

Construction of the Guangdong–Hong Kong–Macao Greater Bay Area City Image in the Eyes of the Media Corpus Study

Juan Liu ^{1,*}

¹ Guangdong Police College, Guangzhou, Guangdong, 510000, China

* Correspondence: Juan Liu, Guangdong Police College, Guangzhou, Guangdong, 510000, China

Abstract: Drawing on the NOW (News on the Web) corpus and integrating quantitative and qualitative methods, this paper investigates how news discourse constructs the city image of the Guangdong–Hong Kong–Macao Greater Bay Area (GBA) of China (for brevity, the country name “China” is omitted in subsequent references). Framing theory is employed to compare the “home” narratives produced by Guangdong media with the “external” narratives circulated by overseas outlets. The findings reveal that the GBA’s global image is co-produced by two complementary forces: (1) the self-representation of Guangdong media anchored in local perspective and (2) the external representation projected by foreign media. The study recommends intensifying cross-cultural communication and refining multimodal communication strategies so that a more positive and coherent GBA image can be circulated on the world stage.

Keywords: city image shaping; media corpus; framing theory; Guangdong–Hong Kong–Macao Greater Bay Area

1. Introduction

In the era of global economies, the creation and circulation of city images has become a prerequisite for regional development. GBA as China’s southern gateway linking nine Guangdong municipalities with Hong Kong, China and Macao, China—has moved to the forefront of national and global competition in terms of economic scale, technological innovation and international competitiveness. The 2019 Outline Development Plan for the GBA was released, which clarified the development goals, spatial layout, and key tasks of the Greater Bay Area. It seems that the construction and dissemination of GBA urban image are increasingly receiving international attention. The shaping of urban image relies on the dissemination and reporting of news media, which constructs and shapes the urban image through diversified narrative strategies and media techniques [1].

News media often use framework theory to provide a basis for constructing specific urban images. News media shapes a city image that is in line with its values and interests by foregrounding certain facts while backgrounding others. Therefore, analyzing the relationship between media coverage and urban image is of great significance for enhancing the construction of city image. As a result, this study will analyze the commonalities and differences in media report under different cultural backgrounds, and explore how cultural factors affect media reporting and public perception.

2. Research Design and Theoretical Framework

2.1. Corpus-Based Critical Discourse Analysis

With the help of corpus sorting, annotation, retrieval, and statistical analysis, we can calculate the density of keywords, high-frequency vocabulary, related collocations, and core keywords. The results provide objective and scientific data support for the international communication of urban image [2]. This article adopts the interdisciplinary research method that combines linguistics with communication studies, and uses the NOW corpus

Published: 15 October 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

to retrieve English-language reports on the GBA from local media in Guangdong Province and 20 countries since 2019. Research encodes and quantifies news texts through keyword search conducting quantitative analysis.

2.2. Data Screening

In the analysis of media reports in the GBA with corpus method, the article reveals the characteristics of expression frequency, list, collocation words, and keywords, and conducts quantitative statistics and analysis on them.

2.2.1. Frequency analysis

In the search interface of the NOW corpus, the keywords "City identity/image" (chengshi xingxiang), "Region/Regional/Area" (quyu), "Greater Bay Area" (dawanqu), and "Guangdong-Hong Kong-Macao" (Yuegangao) were entered. The date filtering criteria were set from January 1, 2019, to December 31, 2023, yielding a total of 5,688 index records. These records were then imported into an Excel sheet, excluding data related to other countries and retaining only the data related to Guangdong, Hong Kong, China and Macao, China. Ultimately, 2369 indexes were selected. Next, these index records were classified and annotated according to the time and geographical source of reporting. Considering that there were relatively few indexes from other countries, the classification focused mainly on the three regions: Guangdong, Hong Kong, China and Macao, China.

2.2.2. List Chart

This article categorizes and labels the selected records according to the time and geographical source of the reports, and creates a list mainly classified and organized according to the three regions of Guangdong, Hong Kong, China, and Macau, China, in order to more intuitively observe the differences and characteristics of media in different regions in constructing the image of the Greater Bay Area.

