

# An Analysis of the Current Situation of Hong Kong City Image Communication on YouTube and Research on Strategies

Zhe ZHANG

*Guangzhou College of Commerce, Guangdong, China email: 20122022@gcc.edu.cn*

## Abstract

This research takes the Hong Kong city promotional videos released by China International Television (CGTN) on the YouTube platform as the research object, aiming at exploring the unique performance, influencing factors, and improvement strategies of this promotional videos in international communication. In this paper, Python software was used to obtain the comment data of Hong Kong city's international promotional videos on YouTube platform, and combined with the methods of word frequency measurement and text analysis, semantic network was analyzed. Then a response strategy is proposed from the 5W communication theory (communication subject, communication content, communication channel, communication audience and communication effect). This research focuses on the Hong Kong city promotional videos released by China Global Television Network (CGTN) on the YouTube platform. The study aims to explore the unique characteristics, influencing factors, and potential improvement strategies for these promotional videos in the context of international communication. Using Python, the comment data from these videos on YouTube was collected and analyzed through methods such as word frequency measurement and text analysis. A semantic network analysis was also conducted. Based on the findings, a response strategy is proposed using the 5W communication theory, addressing the communication subject, content, channel, audience, and effect.

**Keywords:** Hong Kong; city image; international communication; semantic network; affective tendency; 5W communication theory

## 1. Introduction

### 1.1 Background of the Research

A good national image influences the construction of cities and the establishment of their image, and the image of cities feeds the national image in the same way.

*The 2016/2017 State of China's Cities Report* proposes to plan the future of China's cities with a global vision, not only the development of global cities will affect the country's world influence and popularity, but also every city that wants to find a place in the forest of the world reconstructs people's imaginations and perceptions of the country and the city (Guo, Chen & Du, 2018). Especially since China hosted the Olympic Games in 2008, people's attention to the image of the city has become higher and higher, and the world's attention to Chinese cities can not be ignored, the construction and development of China's national image and the need for image shaping of each city has become more and more urgent.

As the number of global Internet users continues to grow, the flourishing of international online social media provides more space for city image communication. As the Internet enters the Web 2.0 era, the global social media platforms represented by YouTube, Twitter and Facebook have become the main positions for international social activities to 'happen' and 'speak out'. YouTube is undoubtedly the world's largest video sharing platform with more than 1 billion visits per month, and it is one of the six social media platforms with the largest number of visits from overseas, which means that presenting the national image and the city's image on the YouTube platform creates a complete communication chain of the city's image in an all-rounded, multi-level and deep pattern, and has a forward-looking effect on the presentation of the city's hardware facilities, living environment, humanistic style and spiritual delicacies. It has a forward-looking role and irreplaceable value for showing the city's hardware facilities, living environment, humanistic style and spiritual delicacy.

### 1.2 Significance of the Research

Hong Kong, as an international metropolis, the communication of its city image is not only about economic benefits, but also about the display of cultural soft power. However, the current status of city image positioning and communication is still vague and needs to be further explored. Hong Kong ranks first in *the Report on Building Overseas Communication Power of Chinese Cities in 2021*, which has certain research value in terms of its influence as well as the strength and scope of its

communication (Beijing, 2022). However, the current status of Hong Kong's city image communication on YouTube is all vague, thus requiring a deeper investigation. The study finds that by investigating and exploring the communication status of Hong Kong's international city image on YouTube, and summarizing the international communication ideas of Hong Kong's city image accordingly, it is also inspiring and useful for the external communication of such cities. Therefore, this study is of great practical significance and application value. Through the in-depth analysis of the current situation of Hong Kong's city image communication on YouTube, this paper expects to provide relevant policy makers and practitioners with scientific theoretical basis and practical guidance, with a view to better shaping and communicating Hong Kong's city image in the new media era.

