

Encoding from Visual Content Analysis in Cultural Design Research

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This study investigated the development of inspirational design research based on encoding from the visual content analysis. Approaches were proposed for conducting cultural design research. Cultural research often involves complex issues. These issues combine the complexities of humanity, social behaviour, science, technology, and business. Some scholars have proposed content analysis as the most appropriate tool for conducting aesthetic design research. The principles of such analysis have been developed in recent years. However, there is still a lack of knowledge about how to manipulate the research process with visual research materials. Hence, there is a need to investigate potential code-compliant approaches, especially in relation to visual research material. This study was conducted in cultural design research on typography in Hong Kong with a practical application of content analysis. The goal was to establish the challenges and opportunities related to typography in Hong Kong. The unique culture of the city was investigated and described in detail. The interactions between East and West and its city lifestyle influenced the changes in Hong Kong's design and typography as the city expands further. It was expected that the significance of the development of Hong Kong design and typography provided some insights into how a unique culture was created and expanded. Hence, this project aimed to investigate proper approaches for conducting visual content analysis around changes in Hong Kong typography. The research aimed to provide a detailed picture of how Hong Kong typography has developed, the ways in which it represents the Hong Kong spirit, and how it may be developed in the future.

Keywords: encoding; visual material; content analysis; cultural design research

1 Introduction

The study of culture is no longer a unique discipline – if it ever was. It involves a shifting multiplicity of symbolic practices and value systems. It provides vast potential resources of academic investigation and ethnographic research for understanding difference, autonomy and power. As such, culture has become one of the most productive resources for various innovations in areas such as design, art and technology. These relationships have led scholars to rethink the nature of culture. Instead of accepting cultural identity and recognition as single forms, scholars have proposed new features of the culture concept. The goal is to find better ways of improving society with innovations and developments in various aspects. Some studies have proposed that social recognition can affect how learners generate ideas and the manipulation of their thinking processes. Based on the importance of understanding

culture and lifestyle in the improvement of society, much research has been conducted. Approaches were proposed for conducting cultural design research. Cultural research often involves complex issues. These issues combine the complexities of humanity, social behaviour, science, technology, and business. Some scholars have proposed content analysis as the most appropriate tool for conducting aesthetic design research. The principles of such analysis have been developed in recent years. However, there is still a lack of knowledge about how to manipulate the research process with visual research materials. Hence, there is a need to investigate potential code-compliant approaches, especially to visual research material. This study was conducted in artistic design research on typography in Hong Kong with a practical application of content analysis. The goal was to establish the challenges and opportunities related to typography in Hong Kong. The unique culture of the city was investigated and described in detail. The interactions between East and West and its city lifestyle influenced the changes in Hong Kong's design and typography as the city expands further. It was expected that the significance of the development of Hong Kong design and typography provided some insights into how a unique culture was created and expanded. Hence, this project aimed to investigate proper approaches for conducting visual content analysis around changes in Hong Kong typography. The research aimed to provide a detailed picture of how Hong Kong typography has developed, how it represents the Hong Kong spirit, and how it may be developed in the future.

2 Content analysis

Content analysis is an empirical approach for the systematic analysis of multimedia material (Han, 2015) – textual, visual, audio, and so forth. Unlike other, reactive research methods, content analysis requires the determination of a sample for analysis (Jewitt & van Leeuwen, 2001). It is necessary not only to assemble material but also to codify it, all at an affordable cost. The content analysis must be undertaken under conditions of objectivity, and scientific criteria need to be applied to ensure reliable sampling and generalisability (Knippendorf, 2004; Jewitt & van Leeuwen, 2001). Visual material can include photographs, magazines, packages (Go & Wu, 2003), books, and so forth. Although both the mentally visualised and the visually materialised are essential materials for visual communication, the latter is much more appropriate for content analysis (Atkinson, Coffey, Delamont, Lofland, & Lofland, 2001). Visual materials provided the foundation for scientific understanding. Insights gained from the content analysis may be transferable to various media (Bennett & Frow, 2008). Such analysis usually involves five stages. In the first stage, the main topics need to be identified. Researchers need to determine the number of samples required and select the material for analysis. In the second stage, researchers need to encode the visual material. In the third stage, cultural and social issues need to be established as a reference for the encoding process, followed by further analysis. In the final stage, insights are summarised and conclusions are drawn.

