

An Overview of the Progress of Mural Painting Practice and Research in Chinese Subways

Xue Du *

College of Architecture and Art, North China University of Technology University, Beijing, China

*Corresponding Author

ABSTRACT

This paper takes CNKI database database as the source of literature data, and carries out data visualization literature analysis through software Citespace. It aims to sort out the basic characteristics, research hotspots, literature citations, source analysis and literature keywords of the literature related to subway mural design in China, with a view to providing certain theoretical references for the development of the subsequent research, guiding the subsequent practice and promoting the great development of the subway mural industry.

KEYWORDS

Subway mural; Regional culture; Humanities.

1. A CITESPACE-BASED ECONOMETRIC ANALYSIS OF LITERATURE RELATED TO SUBWAY MURALS

1.1. Research methodology and data sources

The visualization and analysis of this paper uses citespace as the main tool, and the journal articles that can be retrieved from the China Knowledge Network (CNKI) as the data source. Firstly, the keyword "subway murals" was searched by advanced search, and the time limit was up to 2022, and a total of 135 initial records satisfying the conditions were obtained, and the earliest article was "Subway murals in Brussels", which was published in 1994. The earliest article is "Metro Mural in Brussels" published in 1994. In these initial results, the irrelevant data such as meeting records, interviews, news reports, and so on, were screened out, and the subjects were matched precisely, and finally 114 valid data were obtained, with the effective years distributed in the range of 2001-2022, which will be analyzed in the following section based on the batch of data.

1.2. Annual Measurement Analysis of Subway Mural Journal Papers

Table 1 lists the distribution of the number of publications in China for each year from 2001 to 2022. From the table we can see that China's subway mural research is not high in the overall number of articles, but the overall state of slow increase. China's subway mural history by the 1984 Zhang Ding, Li Huaji, Yuan Yunfu and other artists predecessors for the subway line 2 Xizhimen station, Jianguomen station and Dongsishitiao station created by the Great Wall of Yanshan Figure, Chinese astronomy history, "to the world" for the beginning, and scientific research articles only began to appear in 2001, obviously lagging behind the practical application.

2001 is China's subway mural thesis starting year, that year a total of "subway station mural design positioning analysis (above)", "subway station mural design positioning analysis (below)", "Shanghai

metro mural appreciation" three articles, it can be assumed that this year is the subway mural as a design category of scientific research topics began to be the starting point of the planning; 2005-2009 there is only one output per year, the reference significance of the more limited, but it is worth mentioning that in 2007, the relevant leaders approved the letter of the president of the Chinese Society of Mural Painting made the following approval, "please planning commission and rail finger office to contact with the letter to help improve the art of station. Limited, but it is worth mentioning that in 2007, the relevant leaders responded to the letter of the then president of the China Mural Painting Society, made the following approval: "please planning commission and rail refers to the Office of contact with the letter to help improve the artistry of the station" "really necessary"; 2010; with the underground transportation network, the subway mural painting is the first time to be planned as a scientific research topic. Since 2010, with the spread of underground transportation network, the number of papers published has shown a slow growth, subway mural selection gradually appeared in the way of articles in the research, in recent years the number of papers issued also compared to the past has a more stable increase. However, during 2020-2022, the construction of the subway was affected by the epidemic, and the research on subway murals also slowed down.

Table 1. Volume of scholarly papers included on subway murals, 2001-2022

Year of publication	Number of journal publications (articles)	Percentage (%)	Year of publication	Number of journal publications (articles)	Percentage (%)
2001	3	3%	2012	4	4%
2002	0	0%	2013	7	6%
2003	1	1%	2014	5	4%
2004	0	0%	2015	10	9%
2005	1	1%	2016	6	5%
2006	2	2%	2017	11	9%
2007	1	1%	2018	9	8%
2008	2	2%	2019	20	17%
2009	1	1%	2020	9	7%
2010	4	4%	2021	7	6%
2011	2	2%	2022	9	7%

1.3. Subway mural academic paper research hotspot analysis

Around the central vocabulary of subway mural, keywords are selected as node settings, and 94 nodes and 209 interlinking relationships are obtained. Among them, the terms with higher centrality are: regional culture, mural design, mural art, mural creation, subway public art, subway space, Beijing subway, city subway, urban image shaping, design method, humanistic sentiment and so on. It can be seen that more papers are based on the creation of murals as an argument, and there is no lack of the existence of many appreciation papers. These hotspots can be categorized as "regional culture", "humanistic feelings", "urban image", "design creation", "public space", and so on. " "public space" five different aspects. Combined with the timeline, in recent years, the key words "regional culture", "humanistic feelings", "six dynasties" and other words appear and increase in frequency and show that the creation of subway mural connotations richer, closer to the local needs and heritage, what is the subway mural research is also a step closer. As a new research direction, subway murals are still in the growth stage of collision and contact with other professions, and the methodology and other contents are relatively small, which urgently need more in-depth research.

