

A CORPUS-BASED ANALYSIS OF GUANGZHOU'S CITY IMAGE IN THE *Global Times* DURING THE COVID-19 PANDEMIC

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Abstract: City image is the spirit and appearance of the city as a whole, the all-round and global image of the city, including the overall style and appearance of the city, and the overall values, mental outlook and educational level of the city residents. It is of great significance to shape a good city image for the progress of the city and the promotion of foreign exchanges and cooperation. With the acceleration of globalization, the shaping and dissemination of city image on the global stage has become more and more important. Especially in the context of the Covid-19 pandemic, a global public health crisis, how cities around the world responded to the pandemic and how their images were presented in the international media has become a focus of attention for all sectors of society.

As a significant first-tier city in China, Guangzhou gained extensive attention from domestic and international media during the Covid-19 pandemic due to its positive performance and the effect it brought in the prevention and control of the Covid-19 pandemic. *Global Times*, a Chinese comprehensive newspaper with national circulation and the only one that conveys general news to foreign countries in line with China's basic national conditions. It conveyed information to the world about Guangzhou's fight against the Covid -19 pandemic and shaped Guangzhou's city image through its international communication platform during the pandemic.

In this paper, we adopt the corpus method to analyze the discourse characteristics of *Global Times*' news reports and Guangzhou's city image during the Covid-19 pandemic from the perspectives of keywords and high-frequency words, and explore the factors affecting the shaping of Guangzhou's city image based on critical discourse analysis. The study finds that *Global Times*' news coverage of Guangzhou focused on three major themes: current events around Guangzhou, the Covid-19 pandemic and transportation; and emphasized the views and attitudes of authorities such as the government and experts; and used positive words to portray Guangzhou as a cosmopolitan city that is pragmatic, hardworking, people-centered, people-serving, and open and friendly. This paper argues that these images are related to the idea of China's development, the purpose of *Global Times* and Guangzhou's urban culture.

Keywords: Covid-19 pandemic; *Global Times*; Guangzhou; City image

1 INTRODUCTION

1.1 Research Background

City image is the spirit and appearance of the city as a whole, the all-round and global image of the city, including the overall style and appearance of the city, and the overall values, mental outlook and educational level of the city residents. Shaping a good city image can stimulate the sense of responsibility and pride of all citizens, encouraging them to contribute to the economic development and social progress of the city; strengthen the role of international communications, promoting the opening up of the city to the outside world and exchanges and cooperation; and improve the competitiveness of the city in the market economy. Papers should be written in comprehensible academic English. We strongly recommend to attentively check the spelling and get your paper proofread by a native English speaker.

Guangzhou is one of the first historical and cultural cities in China. As one of the earliest open cities among the coastal cities in China, Guangzhou is also an important port city for foreign trade, and is known as "the business capital of the millennium" with the spirit of "daring to be the first in the world". The outbreak of Covid-19 pandemic in December 2019 has brought about profound impacts and changes to people's life safety and health, as well as social development. Against this background, Guangzhou, as the capital of Guangdong Province, actively responded to the states appeal to take scientific and precise control measures to cope with the sudden attack of the pandemic. The news reports during the Covid-19 pandemic conveyed the response and real-life stories of countries and even cities, and expressed the affection and attitudes towards the events, which showed the image characteristics of each country and city during this period; at the same time, each country and city was also able to enhance its international influence and prestige through these news reports.

Global Times is the second English-language comprehensive newspaper circulated nationwide in China, and is the only one that conveys comprehensive news to foreign countries in line with the basic national conditions of China. The application of vocabulary or sentence structure in the news is of vital importance for reflecting social concerns and presenting China's image, which creates the necessity for China to demonstrate its domestic development and disseminate cultural to the world. As one of the representatives of China's foreign publicity media, *Global Times* conveyed the message of Guangzhou's prevention and fight against the Covid-19 application of vocabulary or

application of vocabulary or sentence structure in the news is of vital importance for reflecting social concerns and presenting China's image, which creates the necessity for China to demonstrate its domestic development and disseminate cultural to the world. As one of the representatives of China's foreign publicity media, *Global Times* conveyed the message of Guangzhou's prevention and fight against the Covid-19 pandemic to the world through its international communication platform during this period, and it also shaped Guangzhou's city image. Therefore, we can utilize this feature of *Global Times* to study the vocabulary application of news reports during the Covid-19 pandemic, mainly keywords and high-frequency words, to explore the discourse characteristics and the city image of Guangzhou.

1.2 Research Purpose and Significance

The purpose of this study is to explore how *Global Times*' coverage during the Covid-19 pandemic shaped Guangzhou's city image through corpus analysis methods, revealing the discourse features and the social and cultural factors reflected behind the coverage. This study not only helps to understand how the media shapes the image of a local city through discourse, but also provides a reference for future research on city image and a basis for Chinese foreign media to optimize their communication strategies.

By collecting and analyzing a large amount of data from news reports, social media comments, etc., we are able to present a more objective and comprehensive picture of the process of constructing Guangzhou's city image and the factors influencing it, which helps to understand how the media shapes the image of a city through discourse. In addition, this study will also pay more attention to cross-cultural communication under the global perspective, especially how the city shapes its image through outreach media under global crises (e.g., the Covid-19 pandemic), which will serve as a reference for future research on city image and provide a basis for Chinese outreach media to optimize their communication strategies.

1.3 Thesis Structure

The paper is divided into six parts. The first part is the introduction, which mainly explains the background, purpose, significance, content, method, and structure of this study. The second part is a literature review, which summarizes and analyzes the research on city image at home and abroad. The third part is the theoretical framework, which contains an introduction of Critical Discourse Analysis Theory and Corpus-assisted Critical Discourse Analysis. The fourth part is the research design, presenting research questions, collection, tool, method and procedure. Chapter five is a data analysis which contains keyword analysis, high-frequency word analysis, socio-cultural factors in shaping city image. The sixth part is the conclusion, which summarizes the data of this study and concludes the findings, significance, and limitations of this study.

2 LITERATURE REVIEW

2.1 Previous Research on City Image at Home

The research on city image in China mainly focuses on two aspects that are multimodal discourse analysis of city image construction and the research on English translation of city image.

The multimodal discourse analyses of city image construction include analyses of advertisements, posters, and news media discourse, e.g., Lv Rongrong and Duan Cuixia, from the perspective of systemic functional linguistics of accessibility, used English reports on Harbin from China Daily since July 2023 as the corpus of the positive discourse analysis, to explore the way of presenting Harbin's city image in the media reports and its linguistic characteristics[1]. Researches on discourse construction of city image in social media are also substantial, for example, Shen Bingkun analyzed the textual resources and visual resources on the official Olympic Twitter accounts @Beijing2022 and @Tokyo2020, and analyzed and compared the city brands constructed in terms of the ideational meaning, interpersonal meaning, and textual meaning. In addition, there is also a discourse analysis of the city's image publicity films[2]. For example, Li Zhenyu discussed and analyzed the realization of the representational meaning, interactive meaning and compositional meaning of visual shots in the promotional film of "Lanzhou", the distribution characteristics of the main multi-modal modes, and the main relationship between the main forms of modalities, based on the theory of visual grammar of Kress and Leeuwen and the comprehensive analysis framework of the forms and relations of different modes of multimodal discourse of Zhang Delu[3].

The studies of English translation of city image include English translation of foreign publicity videos, such as Li Qiong and Rong Chen Yu took the video of "The Hometown of Poetry Saints, River Gongyi" as an example, and analyzed the English translation strategy of the video under the guidance of Skopos theory, so as to contribute to the study of translation of foreign publicity videos[4]; English translation of foreign publicity books city image, such as Feng Ling and Lei Cai took the Chinese and English version of the book "Magnificent Guangxi" as an example, and based on Newmark's communicative translation theory, they analyzed the English translation of the text from the method of deletion, addition of words, phonetic annotation, and deconstruction and reorganization, with the aim of exploring translation methods and techniques suitable for the English translation of the city image, hoping to provide reference for the research on the English translation of the city image[5]; Han Le's study on the translation of the tagline of the city image, for example, to explore the English translation of the tagline of the city image under the perspective of the three-dimensional transformation of Eco-translatology, through the interpretation of the meaning of the

three-dimensional conversion of Eco-translatology, he put forward the current problems of the translation of city's image taglines, and made it clear that the quality of the English translation of the city's image tagline could have a direct impact on the city's image and the construction of the cultural soft power[6].

In addition to the above studies, there are also quite a number of studies on Guangzhou's urban image. For example, Wang Xingguang studied the characteristics of Guangzhou's city image in Chinese mainstream English-language media and compares them with the characteristics of Guangzhou's city image in overseas media[7]; Xie Jie analyzed the problems in the translation process of the public notices of some scenic spots in Guangzhou based on the situation of the public notice language in Guangzhou and puts forward a strategy for translating the scenic spots' public notice language with a view to promoting the enhancement of the image of Guangzhou's city tourism[8].

In terms of research methodology, a number of studies at home are based on the corpus method to analyze city image. Yin Bochun, based on the NOW corpus and the discourse analysis theory, conducted a quantitative and qualitative investigation of Changsha's international image[9]; Gao Angzhi analyzed the research results in targeted corpora under the comparative perspective of "self-shaping" and "others'-shaping", so as to reveal the differences of Hangzhou's image in the field of public opinion in Chinese and foreign medias[10]; Shen Nan and Yan Rui selected news reports on Xi'an on the official mainstream English media China Daily Global Edition from 2018 to 2022 as research samples for content analysis, strengthening the image of Xi'an as a "tourist city with a rich historical and cultural heritage"[11].

2.2 Previous Research on City Image Abroad

Foreign researches on city image cover the shaping of urban image, factors affecting urban image, the impact of urban image and other aspects, involving a variety of fields such as tourism, media, architecture, sports and so on.