During the process of content analysis, categorisation was the critical tasks. They were the mean for deducing answers those related to the interest of the study. It provided the foundation of developing code. It was possible to develop theories into variables. Therefore, as described by Rose (2001), every level of visual with which the research was started from categorisation. A content analysis started from examining formal categorisation included the size of visual material, position in the media, the space allocated around the visual materials. This information supported conclusions related to the priority of visual material. Also, count vial of the same topic in various media (such as magazines, books, and so forth) provided data and information about the frequency of visual material. After determining the objective principles of categories, the approaches of coding might be then involved subjective categories of the visual material. Content analysis of the visual material started with

questions about aesthetic design research (Krippendorf, 2004). Questions involved the target audience natures, the application of the visual material and so forth. The communication process of visual material was characterised by the vast influence of their producers. In the content analysis of visual material, researchers had to consider potential selecting options, interpretation, reducing, and constructing visual material. Personal experiences, various socialisation processes, cultural backgrounds were example influence for considering the approaches of content analysis. The process of visual material with various contexts was collected and prepared for content analysis. The process of communication on the visual materials was therefore proposed from the concrete foundation. Such foundation then created the visual in audience mind as well as their cognition thinking. Thus, the researcher had to evaluate the relationships between the process of communication, visual in the audience's mind and their cognition thinking directions those reflected the personal experiences, various socialisation processes, cultural backgrounds. Underlying assumptions of visual material thus were developed. The data and information gathered would be linked with the research questions. As a result, the effort of researchers and the complexity of information were involved in the context analysis. Through the process of content analysis, more intensive finding thus would be prepared for more investigation.

3 Model of visual cultural content analysis

Based on the practices of collecting visual material, a specific model of visual content analysis from the cultural research field was developed, as shown in figure 1. Visual materials were collected and then categorised by various media types. Different media types were determined according to the audience, location, and communication objectives. The objective of the visual materials was providing essential information (Mattern, 2017). Therefore, the publishing time of the media types had to be considered to form the historical sequence of the events that happened in society. It also revealed how the relationships between society, communication and technology worked together in a particular period. As a result, more comprehensive findings could be presented.

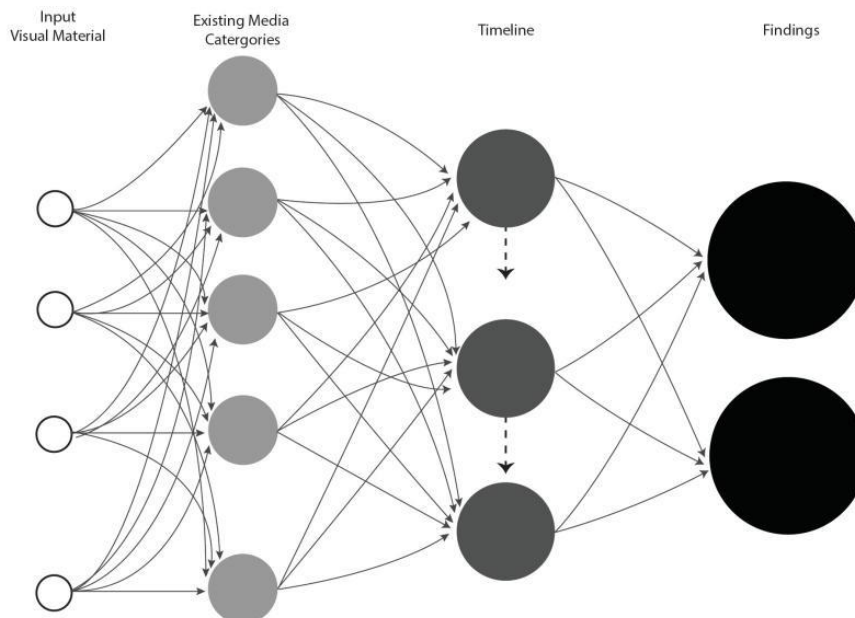


Figure 1. Model of visual content analysis in the cultural research field.

