition of covering China and its relevant issues negatively (Sparks, 2010; Wu, 2006). Therefore, the following alternative hypothesis was studied.

H1: Chinese media will cover Chinese investment in Africa positively, while American and British media will cover the issue negatively.

For RQ2 and RQ3, this study explores how Kenyan, South African, Nigerian, Chinese, American, and British media use different frames to cover Chinese investment in Africa. Therefore, the following research questions were asked.

RQ2: How did Kenyan, South African, and Nigerian media cover Chinese investments in Africa in terms of (a) the attribution of responsibility frame; (b) the human interest frame; (c) the conflict frame; (d) the morality frame; and (e) the economic consequence frame?

RQ3: How did Chinese, American, and British media cover Chinese investments in Africa in terms of (a) the attribution of responsibility frame; (b) the human interest frame; (c) the conflict frame; (d) the morality frame; and (e) the economic consequence frame?

Methods

This study adopted a quantitative content analysis to analyze tones and frames adopted by Kenyan, Nigerian, South African, Chinese, American, and British newspapers when reporting about Chinese investments in Africa. News articles about Chinese investments in Africa were downloaded from Factiva and Nexis Uni news databases. The same keywords ("China AND investment AND Africa") were used for searching each country's news articles. The newspaper articles were downloaded from January 1, 2013, to

December 31, 2018. The year 2013 was selected because it was the time when the Chinese president, Xi Jinping, visited Africa during the FOCAC and put forth principles of sincerity, affinity, real good faith, and results, with the target of combining efforts to support Africa to achieve its economic independence, fair trade, equitable and sustainable development, and mutual development between China and Africa. It was during the same year that China formally initiated the Belt and Road Initiative in Africa (Shuo, 2013).² Five years captures a significant enough time frame to see the potential emergence of different frames; looking at only one year could have skewed my findings because of the possibility of one country having a major investment that others did not.

A total of 6,518 news articles from the six newspaper websites were downloaded. News articles from the mined corpus were randomly selected for analysis as follows (total $N = 490$): *Daily Nation* (Kenya, 85 articles), *Mail & Guardian* (South Africa, 81 articles), *Vanguard* (Nigeria, 80 articles), *China Daily* (China, 83 articles), *The Guardian* (Britain, 82 articles), and *The New York Times* (United States, 79 articles). The search was restricted to English-language publications, which have a significant readership in Africa. The unit of analysis for this study was each news story. The selection of the newspapers from each country was based on popularity and national or global representation of the news coverage. According to a report by The Open Society Foundations (2013), *Daily Nation* has the highest circulation and one of the most representative of news coverage in Kenya. The case is the same for *Mail & Guardian* and *Vanguard* (Brown & Udomisor, 2015; Tyali, 2017). *The New York Times*, *The Guardian* (Danielson & Lasorsa, 2020; Haider, 2017), and *China Daily* (He, Zhang, & Chen, 2020) are the most popular and most representative, both locally and globally, in the United States, Britain, and China, respectively.

Variables

The independent variable in this study is the country of the news organizations under study. Four tones and five generic frames proposed by Semetko and Valkenburg (2000) were categorized as the dependent variables. The tones are positive, negative, neutral, or mixed, and the five generic frames are conflict, human interest, economic consequence, morality, and attribution of responsibility frames.

Measurement of Frames and Tones

For the tone, a story was positive if it was written in such a way that it conveyed a positive meaning or would cause the reader to form positive feeling toward Chinese investments in Africa. For example, if a story proposes that Chinese investments in Africa will lead to infrastructure improvement on the African continent, it was coded as 1 to mean presence of positive tone. A story was considered to have a negative tone if it was written in such a way that it conveys a negative meaning or would cause the reader to form a negative feeling toward Chinese investments in Africa. For example, if a story suggests that Chinese investment in Africa is not a win-win trade, but instead, China is exploiting African resources, it was coded as 2 to represent a negative tone. A story was coded as neutral if it is neither positive nor negative and if it

² For more information about the Belt and Road Initiative and a graphical representation of Chinese loans commitment to Africa by sector, see <https://www.bloomberg.com/news/articles/2020-07-22/chinese-credit-fuels-debt-crisis-in-africa>.

does not condemn or support Chinese investments in Africa. For example, if a story states that China has been investing on the African continent for the last two decades without outlining the positives or negatives of the investments, it was coded as 3 to represent a neutral tone. A story was coded as mixed if the positive and negative tones are mentioned almost equally in terms of the amount of space. Such stories outline the benefits of the issue under study while also condemning it (Melkote, 2009). For example, if a story suggests that Chinese investments in Africa are good because they lift people from poverty but are also likely to cause the second colonization of the African continent, its tone is considered mixed. A story with a mixed tone was coded as 4.

A series of binary questions (1 = yes; 0 = no) were used to measure the presence of each frame in each of the selected articles. Cronbach's alpha was then calculated to determine internal consistency of the items used for each frame (Cronbach, 1990). Finally, a scale was created by adding up the scores of the items used for each frame. Eighteen questions proposed by Semetko and Valkenburg (2000) were adopted for this study. The wording of the questions and their Cronbach's alpha scores are outlined in Appendix B.

The attribution of responsibility frame was measured by addressing four questions that asked about government, organizations, and individual responsibilities and solutions. The human interest frame was measured using five questions that addressed the emotional angle in the reporting of Chinese investments in Africa. On the other hand, the conflict frame was measured using four items that depicted a conflict between individuals, institutions, organizations, or governments. The morality frame was measured by addressing three questions about societal and religious norms of the societies under study. Finally, the economic consequence frame was measured using three questions that addressed issues such as trade, local and foreign investments, economic development, loans, and infrastructural development.

Intercoder Reliability Analysis

Two trained coders coded randomly selected news articles (16.3% of the final sample) to calculate the intercoder reliability. Cohen's kappa was calculated to measure the intercoder reliability between the two coders. The first round of intercoder reliability check involved 50 news articles. Discrepancies were resolved by retraining the coders and then conducting a second round that involved 30 more news articles. The intercoder reliability ranged from .69 to 1.00 (see Appendix A).

Analysis of Tone and Frames

To investigate whether the use of tones and frames varied depending on the countries under study, chi-square tests were conducted to address RQ1 and H1 to investigate variations in tone, and one-way analysis of variance (ANOVA) was used to address RQ2 and RQ3 to investigate the use of different frames among different countries. To understand the comparisons between different pairs of countries, a post hoc analysis (i.e., Tukey's HSD) was conducted.

