Quantitative Analysis of Mainstream Media Coverage of the “One Belt and One Road” Initiative in Central Asian Countries*

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Five Central Asian countries are active participants in the construction of “One Belt and One Road”. Understanding the acceptance and participation of the “One Belt and One Road” Initiative by Central Asian countries will help promote the dissemination of some relevant issues, deepen the understanding of “One Belt and One Road” Initiative among the people of the five Central Asian countries, and promote the joint development of “One Belt and One Road” to be deeper and more concrete. This paper takes the official reports related to the “One Belt and One Road” Initiative among the five countries as samples, and on the basis of sorting out the number of reports and analyzing the content of the reports, uses Python language to conduct text mining, and analyzes in detail the reporting tendency and its causes. It is found that due to the different national conditions of Central Asian countries and the development level of their cooperation with China, there are differences in the number and content of the “One Belt and One Road” Initiative reports. Therefore, in addition to strengthening political mutual trust, different communication strategies should be adopted in economic, cultural, and media cooperation to spread the “One Belt and One Road” Initiative to Central Asian countries.

Keywords: Central Asia, “One Belt and One Road” Initiative, disseminate culture

Introduction

Adjacent to northwest China, and at the hub of the “Silk Road Economic Belt” extending westward, the five Central Asian countries are located in the center of the Eurasian continent. From the “Jade Road” in the pre-Qin Dynasty to the “Silk Road” in the Western Han Dynasty, China has a long history of political, economic, and cultural exchanges with Central Asia. From the formation of “Shanghai Five” meeting mechanism in the 1990s, the establishment of Shanghai Cooperation Organization in 2001, to the “One Belt

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and One Road” cooperation initiative put forward by President Xi Jinping in 2013, China’s relations with Central Asian countries have been enriched in many aspects (Meng, 2017). The traditional friendship and close political, economic, and cultural ties between China and Central Asian countries formed in the course of exchanges are the basis for deepening cooperation between the two sides. As the important node countries of “One Belt and One Road” construction, these five Central Asian countries play an important role in driving the development of the whole “Silk Road Economic Belt”. How Central Asian countries view the “One Belt and One Road” Initiative and how much they participate in the construction of “One Belt and One Road” will have a significant impact on the development prospects of the initiative.

At present, there is not much research on the media coverage of the “One Belt and One Road” Initiative in Central Asian countries. Most of the existing studies focus on the reports on the websites of one Central Asian country and analyze the national image of China shaped by the reports. For example, Jin Xin (2015) analyzed the content and tendency of China-related reports on the Kazakh portal “Guangming” and “Sky.com”. Umarova Jamila (2017) took the website of the Uzbek National News Agency as an example to analyze the tendency and causes of its reports on China. Li Yan and Ma Jing (2016) take The Voice of Asia and Dushanbe Evening News in Tajikistan as examples to study the image of China’s economy constructed by local newspapers. These articles have studied how the media of Central Asian countries shaped and what kind of China’s image has been shaped from different levels, but they have not explored the cognition, communication status, and effect of the “One Belt and One Road” Initiative in Central Asian countries under the background of the initiative. In 2018, the “One Belt and One Road” Global Communication Big Data Report was released at the “One Belt and One Road” Global Communication Forum jointly held by Qingyan Think Tank and Ifeng.com International Think Tank. The report indicated that Central Asian media had the least reports about the initiative, which shaped a big contrast to the usually regarded position of Central Asia as the hotspots of “One Belt and One Road” Initiative. This phenomenon also does not match the situation of cooperation between China and Central Asian countries in the aspects of politics, security, economy, and culture (Stdaily.com, 2018). Therefore, this paper takes the reports of the mainstream media of Central Asian countries on the “One Belt and One Road” Initiative from 2013 to 2019 as the study object and attempts to study the current report situation of the “One Belt and One Road” Initiative in Central Asia and the cognition of Central Asian countries on this initiative and the problems reflected from the reports. The purpose of the study is to provide constructive suggestions for the promotion of the “One Belt and One Road” Initiative in Central Asia.1

1 This study excluded the influence of COVID-19 epidemic on relevant reports, so the year 2020 was not included in the scope of investigation.
articles in English) randomly from the political, economic, and cultural classes, using the Python language to extract and classify the keywords in these sample reports.