1.4. Analysis of literature citations and sources

1.4.1. Analysis of types of communication

The different sources of research subjects reflect to some extent the differences of the research group, with 57.14% of journals in various article resource types, and 41.84% of master's and doctoral dissertations of this kind, which shows that there is still a large proportion of the college group. It can be assumed that in addition to experienced artists, young researchers and creators are also actively making efforts for the improvement of the subway mural system and the planning of the future, and we can look forward to the future of theoretical research on subway murals.

In the distribution of disciplinary classification subway mural related papers are not completely in the field of research and creation of philosophy and humanities, the total number of philosophy and humanities category accounted for 88.76%, 22.45% of the articles belong to the engineering science and technology classification, 7.14% belong to the information science and technology classification. This shows that the interaction between subway murals and other disciplines has begun, and is not confined to the study of pure forms of artistic creation, but rather multifaceted, multi-angle as a comprehensive research object for the study. In the future after more in-depth cross-disciplinary research, subway murals will bring more rich sensory enjoyment and academic results.

1.4.2. Analysis of article sources

According to the number of published statistics of each source, the journal "Popular Literature and Art" accounted for 8.08%, college dissertations in Xi'an Architectural University of Science and Technology accounted for 7.07%, the Central Academy of Fine Arts accounted for 4.04%, Hefei University of Technology accounted for 3.03%, Hebei University of Science and Technology accounted for 3.03%, and the rest of the institutional sources accounted for 74.75% of the source of the article is still relatively rich in the institution.

Re-analyzing the submissions according to the place of submission, it can be found that relatively speaking, there are more submissions from cities with subway lines under construction. More submissions analyze the features, innovations, and lessons to be learned from already built subway murals, and look for parts of these existing murals that can constitute a design methodology, and summarize them to form a vein. Most of the local scholars will adopt the form of on-site research when writing their papers, so that they can see the on-site effect more intuitively and hear the public's comments. These essays are not only a refinement of the methodology, but also a kind of feedback on the space of the completed subway stations, which will be a reference for future subway construction.

There are also studies outside of these areas, and their access to information is mostly different from that of local scholars, focusing more on the acquisition of information on the internet. The collection of this information is not first-hand compared to the field, but it contains more differentiated records, and the online spectator's point of view reveals information that is not noticed in the field.

2. SYNTHESIS OF PRACTICE IN CONJUNCTION WITH KEYWORDSSECTION HEADINGS

2.1. Regional culture

Regional culture is not only in the field of subway murals, in all areas are now hot topics, China's infrastructure development speed is gratifying, but the accompanying problem is the lack of regional characteristics. In the subway mural creation and research of 37 years, there is no lack of excellent subway mural creation rich in regional cultural characteristics.

Such as Beijing Line 6, Dongsi Station to the old Beijing hutong activities as the theme of the creation of a stone collage form of mural, the overall gray tone of the stone in the Chinese red sugar gourds, firecrackers more warm and rich, can make the viewers feel warm nostalgia; East Bridge Station to shadow-like characters and Han Dynasty portrait bricks of the expression to create a strong traditional flavor, its content is also the Dongyue Temple of the various departments of the characters laying The story is both intellectual and artistic. Not only along Line 6, but also along other lines in Beijing, there are many murals created based on the stories, architecture, and functions around the subway stations. This kind of creation rooted in the cultural characteristics of a small area makes the subway station an invitation to tell people passing by what kind of past and what kind of life has been and is being lived here. One by one, the subway stations are connected and weaved into a network, constructing a letter of introduction reflecting the urban landscape of Beijing.

2.2. Humanistic feelings

The literal meaning of "Humanistic Sentiment" is the feeling and care for people's self, i.e., the respect and fulfillment of our dignity, value, and emotional needs under the core of "human-oriented", where everyone is treated as a human being as their name suggests. Artists put their understanding of humanistic feelings into the selection and expression of subway murals, people's understanding of the city is collected by the artists during the creation process, and the audience and the artists achieve mutual fulfillment, the subway murals take on the important task of expressing the humanistic spirit of a region.

Nanjing Metro Daxinggong Station is close to the Jiangning Weaving Museum, so the stories in the Grand View Garden, which are modeled after it, were chosen as the content of the mural. The white jade wall is hollowed out in the shape of Baoyu, in which the twelve hairpins of Jinling have delicate postures and pretty faces, although Baoyu does not appear in person, but it breaks the connection between him and the twelve hairpins, the mural narrows down the difference between the makeup and hair of the twelve hairpins, which arouses curiosity among the public, and is often discussed by people, and this transmits the cultural connotations to the public without any intentional indoctrination. Let the viewer of the mural curiosity, empathy. Humanistic feelings is undoubtedly the current subway mural creation of an important direction to pursue, so that the subway mural temperature, create value.