Results

Tone Analysis

The first research question (RQ1) investigates how Kenyan, South African, and Nigerian media covered Chinese investments in Africa in terms of tone. Generally, most of the media coverage in these three African countries covered Chinese investments using a positive tone.

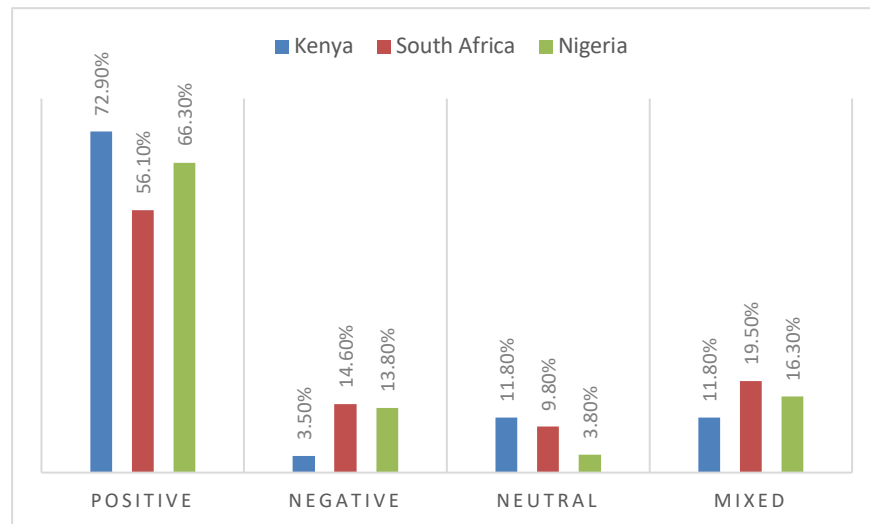


Figure 1. Percentage of tones used among the media in African countries.

Chi-square tests indicate that media in these three African countries used different tones to cover Chinese investments in Africa ($\chi^2 = 12.1838$, $df = 6$, $p < .05$). News articles from Kenya (72.9%) covered Chinese investment in Africa with a more positive tone than those from South Africa (56.1%) and Nigeria (66.3%). At the same time, Kenya (3.50%) had fewer negative articles than South Africa (14.60%) and Nigeria (13.80%) (see Figure 1 and Table 1).

Table 1. Chi-Square Results of the Tone Variations Among African Countries.

			Tone Toward Chinese Investments in Africa				Total
			Positive	Negative	Neutral	Mixed tone	
Country of Study	Kenya	Count (% Within Country of Study)	62 (72.9)	3 (3.5)	10 (11.8)	10 (11.8)	85 (100.0)
		Expected Count	55.4	8.9	7.2	13.4	85.0
	South Africa	Count (% Within Country of Study)	46 (56.1)	12 (14.6)	8 (9.8)	16 (19.5)	82 (100.0)
		Expected Count	53.4	8.6	7.0	12.9	82.0
	Nigeria	Count (% Within Country of Study)	53 (66.3)	11 (13.8)	3 (3.8)	13 (16.3)	80 (100.0)
		Expected Count	52.1	8.4	6.8	12.6	80.0
Total		Count (% Within Country of Study)	161 (65.2)	26 (10.5)	21 (8.5)	39 (15.8)	247 (100.0)
		Expected Count	161.0	26.0	21.0	39.0	247.0

H1 states that Chinese media will cover Chinese investments in Africa positively, while British and U.S. media will cover the issue with a negative tone. In general, Chinese media covered Chinese investments in Africa in a more positive tone, while British and U.S. media were more negative, supporting H1 (see Figure 2 and Table 2).

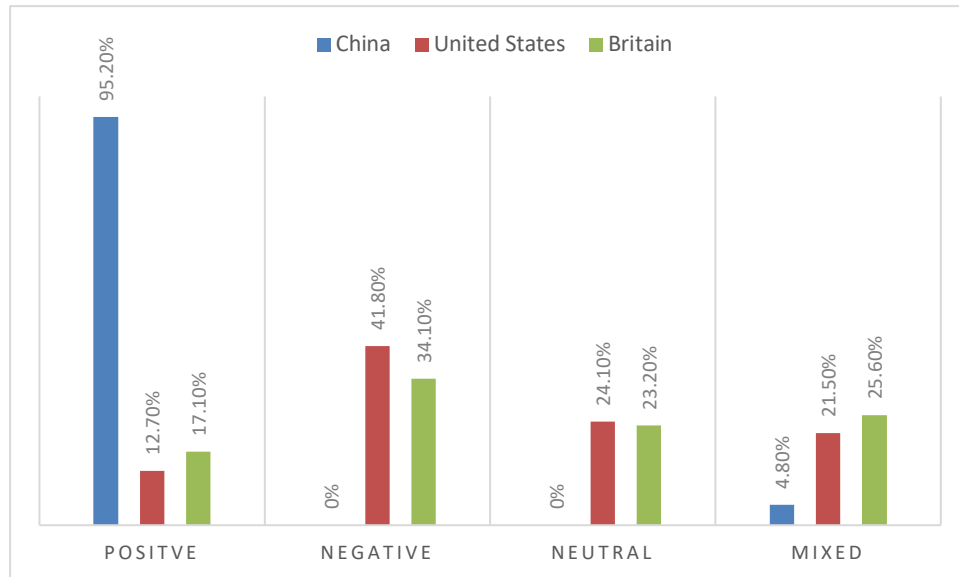


Figure 2. Percentage of different tones used among the media in China, the United States, and Britain.

Chi-square tests indicate that media in these three countries used different tones to cover Chinese investments in Africa ($\chi^2 = 147.397$, $df = 6$, $p < .001$). China (95.2%) covered the issue with a more positive tone than the United States (12.7%) and Britain (17.1%). Media in the United States (41.8%) and Britain (34.1%) had more negative articles than the Chinese media (0%). Therefore, the hypothesis is supported.

Table 2. Chi-Square Results of the Tone Variations Among China, the United States, and Britain.