2.2.3. Collocates

The collocation analysis revealed the co-occurrence relationship of keywords "City identity/image", "Region/Regional/Area", "Greater Bay Area", and "Guangdong Hong Kong Macao" in the corpus. Through analysis, we found that some high-frequency collocations, such as "economic growth," "cultural diversity," and "technological innovation," are frequently associated with the image of the Greater Bay Area, reflecting the focus of media attention in shaping the image of the Greater Bay Area.

2.2.4. Keywords

Keyword analysis helps us identify the most representative and influential vocabulary in reporting on the GBA. Through statistics, we found that words such as "integration," "development," and "cooperation" frequently appear, which not only reflect the development trend of the Greater Bay Area, but also highlight the importance of regional cooperation.

2.3. News Framework Theory

Communication scholar G. Tuchman introduced the concept of "framework" and proposed the theory of "news as a framework", emphasizing that the news framework is a set of standard systems that journalists rely on the value of information and produce news. Mass media sets specific framework preferences based on their own structural rules, professional guidelines, business strategies, and expectations of the audience, which influence readers' understanding and discussion of social issues. R. Entman defined framework theory as a research paradigm, which has been widely introduced into academic research in communication studies. This article will explore the image shaping of the

Greater Bay Area and the framework strategies adopted from the content analysis. Therefore, this article will start from the framework theory, compare the image shaping of cities in the Greater Bay Area from both local and external perspectives, and explore the influence of local and external media on city image.

3. Findings

The article quantitatively analyzes the media about GBA in the NOW corpus, aiming to compare the stance and effects of news dissemination, as well as how local media shapes the influence of Lingnan culture on city image, and explore the external media shaping urban image under cross-cultural influence [3].

3.1. Frequency difference in reporting

By searching for keywords in the NOW corpus, the article observed that after the State Council issued the "Outline of the Development Plan for the Guangdong Hong Kong Macao Greater Bay Area" in February 2019, the media's attention to the development of the region rapidly increased, and the number of reports reached its peak. However, due to the impact of the COVID-19 in 2020, the focus of media reports will shift to epidemic prevention and control, which will reduce the discussion on the GBA. Analyzing the frequency of reports from 2019 to 2023, it was found that media in Guangdong Province, such as Southern Daily, Guangzhou Daily, Yangcheng Evening News, Southern Metropolis Daily, and Southern Net, showed fluctuating rise in their reporting frequency during 2019, reaching a peak of 1107 times in 2019; After 2019, there was a significant decrease in the frequency of reporting, with the decrease of 86% in 2022. From 2019 to 2023, the annual reporting frequency remained in the range of 120-1100 times, showing a wide range of fluctuations. During the same period, a total of 23 overseas media reported on the Greater Bay Area, ranking the highest in terms of the number of reports in 2019 and 2023, with the rest decreasing in order. The article conducted a frequency analysis of news reports mentioning the Greater Bay Area in Hong Kong, China and Macau, China, media such as the South China Morning Post, Ming Pao, Hong Kong Economic Daily, Ta Kung Pao, Macau Daily, Overseas Chinese Daily, and Xinhua Macau News. As shown in the figure below, the overall number of media reports on the Greater Bay Area is on the rise in 2023, indicating that the international influence of the Greater Bay Area continues to expand and its development is attracting worldwide attention [4]. The detailed distribution of media reports across different cities from 2019 to 2023 is shown in Table 1.

Table 1. Statistics of the Number of Media Reports.

City	2019	2020	2021	2022	2023	Total
Guangzhou	56	48	23	17	37	181
Shenzhen	159	90	35	14	53	351
Foshan	108	27	32	9	42	218
Zhuhai	14	7	21	11	34	87
Dongguan	13	35	20	15	40	123
Huizhou	121	53	11	23	56	264
Jiangmen	167	75	16	9	43	310
Zhaoqing	254	25	22	20	90	411
Hong Kong	115	32	11	12	91	261
Macao	100	36	21	11	40	208
Total	1107	428	212	141	486	2414

Analyzing the frequency of media report from 2019 to 2023, it was found that the frequency of media report in Guangdong Province showed a fluctuating upward trend during 2019, reaching a peak of 1107 times in 2019; After 2019, there was a significant decrease in the frequency of reporting, with the decrease of 86% in 2022. From 2019 to

2023, the annual reporting frequency remained in the range of 120-1100 times, showing a wide range of fluctuations. (As shown in Figure 1 and Figure 2).