Metaxas explored the Madrid Nuevo Norte Project (MNNP), focusing on its adherence to sustainability principles and its role in shaping Madrid's sustainable urban identity. The study also examined marathon races as key urban activities, analyzing how a city's image influences participants' perceptions of branded marathon events[12]. SEO and PARK compared different stakeholders' views on colonial cultural heritage in urban settings, highlighting how these perspectives contribute to a more complex and layered city image[13]. Cecilia et al. investigated how local communities perceive event-related imagery and its impact on a city's overall reputation, as well as their willingness to promote both the events and the city as tourist destinations[14]. Additionally, Yeol et al. assessed the influence of city image on residents' attitudes and the bidirectional effects (top-down and bottom-up) of sporting events on host cities[15]. Regarding researches about Guangzhou, Qu Huimin et al. employed web scraping techniques to collect 370,000 social media posts referencing "Guangzhou City" from 2019 to 2023. The researchers applied three text analysis approaches—Term Frequency-Inverse Document Frequency (TF-IDF), Latent Dirichlet Allocation (LDA), and Sentiment Analysis (SnowNLP)—to identify key features of Guangzhou's urban image[16]. Meanwhile, Xi et al. proposed a framework to evaluate how pre-travel promotional campaigns affect city branding and tourists' intentions to visit[17].

2.3 Summary

In addition to the above studies, the study of Guangzhou's city image based on corpus method has also been abundant in recent years. These studies include Ren Chaowang and Luo Jiawen, who obtained the frequency of "Guangzhou" and the frequency lists of various collocations based on corpus-critical discourse analysis, and discussed Guangzhou's city image in a large-scale online corpus, NOW, between 2010 and 2020[18]; Yang Kai and Chen Yingjun, selecting "Guangzhou" as the subject word, used Python to automatically crawl a self-constructed corpus of tweets related to Guangzhou on overseas social platforms from 2010 to 2019, and took advantage of corpus analysis software to analyze the related words in terms of word frequency, collocations, index lines and sentiment words[19]; Li Zhiying et al. based on two self-constructed corpora of Chinese and American news, extracted high-frequency words using the corpus search software AntConc3.4.3, analyzed their semantic preference and semantic prosody, and combined with critical discourse analysis to compare the different international images of Guangzhou city portrayed by Chinese and American media[20].

It should be pointed out that the above researches have studied and analyzed Guangzhou's urban image from different perspectives by using corpus research methodology, obtaining fruitful results in the areas of image shaping, presentation of media characteristics, and media strategies. However, the study of Guangzhou's city image against the background of Covid-19 pandemic is still insufficient. And as an important topic affecting people's lives in recent years, the Covid-19 pandemic is of great significance and research value for enriching Guangzhou's urban image and exploring the media's strategies of shaping the city's image in various aspects. In addition, there are fewer studies on city image targeting *Global Times*, which as an important Chinese foreign publicity media, plays an indispensable role in spreading the city image. Therefore, this paper chooses *Global Times* as a specific Chinese foreign publicity media, and selects news reports about Guangzhou from 2020 to 2022 as the news corpus during the Covid-19 pandemic to analyze and study the discourse characteristics of *Global Times*' news reports, and the shaping of Guangzhou's city image.

3 THEORETICAL FRAMEWORK

3.1 Introduction of Critical Discourse Analysis Theory

Critical linguistics emerged in the 1970s and 1980s, and was echoed by some scholars in European countries such as the Netherlands and Austria. Some representative researchers, like Fairclough, stood out. From the late 1970s to the early 1980s, CDA developed into an emerging branch of modern linguistic research. At the end of the twentieth century, the study of critical linguistics made significant progress in Europe, gradually forming a global research boom. In 1989, Fairclough published the book *Language and Power* where "Critical Discourse Analysis (CDA)" was first introduced as a professional term. He mentions that discourse is a social practice and the relationship between language and society is intrinsic[21]. Therefore, he defines CDA as a theory and methodology that explores the relationship between discourse, society and cultural development under different social conditions[22].

Critical discourse analysis reveals the relationship between language, culture and power. Critical discourse analysis believes that language not only reflects society, but also shapes it. It advocates the analysis of language structure so as to clarify the social meanings expressed by language, and establish and protect the social power relations through language, emphasizing the linguistic analysis of texts to reveal the ideology embedded therein, and the clarification of how the ruling class uses language to implement ideological control and to maintain its position of power[23].

Taking critical discourse analysis as the theoretical basis, this study explores *Global Times'* news focus on Guangzhou and analyzes its shaping of Guangzhou's image on the basis of analyzing the discourse language characteristics of Chinese foreign media, and then summarizes the characteristics of *Global Times'* news reports about Guangzhou. According to critical discourse analysis, language is a social practice and an intervening force in the social process. Therefore, we can analyze the linguistic structure of *Global Times'* news reports about Guangzhou through critical discourse, so as to explore the social concerns and image of Guangzhou and analyze the causes of image building.

3.2 Introduction of Corpus-Assisted Critical Discourse Analysis

Corpus linguistics is an interdisciplinary field that emerged in the 1980s. It is a science that studies language based on real-life examples of language use. It uses the automatic and interactive technology of computers to collect, store, process, and statistically analyze text, combining quantitative and qualitative analysis techniques. It integrates linguistic theory, mathematical thinking patterns, and computer technology to comprehensively and completely describe language in a new objective scientific way. Corpus linguistics takes real natural language texts as the research object, investigates large-scale language usage patterns, and explores universal conclusions. It extracts language high-frequency reproduction patterns with significant statistical significance from a large number of discourses by conducting topic frequency statistics and index line analysis on representative corpus texts, which is a typical feature of corpus empirical research. Corpus focuses on the functionality and meaning of real-life texts[24]. In this sense, it is common with critical discourse analysis and systemic functional linguistics that focus on real language phenomena. Previous studies have shown that using corpus analysis methods can effectively reveal the ideology hidden in discourse texts[25].

Hardt Mautner was the first to integrate linguistic qualitative research on corpus with critical discourse qualitative analysis. He believes that independent critical discourse analysis lacks sufficient, systematic, and objective language explanations or evidence, and is also controversial and critical. Therefore, it is necessary to combine corpus linguistics techniques to enhance the persuasiveness and objectivity of discourse interpretation in CDA so that revealing the relationship between language, ideology, and power. The corpus-assisted critical discourse analysis is based on large-scale corpus sampling surveys. That means scholars can use the rich language retrieved from corpora to objectively and comprehensively study the thematic vocabulary in language materials, making discourse content, style, and source analysis more efficient. In addition to the theme vocabulary, there are also various ways of analyzing, such as the degree of collocation, frequency of vocabulary display, and indexing function, which can provide a lot of effective evidence for critical discourse analysis. The combination of corpus and critical discourse analysis greatly enhances the objectivity of related research, making the research results highly scientific, systematic, and authoritative.

Therefore, based on corpus-assisted critical discourse analysis, this study conducts quantitative and qualitative research on the news reporting of *Global Times*. We use corpus to analyze keywords and high-frequency words in *Global Times'* news reports, providing objective data support for exploring the discourse characteristics of news reports. Based on this, we use critical discourse analysis, exploring image shaping reflected in news report language and the impact factors of Guangzhou city image, explaining the ideology behind language, and demonstrating the relationship between language, society, and cultural development.

4 RESEARCH DESIGN

4.1 Research Questions

This paper answers the following questions:

- (1) What are the discourse characteristics of *Global Times'* news reports about Guangzhou during the Covid-19 pandemic?
- (2) What kinds of image of Guangzhou have *Global Times* shaped through its news reports during the Covid-19 pandemic?
- (3) What are the factors affecting the image of Guangzhou?

4.2 Data Collection

Using “Guangzhou” as the search term, we search for all *Global Times* news reports about Guangzhou and manually filter them to create a self-constructed corpus of *Global Times* news reports about Guangzhou from 2020-2022, with a total of 159 reports, 52011 words.

4.3 Research Tool

This study adopts a combination of quantitative and qualitative research methods. AntConc4.0 is used as the analysis tool, and the corpus is utilized for quantitative research and analysis. Through AntConc4.0 software, we study the *Global Times* news reports about Guangzhou from 2020 to 2022 in the corpus, and analyze the vocabulary collocation or syntactic structure in the news corpus from the perspective of keywords and high-frequency words, and explore the *Global Times*’ shaping of the Guangzhou city image.

4.4 Research Method and Research Procedure

First, we use AntConc 4.0 software to extract the top 20 keywords from the self-constructed corpus to make a word list, and carry out subject word analysis to explore the focal points of those news reports and reveal the city image of Guangzhou reflected through these points.

Secondly, we extract the top 20 high-frequency content words in the *Global Times* news corpus about Guangzhou during 2020-2022 to make a word list, mainly nouns, verbs, adjectives and adverbs, etc., and analyze the frequency of the application of these words, their collocations and index lines. From the perspective of the collocation and semantic prosody of the words, the characteristics of *Global Times*’ news reports and the image of Guangzhou portrayed by them are reflected.

Finally, based on the theory of critical discourse analysis, combined with the data collection and literature reading, we discuss and summarize the image of Guangzhou portrayed by *Global Times* and the causes of its construction. We also provide some strategies for news report on structuring city image.

5 DATA ANALYSIS AND RESULTS

5.1 Keyword Analysis

Keywords are words that appear significantly more frequently in one text or corpus than in another comparable, larger reference text or corpus[26]. Using AmE06 as the reference corpus, the top 20 keywords were extracted, as shown in Table 1. In order to ensure that the selected keywords are related to the research topic of this paper, we screened out the stop words such as “photo”, “information” and so on.

Table 1 Top 20 Key Words

Number	Key Word	Frequency	Keyness
1	guangzhou	1036	6283.443
2	china	684	3654.346
3	guangdong	317	1909.806
4	province	328	1856.205
5	Covid	221	1340.408
6	south	287	1121.867
7	nucleic	144	873.183
8	epidemic	157	851.695
9	cases	204	729.864
10	acid	139	701.661
11	city	230	590.155
12	district	142	580.689
13	quarantine	89	528.696
14	testing	101	466.024
15	Chinese	108	437.874
16	railway	71	412.296
17	airport	103	386.334
18	prevention	82	360.157
19	infections	79	356.145
20	measures	104	352.481

On the whole, the top 20 keywords can be divided into three categories. The first category indicates location, including the keywords “guangzhou” “china”, “guangdong” “province” “south” “city” and “district” which are ranked in the top 4, 6, 11, and 12, respectively, to describe the geographic location of Guangzhou, highlighting Guangzhou as a topic of news coverage, and detailing not only an overall report on Guangzhou, but also includes attention to current events in individual districts. More statements describing the geographical location of Guangzhou, such as “south China’s Guangdong Province”, can be found in the relevant news texts. The second category is related to the Covid-19 pandemic, including the keywords “Covid” “nucleic” “epidemic” “cases” “acid” “quarantine” “testing” “prevention” “infections” “measures” which accounted for fifty percent of the top 20 keywords, reflecting that the Covid-19

pandemic was the top priority of the news reports in these three years. The last category of keywords is other vocabulary, such as “Chinese” “railway” and “airport”. These three words could reflect that, in addition to the “epidemic”, transportation is also the key topics of concern.