			Tone Toward Chinese Investments in Africa				Total
			Positive	Negative	Neutral	Mixed tone	
Country of Study	China	Count (% Within Country of Study)	79 (95.2)	0 (0.0)	0 (0.0)	4 (4.8)	83 (100.0)
		Expected Count	35.0	20.8	12.9	14.3	83.0
	United States	Count (% Within Country of Study)	10 (12.7)	33 (41.8)	19 (24.1)	17 (21.5)	79 (100.0)
		Expected Count	33.3	19.8	12.3	13.6	79.0
	Britain	Count (% Within Country of Study)	14 (17.1)	28 (34.1)	19 (23.2)	21 (25.6)	82 (100.0)
		Expected Count	34.6	20.5	12.8	14.1	82.0
Total		Count (% Within Country of Study)	103 (42.2)	61 (25.0)	38 (15.6)	42 (17.2)	244 (100.0)
		Expected Count	103.0	61.0	38.0	42.0	244.0

Frame Analysis Results

In terms of framing news stories by the respective newspapers from the three African countries, 18 items of the five generic frames developed by Semetko and Valkenburg (2000) were analyzed. Three frames—the attribution of responsibility frame, the economic frame, and the human interest frame—were more prominent as compared with the conflict frame and the morality frame, as shown in Figure 3. The descriptive statistics of the five frames adopted by the three African countries’ media are illustrated in Table 3.

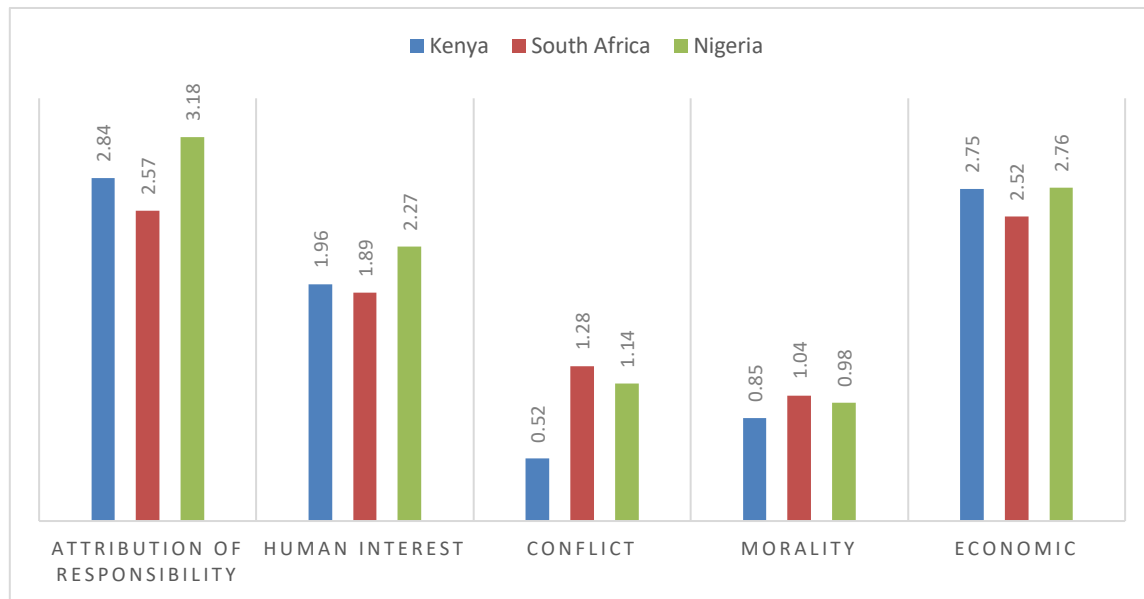


Figure 3. Means of different frames adopted by Kenyan, South African, and Nigerian media.

Table 3. Descriptive Statistics of the Media Frames Adopted by African Countries.

Country	Attribution of Responsibility <i>M (SD)</i>	Human Interest <i>M (SD)</i>	Conflict <i>M (SD)</i>	Morality <i>M (SD)</i>	Economic <i>M (SD)</i>
Kenya	2.84 (1.35)	1.96 (1.35)	.52 (1.25)	.85 (.99)	2.75 (0.46)
South Africa	2.57 (1.62)	1.89 (1.53)	1.28 (1.73)	1.04 (1.13)	2.52 (0.79)
Nigeria	3.18 (1.21)	2.27 (1.25)	1.14 (1.63)	.98 (1.08)	2.76 (0.48)
Range	(0–4)	(0–5)	(0–3)	(0–3)	(0–3)

For RQ2a, the results of a one-way ANOVA indicate that the presence of the attribution of responsibility frame differed significantly across the media coverage from the three African countries, $F_{\text{attribution}(2, 243)} = 3.78; p < .05$. To examine if there were significant differences in framing the attribution of responsibility frame among the three African countries, Tukey post hoc multiple comparisons tests analysis was used, which indicated that the presence of the attribution of responsibility frame was significantly different between South Africa ($M = 2.57, SD = 1.62$) and Nigeria ($M = 3.18, SD = 1.21, p <$

.05). However, no significant results were found between Kenya ($M = 2.84$, $SD = 1.35$) and the other African countries (South Africa: $p = .44$, Nigeria: $p = .27$).

As for RQ2b, no significant differences were found among the three African countries in their adoption of the human interest frame, $F_{\text{humaninterest}}(2, 242) = 1.66$; $p = .19$. The human interest frame's Tukey post hoc multiple comparison test analysis indicated no significant difference between Kenya ($M = 1.96$; $SD = 1.35$) and South Africa ($M = 1.89$, $SD = 1.53$, $p = .93$); Kenya and Nigeria ($M = 2.27$, $SD = 1.25$, $p = .35$); and Nigeria and South Africa ($p = .20$).

In response to RQ2c, there was a significant difference in adopting the conflict frame, $F_{\text{conflict}}(2, 243) = 5.62$; $p < .01$. Tukey post hoc analysis indicated that the conflict frame was significantly different between Kenya ($M = .52$, $SD = 1.25$) and the other two African countries: South Africa ($M = 1.28$, $SD = 1.73$, $p < .01$) and Nigeria ($M = 1.14$, $SD = 1.63$, $p < .05$). No significant difference was observed between South Africa and Nigeria ($p = .83$).

For RQ2d, no significant differences were found among the African countries in the adoption of the morality frame, $F_{\text{morality}}(2, 244) = .69$; $p = .50$. The Tukey post hoc multiple comparison test indicated no significant differences between Kenya ($M = .85$, $SD = 0.99$) and South Africa ($M = 1.04$, $SD = 1.13$, $p = .49$); Kenya and Nigeria ($M = .98$, $SD = 1.08$, $p = .72$); and South Africa and Nigeria ($p = .93$).