**Quantity and Classification of Reports**

Firstly, this paper selects a mainstream media with high influence from the five Central Asian countries respectively. A total of 309 reports on this initiative were found on its official website by taking “One Belt and One Road” in Chinese, English, and Russian as the key words from the period of September in 2013 to December in 2019. The mainstream media in the Central Asian countries are: Kazakhstan International News Agency (hereinafter referred to as the “agency”), the Official Website of the Presidential Palace of Tajikistan, State News Agency of Uzbekistan, Kyrgyz 24 News Agency, and Eastday of Turkmenistan (the site registered in 2017, so this study involves the website reported statistics for 2017 to the end of December 2019. In view of the innovative cooperation mode of “One Belt and One Road” Initiative, which is committed to policy communication, infrastructure connectivity, unblocked trade, financial integration, and people-to-people connectivity, this paper makes a statistical analysis of the reports of the five media on “One Belt and One Road” Initiative according to the three categories: politics, economy, and culture. The results are shown in Table 1.

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>Political reports</th>
<th>Economic reports</th>
<th>Culture reports</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan International News Agency</td>
<td>97 (50.52%)</td>
<td>62 (32.99%)</td>
<td>33 (17.19%)</td>
<td>192</td>
</tr>
<tr>
<td>Official Website of the Presidential Palace of Tajikistan</td>
<td>27 (87.10%)</td>
<td>2 (6.45%)</td>
<td>2 (6.45%)</td>
<td>31</td>
</tr>
<tr>
<td>State News Agency of Uzbekistan</td>
<td>12 (42.86%)</td>
<td>7 (25.00%)</td>
<td>9 (32.14%)</td>
<td>28</td>
</tr>
<tr>
<td>Kyrgyz 24 News Agency</td>
<td>23 (69.70%)</td>
<td>8 (24.24%)</td>
<td>2 (6.06%)</td>
<td>33</td>
</tr>
<tr>
<td>Eastday of Turkmenistan</td>
<td>8 (32.00%)</td>
<td>15 (60.00%)</td>
<td>2 (8.00%)</td>
<td>25</td>
</tr>
</tbody>
</table>

As can be seen from Table 1, the five Central Asian countries not only have significant differences in the number of reports on the “One Belt and One Road” Initiative, but also show different characteristics in the proportion of the fields reported.

In the samples involved in this study, the proportions of various kinds of reports by countries are: Kazakh media focuses on economic reports; Tajik and Kyrgyz media report the most about politics; the Uzbek media, on the other hand, is more on culture; Turkmenistan focuses on the economy. The main reasons are as follows: Kazakhstan not only shares a border of thousands of kilometers with China, but also has the largest economic aggregate and a high level of industrialization among the five Central Asian countries; Kazakhstan has always been China’s most important trading partner with a lot of bilateral trade among the Central Asian countries; Tajikistan and Kyrgyzstan are small mountainous countries in Central Asia that border China. Since the establishment of diplomatic ties, China and Tajikistan and Kyrgyzstan have maintained sound bilateral relations.

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2 Data for this study were collected from the following media websites in Chinese, English, and Russian: Kazakhstan International News Agency: https://www.inform.kz/cn; Official Website of the Presidential Palace of Tajikistan: http://www.president.tj; Kyrgyz 24 News Agency: http://www.24.kg; State News Agency of Uzbekistan: https://www.uza.uz/uz; Eastday of Turkmenistan: https://orient.tm/.
From the perspectives of reporting content, the media of Tajikistan and Kyrgyzstan have reported on the exchange of visits by senior leaders of the two countries, the smooth development of bilateral relations and the deepening of political mutual trust and the continuous consolidation of good-neighborly friendship since the “One Belt and One Road” Initiative was put forward. As China and Uzbekistan are not neighbors, the development of economic and trade relations is to some extent restricted by geographical and transportation conditions; therefore the scale of economic and trade cooperation is not large. However, China-Uzbekistan cooperation in education, science and technology, culture, tourism, and other areas has been significantly enhanced. Turkmenistan is rich in natural resources, with oil, natural gas, and other important energy reserves in 80% of its territory. In addition, Turkey’s GDP has grown rapidly in recent years, and there are more economic cooperation reports with China.