Corpus linguistics is essentially a contextual theory in which words must be studied in context, and this can be achieved using indexing analysis in corpus [27]. Index line analysis, as one of the core parts in corpus linguistics, helps to discover many important linguistic forms in texts [28]. In this paper, we further summarize the main concerns of *Global Times* during the Covid-19 pandemic by analyzing the contexts of significant collocations and related index lines of the top 20 key words, so as to analyze the image of Guangzhou presented in *Global Times* news reports.

5.1.1 Index line analysis for keywords indicating location

A search of all the index lines indicating locations reveals that the words “Guangzhou” “China” “Guangdong” “city” and “south” are mainly collocated with each other. In addition to “Guangzhou, south China’s Guangdong province” mentioned above, there are also expressions like “Guangzhou, capital of South China’s Guangdong Province”, as shown in the Figure 1. These expressions emphasize Guangzhou’s geographic location “in the south of China” and its status as the “provincial capital”. The main contents include the development of Guangzhou city and the epidemic situation, depicting the positive image of Guangzhou like example 1.

File	Left Context	Hit	Right Context
31 Global ...	a fruit cake at Chimelong Safari Park in Guangzhou, south	China'	s Guangdong Province, Aug. 10, 2020. (Xinhua/Liu Dawei) <Some roads
32 Global ...	gushes out of wells on a street in Guangzhou, south	China'	s Guangdong Province, Aug. 26, 2020. Some roads in Guangzhou were
33 Global ...	stabbing incident occurred Monday near a kindergarten in Guangzhou, South	China'	s Guangdong Province, leaving five people injured. The suspect
34 Global ...	kilometers an hour — debuted in Guangzhou, the capital of South	China'	s Guangdong Province, on Friday, according to media reports.
35 Global ...	fun at Chimelong Safari Park in Guangzhou, capital of south	China'	s Guangdong Province, Sept. 28, 2020. Twin cubs of South China
36 Global ...	posted by The Paper A high school in Guangzhou, South	China'	s Guangdong Province, recently made headlines after discovering a
37 Global ...	marks Halloween, police in Guangzhou, the capital city of South	China'	s Guangdong Province, banned scary Halloween makeups and ghost-
38 Global ...	flowers at Haizhu Wetland Park in Guangzhou, capital of south	China'	s Guangdong Province, Nov. 3, 2020. (Xinhua/Liu Dawei) A tourist
39 Global ...	flowers at Haizhu Wetland Park in Guangzhou, capital of south	China'	s Guangdong Province, Nov. 3, 2020. (Xinhua/Liu Dawei) <Painting exhibition
40 Global ...	works kicked off at the Wenlifang Gallery in Guangzhou, South	China'	s Guangdong Province, on Saturday. An artist belonging to
41 Global ...	News Service) People enjoy a light show in Guangzhou, South	China'	s Guangdong Province, Nov. 18, 2020. The 10th Guangzhou International Light
42 Global ...	the China Import and Export Fair Complex in Guangzhou, south	China'	s Guangdong Province, Nov. 20, 2020. The ten-day exhibition opened
43 Global ...	the China Import and Export Fair Complex in Guangzhou, south	China'	s Guangdong Province, Nov. 20, 2020. The ten-day exhibition opened
44 Global ...	the China Import and Export Fair Complex in Guangzhou, south	China'	s Guangdong Province, Nov. 20, 2020. The ten-day exhibition opened

Figure 1 Part of Index Lines of Collocations of “Guangzhou” “China” “Guangdong” “City” and “South”

Example 1: Guangzhou, the capital city of South China’s Guangdong Province, has seen a limited impact on logistic and trade so far thanks to the local government’s launch of dynamic epidemic control measures to bring down the possible impact of the outbreak and quick reining of the virus to stop it from further spreading, industry experts told the *Global Times* on Sunday (from *Global Times*, November 06, 2022).

In addition to descriptions of locations, the related expressions of the words “city” and “district” also cover other news focuses. Therefore, the following is an analysis of the index lines for these two words.

Apart from the meaning of “Guangzhou city” and relation with the topic of “city epidemic”, the index line analysis with “city” also includes the nouns “health” “supply” “business” “economic” “financial” etc. (see Figure 2), which reflect the concern for people’s livelihood protection and economic construction in the context of the Covid-19 pandemic, demonstrating Guangzhou’s image as a city that is people-centered and emphasizes economic development. The example 2 is from the self-constructed corpora.

File	Left Context	Hit	Right Context
1 Global ...	treatment methods. On Friday’s press conference, officials from the	city'	s health commission said as of Thursday midnight, a
2 Global ...	the intensive care unit. When the outbreak first occurred, the	city'	s health commission prepared to expand the number of
3 Global ...	well as closed and controlled management areas from Monday. The	city'	s health commission released a list of places where
4 Global ...	s largest scale nucleic acid testing city, data from the	city'	s health commission showed. Mass nucleic acid testing is
5 Global ...	situation in three years, as the deputy director of the	city'	s health commission Zhang Yi told a press conference
6 Global ...	found during screening of close contacts at quarantine hotels. The	city'	s health authority announced on Monday. From May 21 to
7 Global ...	at home and take virtual classes until further notice, the	city'	s authorities announced in a news conference on Sunday
8 Global ...	in the latest outbreak since it started on May 21. The	city'	s authorities imposed transportation restrictions on Sunday night to
9 Global ...	provincial capitals, and five cities reviewed in the report. “A	city'	s business environment can be evaluated in many aspects,
10 Global ...	is another important factor that researchers use to evaluate a	city'	s business environment, Liu said, adding that it’s
11 Global ...	of the year, indicating the resilience and vitality of the	city'	s economic operation. Chen said that the city will
12 Global ...	of the year, indicating the resilience and vitality of the	city'	s economic operation. Chen said that the city will
13 Global ...	regulations were announced by Yang Bingsheng, deputy director of the	city'	s Public Security Bureau. One confirmed case in Panyu
14 Global ...	Transportation Bureau on Monday said this can effectively streamline the	city'	s public transportation scheduling and save the route’s

Figure 2 Part of Index Lines of “City”

Example 2: Officials said that the city has sufficient supplies of daily necessities with stable prices and called on the citizens to not panic (from *Global Times*, April 09, 2022).

Analyzing the search lines of “district”, the most expressive expressions are those about the prevention and control of the epidemic in various districts (see Figure 3), reflecting the city image of Guangzhou’s districts’ efforts and unity in preventing the Covid-19 pandemic. Here is an example:

Example 3: A staff member of a property management company (R) hands over the online shopping goods ordered by residents under home quarantine to a volunteer at a residential area at Liwan District of Guangzhou, capital of south China’s Guangdong Province, June 1, 2021(from *Global Times*, June 03, 2021).

File	Left Context	Hit	Right Context
1 Global ...	resident for nucleic acid test at a community in Liwan	district	of Guangzhou, south China's Guangdong province. Photo: Xinhua
2 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
3 Global ...	Nanfeng Hospital collect samples for nucleic acid tests in Liwan	District	of Guangzhou, south China's Guangdong Province, May 27, 2021. Liwan
4 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
5 Global ...	from a resident for COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
6 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
7 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
8 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
9 Global ...	their information registered before COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
10 Global ...	Residents shop at a bus-based mobile market in Liwan	District	of Guangzhou, south China's Guangdong Province, June 19, 2021. Guangzhou
11 Global ...	from a resident for COVID-19 nucleic acid test in Liwan	District	of Guangzhou, south China's Guangdong Province, May 27, 2021. Photo:
12 Global ...	from a resident for COVID-19 nucleic acid testing in Liwan	District	of Guangzhou, south China's Guangdong Province, June 8, 2021. A
13 Global ...	Nanfeng Hospital collect samples for nucleic acid tests in Liwan	District	of Guangzhou, south China's Guangdong Province, May 27, 2021. Liwan
14 Global ...	of the National Archives of Publications and Culture in Conghua	District	of Guangzhou, south China's Guangdong Province, July 30, 2022. (Photo:

Figure 3 Part of Index Lines of “District”

5.1.2 Index analysis for keywords related to Covid-19 pandemic

The words related to the Covid-19 pandemic all show an emphasis on the topic of epidemic prevention and control. First, “Covid” “cases” and “infections” are used to reveal the situation of new cases of Covid-19 pandemic in Guangzhou. “Covid” is used to denote “Covid-19”, and the index line result totals 221. Among them, the most collocations with “cases”, totaling 39, are shown in the Figure 4. It is mainly used to express the new cases in Guangzhou. The indexed lines of “cases” are analyzed, and the expressions mainly include “reported cases” “new cases” “sporadic cases” “confirmed cases” “imported cases” and so on, reflecting the condition of new cases in Guangzhou, as shown in the Figure 5. It is worth noting that “new cases” are connected with words like “surge” and “raise”, which indicates the increase in the number of cases, reflecting the fact that the outbreak of the Covid-19 pandemic is not to be underestimated, and Guangzhou, as an international metropolis, is even more profoundly affected by the epidemic due to its large population and high degree of openness to the outside world. Similar to the usage of “cases”, “infections” is mostly used to report new infections (see Figure 6), showing Guangzhou’s real-time follow-up and attention to the prevention and control of the epidemic, as well as its concern for infected patients, reflecting the city’s image of actively preventing the Covid-19 pandemic.