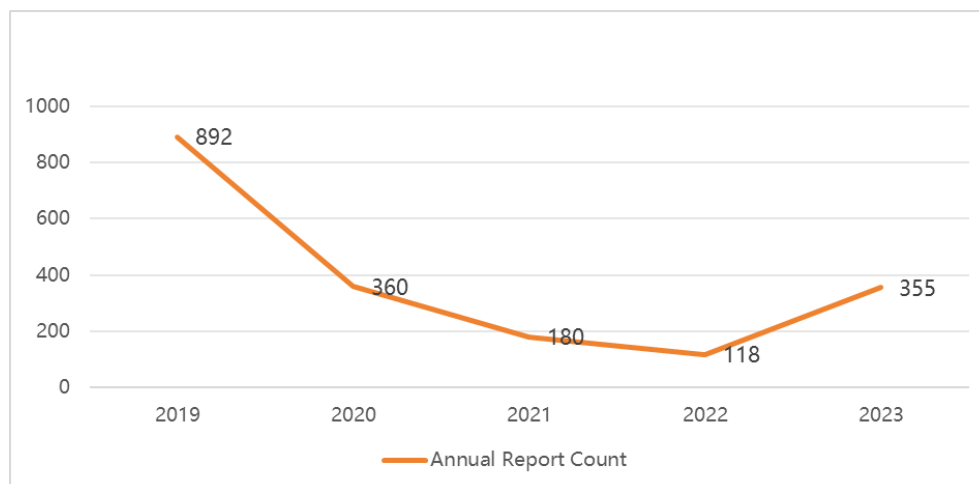


Figure 1. Changes in Frequency of Local Media Reports.

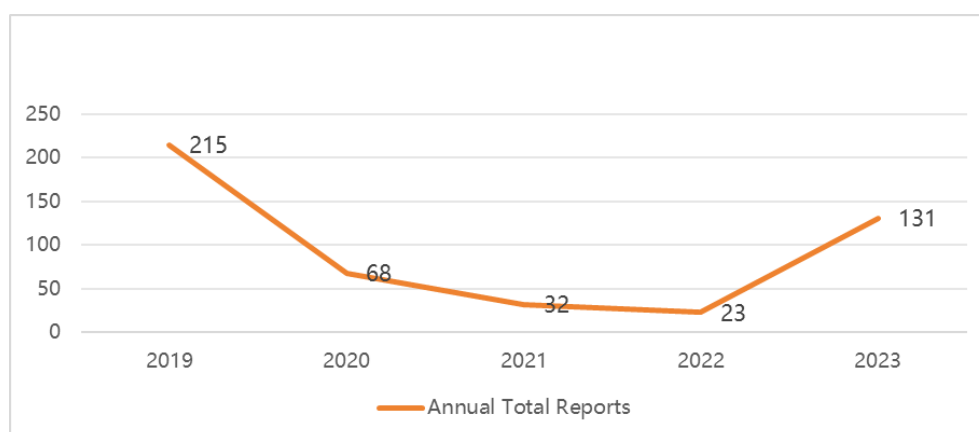


Figure 2. Changes in Frequency of External Media Reports.

3.2. Collocation Patterns

Collocation words are the object of corpus, which can provide objective basis for discourse analysis. The study of collocation words cannot only reveal the regularity of language use, but also has important significance for understanding the semantic evolution and language style in specific contexts. In the field of news reporting, collocation analysis helps identify keywords and high-frequency vocabulary in the report, thereby revealing the core issues and tendencies of the report. Therefore, this study conducted a collocation search with the condition that there were 6 words before and after the theme word, and the time span was from January 2019 to December 2023. The results of the collocation analysis are presented in Table 2 and Table 3, which respectively show the collocation lists of local media reports in Guangdong and those of media in Hong Kong, China and Macao, China. These data help reveal the different focuses and discursive tendencies in the construction of the Greater Bay Area's urban image under varied cultural backgrounds.

Table 2. List of collocations for local media reports in Guangdong.