**Reporting Tendency**

Python language as a programming language is a relatively important application scenario in data analysis especially in the analysis of public opinion, such as the analysis of the public’s attitude towards a certain topic on social networks, analysis of the sentiment of shareholders as investment reference, etc. The most basic part is analyzing the emotional orientation of a topic. In this study, affective words were extracted from 75 randomly sampled texts of news reports, and scores were set for affective words. For example, single positive words +1, negative words -1; adjectives, negative, or positive words that precede a word can also affect a word’s score. Then we use Python language to calculate the emotional orientation of the extracted text. The calculation results show that the media of the five countries that reported on the “One Belt and One Road” Initiative hold a positive attitude towards this issue, and the sentiment index is all 2 (0 is negative; 1 is neutral; 2 is positive).

![Figure 1](image)

**Figure 1.** The word frequency map of “One Belt and One Road” reported by the media in Central Asian countries.

Figure 1 is the “keyword clouds” map with high frequency in the report texts stand out visually and highlight the main idea of the text. In the map, “friendship”, “partnership”, and “cooperation”, which describe China’s political relations with relevant countries, appear more frequently. The subject of the report has a high degree of relevance, and all of them are mainly political reports. The content covers similar topics, mainly at the government level. Cultural nouns such as “confidence”, adjectives such as “friendly”, and verbs such as “strengthen” appear more frequently. The most prominent ones are those describing economic and trade
relations. The frequent occurrence of adjectives such as “important”, “necessary”, “effective”, and “active” fully shows that the practical cooperation between China and Central Asian countries in the economic and trade field has produced extensive and positive impacts. All these positive words indicate that the Central Asian countries have taken a positive attitude towards political, economic, and cultural exchanges with China.

As can be seen from the reported sentiment index in Table 2, the average attitude of media in Central Asian countries towards the “One Belt and One Road” Initiative is above 0.9, reflecting a very high degree of recognition (the closer the value is to 1, the stronger the positive emotional attitude is).

Table 2
*Average Sentiment Index of “One Belt and One Road” Initiative Reports by the Mainstream Media in Central Asian Countries*

<table>
<thead>
<tr>
<th>The media</th>
<th>Positive attitude</th>
<th>Negative attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan International News Agency</td>
<td>0.964611</td>
<td>0.035723</td>
</tr>
<tr>
<td>State News Agency of Uzbekistan</td>
<td>0.918627</td>
<td>0.081373</td>
</tr>
<tr>
<td>Official Website of the Presidential Palace of Tajikistan</td>
<td>0.939287</td>
<td>0.060713</td>
</tr>
<tr>
<td>Kyrgyz 24 News Agency</td>
<td>0.927089</td>
<td>0.072911</td>
</tr>
<tr>
<td>Eastday of Turkmenistan</td>
<td>0.859712</td>
<td>0.140288</td>
</tr>
</tbody>
</table>

**Summary of Data Analysis and Cause Analysis**

From the total number of reports and sampling analysis, we can see that the number and content structure of mainstream media reports on the “One Belt and One Road” Initiative in Central Asian countries show the following main characteristics:

**The number of reports on the “One Belt and One Road” Initiative fluctuates without obvious regularity.** Since the “One Belt and One Road” Initiative was put forward in 2013 to the year of 2019, the number of reports on the initiative by mainstream media in Central Asian countries has fluctuated without significant regularity. Among them, the highest number of reports of media in the five countries with relevant reports all occurred in 2017, which was related to the “One Belt and One Road” Initiative for International Cooperation Forum held in Beijing in May of that year. However, in the context of China’s overall national strength steadily increasing and deepening relations with Central Asian countries, the number of reports on the “One Belt and One Road” Initiative by the media of these countries has not increased year by year. From 2018 to 2019, the number of reports showed a disorderly increase and decrease: For example, in 2018, State News Agency of Uzbekistan did not report on the “One Belt and One Road” Initiative; Kyrgyz 24 News Agency had only two reports on the issue, compared to 12 in 2019. It can be seen that the mainstream media in the five Central Asian countries still need to improve their initiative in reporting the “One Belt and One Road” Initiative.