2.3. Urban image

City image is both related to and different from regional culture. Compared with regional culture, it also includes elements such as natural geographic environment, economic and trade level, social security situation and citizens' living condition, and is the sum of impressions that enable the public to form a cognizance of a certain city. Compared with the pure regional culture, the city image is more controllable, not only by what is available here, but also by the development and choice of the place.

The mural creation of Line 3 in Xi'an combines the characteristics of the countries along the ancient Silk Road and the current Belt and Road Silk Economic Belt, and the customs of different countries and regions are presented therein. Select two of the stations, Qinglong Temple Station mural only stone green mountains and pink cherry blossoms to create a contagious Afghan scenery, so that passengers, tourists can see the beauty of this slightly mysterious country in the Middle East, and Xi'an carries a part of the link between the two countries; Science and Technology Road Station has chosen a combination of Turkey and the local culture of the Tang Dynasty, the image of the female figure and the image of the Turkish women placed in the dance together, the mural is a combination of the ancient Silk Road countries and now the countries along the Belt and Road Silk Economic Belt. The image of a Tang Dynasty lady and a Turkish woman are placed together in a dance, just like the economic and trade cooperation between the two countries, and the cultures are also intermingled,

which shows that Xi'an as a city can and is willing to exchange and cooperate with other cities, regions and countries, and construct the idea of the future together. This design reflects the inclusive nature of the city of Xi'an and its vision of future development, which will help shape the image of the city.

2.4. Design creation

Design creation is the mural artists tirelessly explore the theme, appear in the high-frequency word is not surprising, subway mural is not only pure art painting creation, but also part of the subway public space design, which has some different from the traditional mural or pure painting creation point.

First of all, the treatment of color, color for the public psychological impact, different religious beliefs whether there are taboos and other content are creators need to consider, color will be and psychology, ergonomics, religion, sociology and other disciplines cross a project; works of the overall atmosphere of the tone should be more suitable for public occasions, easier to appreciate, will be a combination of strong heritage and bright fashion, to meet the people's aesthetic needs; the introduction and use of new media technology also makes the creation of subway murals more free, in addition to visual, but also from the auditory, tactile and other perspectives into the sound, light, color fusion of viewing the area. The introduction and use of new media technology also makes the creation of subway murals more free, in addition to the visual, but also from the auditory, tactile and other perspectives into the sound, light, color fusion in the mural area, to give the viewer a better sensory experience; a high degree of visual symbols of condensation and generalization is also very important to explore the direction of the thousands of viewers with a short period of time stopping by, the characteristics of the contradictory symbols of the design is particularly important, the visual symbols perfectly match with the expression of intent, and the design is very important. The perfect match between the visual symbols and the expression of intent is the only way to meet the goal of reaching the hearts of the people in a short period of time.

2.5. Public space

The public space carries multiculturalism and city image, making a correlation between the subway mural and the design of the whole underground space, a good mural shouldn't be a stand-alone, it should be harmonized with the surrounding environment, and it should even be echoed with the installation scene on the ground. As mentioned above, a complete subway space should be able to reflect the image of the city, as a miniature of the city, the subway space should be rich and coordinated, and its space is generally composed of public facilities, functional space planning, access, central hall, platforms several parts, these parts as well as the mural should be a reflection of each other.

In the Beijing subway station Yuanmingyuan station, the mural part of the mural is very representative of the Yuanmingyuan building remnants of the columns as the background of the large marble relief, clear veins, supplemented by the blank space of the Forty Scenes of the Yuanmingyuan text, in itself, is already a subway mural of due diligence, but with the entire subway station with the same gray-yellow color tone of the space, the mutilated form of the columns, the entire space will be rendered more sedate, holistic, such as an epic. Just by the calm narrative can make people feel the pain caused by the invasion, alone the mural is unable to achieve this degree of shocking, but with the other facilities of the subway space will be able to do the best.

3. CONCLUSIONS AND OUTLOOK

Not only the cases mentioned in the practice part, at present it can be said that it is the active period of the design creation of subway and subway subsidiary of each city in our country, and there are a lot of praiseworthy achievements in the practice. This is a very optimistic scene for the theoretical study of subway murals, with enough practice accumulation, in doing theoretical exploration to have

a higher efficiency, the formation of the theory can also be a guide to the practice of the aftermath, thus forming the whole subway mural industry development.

Internationally, we are in agreement with other countries on the general direction of subway mural development. Rooted in local culture, expressing our expectations for the future development, creating a close integration with the audience, and the environment, to make the public can appreciate, aesthetic and functional, unity and diversity of the excellent subway mural works coexist.

REFERENCES

- [1] Zhai Xiaobing. Beijing subway mural and the development trend of Chinese contemporary mural art[J]. Literature and Art Controversy, 2017(08):194-197.
- [2] China Mural Painting Association. New works of Beijing subway murals [M]. Beijing: People's Fine Arts Publishing House, 2013.