Ranking	Collocations	Frequency	Percentage	MI
1	province	89	1.02%	10.89
2	bridge	73	0.88%	8.23

3	south	73	0.88%	8.01
4	world	70	0.85%	7.55
5	development	70	0.85%	7.45
6	open	68	0.81%	6.19
7	government	63	0.80%	7.21
8	management	56	0.75%	6.81
9	cross-cultural	51	0.70%	6.21
10	life	43	0.65%	4.13
11	non-local	41	0.62%	4.80
12	city	31	0.55%	3.32
13	region	28	0.47%	3.11
14	special	22	0.40%	4.01
15	the longest	22	0.40%	4.23
16	industrialized	21	0.39%	2.21
17	investment	20	0.36%	3.21
18	communication	20	0.36%	2.21
19	economy	19	0.34%	1.45
20	reform	19	0.34%	3.80

Table 3. List of collocations for media reports on Hong Kong, China and Macau, China.

Ranking	Collocations	Frequency	Percentage	MI
1	economic	64	1.22%	10.89
2	developing	61	1.08%	8.23
3	cooperation	61	0.98%	8.01
4	innovation	60	0.86%	7.55
5	technological	60	0.85%	7.45
6	financial	59	0.81%	6.19
7	chance	54	0.80%	7.21
8	potential	47	0.71%	6.81
9	prosperous	42	0.65%	6.21
10	challenge	33	0.62%	4.13
11	competitive	32	0.60%	4.80
12	global	22	0.52%	3.32
13	market	19	0.44%	3.11
14	investment	13	0.41%	4.01
15	travel	13	0.40%	4.23
16	policy	12	0.40%	2.21
17	business	11	0.40%	3.21
18	communication	11	0.38%	2.21
19	commercial	10	0.36%	1.45
20	industry	10	0.36%	3.80

The analysis of the collocation list in Table 2 not only reveals the keyword preferences of Guangdong media in reporting on the Greater Bay Area, but also through comparison on the timeline, the evolution of reporting focus can be observed. For example, the high-frequency combination of "Guangdong Province", "Bridge", and "South" may indicate a reporting tendency towards infrastructure construction and Lingnan cultural characteristics in the Greater Bay Area.

In addition, the frequencies of "world", "development", "openness", "government", and "management" are 0.75% -0.85%, indicating that Guangdong media not only focus on local development when reporting on the GBA, but also emphasize its position in the global economy, and the role of the government in regional development.

Table 3 selects 20 collocation words that have appeared more than 10 times in the Greater Bay Area, with "Greater Bay Area" and "Guangdong Hong Kong Macao Greater Bay Area" as node words. We found that the frequency of "economy," "development," and "cooperation" is 0.98% -1.22%, indicating that external media has given high attention to the economic development and regional cooperation of the Greater Bay Area. In addition, the frequency of "innovation," "technology," and "finance" ranges from 0.81% to 0.86%, reflecting the media's expectations for financial innovation in the Greater Bay Area. Further analysis shows that the internal media tends to use positive vocabulary in their reports, while foreign media focuses on words such as "challenge" and "competition", highlighting the difficulties and competitive pressures that the Greater Bay Area needs to overcome in its development process [5].

Overall, external media's focus on the GBA is concentrated on economy, technology, and finance, with a tendency towards positive expectations for its future development and attention to current challenges.

3.3. Keyword Contrasts

The analysis of keywords cannot only identify language features, but also reveal the writing attitude hidden between the lines. This analysis is crucial for the media as it helps to reveal how the media shapes public perception of events by selecting specific vocabulary. In addition, keyword analysis can also reveal the ideological tendencies and values of the media, providing important clues for understanding how the media shapes the image of a city. To analyze keywords, this article uses the corpus reports on the Greater Bay Area from January 2019 to December 2023 as research data. The keyword frequency statistics for Guangdong provincial media are summarized in Table 4 below. These keywords reflect the regional focus on economic growth, technological innovation, cultural development, and livelihood improvement in the discourse surrounding the Greater Bay Area.

Table 4. Keyword List Reported by Guangdong Provincial Media.