**The proportion of political reports is higher than that of economic and cultural reports.** With the exception of Turkmenistan, the media reports of the “One Belt and One Road” Initiative in the other four Central Asian countries obviously lay more emphasis on political content, indicating that the four countries and China lay more emphasis on intergovernmental exchanges. Thanks to years of efforts, political mutual trust and cooperation between China and Central Asian countries have been deepening gradually. This is reflected not only in the frequent exchanges of high-level visits between the two sides, but also in the mutual understanding and support between China and Central Asian countries in some international affairs. Both China and Central Asian countries stand for enhancing mutual understanding and trust among countries and promoting regional peace and stability. The Shanghai Cooperation Organization has become an important platform for international
cooperation between China and Central Asian countries. With the deepening of reform and opening up and the continuous improvement of comprehensive national strength, China’s image as a great power is increasingly evident. China’s economic, political, and cultural exchanges with Central Asian countries have demonstrated its sincerity for sincere cooperation and common development with these countries. Therefore, the high-level and elite of Central Asian countries generally have a positive attitude towards China, and the local mainstream media also focus on high-level political exchanges. Turkmenistan, the only neutral country in Central Asia, does not share a border with China, so bilateral cooperation is mostly conducted in the form of economic exchanges.

![Graph showing changes in reports on "One Belt and One Road" by Central Asian state media from 2013 to 2019](image)

*Figure 2. Changes in the number of reports on “One Belt and One Road” by Central Asian state media from 2013 to 2019 (unit: item).*

**There are certain differences in the number of economic reports, but few cultural reports.** Due to the uneven distribution and uneven utilization of water, gas and other natural resources in the five Central Asian countries, the production and living costs of water, electricity, gas, and other natural resources in the five Central Asian countries vary greatly. Economically, the economic exchanges between China and the five Central Asian countries are mainly reflected in trade and investment. The overall growth rate of investment is relatively high, but there are gaps among different countries. This is because the five Central Asian countries have different levels of economic development, investment costs and transportation and communication infrastructure construction levels are quite different. For example, Kazakhstan, a country with a relatively high degree of market openness, has no special financing restrictions for foreign enterprises investing in its country and adopts national treatment to foreign enterprise. Among the five countries, except Kazakhstan, which has a good development in transportation, communication, and Internet, the other four countries have the situation that transportation, communication, and other infrastructures are not perfect and the Internet is not developed, which increases the cost of commodity circulation. As a result, the number of economic reports varies among Central Asian countries (Xi, 2015).
Culturally, Central Asian countries have been under the influence of Russian culture for a long time, leaving obvious marks in language, culture, education, society, and other aspects. Although the cultural exchanges between China and Central Asian countries have made further progress at the present stage, such as the increase in the number of students studying in Central Asian countries and the development of Confucius Institutes in the local areas, China’s cultural influence on Central Asian countries is unlikely to surpass that of Russia in the short term (Li, 2013). At the same time, western countries still have a strong voice in the international public opinion and cultural exchange pattern. Therefore, the influence of Chinese culture in Central Asian countries is not comparable to that of Russian culture, Islamic culture, and western culture. The media of Central Asian countries have not reported much about cultural exchanges with China, and most of the reports focus on traditional Chinese festivals.