For RQ2e, there was a significant difference in adopting the economic consequence frame among the three African countries, $F_{\text{economic}}(2, 244) = .69$; $p < .05$. A Tukey post hoc multiple comparisons tests analysis indicated that the presence of economic frame was significantly different between Kenya ($M = 2.75$, $SD = 0.46$) and South Africa ($M = 2.52$, $SD = 0.79$, $p < .05$) and between South Africa and Nigeria ($M = 2.76$, $SD = 0.48$, $p < .05$). No significant differences were observed between Kenya and Nigeria ($p = .99$).

The media coverage in China, the United States, and Britain was analyzed to examine their adoption of the five generic frames, as illustrated in Table 4. Four frames—the attribution of responsibility frame, the economic frame, the conflict frame, and the human interest frame—were more prominent in U.S., British, and Chinese media, except for Chinese media when using the conflict frame. The morality frame was less prominent among all three of these countries, as shown in Figure 4.

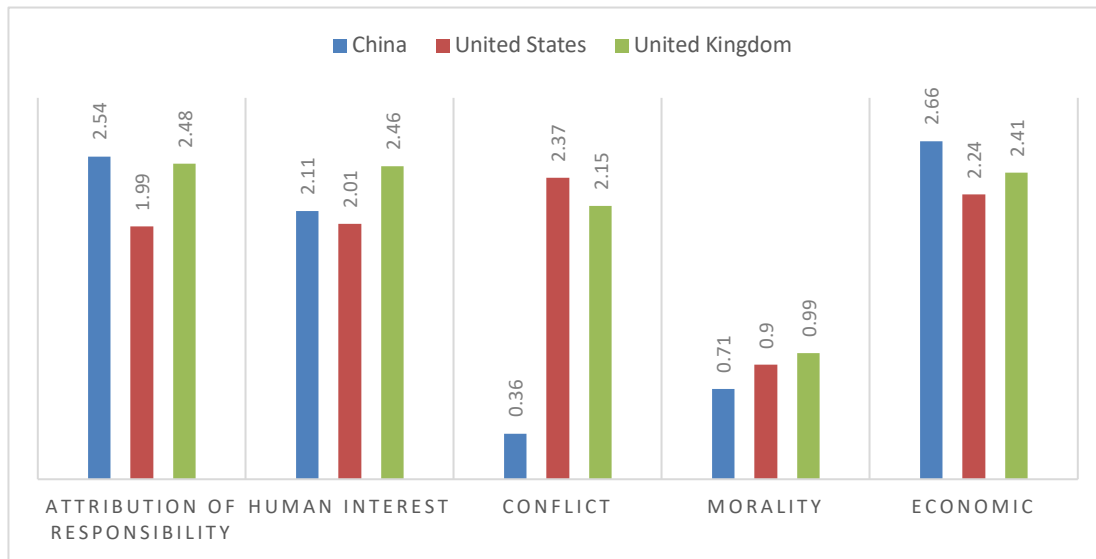


Figure 4. Means of different frames adopted by Chinese, American, and British media.

For RQ3a, the results of a one-way ANOVA indicated that the presence of the attribution of responsibility frame differed significantly across the media coverage from the three countries, $F_{\text{attribution}}(2, 239) = 4.17; p < .05$. An examination of whether there were significant differences in framing the attribution of responsibility frame among the three countries, a Tukey post hoc multiple comparisons tests analysis indicated that the presence of the attribution of responsibility frame was significantly different between China ($M = 2.54, SD = 1.23$) and the United States ($M = 1.99, SD = 1.31, p < .05$). However, no significant results were found between China and Britain ($M = 2.48, SD = 1.39, p = .95$), but a marginal difference was observed between the United States and Britain ($p = .051$).

Table 4. Descriptive Statistics of the Media Frames Adopted by China, the United States, and Britain.

Country	Attribution of responsibility <i>M (SD)</i>	Human interest <i>M (SD)</i>	Conflict <i>M (SD)</i>	Morality <i>M (SD)</i>	Economic <i>M (SD)</i>
China	2.54 (1.23)	2.11 (1.05)	0.36 (0.97)	.71 (0.95)	2.66 (0.55)
United States	1.99 (1.31)	2.01 (1.34)	2.37 (1.76)	.90 (0.11)	2.24 (0.91)
Britain	2.48 (1.39)	2.46 (1.10)	2.15 (1.70)	.99 (0.99)	2.41 (0.82)
Range	(0-4)	(0-5)	(0-3)	(0-3)	(0-3)

In response to RQ3b, there were significant differences in adopting the human interest frame, $F_{\text{humaninterest}}(2, 239) = 3.32; p < .05$. A Tukey post hoc multiple comparisons tests analysis indicated that the adoption of the human interest frame was significantly different between United States ($M = 2.01, SD = 1.34$) and Britain ($M = 2.46, SD = 1.10, p < .05$). However, no significant results were found between China ($M = 2.11, SD = 1.05$) and the United States ($p = .86$), and between China and Britain ($p = .14$).

As for RQ3c, there were significant differences in the adoption of the conflict frame among the three countries, $F_{\text{conflict}}(2, 241) = 43.30$; $p < .01$. A Tukey post hoc multiple comparisons test analysis indicated that the adoption of the conflict frame was significantly different between China ($M = 0.36$, $SD = 0.97$) and the United States ($M = 2.37$, $SD = 1.76$, $p < .001$) and between China and Britain ($M = 2.15$, $SD = 1.70$, $p < .001$). No significant difference was exhibited between the United States and Britain ($p = .63$).

For RQ3d, the presence of the morality frame showed no significant differences among the three countries; $F_{\text{morality}}(2, 240) = 1.76$; $p = .17$. A Tukey post hoc multiple comparisons test analysis indicated that no statistical significance was exhibited between China ($M = 0.71$; $SD = 0.95$) and the United States ($M = 0.90$, $SD = 0.11$, $p = .43$), between United States and Britain ($M = 0.99$, $SD = 0.99$, $p = .83$), and between China and Britain ($p = .16$).

Finally, the test of RQ3e indicated that the adoption of the economic consequence frame exhibited significant differences among the three countries, $F_{\text{economic}}(2, 241) = 3.16$; $p < .01$. A Tukey post hoc multiple comparisons test analysis indicated that the presence of the economic consequence frame was significantly different between China ($M = 2.66$, $SD = 0.55$) and United States ($M = 2.24$, $SD = 0.91$, $p < .01$). No significant difference was exhibited between the United States and Britain ($M = 2.41$, $SD = 0.82$, $p = .33$), and between China and Britain ($p = .10$).