Terms	Word Class	Frequency	Percentage	Similar Words
Economy	noun	126	24.2%	economy/economic
Technology	noun	113	21.3%	technology/technological
Society	noun	112	21%	society/social
Well Being	noun	110	20.5%	the people livelihood
Culture	noun	110	20.5%	culture/civilization
Urban Agglomeration	noun	107	19.6%	urban agglomeration
International Innovation	noun	106	19.6%	international innovation
Modern Industry	noun	96	18.2%	Modern Industry
Life Circle	noun	91	17.6%	living circle
Open	Adjectives /Nouns	82	16.44%	opening
Cooperation	noun	81	16.4%	cooperation
Development	noun	71	15.33%	development
Finance	noun	68	14.65%	finance/financial/banking
Start a Business	noun	62	14.2%	entrepreneurial
Green and Low-Carbon	noun	62	14.2%	green and low-carbon
Traffic	adjective	61	14.2%	traffic/transportation
Educational	adjective	52	13.34%	educational/education

Regional Coordination	adjective	46	12.21%	regional coordination
Fusion	noun	38	10.23%	integration
One Country, Two Systems	noun	29	8.32%	One Country, Two Systems

The keywords compared to external media reports are as follows (see Table 5):

Table 5. Keyword list for reports on Hong Kong, China and Macao, China.

Terms	Word Class	Frequency	Percentage	Similar Words
Hong Kong	noun	102	1.22%	HK
China (Mainland)	noun	93	1.08%	Chinese
Development	noun	86	0.98%	develop
Macao	noun	78	0.86%	Macau
City	noun	72	0.85%	cities
Guangdong	noun	64	0.81%	Canton
Region	noun	61	0.80%	regions
Bay Area	noun	59	0.71%	Greater Bay Area
Mainland	noun	50	0.65%	
Bridge	noun	45	0.62%	

Note: "Hong Kong" and "Macao" refer to the Hong Kong and Macao Special Administrative Regions of China. "Mainland" refers to Mainland China.

Based on the data in the table, we can further analyze the stance tendencies of media reports and the strategies of media in constructing the city's image. The following is a specific analysis on the local media: the frequent occurrence of economy (24.2%) and technology (21.3%) indicates that news reports tend to emphasize the importance and achievements of the Greater Bay Area in economic development and technological innovation. This reflects the positive evaluation of the media towards the Greater Bay Area as an engine for economic growth and a center for technological innovation. The frequency of social (21%) and livelihood (20.5%) shows the media's emphasis on balancing economic development and social harmony as well as improving residents' quality of life. The emergence of culture (20.5%) and integration (10.23%) indicates that the media emphasizes the importance of cultural diversity and regional integration in shaping the image of the Greater Bay Area, which helps to build a harmonious regional image.

The international community attaches great importance to the development trends of GBA, and its coverage deeply focuses on the unique development path for region and significant achievements in practical fields [6]. The two key words of "development" and "cooperation" frequently appear on the paper, becoming the focus of reports, which fully reflects the high recognition and strong interest of the world in the development model of the GBA urban agglomeration.

3.4. Preliminary Summary

The media has shaped a positive, open, and innovative urban image of the Greater Bay Area by emphasizing keywords such as economic development, technological innovation, social harmony, cultural diversity, environmental sustainability, and regional coordination and cooperation.

- 1) The uniqueness and openness of local Lingnan culture also provide rich cultural resources and profound historical heritage for shaping the urban image of the Greater Bay Area. The integration of traditional culture with modern development not only enhances the international competitiveness of the Greater Bay Area, but also provides a solid foundation for the sustainable development of the region.

- 2) The frequent emergence of terms such as "economic engine", "international cooperation", "financial pulse", "global perspective", "opportunity window", "policy support" and "open attitude" in foreign media reports accurately depicts the core of the GBA city image, and indirectly reflects the expectations of the countries where foreign media are located to achieve political and economic goals. Despite the overwhelming dominance of positive attitude, there are still a few reports that hold negative views. These negative reports mainly focus on the tense relations between China and the United States, as well as concerns about the external economic pressure that the Greater Bay Area may face and its impact on regional economic development. This reflects the differences and complexities in the standpoints of media from different countries.

4. Discussion and Suggestion

After comparing and analyzing the reports of local and external media on the image of the Greater Bay Area, it can be seen that the shaping of the city image is based on two points: the local perspective of Guangdong media shaping itself, and the external perspective of foreign media depicting it. These two points complement each other, jointly shaping and promoting the construction and dissemination of the GBA image [7]. The author provides the following suggestions:

4.1. Strengthen cross-cultural communication

The Greater Bay Area should actively promote the exchange and integration of diverse cultures, providing opportunities for people from different cultural backgrounds to communicate and interact. This can be achieved by organizing various cultural exchange activities, such as international art festivals, cultural festivals, food festivals, etc., to attract people from different countries and regions to participate and promote mutual understanding and integration of different cultures.