In addition, the development of the Internet in the five countries also has a certain impact on the reporting. According to statistics, as of July 2019, Internet users in Central Asian countries accounted for 76.4% of the total population in Kazakhstan, 52.3% in Uzbekistan, 40.1% in Kyrgyzstan, 32.4% in Tajikistan, and 21.2% in Turkmenistan (Xiao, 2020). Among the five countries, only Kazakhstan has reached or exceeded the world average, Uzbekistan has surpassed the Asian average, and the other three countries still lag behind. Turkmenistan is the most difficult country in Central Asia to popularize Internet use. As of early 2018, only one-fifth of Turkmenistan’s citizens had access to the Google browser and WhatsApp. The number of Internet users in Turkmenistan is 0.933 times less than that in Uzbekistan, 0.928 times less than that in Kazakhstan, 0.667 times less than that in Tajikistan, and 0.5 times less than that in Kyrgyzstan (Economic and Commercial Counselor’s Office of the Embassy of the People’s Republic of China in the Republic of Kazakhstan, 2018). Due to the inadequate and aging Internet infrastructure and unstable power supply in Central Asian countries, local Internet users have to face the problems of interrupted connection and slow speed, while 94% of rural and remote users only access to the Internet through mobile phones, unable to enjoy the convenience of broadband. This makes it difficult for the “One Belt and One Road” Initiative to spread.

**The Promotion Path of the “One Belt and One Road” Initiative in Central Asian Countries**

The “One Belt and One Road” initiative serves the fundamental interests of Central Asian countries in developing economy and improving people’s livelihood and has been widely welcomed. However, the above analysis shows that the mainstream media coverage of the “One Belt and One Road” Initiative in Central Asian countries is less than satisfactory. The spread of the initiative needs to be strengthened. Therefore, when promoting this initiative, China should take into account the different national conditions and needs of various countries and adopt targeted communication methods respectively.

**Subdivide Communication Strategies to Achieve Accurate Communication**

China should set up communication topics according to the different political, economic, and cultural concerns of the Central Asian countries on the “One Belt and One Road” Initiative as well as the different interest points of the people, so as to further cultivate the interest of the people of the Central Asian countries on the “One Belt and One Road” Initiative and deepen their understanding of the it. To be specific, the five Central Asian countries should adopt different communication strategies due to their different national conditions and needs.

First, since Turkmenistan media barely reports on the “One Belt and One Road” Initiative until 2017, the Chinese and Turkmenistan media should further cooperate and step up communication efforts so that local
people can have a more objective and profound understanding of the initiative. China is an important strategic cooperative partner of Turkmenistan. According to the General Administration of Customs of China, in 2019, the bilateral trade volume between China and Turkey was 9.117 billion US dollars, an increase of 8.1% year on year. Among them, the cooperation in the field of energy is particularly significant. China and Turkmenistan have completed the construction of three natural gas pipelines, namely A, B, and C, between China and Central Asia. It starts from the Turkmenistan-Uzbekistan border, passes through Uzbekistan and Kazakhstan, and ends in the vicinity of Horgos Port in Xinjiang, with a total length of 1,833 kilometers (Wang & Qin, 2016). We should make use of the economic and trade cooperation between China and Turkey to encourage Chinese enterprises to jointly speak out with local media and build a good image of China. At the same time, China and Turkey should speed up the process of connectivity and regional integration, actively promote the construction of a China-Turkey free trade area, and use trade growth to drive economic and cultural exchanges between the two sides.

Second, China maintains mutually beneficial relations with Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. According to data analysis, the reports of the mainstream media of the four countries on the “One Belt and One Road” Initiative are all positive. Take Tajikistan as an example, as China has increased its investment in Tajikistan, bilateral cooperation has made great progress in recent years in terms of economic and trade cooperation, trade structure and scale, as well as transportation, energy, and port infrastructure. These results, however, are rarely reported in the local media. This requires Chinese media to take the initiative, take economic development as a breakthrough point, cooperate with local media, and carry out in-depth reports. We will tap into cultural exchange materials, conduct cultural diplomacy, and actively encourage local media to speak out, so that people in the Central Asian region will have a rich and comprehensive understanding of China and the “One Belt and One Road” Initiative.