4 Practical application of content analysis in cultural design research on the typography in Hong Kong

4.1 Research methods

This study explored how Hong Kong's design history developed, with a particular focus on aspects of typographic design through a survey of the image (Margolis & Pauwels, 2011). The relationship between Hong Kong's typographic design and design concepts from Japan, South Korea and China had yet to be investigated. This study was expected to compile a historical archive of Hong Kong typographic design for Asian academics, presenting another perspective on the design history of Hong Kong. It is hoped that this study will lead to further research examining the value of Hong Kong's typographic designs and language as a response to the resolution to adopt simplified Chinese.

This project conducted a visual content analysis (Gwinner & Eaton, 1999; Martin & Eroglu, 1993) for understanding the development of Hong Kong typography. This research aids understanding of Hong Kong typography's development and how it embodies the spirit of Hong Kong. It also provides a glimpse into how it might develop in the future.

Table 1 Research procedures

Stage 1	Preparation of Research	<ul style="list-style-type: none"> • Collect the information • Plan for the idea
Stage 2	Set research questions and aims	<ul style="list-style-type: none"> • Organise research rationale, background and significance • Plan for the research schedule
Stage 3	Reviewing and Analysing the Literature on Hong Kong Design	<ul style="list-style-type: none"> • Survey the literature • Evaluate the literature critically
Stage 4	Gathering different applications of Hong Kong Typographic Design from various museums, collectors and Historical locations	<ul style="list-style-type: none"> • Contact the museums, collectors and Historical locations • Arrangement meetings with museums, collectors and Historical locations • Purchase and record the research material
Stage 5	Categorising and Documenting the collected Applications of Hong Kong Typographic	<ul style="list-style-type: none"> • Categorising collected Applications of Hong Kong Typographic • Prepare notes for the details of the Hong Kong Typographic design
Stage 6	Analysing the influence and changes of Hong Kong on its typographic design	<ul style="list-style-type: none"> • Match the features of Hong Kong Typographic design with the development. • Write a summary of the collected research material
Stage 7	Determine findings	<ul style="list-style-type: none"> • Organise research findings • Write and report research result

4.2 Research Process

Total of six hundred and six pieces of visual materials about different stages of the Hong Kong typography was collected from museums, collectors and historical locations. They were categorised into different groups. The categorised stages were developed according to the Hong Kong significant historical milestones. According to the investigation of Hong Kong history, some scholars developed the timeline of Hong Kong historical development. The place was ceded to Great Britain as a colony in 1842; English has been an official language of Hong Kong in the old days and could be easily found in official government documents. Since Qin's unification of China, the people of the Central Plains have moved southward in vast numbers, bringing more advanced culture and skills to the south. The development of

the Guangdong region influenced the development of Hong Kong. Some visitors have begun working in Hong Kong, learning the Cantonese dialect and adopting the Hong Kong lifestyle. Some studies have explored how the Cantonese dialect has developed in Hong Kong; however, Hong Kong typographic design, which has developed in close connection to the Cantonese dialect, has not received much attention from scholars. Hong Kong is characterised by a unique culture, which has emerged thanks to the interactions between East and West and its city lifestyle. After 1974, with the anti-colonial movement, Chinese was elevated to the co-official language status as important as English. Hong Kong culture reached its peak of influence among other Asian countries, such as South Korea, Japan and China, during the 1970s–80s. In the same period, Japanese comics, music and drama brought Japanese typographic design to Hong Kong. Japanese design firms, even design foundries such as Monotype, influenced the further development of Hong Kong’s typographic design. Its influence spread through mass media platforms, such as cinema, TV and music. These historical stages were developed as the main categories for visual materials content analysis. The six hundred and six pieces of visual materials were categorised as shown in table 2.

Table 2 Distributions of visual materials collected for content analysis

Categorised Stages	No. of visual materials collected for content analysis
The Birth of the Hong Kong Typography	20
The early growth of Hong Kong Typography in the Colonial era (1900-1920)	26
The development in the early 20th century (1920-1970)	45
The development in the late 20th century (1970-1990)	157
The contemporary Hong Kong Typography (after 1990)	358

4.3 Research result

Before investigating how Hong Kong had developed and influenced by local living and foreign cultures such as British and Japan in its long typographic history. Theoretical background and analysis of the historical development of Hong Kong Typography of different designers were conducted (Lee, 1997; Xie, 2002).