### *1.3 Research Theory*

In *The Structure and Function of Social Communication*, Lasswell constructively put forward the '5W' model of communication, namely 'who', 'says what', 'in which channel', 'to whom', 'with what effect', 'with what effect', 'in which channel', 'to whom', 'with what effect', and 'with what effect'. 'in which channel', 'to whom', 'with what effect', with what effect'. These five elements explain the complete process of communication and play a fundamental role in the subsequent research of communication (Gao, 2008). This paper explores the main body of urban image communication on YouTube, clarifies who is communicating Hong Kong's urban image, and with the prosperity of social media, the range of communicators is also expanding, and then analyses in detail the content of the urban image, which also contains invisible emotional factors and is the presentation of the communicator's attitudinal tendencies. YouTube, as a channel for the communication of Hong Kong's urban image, provides a platform for the publicity of domestic and foreign cities. YouTube, as a channel for Hong Kong's city image to be disseminated, provides a platform for the city to promote itself to the outside world, and the city can make use of the diversified forms of communication in social media to increase the readability of the message, and the forms of communication are also a part of the 'media analysis' extended by the 5W model. YouTube is used by users from all over the world, thus expanding the range of recipients of the city's image in general, and the communicators are also the recipients, and the two are increasingly connected, with the effect of the communication mainly reflected in the degree of attention to the message, the degree of recognition, and the effect of diffusion. Compared with the unidirectional linear communication of the 5W model, the powerful commenting and retweeting functions provided by social media platforms, such as YouTube, increase the feedback link, which is conducive to the 'reproduction' of information content by communicators.

### *1.4 Innovations*

Literature research reveals that there is a considerable amount of literature on city image research, but the research perspective mainly focuses on domestic social media, especially the literature that examines the construction of city image by short videos, while the literature that examines the city's international image is relatively small; most of the literature within the scope of the current research only focuses on the international dissemination of the city's image in a general sense, so this paper conducts a quantitative and qualitative investigation of Hong Kong's city image on YouTube. This paper is a quantitative and qualitative study of Hong Kong's city image on YouTube, which not only enriches the academic exploration of the international communication of Hong Kong's city image, but also expands the research ideas and contributes thoughts or ideas to other studies on city image.

## **2. Research Methodology**

### *2.1 Sample Extraction*

This paper uses python technology for data collection, and investigates and researches the current situation of Hong Kong's city image communication on YouTube through content analysis and case study.

This paper is based on the current situation of Hong Kong's city image communication on YouTube. Taking into account the fact that Hong Kong's ranking in the top one of the domestic cities regarding the influence of international communication and that there being a sufficient amount of data, the overall data selection is from the year of 2019 to the year of 2022. In this study, the Python tool was used to explore the data on YouTube about Hong Kong's city image from 11 October 2019 to 19 December 2022, with 'HongKong' as the keyword, to exclude the Chinese comment samples and focus on the overseas comment samples. Chinese comment samples and focusing on overseas comments, non-English samples (due to small data size and language recognition difficulties), and pure emoji, punctuation and other meaningless symbol samples. In the end, we obtained 100,852 valid audience comment data. The study mainly employs data text analysis and semantic network analysis methods, aiming to investigate the effectiveness of Hong Kong's city promotional videos in international communication as well as improvement strategies.

Table 1. CGTN Hong Kong's international dissemination data on YouTube platforms

Name of the data	First Release Date	Number of views	Number of likes	Number of comments
1. Hong Kong and the Greater Bay Area (GBA): Internationalization and Integration-part 1	24 <sup>th</sup> Nov. 2020	247,447	78	15074
2. Hong Kong youth in Shenzhen: Try the Greater Bay Area	22 <sup>nd</sup> Jun. 2022	3,197	147	525
3. Hong Kong's New Era: Stories From After 1997   CGTN Documentary	19 <sup>th</sup> Dec. 2022	13,959	418	29434
4. Hong Kong youth, here is a Hong Kong history class	11 <sup>th</sup> Oct. 2019	50,008	1287	21818
5. Hong Kong is Building a 2.5M Person City From Scratch	7 <sup>th</sup> Dec. 2021	360,993	9892	18395
6. Hong Kong and the Greater Bay Area (GBA): Internationalization and Integration-part 1	24 <sup>th</sup> Nov. 2020	247,447	78	15606