File	Left Context	Hit	Right Context
1 Global ...	ngzhou, South China's Guangdong Province, reported 18 local confirmed	COVID-19 cases	on Monday, of whom 14 patients were previously diagnosed
2 Global ...	a local rebound. The manufacturing hub reported 527 locally transmitted	COVID-19 cases	on Sunday and it has dealt with a
3 Global ...	is lifted, the report said. Guangzhou reported four new domestic	COVID-19 cases	on Sunday, the local government said on Monday.
4 Global ...	and nine medium-risk areas, and reported four locally transmitted	COVID-19 cases	on Sunday. A total of 102 cases have been
5 Global ...	na News Service Guangdong Province reported 7 new locally-transmitted	COVID-19 cases	on Thursday, 6 of which are from Guangzhou City.
6 Global ...	Xinhua) Guangzhou, South China's Guangdong Province detected no new	COVID-19 cases	on Tuesday - the first time since the recent
7 Global ...	far. According to the local health commission, Guangzhou reported 8,761	COVID-19 cases	on Wednesday and 16 of them were detected at
8 Global ...	staff to screen and monitor their situations, Liu said. <Imported	COVID-19 cases	in Guangzhou raise local transmission concerns> By Globaltimes.
9 Global ...	the world have an immunity barrier. Global Times <Surge in	COVID-19 cases	in Guangzhou traced to one transmission chain> By
10 Global ...	spread to schools. The mutated variant Delta had triggered clustered	COVID-19 cases	in Guangzhou and Shenzhen the past few weeks.
11 Global ...	recent, the CAAC said. <Guangzhou cancels 888 flights after detecting 527	COVID-19 cases	in a single day> By Global Times Published:
12 Global ...	the Communist Party of China (CPC). Experts say the sporadic	COVID-19 cases	in small areas of China will not have
13 Global ...	ses, and seven were asymptomatic patients. <Guangzhou reports no new	COVID-19 cases	for first time since recent resurgence, risk levels
14 Global ...	PM Photo:Xinhua South China's Guangzhou reported no new	COVID-19 cases	for the first time since the recent resurgence

Figure 4 Part of Index Lines of Collocation of “Covid” and “Cases”

File	Left Context	Hit	Right Context
1 Global ...	have imposed stricter epidemic prevention measures as the newly reported	cases	in the city record a new high over the
2 Global ...	you have imposed stricter epidemic prevention measures after newly reported	cases	in the city recorded a new high over the
3 Global ...	s health authorities reported that the virus strain on new	cases	in the city was not homologous to previously detected
4 Global ...	one district - Haizhu, accounting for over 95 percent of the daily	cases	in the city. In response to the surge in
5 Global ...	the epidemic, there is still some possibility of subsequent sporadic	cases	in the coming days, and we still need to
6 Global ...	facing severe challenges. Guangdong Province, which currently has the most	cases	in the country, reported 592 new locally confirmed cases and 2,611
7 Global ...	between Saturday morning and Sunday afternoon, raising the tally of	cases	in the latest outbreak to 23. <Guangzhou renovates key fair
8 Global ...	from Monday until Friday as there were 384 new local confirmed	cases	in the province on Sunday, including 296 in Guangzhou, and 7,885
9 Global ...	to schools. The mutated variant Delta had triggered clustered COVID-19	cases	in Guangzhou and Shenzhen the past few weeks. Since
10 Global ...	to screen and monitor their situations, Liu said. <Imported COVID-19	cases	in Guangzhou raise local transmission concerns> By Globaltimes.cn
11 Global ...	world have an immunity barrier. Global Times <Surge in COVID-19	cases	in Guangzhou traced to one transmission chain> By Global
12 Global ...	the CAAC said. <Guangzhou cancels 888 flights after detecting 527 COVID-19	cases	in a single day> By Global Times Published: Nov 01, 2022 12:45
13 Global ...	place in October 22. Moreover, the new local infections amounted to 1,325	cases	in a single day on Saturday, reaching a record
14 Global ...	migrant workers. So far, the city has reported zero infection	cases	in its designated medical institutions, zero deaths, zero infections

Figure 5 Part of Index Lines of “Cases”

File	Left Context	Hit	Right Context
10 Global ...	the first locally transmitted asymptomatic case on May 21. The recent	infections	in Shenzhen were related to the city's Yantian
11 Global ...	obstacles for normal economic communications when the real source of	infections	in this wave has not yet been identified, experts
12 Global ...	a situation where imported cases from Nigeria caused five domestic	infections	in two cities. The Nigerians were confirmed infections during
13 Global ...	the Guangzhou government on Sunday. On Saturday, nine new domestic	infections	were reported in the city, including six confirmed cases
14 Global ...	faster nucleic acid detection methods, Wang added. A total of 94	infections	were reported in Guangzhou during the latest resurgence as
15 Global ...	up its citywide nucleic acid testing, as a total of 94	infections	were reported during the latest resurgence as of Saturday,
16 Global ...	with November. A total of 2,338 confirmed cases and 8,477 asymptomatic	infections	were reported on the Chinese mainland on Saturday, with 39,391
17 Global ...	since October 22. A total of 2,370 cases, or 64 percent of the 3,732	infections,	were discovered in the Haizhu district, Zhang Yi, deputy
18 Global ...	to Guangzhou Center for Disease Control and Prevention. After the	infections	were found, the local authorities have closely worked together
19 Global ...	, according to experts. Epidemiological investigations showed that the two	infections	were highly likely to have contracted the virus through
20 Global ...	with a total of 260 COVID-related incidents since October 1. “COVID-19	infections	were imported through various ways such as by air,
21 Global ...	Guangzhou Municipal Health Commission announced on Sunday night. The	infections	were likely to have been caused by accidental exposure,
22 Global ...	Baiyun and Huangpu immediately launched nucleic acid testing after the	infections	were spotted. As of 8 am on Wednesday, all the 6.64
23 Global ...	y press conference. According to Zhang, Guangzhou city reported 746 local	infections	on Friday, among which eight are discovered in local

Figure 6 Part of Index Lines of “Infections”

In addition, “Covid” and “epidemic” are paired many times with “prevention” “control” and “measures”, involving topics such as epidemic cases, control and protection, as shown in the Figure 7 and Figure 8. These expressions, like the one in example 4, reflect the strong awareness of Guangzhou and its people in epidemic prevention and control. Besides, these also show that Guangzhou was actively fighting against the epidemic, and the people of Guangzhou are tenacious, taking many measures to prevent and control the epidemic, and defending the health and safety of Guangzhou together.

File	Left Context	Hit	Right Context
58 Global ...	News Service <Aerial view of traffic flow in Guangzhou after	COVID	control eased> By echnphotos Published: Dec 04, 2022 10:22 AM Drone photo
59 Global ...	comprehensively and accurately implement the ninth edition of China's	COVID-19	control protocols and further optimize 20 prevention and control measures,
60 Global ...	comprehensively and accurately implement the ninth edition of China's	COVID-19	control protocols and further optimize the epidemic prevention and
61 Global ...	s Guangdong Province and London for two weeks due to	COVID-19	control measures. It is the first airline in the
62 Global ...	tests for COVID-19, according to Tuesday's government press conference.	COVID-19	control work is aimed at safeguarding both Chinese and
63 Global ...	disease expert Zhong Nanshan Photo: VCG The first wave of	COVID-19	infections in Guangzhou, South China's Guangdong Province, is
64 Global ...	for daily life. This comes after a surge in fresh	COVID-19	infections in the city. According to a statement published
65 Global ...	gnant women in the area under closed management. Guangzhou reported 22	COVID-19	infections between Saturday morning and Sunday afternoon, raising the
66 Global ...	fast and strong, local health authority said. Guangzhou's fresh	COVID-19	infections have spread to a neighbor city. Nanhai district
67 Global ...	nucleic acid testing to more residents. After a surge in	COVID-19	infections this week, Yantian district of Shenzhen on Saturday
68 Global ...	dealt with a total of 260 COVID-related incidents since October 1. *	COVID-19	infections were imported through various ways such as by
69 Global ...	not yet available at boarding due to the requirements of	COVID-19	prevention and control measures. <In pics: giant pandas at
70 Global ...	and shifting to home quarantine for seven days. The upgraded	COVID-19	prevention and control measures were implemented ahead of the 130
71 Global ...	to keep warm and safe. “China has performed well in	COVID-19	orevention and control.” said Yan. What we need to

Figure 7 Part of Index Lines of “Covid”

	File	Left Context	Hit	Right Context
31	Global ...	amid rising infections. Several districts in Guangzhou have imposed stricter	epidemic	prevention measures after newly reported cases in the city
32	Global ...	one in Zhanjiang. Several districts in Guangzhou have imposed stricter	epidemic	prevention measures as the newly reported cases in the
33	Global ...	total of 52,888 students have sat the gaokao exam under strict	epidemic	prevention measures in Guangzhou, South China's Guangdong Province,
34	Global ...	the country, many places in China have also implemented flexible	epidemic	prevention measures to prioritize people's lives, livelihoods and
35	Global ...	cleaned and disinfected its office areas according to the latest	epidemic	prevention measures, and may resume on-site work in
36	Global ...	of flare-up driven by the Delta variant. With effective	epidemic	prevention measures, the city ended the outbreak in late
37	Global ...	directly linked to the severity of the local epidemic," an	epidemic	prevention expert told Caixin. Under the current epidemic situation,
38	Global ...	and parks, in a bid to ensure the supply of	epidemic	prevention materials and living materials. Additionally, the city vowed
39	Global ...	COVID-19. Some Chinese netizens expressed concerns over the efficacy of	epidemic	control and prevention measures adopted by Starbucks. One netizen,
40	Global ...	was downgraded to a low-risk area, according to the	epidemic	control and prevention headquarters of the city, while the
41	Global ...	far thanks to the local government's launch of dynamic	epidemic	control measures to bring down the possible impact of
42	Global ...	far thanks to the local government's launch of dynamic	epidemic	control measures to bring down the possible impact of
43	Global ...	by Guangzhou are effective. In the future, the city's	epidemic	control group should just be guided by this experience
44	Global ...	Guangzhou increased by 2.5 times after the announcement of lifting temporary	epidemic	control measures, domestic online travel agency Qunar.com said,

Figure 8 Part of Index Lines of “Epidemic”

Example 4: For those depart from Shenzhen, a result with 72 hours is required, according to the relevant epidemic prevention and control measures (from *Global Times*, June 10, 2021).

The word “nucleic” “acid” and “quarantine” have fewer index lines and are all used to indicate the main specific measures for epidemic prevention and control, where nucleic and acid are used to indicate “nucleic acid testing” and “quarantine” has more index lines expressed as “under (home) quarantine” (see Figure 9 and Figure 10).