**Improve the Scope of Influence of Cultural Exchange Activities**

From the data analysis of this paper, it can be seen that the reports of the above-mentioned Central Asian countries on the “One Belt and One Road” Initiative mostly focus on the political and economic aspects, while the reports on the cultural aspects are not very impressive. But state-to-state relations depend on amity between the people, and amity between the people lies in mutual understanding. To strengthen the communication between China and Central Asian countries in terms of culture and values in the way of “culture first”, and to promote the “people-to-people connectivity” in the way of “cultural connectivity”, will play an irreplaceable role in strengthening the dissemination of “One Belt and One Road” Initiative in Central Asian countries.

In terms of specific measures, firstly, carry out cultural cooperation in various aspects, make full use of rich historical documents and materials, research and compile historical monographs on the friendly exchanges between the Chinese people and the people of Central Asian countries, and research and compile monographs and popular books on the “One Belt and One Road” Initiative. Second, we need to strengthen exchanges and cooperation between the media of China and Central Asian countries, expand social networks, and use the Internet, social media, and news apps to tell stories about China and the friendship between China and relevant countries. In particular, Chinese mainstream media can work with Central Asian countries to promote the “One Belt and One Road” Initiative, focusing on the historical origins and highlights of exchanges between different countries and China, so as to enhance the dissemination effect. Third, the realization of “people-to-people
exchanges” and the promotion of cultural cooperation and exchanges are inseparable from emotional resonance. Central Asian countries, for example, the main national religions are Islam and Muslims. Therefore, they should be the emotional resonance of China and Central Asia countries for folk cultural exchange. They also can be used to build the bridge between China and Central Asia for Muslim folk culture exchanges so as to implement China and Central Asian Muslim folk culture exchange activities, such as dance, painting and calligraphy, diet, etc., and expand the spread of cultural exchange activities (Yang, Cai, & Li, 2017).

**Reports on Strengthening Political Mutual Trust and Economic Cooperation**

According to the above analysis, cooperation in the economic field is the focus of media attention and communication in Central Asian countries, while the political field is the highlight and growth point. Therefore, on the one hand, for the economic cooperation with China, which has been widely recognized in the Central Asian countries, Chinese media should continue to strengthen the communication, strengthen the correct cognition of the people of the five Central Asian countries on the “One Belt and One Road” Initiative with the bright prospect of mutual benefit and win-win situation, and promote the further cooperation between the two sides. On the other hand, from the perspective of the number of reports, political reports occupy a core position in the reports of the “One Belt and One Road” Initiative in Central Asian countries. China should take further steps to tell the story of political and diplomatic cooperation between China and Central Asian countries while encouraging local media to report on political mutual trust. First, actively disseminate the core concept of national politics and diplomacy with the “community of shared future for mankind” as the core in political exchanges, explore the joint points with the governance concept of Central Asian countries, strengthen top-down promotion and popularization, and make the concept of “community of shared future for mankind” widely spread. Second, we need to fully explore historical stories of political mutual trust through media cooperation. Over the years since the independence of the Central Asian countries, China has maintained good relations with the five countries and ensured the sound development of state-to-state relations. Chinese media cooperation with central Asian countries should pay attention to the history and reality. In order to obtain wider political mutual trust, the two sides should strengthen mutually beneficial cooperation in the political and economic aspects based on mutual understanding, mutual recognition; spread with more active, friendly, and open attitude to discuss peace and cooperation with the goal of achieving mutual learning, mutual benefit and win-win results.

**Conclusion**

In this paper, the five central Asian countries report “One Belt and One Road” Initiative (2013-2019) fits the needs of the development of the Central Asian countries as well as the development of China after text mining. Since the mutual benefit and common development has brought new opportunities, Central Asia in the mainstream media reports show positive attitude to it. In addition, the different emphases of media coverage of the “One Belt and One Road” Initiative in Central Asian countries reflect the different interests, appeals, and expectations of the five different countries. In the strategy of disseminating the “One Belt and One Road” Initiative to Central Asian countries, China should give full consideration to the differences of each country, take into account the bilateral interests of China and each country, innovate the path and complement each other’s advantages, aim at people-to-people connectivity, and guarantee policy communication, so as to make the initiative more deeply rooted in the hearts of the people of Central Asian countries.
References