4.3.1 The Birth of the Hong Kong Typography

According to Xie’s described, Hong Kong was ceded to Britain as a colony in 1842 (Xie, 2002). As described by Lee (1997), English has been an official language of Hong Kong in the old days and could be easily found in official government documents. Since Qin’s unification of China, the people of the Central Plains have moved southward in vast numbers, bringing more advanced culture and skills to the south. Lee (1997) pointed out that the development of the Guangdong region influenced the development of Hong Kong. The establishment of the Guangdong and Guangxi regions was followed by that of the Nanhai, Hui and Guilin counties. During this time, Hong Kong was under the jurisdiction of Panyu in Nanhai County. Hong Kong was affected by the Central Plains culture as early as the Qin Shiming. During the years of the Northern and Southern Dynasties, Buddhism was introduced and became one of the most important Chinese religions. Xie (2002) revealed that books about Buddhism were transported to Hong Kong and the content of the books maintained a close relationship with Chinese traditions. Due to changing foreign trade trends, woodcut versions of these Buddhist books were delivered to the south part of Guangzhou

and then later to Hong Kong. Lee (1997) mentioned the perspective of the ancient economic development of Hong Kong. He pointed out that merchant ships travelling to Hong Kong would arrive at its main port and sail through the gates of Tuen Mun. The government had set up the town of Tuen Mun during this same period and sent troops to these gates. These troops frequently brought Chinese culture to Hong Kong. In the period of the South Han Dynasty, Hong Kong was rich in pearls. In addition to retaining specially purposed households in the Tai Po area, they also sent troops to the station. The collected typographic material created in Song Dynasty revealed the point of view from Lee. They reflected that the Central Plains region was often invaded by small groups from the north. Compared to the North, the South part of Hong Kong was much more stable, and a large amount of arable land was not yet claimed. The Central Plains people were attracted by this, which led to the settlement of, for example, Deng, Peng, Lin, and Tao. Family members like Hou moved to Hong Kong to make a living from farming, to places like Kam Tin, Tuen Mun, Tai Po and Lung Yeung Tau. The visual material collected about the typographic work created such as the almanack are believed to have been introduced to Hong Kong during this period. Hong Kong was also rich in sea salt at this time, prompting the imperial court to send troops to the station. Two pieces of collected topographic records reflected Hong Kong's social economy fared better in the Ming Dynasty. Alike the description of Lee (2002). Villagers earned a living through agriculture and fishing, or by trading salt, pearls and incense. The creation of an impressive Dapu bowl kiln also enhanced the technology of porcelain and was a considerable artistic achievement, too. The development of typography also took huge strides when masters of this art moved to Hong Kong. These artisans moved onto large pieces of land that had been occupied by earlier occupants, as typography thrives in unusual, remote places. Since earning a living was a struggle, most of the men had to go abroad to earn money in foreign currencies. During the process of the cultural exchange, the correspondence between Western and Chinese styles would also be brought to Hong Kong when relatives visited. Therefore, it was believed that communication and the communication of culture would spread. From another point of view, China's vast territory and a plethora of ethnic groups and dialects made the text the paramount medium of communication. The roots of the text are far-reaching because Hong Kong's ethnic group comes from a variety of places in China. As such, its development was more varied.

4.3.2 The early growth of Hong Kong Typography in the Colonial era (1900-1920)

Hong Kong's ethnic groups come from all parts of the Central Plains of China. After arriving in Hong Kong, they were engaged in activities such as farming, salt refining, fishing, pearl harvesting and planting incense trees. They also engaged in trade activities, so business trips were also frequent.

Moreover, the introduction of Buddhism led to increased demand for scriptures, books, papers, meditation, cards and advertisements. Local printing production was similarly promoted when these items were unable to meet the needs of business travellers in terms of quantity and content. The first use was also naturally printed in the prevailing edition at that time. Since trade inevitably brings advertisements, the text was the original primary advertising medium. As such, it was necessary to use distinctive art characters to attract attention, while woodcut versions could include engraving, but this was the only option at this time. This method has had a significant influence on the development as well as the popularity of typography. Since Hong Kong became a colony, there have been various political changes in the motherland. As a result, more of the mainland population has moved

to Hong Kong, while foreign printing also spread to Hong Kong during that period. In the long period of these important books, woodblock printing was an essential medium for the creation of texts. Because different printing techniques were only used in foreign languages, foreign missionaries used woodblock printing (Woodberry, 2012). This suggestion proposed that foreigners worked with Chinese people to carry out the necessary work for woodblock printing.