## 2.2 Category construction

Based on the basic attributes of the YouTube platform and the two categories of concepts, namely the concepts given to communication texts by mass communication and the concepts such as emotions contained in communication texts (Deng, 2021:498), this study follows the rule that a complete YouTube text is a unit, and is based on four aspects, namely, user identity information, tweet content information, tweet interaction information, and tweet emotion information, according to YouTube's available information sources are encoded. The user identity information includes the user's positioning, identity and influence; the tweet content information contains the tweet content and multimedia information; the tweet interaction information is mainly about the dissemination effect, audience comments, including likes, comments, retweets, and audience comments on the Top5 texts; the tweet sentiment information is mainly related to the sentiment tendency, including positive, neutral and negative categories. The latest version 0.16.0 of TextBlob, an open source library based on the Python programming language, produces two values of 'Polarity' and 'Subjectivity'. The two values are 'Polarity (or positive and negative emotions)' and 'Subjectivity (subjectivity)', where a Polarity of 0 is neutral (neither positive nor negative), a positive value (maximum of 1 and greater than 0) is positive (i.e., love, liking, recommending, approving, admiring, worshipping, etc.), and a negative value (minimum of -1 and less than 0) is negative (i.e., resisting, antipathy, sarcasm, complaining, hatred, etc.), (i.e., resistance, antipathy, sarcasm, complaint, hatred, etc.). The above categories are basically in line with the 5W model and its extended theoretical content.

## 3. Analysis of the Current Status of Hong Kong City Image Communication on YouTube

### 3.1 Semantic Network Analysis of Overseas Audience Comments on Hong Kong Cities

After word frequency cleaning and statistical processing of overseas audience's comments on Hong Kong city promotional videos, we installed 'Java11 for Windows' and imported the data into the data visualization software 'Gephi 0.10.1' to draw semantic network maps based on co-occurring words and to summarize the main issues arising from overseas audience's comments on the sample documentaries. The data was imported into the data visualization software 'Gephi 0.10.1', and a semantic network diagram based on co-occurring words was drawn.

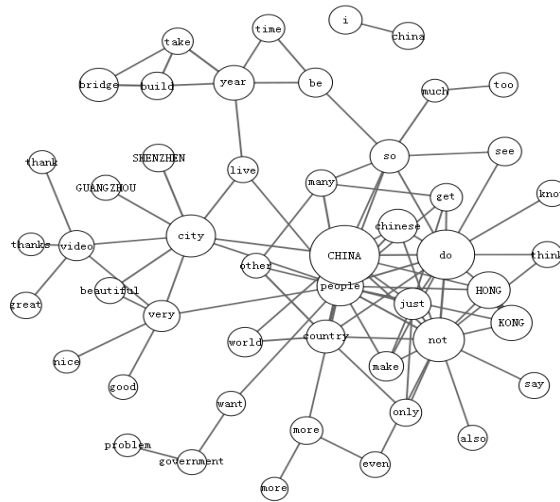


Figure 1. Semantic network diagram of the ‘Hong Kong People, Events and Situations Discussion’ framework.

In the network graph, there are several nouns that have the highest node degree values, they are ‘people’ ‘China’ ‘city’ ‘do’ ‘not’ ‘Chinese’ ‘country’ ‘bridge’ ‘beautiful’, and ‘great’. The magnitude of the degree values of these nodes can be seen that the degree values of the nodes are not only related to the word frequency, but also consistent with the emotional tendency of the audience. This suggests that the comments are generally positive and more focused on the Hong Kong crowd. Moreover, the comments are not only limited to evaluating people and events in Hong Kong-related news events, but also cover broader topics such as government administration. The most important node word in the center is ‘China’, and the most closely related node word is ‘people’, with the word ‘people’ in the densest network relationship. The word ‘people’ is in the densest network relationship. This shows that Hong Kong’s participation in the construction of the Greater Bay Area is beneficial to the local people, with the ‘motherland’ as the background for the construction.