4.2. Optimize communication strategy

The Greater Bay Area should innovate communication methods, utilizing new media technologies such as social media, mobile applications, virtual reality, etc., to expand the breadth and depth of communication. For example, posting news, cultural activities, and tourism information about the GBA on social media platforms to attract more attention and interaction from netizen.

4.3. Enrich cultural dimensions

The Greater Bay Area should deeply explore the cultural characteristics of each city and showcase their unique cultural charm and value. For example, we can explore the Lingnan culture in Guangzhou, the innovative culture in Shenzhen, and the integration of Chinese and Western cultures in Hong Kong, China. By organizing various cultural activities, exhibitions, lectures, etc., we can showcase these cultural characteristics to the public. At the same time, it is necessary to strengthen exchanges and cooperation between the Greater Bay Area and the international community, promote the internationalization of the city image, and provide strong support for achieving sustainable development.

4.4. Limitations and Future Research

However, this study is limited by its research perspective and scope, mainly focusing on the coverage of the GBA in mainstream media, and failing to fully cover other forces in the discourse system. Therefore, it is necessary to further broaden the research perspective and include more diverse attitude in future studies, in order to provide scientific theoretical support for the image shaping of the Greater Bay Area through more comprehensive empirical research.

5. Conclusion

This study explores the construction of the Guangdong–Hong Kong–Macao Greater Bay Area (GBA) city image through corpus-based discourse analysis and framing theory. By comparing local and external media reports, it reveals that Guangdong media emphasize economic vitality, cultural diversity, and social harmony, while overseas media focus on innovation, cooperation, and competitiveness. The findings demonstrate that both internal and external perspectives jointly shape a multidimensional, open, and forward-looking image of the GBA.

Future research should further integrate multimodal data, including visual and social media texts, to deepen the understanding of how cross-cultural communication influences the global perception of China's Bay Area development.

Funding: Guangdong Provincial Department of Education Innovative Project, "Comparative Study on the International Image of the Greater Bay Area in Chinese and Foreign Media Discourse" (Project Number: 2022WTSCX081).

References

1. E. Avraham, "Nation branding and marketing strategies for combatting tourism crises and stereotypes toward destinations," *Journal of Business Research*, vol. 116, pp. 711–720, 2020, doi: 10.1016/j.jbusres.2018.02.036.
2. F. Cao, "Engagement resources in the English news texts of two phases in China's constructing Greater Bay Area," *Cogent Arts & Humanities*, vol. 10, no. 1, p. 2243076, 2023, doi: 10.1080/23311983.2023.2243076.
3. Y. Wang, "One Country, Two Perspectives: A Corpus-Assisted Critical Discourse Analysis of Newspaper Coverage of the Greater Bay Area Scheme in Hong Kong and Mainland China," *Journal of Asian and African Studies*, 2024, doi: 10.1177/00219096241275416.
4. E. C. Hui, X. Li, T. Chen, and W. Lang, "Deciphering the spatial structure of China's megacity region: A new bay area—The Guangdong-Hong Kong-Macao Greater Bay Area in the making," *Cities*, vol. 105, p. 102168, 2020, doi: 10.1016/j.cities.2018.10.011.
5. Z. Hou, "China's Greater Bay Area Plan and Hong Kong: how phraseologies represent different voices in the media," *SAGE Open*, vol. 13, no. 2, p. 21582440231178258, 2023, doi: 10.1177/21582440231178258.
6. X. Duan and I. K. W. Lai, "The formation of multi-destination image: A study of China's Greater Bay Area," *Frontiers in Psychology*, vol. 13, p. 975025, 2022, doi: 10.3389/fpsyg.2022.975025.
7. Y. Fan, "Branding the nation: Towards a better understanding," *Place Branding and Public Diplomacy*, vol. 6, no. 2, pp. 97–103, 2010, doi: 10.1057/pb.2010.16.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the publisher and/or the editor(s). The publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.