Discussion

Media coverage in the three African countries—Kenya, South Africa, and Nigeria—reported on Chinese investments in Africa using a more positive tone. Similar sentiments were echoed by Afrobarometer findings, in which 63% of the respondents in these African countries said that Chinese political and economic influence in Africa has more merits than demerits (Afrobarometer, 2016).

Despite the general positive tone, the African countries also covered the issue with significant differences. Media coverage in Kenya was particularly likely to portray Chinese investments in a more positive tone. These results are similar to results reported by Geerts, Xinwa, and Rossouw (2014) in a survey conducted by the Ethics Institute of South Africa that aimed to understand the Africa's attitude toward Chinese companies. The survey's findings indicated that a majority of Kenyans (77%), as compared with Nigerians (46%) and South Africans (29%), thought that Chinese companies were having a positive impact on the economy and the development of the country. My findings revealed that Kenya's *Daily Nation* coverage was more positive compared with the newspapers in Nigeria and South Africa. This can be derived from projects such as the construction of the Thika superhighway in Nairobi, the standard gauge railway from Mombasa city to Naivasha via Nairobi, and construction of the Confucius Institute Building at the University of Nairobi, among other projects funded by the Chinese government. In the South African media were reports of Chinese media buying shares in South African media companies. A possible reason for this is that South Africa's media have a higher use of negative tone than the other African countries; hence, the Chinese government, or companies, may wish to use the media to create a positive and conducive image.

Compared with differences among the media coverage in the three African countries ($\chi^2 = 12.18$), variation in tone was significantly more salient between China, the United States, and Britain (χ^2

= 147.40). While *China Daily* had a very strong positive tone with no negative news articles, *The New York Times* and *The Guardian* covered Chinese investments in Africa with an extensively negative tone. This can be attributed to the fact that Chinese media are controlled by the state and hence largely disseminate positively toned news toward Chinese investments in Africa. *China Daily* can be considered a tool for mediated public diplomacy.

On the other hand, media from the Western countries covered Chinese investments using a negative tone because China is often viewed as a competitor by the West. *The New York Times* and *The Guardian* were more likely to represent Chinese investments in Africa as a bad bilateral engagement for the African continent. The negative narrative was aimed at portraying Chinese investments in Africa as having undesirable impacts. These two newspapers were more likely to use phrases such as “new colonial power” and “Chinese colonialism” when covering Chinese investments in Africa.

The attribution of responsibility frame was reported differently among the African countries. A high mean score on the attribution of responsibility frame suggests that Chinese investments in Africa can be attributed to the governments’ initiatives that facilitated or opposed Chinese involvement on the continent. Nigeria’s *Vanguard* used the attribution of responsibility frame the most as compared with the other African countries. Factors leading to Chinese investments in Nigeria were mostly attributed to the government of Nigeria signing agreements with the Chinese government, or the government officials of the two states meeting to discuss economic ties and relations. For the human interest frame, there were no significant differences among media in the three African countries.

Compared with Kenyan media, South African and Nigerian media adopted the conflict frame more frequently. This finding may be attributed the media in South Africa and Nigeria being more likely to challenge the intention and impact of Chinese involvement in their countries. For example, a news story by Phillips, Stoltz, Tolsi, and Zali (2014) featured a survey conducted by a Pretoria-based Ethics Institute of South Africa. The story indicated that South Africans and Nigerians had conflicting opinions about Chinese investments and disagreed with Chinese businesses to a greater extent than were Kenyans. In other words, the news coverage in South Africa and Nigeria acknowledged the benefits of Chinese investments but also considered China to be an exploitative partner. However, most of the Kenyan media coverage reported Chinese investments as being beneficial and supporting the growth of the Kenyan economy. In cases in which the conflict frame was adopted, the Kenyan *Daily Nation* referred to the Western countries’ media, which described Chinese investments in Africa as exploitative.

The morality frame was rarely adopted in media coverage in Kenya, South Africa, and Nigeria; hence, no significant differences were found between these countries. Nevertheless, a closer look into the measurement indicated that one aspect of the morality frame was quite salient in the news coverage about the Chinese investments. Several news articles offered specific social prescriptions about how to behave to address the opportunities and challenges brought by the Chinese investments. For instance, Phillips, Stoltz, Tolsi, and Zali (2015) reported that Nhlanhla Nene, the South Africa's finance minister, advised authorities to implement policies that would ensure that the economic benefits of Chinese investments would be shared by taxation; this would ensure redistributive and progressive development, translating national and

continental economic growth into economic transformation that would create employment and curb poverty on the continent.

News media in Kenya and Nigeria were more likely to adopt the economic consequence frame than South African media. This frame focused on the economic utility of Chinese investments in Africa. Most news articles focused on the positive impact of the investments, though others focused on the negative aspect of the investments as well, especially racial segregation of the African employees working in Chinese owned investments. For instance, Chinese investments in Africa were regarded by the Kenyan *Daily Nation* as a two-way economic collaboration that has improved both African countries and China exponentially. This economic improvement was attributed not just to the remarkable Chinese development, but also to the African countries' fast economic growth.

Media coverage in China, Britain, and the United States presented significant differences in the adoption of the frames, with the morality frame being the only exception. Britain, with its extensive economic, political, military, and cultural engagements in Africa, such as the permanent military base in Kenya and ties with African Commonwealth countries, views China as a direct competitor. The United States also has economic and military ties with several African countries—for instance, the Africa Command in the Pentagon (AFRICOM), a permanent military base in Djibouti. According to McFate (2007), AFRICOM serves several U.S. interests on the African continent, among them combating terrorism, containing terrorism and armed conflicts, and responding to the growing Chinese influence, especially in terms of natural resource acquisition and the search for a market for their industrial products. There are fears that the Chinese influence might become a hinderance to such cooperation between African countries and the West, especially now that the Chinese are not afraid to flex their muscles with the United States and Britain.