### 3.2 Analysis of the Emotional Tendencies of Hong Kong City's Overseas Audience

In this paper, the sentiment annotation of the corpus based on the latest version 0.16.0 of TextBlob, an open-source library in Python programming language, produces two values of ‘Polarity’ and ‘Subjectivity’, where Polarity (sentiment value) of 0 means the sentiment is neutral (neither positive nor negative), and the sentiment value is positive (neither positive nor negative). The two values are ‘Polarity (sentiment value)’, where a Polarity of 0 is neutral (neither positive nor negative), a positive value (maximum 1 and greater than 0) is positive (i.e., love, like, recommend, approve, admire, worship, etc.), and a negative value (minimum -1 and less than 0) is negative (i.e., resistance, resentment, sarcasm, complaint, hatred, etc.), sarcasm, complaint, hatred, etc.). At the level of comment entries, the overall percentile values of the database for the proportion of positive entries, the proportion of negative entries, the proportion of neutral entries, and the proportion of subjective entries. The following results were obtained after importing nearly 2188 audience comments on Guangzhou city promotional films into the sentiment analysis runtime code: 56.7% of the entries with positive comments (Sentiment polarity>0); 30.94% of the entries with neutral attribute comments (Sentiment polarity=0); 30.94% of the entries with negative attribute comments (Sentiment polarity<0) accounted for 12.31%, and Subjective polarity<0) accounted for 73.11% (see Figure 2). It can be seen that overseas audiences' emotional responses to this Guangzhou city film are mainly positive and neutral, while there are also 12.31% of negatively inclined comments.

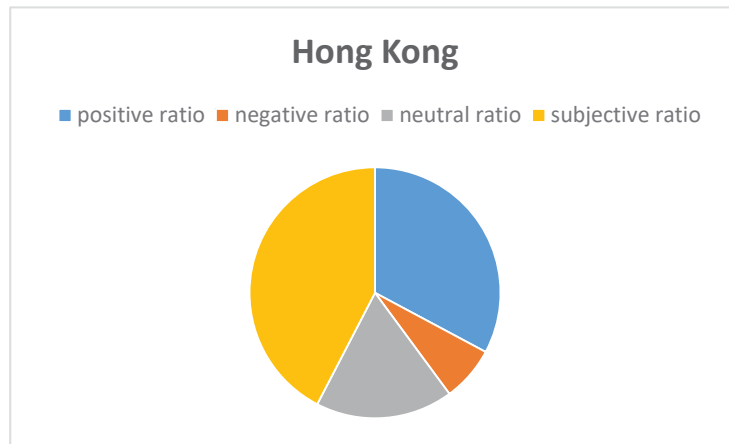


Figure 2: The emotional attitude towards the Guangzhou city promotional video

#### 4. Strategies for Improving the International Image of Hong Kong Cities

Hong Kong city's international communication has not only gained favorable comments from overseas audiences, but also a certain proportion of negative comments, which indicates that there is still room for improvement in the relevant Hong Kong city's international communication work. Based on the above problems, the following improvement strategies are designed in a targeted manner.

##### 4.1 Constructing a diversified outreach organization

YouTube is the world's leading video-sharing platform, and the dominant domestic voice in this field comes mainly from official media and a limited number of organizations and individual accounts. Nonetheless, there is a scarcity of Chinese media entities that are truly capable of exerting a wide-ranging communication effect and far-reaching influence on the international scene. Currently, the official-dominated communication model leads to a clear distinction between content and style, and this monolithic communication often leaves a question mark over the audience's acceptance of propaganda films. In order to break this pattern, we need to identify and motivate more civil society groups and individuals to enter into the creation and dissemination of promotional videos, and support those organizations that have the potential and strength to share more quality content (Green & Gredler, 2002:59-61). Particularly in the case of international communication of Hong Kong's city image, it is crucial to build a diverse group of communicators and to enhance the creative drive and capacity of all parties. Such a shift will not only drive more creative talents and organizations to join the cause of international communication of Hong Kong's and even China's culture, but also leverage on their unique perspectives and modes of expression to showcase Hong Kong's story to the world. On this basis, we should make unremitting efforts to broaden the horizons of the communicators, so that they are no longer confined to building up an image of Hong Kong or China, but extend to the whole grand blueprint of international communication. Cultivating such a body of communicators will ensure that we can build a more proactive image of China in the international arena, and create a group of international communicators who can convey China's voice and show China's style. This is a cultural self-renewal and a new chapter in conveying China's story to the world.