	File	Left Context	Hit	Right Context
1	Global ...	disinfected by the disease control department. The results of wide	nucleic	acid testing in some districts have been released. "Since
2	Global ...	n 09, 2021 07:02 PM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
3	Global ...	n 09, 2021 08:36 AM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
4	Global ...	worker collects a swab sample from a resident for COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
5	Global ...	n 14, 2021 12:46 PM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
6	Global ...	n 14, 2021 09:48 AM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
7	Global ...	n 15, 2021 02:59 PM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
8	Global ...	n 16, 2021 11:00 PM People have their information registered before COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
9	Global ...	worker collects a swab sample from a resident for COVID-19	nucleic	acid testing in Liwan District of Guangzhou, south China'
10	Global ...	be put into operation in 2023. (Photo: Xinhua) <Guangzhou launches mass	nucleic	acid testing in three districts after four infections discovered>
11	Global ...	VCG Guangzhou in South China's Guangdong Province launched mass	nucleic	acid testing in three districts on Thursday after discovering
12	Global ...	with populations of 1.2 million and 1.7 million respectively, both started mass	nucleic	acid testing on Sunday. The testing will last until
13	Global ...	s Guangdong Province, launched mass screening of all residents with	nucleic	acid testing on May 30. People queued to get tested
14	Global ...	nucleic testing within two days. "Since the launch of the	nucleic	acid testing on May 26, as of 12 pm on Saturday,

Figure 9 Part of Index Lines of “Nucleic”

	File	Left Context	Hit	Right Context
1	Global ...	in stable condition. Their close contacts have been put under	quarantine	and all have returned negative nucleic acid testing results.
2	Global ...	man who tested positive for COVID-19 refused to undergo medical	quarantine	and assaulted a nurse, beating her and biting her
3	Global ...	risk flights have been moved from their homes to central	quarantine	and have taken nucleic acid tests. The city reported
4	Global ...	ensure that people in high-risk areas, isolation sites, home	quarantine	and health monitoring in their jurisdiction can seek medical
5	Global ...	and out management and control, epidemiological investigations, transfer and	quarantine	and nucleic acid testing during the initial 24-hour golden
6	Global ...	by the article, saying the cases' close contacts are under	quarantine	and people with high risk of exposure have been
7	Global ...	Each district has at least one designated hospital for medical	quarantine	and the hospital will conduct nucleic acid testing when
8	Global ...	measures. Haizhu district will allow close contacts to implement home	quarantine	and Tianhe, Conghua and Huadu districts will lift restrictions
9	Global ...	in and around the hospital, and the suspect is undergoing	quarantine	and treatment under police supervision. The case will be
10	Global ...	handling. For foreigners who refuse to undergo the required checkup,	quarantine	and treatment, public security will assist health authorities in
11	Global ...	company deliver online shopping goods ordered by residents under home	quarantine	at a residential area at Liwan District of Guangzhou,
12	Global ...	volunteer registers online shopping goods ordered by residents under home	quarantine	at a residential area at Liwan District of Guangzhou,
13	Global ...	October 20. All international arrivals will have to go through 21-day	quarantine	at isolation centers arranged by Guangzhou, instead of staying
14	Global ...	medium-high risk areas in China to go through 14-day	quarantine	at isolation centers. Epidemic prevention and control work at

Figure 10 Part of Index Lines of “Quarantine”

5.1.3 Index analysis for keywords of other words

The words with “Chinese” include “Chinese mainland” “Chinese airport” “Chinese citizens” “Chinese painting” “Chinese companies” etc. (see Figure 11). The expressions cover a wide range of topics such as epidemic, technology, economy, culture and so on, showing the development of Guangzhou in various aspects. Among them, “Chinese citizens” and “other foreigners” are juxtaposed to show Guangzhou’s city image of treating both domestic and foreigners equally and being tolerant and fair during the Covid-19 pandemic. The following is an example:

	File	Left Context	Hit	Right Context
1	Global ...	ranked on the list. Foreign direct investment (FDI) on the	Chinese	mainland is another important factor that researchers use to
2	Global ...	test for Starbucks, which has about 4,200 outlets across the country.	Chinese	mainland is the second-largest market for the coffee
3	Global ...	China's Guangdong, has become the second city on the	Chinese	mainland to detect the Omicron variant due to an
4	Global ...	COVID-19 control measures. It is the first airline in the	Chinese	mainland to make such a move regarding the UK.
5	Global ...	Virgin Atlantic each operate two flights a week, and four	Chinese	mainland airlines – Air China, China Eastern Airlines and China
6	Global ...	January 7. Currently, there are eight non-stop flights between the	Chinese	mainland and the UK every week, as British Airways
7	Global ...	enterprises, particularly those businesses run by individuals. FDI into the	Chinese	mainland expanded 11.8 percent year-on-year to 70.36 billion yuan (\$9.94
8	Global ...	not believe this will happen. The vaccination rate in the	Chinese	mainland has reached 68.86 percent, which is not enough but
9	Global ...	338 confirmed cases and 8,477 asymptomatic infections were reported on the	Chinese	mainland on Saturday, with 39,391 confirmed cases still under medical
10	Global ...	an unexpected COVID-19 resurgence. As the only city in the	Chinese	mainland that currently has high-risk areas for COVID-19,
11	Global ...	Courtesy of the Pakistani Embassy to China Published: May 22, 2022 05:51 PM	Chinese	State Councilor and Foreign Minister Wang Yi (right) and
12	Global ...	and China. Photo: Courtesy of the Pakistani Embassy to China	Chinese	State Councilor and Foreign Minister Wang Yi (right) and
13	Global ...	on Sunday. Photo: Courtesy of the Pakistani Embassy to China	Chinese	State Councilor and Foreign Minister Wang Yi (right) presents
14	Global ...	Global Times Published: May 24, 2022 11:56 AM Updated: May 24, 2022 11:50 AM	Chinese	State Councilor and FM Wang Yi met with UN

Figure 11 Part of Index Lines of “Chinese”

Example 5: Chen Yongqiu, deputy director of the Guangzhou public security bureau, said the city used the same nucleic acid test measures for African people as it did for Chinese citizens and other foreigners, and provided the same designated hotels for their quarantine (From *Global Times*, April 14, 2020).

Indexing analyzing “railway”, it is found that news reports mostly focus on the construction and operation of high-speed railways between Guangzhou and other cities, including Beijing-Guangzhou High Speed Railway, Guiguang-Guangzhou High Speed Railway, Guangshan High Speed Railway and so on (seen Figure 12).

	File	Left Context	Hit	Right Context
1	Global ...	tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in southwest China's Guizhou Province, Sept. 3, 2020. (Xinhua/Liu
2	Global ...	tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in southwest China's Guizhou Province, Sept. 3, 2020. (Xinhua/Liu
3	Global ...	tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in southwest China's Guizhou Province, Sept. 3, 2020. (Xinhua/Liu
4	Global ...	work on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in southwest China's Guizhou Province, Sept. 2, 2020. (Xinhua/Liu
5	Global ...	tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in southwest China's Guizhou Province, Sept. 3, 2020. (Xinhua/Liu
6	Global ...	AM Construction vehicles enter the Futoushi Tunnel of Guangzhou-Shanwei	Railway	in Huidong County of Huizhou, south China's Guangdong
7	Global ...	at the construction site of Futoushi Tunnel of Guangzhou-Shanwei	Railway	in Huidong County of Huizhou, south China's Guangdong
8	Global ...	photo shows an exit of Futoushi Tunnel of Guangzhou-Shanwei	Railway	in Huidong County of Huizhou, south China's Guangdong
9	Global ...	at the construction site of Futoushi Tunnel of Guangzhou-Shanwei	Railway	in Huidong County of Huizhou, south China's Guangdong
10	Global ...	on the Congjiang section of the Guiyang-Guangzhou high-speed	railway	in Congjiang County, southwest China's Guizhou Province, March 4, 2020. (
11	Global ...	derstand the situation. <Congjiang section of Guiyang-Guangzhou high-speed	railway	in Guizhou> By Global Times Published: Mar 05, 2020 12:09 PM A
12	Global ...	seen on Rongjiang-Congjiang section of Guiyang-Guangzhou High-speed	Railway	in south China's southwest China's Guizhou Province,
13	Global ...	A bullet train stops at the platform of Beijing West	Railway	Station in Beijing, capital of China, Dec. 26, 2022. A total
14	Global ...	Passengers are seen on a bullet train at Beijing West	Railway	Station in Beijing, capital of China, Dec. 26, 2022. A total

Figure 12 Part of Index Lines of “Railway”

Example 6: The Futoushi tunnel of Guangzhou-Shanwei Railway was drilled through on Friday (from *Global Times*, April 23, 2022).

The indexing analysis of “airport” reflects the concern for Guangzhou Baiyun Airport, like example 7, showing that Baiyun Airport has become an international transportation hub with large flow of people, which reflects the international image of Guangzhou as an open international metropolis (see Figure 13).

Example 7: Airports across the country saw widespread flight cancellations on Wednesday, with some airports even reaching a flight cancellation rate of 98 percent according to flight information provider Flight Master (from *Global Times*, November 09, 2022).