The attribution of responsibility frame was adopted more frequently in Chinese and British media than in the U.S. media. *China Daily* often attributed Chinese investments in Africa to the efforts by both Chinese and African countries' governments. For instance, Xiaoming (2015) quoted Nkosazana Dlamini-Zuma, the former chairperson of the African Union, who said that African governments expect the Chinese government to help build "the Africa we want" (Bernardo, 2015). She lauded China for supporting African development initiatives and helping the continent fight against colonialism during the struggle for independence and neocolonialism from the West. *The Guardian* focused on relating Chinese investments to the British government's slow response to Chinese competitiveness, especially in terms of their business deals with the African countries. *The New York Times* attributed Chinese investments to the Chinese government attempting to colonize Africa. It focused on portraying Chinese investments negatively and, attributing Chinese investments in Africa to the Chinese government.

The human interest frame was also frequently used by the three media organizations from China, Britain, and the United States. *The Guardian* was more likely than *The New York Times* to adopt this frame in its coverage of Chinese investments. This significant difference may be attributed to the fact that Britain has a strong connection to and a "shared history and cultural ties" (Hirsch, 2018, para. 12) with Africa, as Prime Minister Theresa May said when she visited Africa. Most of the African countries are former British colonies.

The conflict frame was used more frequently by *The Guardian* and *The New York Times* than *China Daily*. While *China Daily* focused on why the China–Africa cooperation was thriving and how Chinese investments in Africa were helping pull the African continent out of poverty through a win-win cooperation, *The Guardian* and *The New York Times* focused on branding China as a country poised to colonize and exploit African resources. For example, a *New York Times* article reported that John Bolton (President Trump’s national security advisor) blamed China for aggressively and deliberately targeting its investments to the African continent to gain a competitive edge over the United States through opaque agreements and bribes and applying “debt trap” diplomacy to hold African countries captive to Chinese demands and wishes (Landler & Wong, 2018). News media in the two Western countries often accused China of having a predatory and negative motive toward African economies, only caring about its own economic interests and not African interests and progress.

The morality frame was the least used frame among the three countries, and there was no significant difference in the adoption of this frame. Other media framing studies, such as Semetko and Valkenburg (2000), also found that the morality frame was not adopted as often as the other frames. A similar study of four Dutch regional newspapers also could not identify this morality frame as a consistent one in the coverage of asylum seekers (d’Haenens & de Lange, 2001). This frame pertains to news stories that refer to morals, God, and religious tenets that dictate our lives (Dirikx & Gelders, 2010). Such tenets were not expected to come out prominently in a study focused on Chinese investments in Africa.

The economic consequence frame was the most used frame in the reporting about Chinese investments in Africa. This frame was popular among the three countries, given that the coverage was mostly focused on the economic impact of the investments on the African continent, the Chinese economy, and the economy of the Western countries that consider China an economic competitor. *China Daily* associated the economic frame with the win-win economic cooperation between China and Africa, while *The New York Times* and *The Guardian* accused China of exploiting Africa and branded China as the big exporter of pollution. American politicians focused on political issues rather than the economy when discussing the African continent. For example, when President Obama visited Africa in 2013 and 2015, he put little focus on the economic progress of the continent, primarily warning the African governments against Chinese investments and advocating for human rights and democracy. *The Guardian* not only criticized the Chinese investments in Africa, but also blamed its own government for not being as aggressive as China in making global investments and participating in “the scramble for Africa” (Hirsch, 2018).

Conclusion

Theoretically, this study contributes to existing literature by extending the applicability of tones and generic frames in the context of Chinese investments in Africa. The examination of media coverage in three African countries suggested that they favor Chinese investments, though the extent of the favorability varies. Specifically, the South African newspaper was more critical of the Chinese investments, citing cases of racism and mistreatment of African employees working in Chinese owned investments contributing to the poor perception. In general, South Africa is considered more xenophobic in comparison with other African countries. This might have contributed to the negative perception of foreign investments, too. Criticism can

also be attributed to the fact that Chinese businesses are considered a threat to the domestic manufacturing sectors in South Africa and Kenya.

As a propaganda and public diplomacy tool, the tone and frame adopted by Chinese media conform with President Xi's proclamations during FOCAC meetings that Chinese economic engagements with Africa are based on an equality model that brings mutual benefits to China and the African continent. Chinese political influence on the African continent has been increasing over the past decade. For instance, in 2013, four African countries gave diplomatic recognition to Taiwan; today, only Eswatini has diplomatic ties with Taiwan. Contrary to *China Daily*, *The Guardian* and *The New York Times* adopted mostly an unfavorable tone toward Chinese investments in Africa, criticizing the investments as aimed toward extracting African raw materials to feed the hungry growing Chinese economy. To portray China as an enemy of the African continent, these two media organizations used terms such as "new colonialism" ("China in Africa," 2018, para. 19) and "new colonialism threatening the African continent" (Moyo, 2012, para. 1). This is also a form of mediated public diplomacy aimed at influencing African public opinion toward Chinese investments in Africa, to the West's advantage.

Limitations and Future Directions

Comprehensively, this research achieved its intended aim of studying the tone and frames adopted by media from various regions when reporting on Chinese investments in Africa. However, it only examined news framing by newspaper organizations. Even though newspapers still play a huge impact on delivering news to audiences and setting the agenda of other news media, such as TV and radio (Lewis, Broitman, & Sznitman, 2015), future research can extend this study by examining how television news and documentaries cover Chinese investments in Africa. Finally, this research was also restricted to 18 items of the five generic frames proposed by Semetko and Valkenburg (2000). This hindered the researcher from coming up with issue-specific frames; hence, important frames that would have created even more new knowledge were left out. It is worth acknowledging these limitations to help identify and highlight gaps and questions that can be addressed by future studies.