##### 4.2 Constructing the Concept of a "Community with a Shared Future for Mankind": Content and Audience Model for Dissemination"

Against the backdrop of deepening global integration, the concept of building a 'community of human destiny' has become more and more crucial. This concept seeks to gradually dissolve cultural barriers between nations through the bonds of empathy and information exchange, and to expand mutual understanding and respect. Instead of pursuing total cultural assimilation, we should embrace diversity and the wisdom of 'harmony and difference'. Through the bridge of empathy, we can not only dispel irrational stereotypes, but also stimulate intercultural dialogue and mutual understanding (Franco & Ortiz, 2020). The 'community of human destiny' not only inherits the profound heritage of traditional Chinese culture, but also integrates the essence of the Western Enlightenment era's concepts of the supremacy of reason and sociability. The concept is not only a modern elaboration of ancient Chinese wisdom, but also a deep insight into the current structure of the 'nation-state'. It rejects the Western hegemonic approach whereby national power determines the map of influence, and advocates a new paradigm of international relations based on morality and justice - the 'Way of the King'. It encourages dialogue among nations on an equal footing, eschews confrontation and moves away from alliances to create a more coherent international community. China's adherence to the concept of 'community of human destiny' on the global stage not only demonstrates its



confidence in its national cultural heritage, but also reveals to all mankind a new way of resolving international disputes and cultural collisions. This innovative strategy of cultural diplomacy aims to promote the harmonious coexistence of global cultures, effectively resolve misunderstandings and stereotypes brought about by differences in history, culture and ideology, and contribute valuable strength to world peace and co-prosperity.

#### 4.3 Building multi-dimensional communication channels

Although 'joint narratives' with a multitude of voices can compensate for the limitations of a single narrator, enrich the dimensions of communication, and enhance the effectiveness of international communication, they are still based on the perspective of 'I' (Bremer, Mayr, Schmidtner & Rutzinger, 2016). However, a single 'self-report' is not enough to reach a global audience, and the techniques of 'endorsement' and 'voice-over' can compensate for this, enhancing the authenticity, trust and effectiveness of the message. The techniques of 'endorsement' and 'voice-over' can compensate for this and increase the authenticity, trust and impact of the message. For example, the overwhelming response to a documentary about the Greater Bay Area on YouTube, with 2.39 million views and thousands of comments, suggests that international audiences are open to and even appreciative of China's stories delivered through third parties, and are likely to place a higher degree of trust in such non-China-centric content. This phenomenon undoubtedly provides valuable insights into our international communication strategies.

### 5. Conclusion

International social media breaks through time and space limitations, giving cities more and more opportunities to display their characteristics and attract admirers on the globalized stage, and bringing brand new opportunities for city construction and development. YouTube, as one of the most visited international social media, provides a broad platform for cities to promote themselves to the outside world. This survey explores the communication status of Hong Kong's city image on YouTube through data mining and content analysis, and draws the following conclusions: Combined with the specific survey results: YouTube presents Hong Kong's economic image of booming industries, advancing with the times in science and technology and education, and creating a brilliant future; its cultural image of deep cultural heritage and outstanding sports characteristics; its ecological image of complete infrastructure, well-developed transport, and excellent environment; and its ecological image of a city of high quality and high quality, and its ecological image of a city of high quality and high quality. It also presents the ecological image of Hong Kong with well-developed infrastructure, excellent transport and environment, as well as the image of warm and tolerant residents and the social image of poor law and order. In terms of communication subjects, the users' regional orientation is dispersed, mainly in Eurasian countries, and the communicators are mainly individuals, lacking opinion leaders; in terms of communication content, the main focus is on cultural and ecological areas. The image of culture and economy is prominent, and information related to the city's sports events, gastronomy culture and economic industry is centrally disseminated. In terms of communication form, it is mainly in the form of graphics, most of which are just simple text communication, and the overall utilization rate of short videos is not high, which needs to be supported by richer, more vivid and interesting forms of communication. In terms of communication emotion, positive emotion is the main focus. In terms of communication effect, the influence is still insufficient, the audience comments are polarized, and the overall communication effect needs to be further improved.

On the basis of sorting out Hong Kong's image on YouTube, this study proposes a communication idea based on the 5W theory of marketing, that is, to enhance the city's image in three aspects, namely, to build a diversified foreign propaganda body, to build a communication content and audience mode of the concept of 'community of human destiny', and to build a multidimensional and three-dimensional communication channel. Due to the limitations of ideological theory and academic level, there are still deficiencies in this research, for example, the sample capacity of the survey is not comprehensive enough compared to the amount of urban image content in YouTube. When summarizing the characteristics of the city and its image positioning, there may not be completely reasonable, and there is still room for improvement. In the future, we will improve the exploration of the relevant topics and contents, and gain more from the investigation and research related to the communication of the city's image.

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