	File	Left Context	Hit	Right Context
1	Global ...	COVID-19 cases nationwide. As of 10:00 am on Wednesday, Guangzhou Baiyun	Airport	in South China's Guangdong Province had cancelled 1,163 flights,
2	Global ...	provider Variflight and the airport statement. Guangzhou Baiyun International	Airport	in South China's Guangdong Province, on Wednesday night detected
3	Global ...	Qi added. In 2019, a total 71.17 million passengers used Incheon International	Airport	in South Korea, of while 70.58 million were international passengers,
4	Global ...	ernational Airport handled 43.77 million passenger trips, becoming the busiest	airport	in the world for the year. But Wang told
5	Global ...	al Airport handled 43.77 million passenger trips in 2020, becoming the busiest	airport	in the world for the year. Global Times <Guangzhou
6	Global ...	ranking. The data broke the record of the Atlanta International	Airport	in the US after 22 years. Baiyun airport, one of
7	Global ...	Customs officers inspect an inbound flight at the Capital International	Airport	in Beijing, capital of China, March 18, 2020. (Xinhua/Chen Zhonghao)
8	Global ...	Southern Airlines flight CZ3001 takes off at the Daxing International	Airport	in Beijing, capital of China, Sept. 25, 2019. File photo:Xinhua
9	Global ...	to fill in an arrival card at Qingdao Liuting International	Airport	in Qingdao, East China's Shandong Province on March 5.
10	Global ...	to fill in an arrival card at Qingdao Liuting International	Airport	in Qingdao, East China's Shandong Province on March 5.
11	Global ...	landed in Guangzhou safely, Mahan Air noted. The Baiyun International	Airport	in Guangzhou said later Monday they initiated emergency response
12	Global ...	porters Published: Sep 15, 2021 06:48 PM The Guangzhou Baiyun International	Airport	in Guangzhou, South China's Guangdong Province Photo: VCG
13	Global ...	bus to greeters upon their arrival at Guiyang Longdongbao International	Airport	in Guiyang, southwest China's Guizhou Province, March 20, 2020. Medical
14	Global ...	exceed 100 billion yuan (\$15.5 billion) by 2025, with the commodity value of	airport	in relation to cross-border e-commerce exceeding 300 billion

Figure 13 Part of Index Lines of “Airport”

To sum up, by analyzing the top 20 keywords, we can find that *Global Times*' news coverage of Guangzhou focuses on three major themes: current affairs around Guangzhou, the Covid-19 pandemic and transportation, specifically including the cases of the Covid-19 pandemic, preventive and control measures, the protection of the livelihood of the city's residents, the construction of economy and culture, as well as the construction and operation of the transportation infrastructure. It shows the image of Guangzhou as a cosmopolitan city with active resistance to the epidemic, economic and cultural prosperity, and openness and inclusiveness.

5.2 High-Frequency Word Analysis

Word frequency is one of the most important data types in corpus research. The frequent use of high-frequency words in news reports can leave a deep impression on readers, thus affecting their emotional attitudes towards the reported things; at the same time, high-frequency word analysis of news report texts can reveal the deeper meanings in the news and summarize the linguistic features. Therefore, removing some words with no practical meaning, we extract the top 20 high-frequency real words, mainly verbs, nouns, adjectives and adverbs, and analyzes the uses of these words are applied and their collocations. The details are shown in Table 2.

Table 2 Top 20 High Frequency Words

Number	High frequency word	Frequency
1	guangzhou	1036
2	china	684
3	province	328
4	said	325
5	be	322
6	guangdong	317
7	south	287
8	city	230
9	Covid	221
10	cases	204
11	epidemic	157
12	nucleic	144
13	district	142
14	acid	139
15	high	138
16	local	134
17	international	129
18	people	123
19	new	118
20	health	117

We analyze the high-frequency content words in the table 2 and they are broadly classified into the following 4 categories: agents, verbs, topic words related to Covid-19 pandemic and adjectives.

5.2.1 Analysis of agents

Firstly, the first category points to the agents. In these three years “Guangzhou” “china” “province” “Guangdong” “south” and “district” were used many times in the news reports, and respectively ranked 1st, 2nd, 3rd, 6th, 7th, and 13th among the high-frequency words. They emphasize the central location and object of the report - Guangzhou City, Guangdong Province, China. In addition, the word “city” is ranked in the 8th position, most of which were combined with authorities and health committee (see Figure 14), which not only emphasizes the principle position of Guangzhou, but also elaborates the related contents including the position, attitude, and measures of the city government authorities and the city health committee. In the news, City's health committee was a way to acquire the latest information of Covid-19 pandemic. The following is an example.

	File	Left Context	Hit	Right Context
1	Global ...	treatment methods. On Friday's press conference, officials from the	city'	s health commission said as of Thursday midnight, a
2	Global ...	the intensive care unit. When the outbreak first occurred, the	city'	s health commission prepared to expand the number of
3	Global ...	well as closed and controlled management areas from Monday. The	city'	s health commission released a list of places where
4	Global ...	s largest scale nucleic acid testing city, data from the	city'	s health commission showed. Mass nucleic acid testing is
5	Global ...	situation in three years, as the deputy director of the	city'	s health commission Zhang Yi told a press conference
6	Global ...	found during screening of close contacts at quarantine hotels, The	city'	s health authority announced on Monday. From May 21 to
7	Global ...	at home and take virtual classes until further notice, the	city'	s authorities announced in a news conference on Sunday
8	Global ...	in the latest outbreak since it started on May 21. The	city'	s authorities imposed transportation restrictions on Sunday night to
9	Global ...	provincial capitals, and five cities reviewed in the report. "A	city'	s business environment can be evaluated in many aspects,
10	Global ...	is another important factor that researchers use to evaluate a	city'	s business environment, Liu said, adding that it's
11	Global ...	of the year, indicating the resilience and vitality of the	city'	s economic operation. Chen said that the city will
12	Global ...	of the year, indicating the resilience and vitality of the	city'	s economic operation. Chen said that the city will
13	Global ...	regulations were announced by Yang Bingsheng, deputy director of the	city'	s Public Security Bureau. One confirmed case in Panyu
14	Global ...	Transportation Bureau on Monday said this can effectively streamline the	city'	s public transportation scheduling and save the route's

Figure 14 Part of Index Lines of "City"

Example 8: Guangzhou reported four new cases over the past 24 hours, all of which were found during screening of close contacts at quarantine hotels, the city's health authority announced on Monday (from *Global Times*, June 14, 2021).

And the news lays stress on the ideas and efforts of the authorities in epidemic prevention. Here is an example.

Example 9: The city's authorities imposed transportation restrictions on Sunday night to prevent the virus spreading (from *Global Times*, May 31, 2021).

The stress on authority information reflects the rigorousness of the news and widens the distance between the speaker and the listener.

The word "people" is located in the 18th position, which is related to the aspects of people's life and safety, and people's living needs. It reflects the city image of Guangzhou, which focuses on the people and serves the people.

Example 10: The city's counter-extreme weather authority on Tuesday started preparations for the transfer and resettlement of personnel to ensure the safety of people in dangerous areas (from *Global Times*, May 10, 2022).

5.2.2 Analysis of verbs

The second category of high-frequency words is verbs. "Said" has the highest frequency of use and is located in the 4th of all high-frequency real words. As a matter of fact, both indirect and direct speeches can also express modalities in English. In the news, "said" is used to quote other evaluators, indicating that this paper repeatedly conveys the views and emotions of relevant people, spectators or other reports on Guangzhou-related events or Guangzhou's city image, especially the opinions of government staff and experts, which effectively enhances the authenticity and persuasiveness of the news report.

Example 11: Experts said that the COVID-19 strain in the latest epidemic, which was initially detected in India, is more contagious and spreads faster, posing a huge challenge for medical workers to complete the citywide nucleic testing within two days (from *Global Times*, June 06, 2021)

It should be noted that the relevant evaluators elicited after "said" include: high-quality development, sufficient supplies, expect to be completed, positive cases, and so on (see Figure 15). The example 12 shows that Guangzhou, against the background of the epidemic's difficult situation, has not been afraid of difficulties and has actively sought development. It also highlights the people's optimism and confidence in Guangzhou's development.

Example 12: Chen said that the city will continue implement high-quality development in the financial sector during... so as to develop Guangzhou as the core engine of Greater Bay Area (from *Global Times*, November 22, 2020).

The news also used the verb "be" several times. An analysis of the indexing lines of "be" reveals that it is mostly used to express the passive voice, often paired with modal verbs such as "will" "should" "may" "could" "can" etc., and these words also followed by specific and active measures to elaborate on Guangzhou's future goals and plans for urban construction (see Figure 16). Example 13 reflects the fact that Guangzhou is a city of "action" that actively seeks better development for the city.

	File	Left Context	Hit	Right Context
1	Global ...	resilience and vitality of the city's economic operation. Chen	said	that the city will continue implement high-quality development
2	Global ...	resilience and vitality of the city's economic operation. Chen	said	that the city will continue implement high-quality development
3	Global ...	measures, the city ended the outbreak in late June. Officials	said	that the city has sufficient supplies of daily necessities
4	Global ...	cross infections, according to the health authority. Guangzhou health officials	said	that the city is facing its "most complicated and
5	Global ...	tuesday, including 80 confirmed cases and 14 asymptomatic infections. Experts	said	that the COVID-19 strain in the latest epidemic, which
6	Global ...	not a disease, and silent carriers are not patients. Zhong	said	that the COVID-19 epidemic is not over yet, but
7	Global ...	from India, which have been found in 26 COVID-19 patients. Experts	said	that the appearance of the strains, which are more
8	Global ...	on a few minutes later," a hotel receptionist said. She	said	that the black-out happened in the early morning
9	Global ...	half of this year. Huang Haoxuan, CEO of VDA Jewellery,	said	that the company has already bounced back to pre-
10	Global ...	or leaving the Guangdong Province on non-essential trips." Chen	said	that the government would strictly implement the information reporting
11	Global ...	imported cases amidst threats posed by the Delta variant. Zhong	said	that the international health station will serve as quarantine
12	Global ...	the city left lockdown status on Monday. "It can be	said	that the latest outbreak in the city has arrived
13	Global ...	well as the establishment of an innovative futures exchange. Lin	said	that the previous trials for carbon trading in eight
14	Global ...	with around 3,000 cups sold each day. The Guangzhou railway operator	said	that the pricing of the bubble tea took into

Figure 15 Part of Index Lines of "Said"

	File	Left Context	Hit	Right Context
1	Global ...	health station with a capacity of 5,000 people is expected to	be	put into operation in Guangzhou in early September, said
2	Global ...	a maximum speed of 350 km per hour is expected to	be	put into operation in 2023. (Photo: Xinhua) Workers are seen
3	Global ...	a maximum speed of 350 km per hour is expected to	be	put into operation in 2023. (Photo: Xinhua) Aerial photo shows
4	Global ...	a maximum speed of 350 km per hour is expected to	be	put into operation in 2023. (Photo: Xinhua) Workers are seen
5	Global ...	a maximum speed of 350 km per hour is expected to	be	put into operation in 2023. (Photo: Xinhua) <Guangzhou launches mass
6	Global ...	put into central quarantine. Their activities caused 197 close contacts to	be	put into quarantine and 1,680 people with the risk of
7	Global ...	on Friday, according to media reports. The subway train will	be	put into service at Guangzhou Metro's No. 18 and
8	Global ...	which he also mentioned that the focus moving forward should	be	put on preventing severe illness caused by the virus,
9	Global ...	positive reaches five, the airline's flight to China will	be	suspended for one week, and if the number reaches 10,
10	Global ...	from August 7, any flight with five detected COVID-19 cases will	be	suspended for one week when the confirmed cases account
11	Global ...	longer than the previously required suspension time. Airlines will still	be	suspended for four weeks if 10 or more passengers test
12	Global ...	passengers test positive for COVID-19, the route in question will	be	suspended for two weeks, one week longer than the
13	Global ...	for one week, and if the number reaches 10, operations will	be	suspended for 4 weeks. On June 14, the regulator suspended China
14	Global ...	Province also announced Monday that subway and bus services will	be	suspended from Monday until Friday as there were 384 new

Figure 16 Part of Index Lines of "Be"

Example 13: An international health station with a capacity of 5,000 people is expected to be put into operation in Guangzhou in early September, said a Guangzhou government official in June (from *Global Times*, September 05, 2021).