4.3.3 The development in the early 20th century (1920-1970)

Although Hong Kong is a small place, it has a long-standing and innate connection to the motherland and its lengthy cultural background. Therefore, the development of Hong Kong's art characters can be traced back to the culture of the motherland, which then merged with Chinese and Western cultures to gradually form a unique incarnation. Calligraphy was a kind of art, and the art characters derived from it form another typographic feature (Xiao, 2016; Lee, 1997). Complex, rich creative characteristics (Belk, 2007) significantly influence artistic value. Furthermore, the creation of these creative characters was changing. Thousands of characters were created, all extremely distinctive and varying in shape. The visual material collected about the reflected that art enriches the colour of life and subsequently enhances people's tastes, thus promoting the overall development of society (Tsien, 1985). This finding revealed the artistic characters of typography. They emphasise the typographic characteristics inherent in the structure of a text. Similar to the point of view from Zhang (2000), characteristics of Hong Kong typography, has freer and more possibilities to be changed, a quality that is unique to Hong Kong's unique blend of Chinese and Western culture.

The findings and discussions from scholars strengthened the uniqueness of Hong Kong typography (Zhang, 2000; Choi, To & Chiu, 2012). However, in one sense, Chinese calligraphy has a high degree of typographic composition. There is often a strong sense of difference. Inferior calligraphy also includes the problem of typos because people are inevitably humbled and ignored. The original idea, or the image after it was processed as an applied text element, can become removed from its original meaning or characteristics. This can be unintentional or because the original creator did not think it was worthwhile. The inclusion of emphasis, in the original typographic form, was based on unconscious encounters; that this was an idea to be exerted could go unnoticed. A combination of both these possibilities is highly likely. Either way, this model has increasingly become one of the methods used in the creation of Hong Kong typography. Because of so-called 'calligraphy', some aspects of this method were the effects of a combination of ideas, since there was no single prevailing technique (Xiao, 2016). Quality is based on the specific tastes of a specific era, and the writing can sometimes seem awkward to those who are unfamiliar with it. It was often disliked in the United States, for instance, because of the original typographic characteristics of Chinese characters. Despite this, there were still many admirable qualities. For example, text elements were often used in Chinese folk crafts (Choi, To & Chiu, 2012). Craftsmen who lacked basic calligraphy or typographic skills still wanted to express themselves through crafts, which often resulted in poorly written typography. Thus, as described by McLaren (2017), a less elaborate kind of Hong Kong typography was conceived through general cooperation. Although very simple in character, this has become an inspiring example of a textual element. The original high-quality Hong Kong typography combines this kind of model with appropriate descriptive techniques and the influences of foreign cultures.

4.3.4 The development in the late 20th century (1970-1990)

Until 1974, after the anti-colonial movement, Hong Kong culture met its peak of influence among other Asian countries such as South Korea, Japan, China, etc. during the 1970s-80s. In the same period, Japanese comics, music and drama alternatively brought the Japanese typographic design to Hong Kong. Japanese design firms, even design foundries such as Monotype facilitated the modification of Hong Kong's typographic design. It spread its influence through mass media platforms, such as movies, TV dramas, songs. This finding revealed Pan (1997)'s analysis. The Hong Kong design followed the mass media platforms to be explored. In the 1980s and 1990s, the change of signboard characters was even more significant. For example, round-faced characters and variety of Hong Kong typography have applications. These were modern design fonts.