References

- Afrobarometer. (2016, October 28). *Here's what Africans think about China's influence in their countries*. Retrieved from <http://www.afrobarometer.org/blogs/heres-what-africans-think-about-chinas-influence-their-countries>
- Ajibo, C. C., Anozie, M. C., Umahi, T. O., & Nwatu, S. (2020). Africa-China investment partnership for development: The downside, the promises, and a roadmap for the future. *Asian Journal of WTO & International Health Law and Policy*, 15(1), 285–318.
- Ayers, A. J. (2013). Beyond myths, lies and stereotypes: The political economy of a "new scramble for Africa." *New Political Economy*, 18(2), 227–257. doi:10.1080/13563467.2012.678821

- Ayodele, T., & Sotola, O. (2014). *China in Africa: An evaluation of Chinese investment*. Retrieved from http://www.ippanigeria.org/articles/China%20-Africa%20relation_Workingpaper_final.pdf
- Bernardo, C. (2015, May 21). China can help build the Africa we want. *Independent Online*. Retrieved from <https://www.iol.co.za/news/politics/china-can-help-build-the-africa-we-want-1861670>
- Brown, N. J., & Udomisor, I. W. (2015). Evaluation of political news reportage in Nigeria's Vanguard and the Guardian newspapers. *Advances in Journalism and Communication*, 3(1), 10–18. doi:10.4236/ajc.2015.31002
- Calzati, S. (2020). China, Africa, and the West: A geopolitical assessment of Huawei's crisis communication on social networks. *International Journal of Communication*, 14, 4952–4972.
- Card, D., Boydston, A. E., Gross, J. H., Resnik, P., & Smith, N. A. (2015). The media frames corpus: Annotations of frames across issues. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing* (Volume 2: Short Papers, Beijing, pp. 438–444). doi:10.3115/v1/P15-2072
- Chen, W., Dollar, D., & Tang, H. (2018). Why is China investing in Africa? Evidence from the firm level. *The World Bank Economic Review*, 32(3), 610–632. doi:10.1093/wber/lhw049
- China in Africa: Win-win development, or a new colonialism? (2018, July 31). *The Guardian*. Retrieved from <https://www.theguardian.com/cities/2018/jul/31/china-in-africa-win-win-development-or-a-new-colonialism>
- Cronbach, L. J. (1990). *Essentials of psychological testing*. New York, NY: Harper and Row.
- D'Angelo, P., & Kuypers, J. A. (2010). *Doing news framing analysis: Empirical and theoretical perspectives*. New York, NY: Routledge.
- Danielson, W. A., & Lasorsa, D. L. (2020). Perceptions of social change: 100 Years of front-page content in the New York Times and the Los Angeles Times. In C. W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 103–116). New York, NY: Routledge. doi:10.4324/9781003064060-7
- de Vreese, C. H., Peter, J., & Semetko, H. A. (2001). Framing politics at the launch of the Euro: A cross-national comparative study of frames in the news. *Political Communication*, 18(2), 107–122. doi:10.1080/105846001750322934
- d'Haenens, L. S. J., & Lange, M. D. (2001). Framing of asylum seekers in Dutch regional newspapers. *Media, Culture & Society*, 23(6), 847–860. doi:10.1177/016344301023006009

- Dirikx, A., & Gelders, D. (2010). To frame is to explain: A deductive frame-analysis of Dutch and French climate change coverage during the annual UN conferences of the parties. *Public Understanding of Science, 19*(6), 732–742. doi:10.1177/0963662509352044
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51–58. doi:10.1111/j.1460-2466.1993.tb01304.x
- Fernando, S. (2014). China–Africa relations: An analysis of forum on China–Africa cooperation (FOCAC) documents using Shinn and Eisenman’s Optimist–Pessimist dual framework. *Insight on Africa, 6*(2), 145–160. doi:10.1177/0975087814535462
- Gagliardone, I. (2019). *China, Africa, and the future of the Internet*. London, UK: Zed Books.
- Geerts, S., Xinwa, N., & Rossouw, D. (2014). *Africans’ perceptions of Chinese business in Africa: A survey*. Pretoria: Ethics Institute of South Africa.
- Goffman, E. (1974). *Frame analysis*. Cambridge, MA: Harvard University Press.
- Guenduez, A. A., Schedler, K., & Ciocan, D. (2016). Generic frames and tonality: Mapping a polarizing issue in a multifaceted context. *European Journal of Communication, 31*(5), 584–599. doi:10.5167/uzh-207382
- Haider, A. S. (2017). Frequency analysis as a way of uncovering news foci: Evidence from the Guardian and the New York Times. *International Journal of English Linguistics, 7*(2), 1–20. doi:10.5539/ijel.v7n2p1
- Han, J., Sun, S., & Lu, Y. (2017). Framing climate change: A content analysis of Chinese mainstream newspapers from 2005 to 2015. *International Journal of Communication, 11*, 2889–2911.
- He, Y., Zhang, G., & Chen, L. (2020). Analysis of news coverage of haze in China in the context of sustainable development: The case of China daily. *Sustainability, 12*(1), 1–15. doi:10.3390/su12010386
- Hirsch, A. (2018, September 4). The scramble for African trade has moved on, but Britain hasn't. *The Guardian*. Retrieved from <https://www.theguardian.com/commentisfree/2018/sep/04/africa-britain-trade-theresa-may-brexit>
- Kim, J., & Wanta, W. (2018). News framing of the U.S. immigration debate during election years: Focus on generic frames. *The Communication Review, 21*(2), 89–115. doi:10.1080/10714421.2018.1479616

- Landler, M., & Wong, E. (2018, December 13). Bolton outlines a strategy for Africa that's really about countering China. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/12/13/us/politics/john-bolton-africa-china.html>
- Leung, C. C. M., & Huang, Y. (2007). The paradox of journalistic representation of the other: The case of SARS coverage on China and Vietnam by Western-led English-language media in five countries. *Journalism*, 8(6), 675–697. doi:10.1177/1464884907083118
- Lewis, N., Broitman, D., & Sznitman, S. R. (2015). Medical cannabis: A framing analysis of Israeli newspaper coverage. *Science Communication*, 37(6), 675–702. doi:10.1177/1075547015608507
- Matorel, E. O. (2021). Main generic frames in the media coverage of environmental popular consultations in Colombia. *Palabra*, 20(1), 41–63. doi:10.32997/2346-2884-vol.20-num.1-2020-3224
- McCombs, M. E., Shaw, D. L., & Weaver, D. H. 1. (1997). *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory*. Mahwah, NJ: Erlbaum.
- McFate, S. (2007). Briefing: US Africa Command: Next step or next stumble? *African Affairs*, 107(426), 111–120. doi:10.1093/afraf/adm084
- Melkote, S. R. (2009). News framing during a time of impending war: An examination of coverage in *The New York Times* prior to the 2003 Iraq war. *International Communication Gazette*, 71(7), 547–559. doi:10.1177/1748048509341887
- Moyo, D. (2012, June 28). Beijing, a boon for Africa. *The New York Times*. Retrieved from <https://www.nytimes.com/2012/06/28/opinion/beijing-a-boon-for-africa.html>
- Open Society Foundations. (2013, March). *Mapping digital media: Kenya*. Retrieved from <https://www.opensocietyfoundations.org/publications/mapping-digital-media-kenya>
- Pakenham, T. (1991). *The scramble for Africa, 1876–1912*. London, UK: Random House.
- Phillips, T., Stoltz, E., Tolsi, N., & Zali, M. (2014, February 21). SA leads Africa in anti-Chinese sentiment. *Mail & Guardian*. Retrieved from <https://mg.co.za/article/2014-02-20-sa-leads-africa-in-anti-chinese-sentiment>
- Phillips, T., Stoltz, E., Tolsi, N., & Zali, M. (2015, May 29). Africa rising leaves the poor behind. *Mail & Guardian*. Retrieved from <https://mg.co.za/article/2015-05-28-africa-rising-leaves-the-poor-behind>
- Reese, S. D., Gandy, J., & Grant, A. E. (Eds.). (2001). *Framing public life: Perspectives on media and our understanding of the social world*. New York, NY: Routledge. doi:10.4324/9781410605689