Besides, we also find more expressions of "will be suspended", indicating that the epidemic has slowed down many ongoing or upcoming urban construction activities, hindered Guangzhou's urban development, and had a more far-reaching impact on the city.

Example 14: Baiyun district in Guangzhou, South China's Guangdong Province also announced Monday that subway and bus services will be suspended from Monday until Friday (from *Global Times*, November 21, 2022).

Moreover, the reports also show "be" verbs are used in various tenses, including "is" "are" "were" "will be" "have been done" and so on. Among them, the word "is" is mostly paired with "expected", and further analysis of the phrase "is expected" reveals that it is mostly paired with positive words such as "cooperate" "accelerate" "improve" etc. (see Figure 17), which shows the positive attitude of expectation towards Guangzhou. The following is an example:

	File	Left Context	Hit	Right Context
1	Global ...	hotel. An international health station with a capacity of 5,000 people	is	expected to be put into operation in Guangzhou in
2	Global ...	makeshift hospital. One pavilion has been basically formed, and it	is	expected to be completed and put into use within
3	Global ...	Shanwei Railway with a maximum speed of 350 km per hour	is	expected to be put into operation in 2023. (Photo: Xinhua)
4	Global ...	Shanwei Railway with a maximum speed of 350 km per hour	is	expected to be put into operation in 2023. (Photo: Xinhua)
5	Global ...	Shanwei Railway with a maximum speed of 350 km per hour	is	expected to be put into operation in 2023. (Photo: Xinhua)
6	Global ...	Shanwei Railway with a maximum speed of 350 km per hour	is	expected to be put into operation in 2023. (Photo: Xinhua) <
7	Global ...	The Guangzhou Futures Exchange which mainly deals with commodity futures,	is	expected to cooperate with the spot transactions in Hong
8	Global ...	The Guangzhou Futures Exchange which mainly deals with commodity futures,	is	expected to cooperate with the spot transactions in Hong
9	Global ...	raw material market price fluctuations," Lin said. The futures exchange	is	expected to fill in the vacancy of commodity futures
10	Global ...	raw material market price fluctuations," Lin said. The futures exchange	is	expected to fill in the vacancy of commodity futures
11	Global ...	Futures Exchange has been approved by the State Council and	is	expected to go into operation within this year, said
12	Global ...	Futures Exchange has been approved by the State Council and	is	expected to go into operation within this year, said
13	Global ...	Guangdong Province, according to China Media Group (CMG). The move	is	expected to accelerate China's offshore wind power installation
14	Global ...	Port South Station, in South China's Guangdong Province. It	is	expected to arrive in Europe in 15 days, marking the

Figure 17 Part of Index Lines of "Is"

Example 15: The move is expected to accelerate China's offshore wind power installation capacity in deep-sea areas and promote affordable access to offshore wind power (from *Global Times*, September 29, 2022).

The words “are” and “were” are mostly used in the passive voice, elaborating on the impact of the Covid-19 pandemic on Guangzhou and Guangzhou's activities to deal with the Covid-19 pandemic.

Example 16: According to the announcement, residents are required not to leave home unless necessary (from *Global Times*, November 05, 2022).

The words “has” and “have” are mostly used in the present perfect tense and the present perfect progressive tense of verbs, and they are mostly used to describe the positive urban construction activities that have been completed in Guangzhou, such as the completion of the infrastructure construction and the improvement of the situation of the Covid-19 pandemic.

5.2.3 Analysis of topic words related to Covid-19 pandemic

The third category of high-frequency words is topic words related to Covid-19 pandemic. The words “cases” “epidemic” “nucleic” “acid” and “health” are located in the 10th, 11th, 12th, 14th, and 20th positions of high-frequency words, respectively. It is clear that “Cases of Covid-19 Pandemic” is the focus of *Global Times*' coverage of Guangzhou in 2020-2022, and thus the issue of people's health is one of the core issues in the news coverage. The main focus is on the status of the increase or decrease of cases of the epidemic and the arrangement of nucleic acid testing. Since “cases” “epidemic” “nucleic” and “acid” have been analyzed in the previous analysis of keyword section, so we do not repeat them here.

The word “health” is mostly used to express the “health committee”, which leads to its opinion (see Figure 18). It reflects that the news focuses on the reporting of authoritative organizations and experts' opinions so as to reflect the characteristics and development of Guangzhou's urban construction in the period of Covid-19 pandemic.

File	Left Context	Hit	Right Context
1 Global ...	and the risk of community transmission was high, the local	health	commission said at Thursday's press conference. Also, the
2 Global ...	Chen Bin, Deputy Director and spokesperson of the Guangzhou City	Health	Commission said at a press conference held by the
3 Global ...	On Friday's press conference, officials from the city's	health	commission said as of Thursday midnight, a total of 339
4 Global ...	had been administered across China as of Sunday, the National	Health	Commission said Monday. Photo: crsphoto Two districts in Guangzhou
5 Global ...	work and production. At the press conference, the Guangzhou Municipal	Health	Commission said that it is further optimizing five prevention
6 Global ...	baby boy, the video exposed. A staffer from a local	health	commission said the commission will crack down on these
7 Global ...	international arrivals every day, according to Duan Yufei, director of	Health	Commission of Guangdong Province. In particular, Guangzhou, where one
8 Global ...	the shortage of nucleic acid testing staff in Guangzhou, the	Health	Commission of Guangdong Province began on Saturday to deploy
9 Global ...	has arrived, without a possibility of another major outbreak. The	Health	Commission of Guangdong Province said on Wednesday that no
10 Global ...	accounting for 5.8 percent, Zhang Yi, deputy director of the municipal	health	commission of Guangzhou said at a Monday press briefing.
11 Global ...	city for five consecutive days starting Monday. According to the	Health	Commission of Hebei Province, two new cases of COVID-19
12 Global ...	Province, with 14 flying from Bangladesh and three from India. Guangdong	health	commission on Sunday also reported four asymptomatic cases, three
13 Global ...	landing city, according to an official release from Guangzhou Municipal	Health	Commission on Tuesday. The official release did not reveal
14 Global ...	cases were reported on Tuesday, according to the Guangdong provincial	health	commission on Wednesday. "Although this is the first time

Figure 18 Part of Index Lines of “Health”

5.2.4 Analysis of adjectives

The last category is adjectives. In addition to the high-frequency adjective new, words “high” “local” and “international” are in the 15th, 16th, and 17th places respectively. “High” is mainly used in a variety of expressions. To begin with, it is used to express high - speed railway (see Figure 19), to elaborate the achievements and important impacts of the construction of high - speed railway, and to reflect that the epidemic has not hindered the development of China's high-speed railway. Moreover, as an outstanding achievement in China's transportation, high - speed railway has always been the focus of news reports.

File	Left Context	Hit	Right Context
1 Global ...	hat helped understand the situation. <Congjiang section of Guiyang-Guangzhou	high-	speed railway in Guizhou> By Global Times Published: Mar 05, 2020 12:09
2 Global ...	train runs on the Congjiang section of the Guiyang-Guangzhou	high-	speed railway in Congjiang County, southwest China's Guizhou
3 Global ...	in a tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in southwest China's Guizhou Province, Sept. 3, 2020. (
4 Global ...	in a tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in southwest China's Guizhou Province, Sept. 3, 2020. (
5 Global ...	train is seen on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in south China's southwest China's
6 Global ...	in a tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in southwest China's Guizhou Province, Sept. 3, 2020. (
7 Global ...	and inspection work on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in southwest China's Guizhou Province, Sept. 2, 2020. (
8 Global ...	in a tunnel on Rongjiang-Congjiang section of Guiyang-Guangzhou	High-	speed Railway in southwest China's Guizhou Province, Sept. 3, 2020. (
9 Global ...	billion passenger trips have been made on the Beijing-Guangzhou	high-	speed railway since it went into operation ten years
10 Global ...	billion passenger trips have been made on the Beijing-Guangzhou	high-	speed railway since it went into operation ten years
11 Global ...	billion passenger trips have been made on the Beijing-Guangzhou	high-	speed railway since it went into operation ten years
12 Global ...	billion passenger trips have been made on the Beijing-Guangzhou	high-	speed railway since it went into operation 10 years ago,
13 Global ...	high-speed rail network in China, the 2,298-km Beijing-Guangzhou	high-	speed railway is closely connected with 12 other high-speed
14 Global ...	high-speed rail network in China, the 2,298-km Beijing-Guangzhou	high-	speed railway is closely connected with 12 other high-speed

Figure 19 Part of Index Lines of “High-Speed”

Example 17: The operation speed of high-speed railway connecting Beijing with Guangzhou, South China's Guangdong Province, will be gearing up to 350 kilometers an hour (km/h) in June, the China Railway announced on Friday (from *Global Times*, May 13, 2022).

Secondly, “high” is also often used with “risk” to indicate high-risk areas (see Figure 20), emphasizing the nucleic acid testing and epidemic prevention and control in high-risk areas of Guangzhou, reflecting the focused and targeted prevention and control of the epidemic in Guangzhou. Thirdly, “high” is often paired with “quality” to emphasize the requirements of high-quality economic development and high-quality life protection.