Signboards were, on the one hand, diversified, while on the other hand, they continued to strictly adhere to with traditional rules strictly. The fonts used in Hong Kong typography were more diversified, even incorporating spray paint and visual elements favoured by young people. Most of those continuing to use traditional elements were more long-standing companies, old institutions, or new operators in the old industry. Most of them maintained the traditional model, which meant they still applied the script as a signboard. Due to the widespread use of prepress computers, the production of signboards also changed (Ip, 2008). Large-scale printers and large-scale canvas matching meant entire signboards could now be printed by computers and made into a canvas signboard. There were many choices in terms of fonts, but large-scale companies still used proprietary typographic designs and the traditional ideas and characteristics of typography (Wong, 2011). By the end of the 1990s, signboards had become accessible from their prototype or through an applied art analysis of their visual elements (Reed, 2007). Even examples of street art that used specific features as creative elements was applied to signboards in the workshop. Although this still involved some difficulties, like the inability to see the typography size, differences between workshop version and the original street art script were seen as negligible and unimportant. This shows how the development of signboard entered a new era; one which was often more beautiful.

4.3.5 The contemporary Hong Kong Typography (after 1990)

After 1997, Chinese people increased their influence on informational domains. The influence from Western cultures, at the same time, has resulted in the formation of unique visual elements. Their influence also greatly influenced the application of tools, materials as well as printing techniques. These range from the era of typography to the traditional plate-making of offset printing (Ip, 2008). According to the analysis in Ip's article, the art of movie advertisements also turned to more varied visual effects until the end of the 1990s due to the widespread application of computerised pre-press procedures. Shades or colour effects were often combined with the background. The use of computers also resulted in a higher level of integrity. However, it seems that in terms of innovation, it was not as revolutionary as it seems: individual titles for TV series, similar to movies in many ways, also used very distinctive art characters.

According to the above development, the findings provided design students understand the relationships between typography and the changes of Hong Kong culture all around the world. It is also an opportunity to let the world understand and how Hong Kong historical influence on its unique typography. Her unique typography style is the most substantial evidence to present how the culture was infinitely created and grown. The research results also provide an indicator to design participants to investigate the approaches for optimising

the design outcomes as well as promoting the values and culture of Hong Kong style. Hong Kong is characterised by a unique culture thanks to the interactions between East and West and its city lifestyle. This research study leads the general people, both foreigners and Hong Kong people to know the unique typography which is rooted in Chinese culture and influenced by the changing in the society. This study investigated the features of Hong Kong typographic design elements and explored a new way to introduce them to general people. It is also an excellent opportunity to let the world to understand our Hong Kong history and its influence on typography development. Local designers understand the unique Hong Kong culture and use it effectively among their designs through this study. The research results also indicated that local designers or design students to consider if they can include these unique Hong Kong styles in their creation. For typographic and graphic design participants, this study will also provide theoretical background and analysis to understand the relationships between typography and the influence of design concepts from Japan, Southern Korea and China (Sherif, 2017). It is aimed to compile a historical archive of Hong Kong typographic design for Asian academics in order to understand the design history of Hong Kong from another perspective. It is expected that the research result of this study would also examine the value of Hong Kong typographic design and language as a response to the resolution to adopt simplified Chinese.

5 Conclusion

This study demonstrated how cultural design research could be developed through visual content analysis. It has shown how to encode cultural design research topics involving complex issues connecting to the humanities and social sciences. The practical application of content analysis has investigated the development of Hong Kong typography. In recent years, more tourists have been coming to Hong Kong. Some visitors have begun working in Hong Kong, learning the Cantonese dialect and adopting the Hong Kong lifestyle (Chun, 1996). Some studies have explored how the Cantonese dialect has developed in Hong Kong; however, Hong Kong typographic design, which has developed in close connection to the Cantonese dialect, has not received much attention from scholars. Hong Kong was characterised by a unique culture, which has emerged thanks to the interactions between East and West and its city lifestyle. In 1842, Hong Kong was ceded to Britain as a colony; English has been an official language of Hong Kong since this time and could be easily be found in official government documents. After 1974, Hong Kong culture reached its peak of influence among other Asian countries, such as South Korea, Japan and China, during the 1970s–80s. In the same period, Japanese comics, music and drama brought Japanese typographic design to Hong Kong. Japanese design firms, even design foundries such as Monotype, influenced the further development of Hong Kong's typographic design. Its influence spread through mass media platforms, such as cinema, TV and music. All the development has shown the collected visual material revealed the timeline of Hong Kong typography as well as the previous theoretical studies about Hong Kong typographic design style.

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