- Semetko, H. A., & Valkenburg, P. M. (1998). The impact of attentiveness on political efficacy: Evidence from a three-year German panel study. *International Journal of Public Opinion Research*, 10(3), 195–210. doi:10.1093/ijpor/10.3.195
- Semetko, H. A., & Valkenburg, P. M. (2000). Framing European politics: A content analysis of press and television news. *Journal of Communication*, 50(2), 93–109. doi:10.1093/joc/50.2.93
- Shuo, H. (2013, March 27). Win-win cooperation between China and Africa. *China Daily*. Retrieved from http://www.chinadaily.com.cn/opinion/2013-03/27/content_16351015.htm
- Sparks, C. (2010). Coverage of China in the UK national press. *Chinese Journal of Communication*, 3(3), 347–365. doi:10.1080/17544750.2010.499637
- Tewksbury, D., & Scheufele, D. A. (2007). Special issue on framing, agenda setting, & priming: Agendas for theory and research. *Journal of Communication*, 57(1), 9–20. doi:10.1111/j.1460-2466.2006.00337.x
- Tversky, A., & Kahneman, D. (1989). Rational choice and the framing of decisions. In B. Karpak & S. Zionts (Eds.), *Multiple criteria decision making and risk analysis using microcomputers. NATO ASI series (Series F: Computer and Systems Sciences)* (Vol. 56, pp. 81–126). Berlin, Germany: Springer. doi:10.1007/978-3-642-74919-3_4
- Tyali, S. M. (2017). Public perceptions of the media as a political actor in South Africa: Regarding the Mail & Guardian. *Journal of African Media Studies*, 9(3), 547–562. doi:10.1386/jams.9.3.547_1
- Umejei, E. (2020). *Chinese media in Africa: perception, performance, and paradox*. Lanham, MD: Lexington Books.
- Wasserman, H., & Madrid-Morales, D. (2018). How influential are Chinese media in Africa? An audience analysis in Kenya and South Africa. *International Journal of Communication*, 12, 2212–2231.
- Wu, M. (2006). Framing AIDS in China: A comparative analysis of U.S. and Chinese wire news coverage of HIV/AIDS in China. *Asian Journal of Communication*, 16(3), 251–272. doi:10.1080/01292980600857781
- Xiaoming, Y. (2015, May 22). China plays important role in Africa's development: AU chief. *China Daily*. Retrieved from http://www.chinadaily.com.cn/business/2015-05/22/content_20790017.htm
- Yalew, M. T. (2019). China-Africa trade and investment cooperation—The forum on China Africa cooperation in focus. *Africa Insight*, 49(2), 1–15. <https://hdl.handle.net/10520/EJC-197e1a2687>

Zhang, E., & Fleming, K. (2005). Examination of characteristics of news media under censorship: A content analysis of selected Chinese newspapers' SARS coverage. *Asian Journal of Communication*, 15(3), 319–339. doi:10.1080/01292980500261639

Appendix A

Explanation of Intercoder Reliability on Five Generic Frames and Four Tones

	% Agreement	Cohen's kappa
Tone	78.00	0.69
Attribution of responsibility frame		
Item 1	98.00	0.94
Item 2	96.00	0.78
Item 3	96.00	0.92
Item 4	98.00	0.96
Human interest frame		
Item 1	96.00	0.90
Item 2	96.67	0.79
Item 3	96.67	0.93
Item 4	96.00	0.73
Item 5	98.00	0.90
Conflict frame		
Item 1	90.00	0.79
Item 2	96.00	0.91
Item 3	100.00	1.00
Item 4	96.00	0.88
Morality frame		
Item 1	94.00	0.77
Item 2	100.00	1.00
Item 3	90.00	0.78
Economic frame		
Item 1	92.00	0.63
Item 2	96.67	0.91
Item 3	94.00	0.86

Appendix B: The Cronbach's Alpha of 18 Framing Items

Attribution of Responsibility (Cronbach's $\alpha = .74$):

Does the story suggest that some level of government has the ability to alleviate the problem?

Does the story suggest that some level of the government is responsible for the issue/problem?

Does the story suggest solution(s) to the problem/issue?

Does the story suggest an individual (or group of people in society) is responsible for the issue/problem?

Human Interest (Cronbach's α = .69):

Does the story provide a human example or "human face" on the issue?

Does the story employ adjectives or personal vignettes that generate feelings of outrage, empathy caring, sympathy, or compassion?

Does the story emphasize how individuals and groups are affected by the issue/problem?

Does the story go into the private or personal lives of the actors?

Does the story contain visual information that might generate feelings of outrage, sympathy, caring-sympathy, or compassion?

Conflict Frame (Cronbach's α = .91):

Does the story reflect disagreement between parties-individuals-groups-countries?

Does one party-individuals-group-country reproach another?

Does the story refer to two sides of the problem or issue?

Morality Frame (Cronbach's α = .75):

Does the story contain any moral message?

Does the story make reference to morality, God, and other religious tenets?

Does the story offer specific social prescriptions about how to behave?

Economic Frame (Cronbach's α = .48):¹

Is there a mention of financial losses or gains now or in the future?

Is there a mention of the costs/degree of expense involved?

Is there a reference to economic consequences of pursuing or not pursuing a course of action?

¹ The Cronbach's alpha for the economic frame is low, but it is similar to that in other studies, such as Semetko and Valkenburg (2000). The low score is attributed to the second item. I decided to keep it because the item captures an important component of the economic consequence frame. When I drop the item and test the hypothesis and research questions, the result is consistent.