Example 18: Chen said that the city will continue implement high- quality development in the financial sector ... (from *Global Times*, November 22, 2020)

File	Left Context	Hit	Right Context
55 Global ...	travel and contact history. As of Tuesday, Guangzhou has two	high-	risk areas and nine medium-risk area. <Guangzhou tests 16
56 Global ...	announcement. Guangzhou travel groups will not head to middle- and	high-	risk areas and will not accept applicants who had
57 Global ...	Of the examinees in the city, 819 students are located in	high-	risk areas or centralized medical management areas, or need
58 Global ...	are discovered in local communities and others are discovered in	high-	risk areas or among people who are under quarantine.
59 Global ...	remained unaffected. As of 10 am on Sunday, Guangzhou still presents 42	high-	risk areas and 64 medium-risk areas, according to media
60 Global ...	the only city in the Chinese mainland that currently has	high-	risk areas for COVID-19. Guangzhou has made full preparations
61 Global ...	statement also required those who have been to COVID-19 medium-	high	risk areas in China to go through 14-day quarantine
62 Global ...	at a press conference on Wednesday. The measures include delineating	high-	risk areas scientifically and accurately, carrying out epidemiological investigations
63 Global ...	work on a regular basis,” Yang noted. Guangzhou has two	high-	risk areas, both in Liwan district, and 11 medium-risk
64 Global ...	Guangzhou were lifted from lockdown on Monday, Guangzhou has two	high-	risk areas, both in Liwan district, and 11 medium-risk
65 Global ...	The city has closed all agricultural markets in medium and	high-	risk areas, as well as closed and controlled management
66 Global ...	general duty and fever clinic, and ensure that people in	high-	risk areas, isolation sites, home quarantine and health monitoring
67 Global ...	masks after entering the venue, but students from medium- or	high-	risk areas, or those taking the exam in isolation
68 Global ...	undergo any quarantine upon arrival as they were not from	high-	risk regions and arrived before the tightened policy. The

Figure 20 Part of Index Lines of “High-Risk”

The word “local” is mainly used to express the local health authorities, government, and people (see Figure 21). For example, Guangzhou has tightened anti-epidemic measures in parts of the city to curb the recent COVID-19 resurgence, local authorities said Tuesday. It reflects that the news focuses on the interviews with local authorities and people and cares much about the ideas from local people, so as to get more comprehensive and reliable news content. Specifically analyzing the local people's evaluative discourse, it is found that the people of Guangzhou express their trust and support for the Guangzhou government's ability to manage and cope with the epidemic, and still feel a sense of well-being under the influence of the epidemic.

File	Left Context	Hit	Right Context
1 Global ...	of 98 percent, according to flight information provider Flight Master. The	local	health authorities also announced that eight districts in Guangzhou
2 Global ...	WeChat account of Guangzhou Good World Plaza on Saturday, and	local	health authorities asked those who had visited the Starbucks
3 Global ...	all office workers in the building were asked by the	local	health authorities to take a free nucleic acid test
4 Global ...	code owner reports symptoms through the code system, communities and	local	health authorities will receive the information and carry out
5 Global ...	the virus to a three-year-old boy in Jieyang.	local	health authority previously said. So far, some 197 close contacts
6 Global ...	fresh COVID-19 infection in Guangzhou was both fast and strong.	local	health authority said. Guangzhou's fresh COVID-19 infections have
7 Global ...	a baby boy, the video exposed. A staffer from a	local	health commission said the commission will crack down on
8 Global ...	clear, and the risk of community transmission was high, the	local	health commission said at Thursday's press conference. Also,
9 Global ...	Wang. Guangzhou has finished 67,399 beds so far. According to the	local	health commission, Guangzhou reported 8,761 COVID-19 cases on Wednesday a
10 Global ...	rapid transfer of patients and close contacts. According to the	local	health commission, there are 6,006 cases in hospitals as of
11 Global ...	didn't make her the original source of infection, as	local	health officials had said she may have become infected
12 Global ...	Guangzhou were highly homologous, all from variants detected in India,	local	health officials had said earlier. Mutant strains of COVID-19
13 Global ...	tests in any fever clinics of medical institutes, according to	local	health authorities. Global Times <Turning point for Guangzhou with
14 Global ...	for a predicted epidemic peak in early January in 2023, a	local	health official said on Monday. Since December, the number

Figure 21 Part of Index Lines of “Local”

Example 19: Although the latest outbreak in Guangzhou slowed down the pace of the metropolis, most local residents still felt the city's strong management abilities and humane care (from *Global Times*, November 10, 2022).

This shows that the Guangzhou government cares for and loves its people, and it is good at management, and the people of Guangzhou live happily.

Words that go with “international” include: airport, health station, bus station, medical protective supplies fair, passenger, etc.

Example 20: The top epidemiologist revealed that the international health station that Guangzhou plans to build will cover an area of 250,000 square meters with 5,000 independent rooms in accordance with strict quarantine standards to prevent cross infection, Zhong said (from *Global Times*, June 26, 2021).

Guangzhou, as an important city in China's economic opening to the outside world, gathers foreign friends from all over the world and has a large population, thus making it more difficult to prevent and control the epidemic. However, Guangzhou has been able to build international medical stations and quarantine zones to strictly control the spread of

the epidemic, and at the same time provide adequate medical protection for foreigners to ensure that they can receive basic livelihood services in the city. Overall, the image of Guangzhou constructed by *Global Times* is that of a positive, people-centered metropolis.

5.3 Socio-Cultural Factors in Shaping City Image

To sum up, *Global Times* has shaped Guangzhou's city image into three main features: first, a positive and pragmatic, diligent and tenacious image, which is mainly reflected in the pursuit of high-quality development and the tenacious resistance to the epidemic; second, a people-centered image with a strong sense of serving people, which is mainly found in the strict protection of people's living needs; and, third, a city image of an international open and friendly metropolis, which is reflected in the fact that Guangzhou accommodated many foreigner and provided help to them in the epidemic. The construction of these three characteristics is mainly related to the idea of China's development, the purpose of *Global Times* and Guangzhou's urban culture.

First of all, China's people-centered development thought greatly affects the shaping of Guangzhou's city image. President Xi Jinping emphasized that the broadest and deepest foundation of comprehensively advancing the rule of law is the people, and that it must be adhered to for the sake of the people and rely on the people. When in face of the difficulties of the epidemic, Guangzhou resisted the pressure, was calm and steady, and cooperated fully from the top to the bottom. We can see from the prevention and control of the epidemic that Guangzhou attaches great importance to the protection of people's livelihood, demonstrating its resilience and the glory of its good and gentle human nature; at the same time, the people of Guangzhou also demonstrated that they were united as one, trusted the government and fully supported and cooperated with the government's work. With the joint efforts of the government and the people, the epidemic in Guangzhou can be controlled in a more stable manner, and on this basis, the people's livelihood and economic construction can be strengthened, demonstrating the image of Guangzhou as a people-centered city.

Secondly, as the only newspaper that conveys comprehensive news to foreign countries in line with China's basic national conditions, *Global Times* adheres to the tradition of reporting which are objectiveness, sensitiveness, and without avoidance of sensitive issues, to show the world the rich, complex and changing China, as well as to report the world from the perspective of the Chinese people, and to convey the stance and views of the Chinese people on major international issues. Therefore, *Global Times* objectively describes the real situation of Guangzhou's urban development during the Covid-19 pandemic, including the situation of new cases, problems in economic development, etc., and does not shy about showing the obstacles that the epidemic has brought to the development of Guangzhou and the difficulties arising from the epidemic; at the same time, it also shows the efforts that Guangzhou has made for the development of Guangzhou under the epidemic, including: infrastructure construction, taking measures to accurately prevent and control the epidemic, etc. Therefore, the reports with the theme of the epidemic are not only the affairs reports on that background of the society, but also the recognition and support to the efforts made by Guangzhou as a city to resist the epidemic, and show the image of Guangzhou as a city that actively resists the epidemic and is pragmatic energetic and motivated.

Finally, Guangzhou itself is characterized by a spirit of tolerance, openness, flexibility and pragmatism. As a pioneer in China's reform and opening up, Guangzhou has been one of the most important ports for China's opening up to the outside world since ancient times, attracting business, culture and talents from all over the world. At the same time, Guangzhou upholds the belief of openness and friendliness to foreign travelers and businessmen, promoting cultural exchanges and economic development between China and abroad. In addition, the people in Guangzhou, who live in the water town, are both gentle and resilient in the face of difficulties. Therefore, in the face of the epidemic, the people in Guangzhou demonstrated a positive and optimistic mindset, at the same time cooperating strongly with the work of the government to combat the damage of the epidemic. In addition, Guangzhou is home to young people from all over the country, who work hard and spend their years in Guangzhou with passion and determination, making the city vibrant and full of vitality.

5.4 Strategies for Constructing Guangzhou's City Image

According to the above research, the following summarizes the strategies of Guangzhou's city image in news report: firstly, we should be good at using positive words to praise the progress and development of the city, and people's labor and sweat; secondly, we should narrate the news from multiple perspectives, and interview local people, such as experts, government staff, working people, etc., so as to ensure the comprehensiveness and truthfulness of the report, and to shape a more three-dimensional and rich Guangzhou; finally, we should not only focus on showing the city's image in diverse fields, such as transportation construction, cultural exchanges, and economic construction, but also seize the city's characteristics, highlight the city's advantages, and show the world the city's unique charms, such as the open and friendly characteristics of the coastal city of Guangzhou, which is shown in *Global Times*.

6 CONCLUSION

6.1 Characteristics of Guangzhou's City Image Construction

This paper adopts a corpus method to analyze *Global Times'* news reports about Guangzhou during the Covid-19 pandemic from the perspective of keywords and high-frequency words, summarizing the focuses and linguistic features

of the reports, and analyzing Guangzhou's city image on this basis. It is found that *Global Times'* news reports on Guangzhou are characterized by three main aspects. First, *Global Times'* news coverage of Guangzhou focused on three major themes: current events around Guangzhou, the Covid-19 pandemic and transportation; second, it focuses on conveying the views and attitudes of the people involved in the event, especially the authorities such as the government or experts; third, it chooses positive and affirmative vocabulary to describe the city of Guangzhou, reflecting the affirmation and praise for the city of Guangzhou. The portrayed image of Guangzhou as a city includes features such as positive and pragmatic, tenacious and hardworking, people-centered, open and friendly.

6.2 Limitations and Future Directions of the Research

It is necessary to point out that this paper only analyzes the characteristics of news discourse for keywords and high-frequency words. However, the analysis of news discourse can also be studied in terms of syntax, part of speech and semantics.

COMPETING INTERESTS

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