The Blending of Architectural Form and Culture in Harbin Middle East Railway Period

[1]Chunyu Zhang, [2]Sitthidham Rohitasuk, and [3]Kittikorn Nopudomphan

Faculty of Arts, Srinakharinwirot University, Thailand

Email: [1]11148110@qq.com, [2]sittidech@g.swu.ac.th, [3]kittikornn@swu.ac.th

Received November 15, 2023**; Revised** December 6, 2023**; Accepted** February 25, 2024

Abstract

Harbin's distinctive architectural identity, shaped by the convergence of Russian and Western influences during the Middle East Railway period, reflects a unique blend of cultural and architectural styles. This article aimed to study (1) the history and development of architectural forms in Harbin during the Middle East Railway period and (2) study the blending of architectural form and culture in Harbin during the Middle East Railway period. The first group of samples was 119 buildings selected from the fifth batch of 219 historical buildings in Harbin using stratified random sampling method. The second group of samples was 10 experts and scholars well-versed in the history and development of architectural forms in Harbin Middle East Railway period. The instruments for collecting data were observation, document analysis and expert interview. The analysis data was obtained by descriptive statistics and content analysis. The research results were found as follows;

1. Harbin's architectural evolution began with Russian influences and subsequently incorporated Japanese, Jewish, and Islamic styles, along with Western trends like Renaissance, Gothic, Baroque, and Neoclassical. The addition of Art Nouveau and modernist styles marked a contemporary phase, contrasting with the decline of traditional Chinese architecture. The study categorized 17 distinct architectural styles into five main groups, which were foreign national styles, new wave styles, Western classics, local styles, and eclectic styles.

2. The study highlighted six key aspects of architectural and cultural blending in Harbin during the Middle East Railway period, including Pluralistic Innovation and Inclusiveness, Migrant

Cultures and Ethnic Traditions, Industrial Civilization and the Age, Local Culture and Regional Technology, Diffusion and fusion, and Geopolitical Character.

The results of the study revealed the main styles of Harbin's architecture and its blending with diverse cultural elements during this significant historical period. This study contributes to a deeper understanding of Harbin's cultural heritage and its role in shaping the city's architectural landscape.

Keywords: Blending; Architectural form; Culture form; Harbin middle east railway period

Introduction

In the scope of Chinese history, Harbin emerges as a relatively young city, with a history spanning just over a century. It stands as a quintessential immigrant city, formerly referred to as Alegin and known as 'Halabin' during the Qing dynasty. The late 19th and early 20th centuries witnessed the construction of the Middle East Railway by Russia, which brought an influx of Russian immigrants to Harbin, exposing the nascent city to architectural influences distinct from traditional Chinese norms. Through this evolution, Harbin developed its unique architectural character, departing from the conventional Chinese urban aesthetic, while also embracing a forward-looking approach to urban planning. Harbin distinguishes itself from other Chinese cities, lacking the deep historical roots of its domestic counterparts, yet holding a distinctive architectural identity. During the wave of Russian immigration, the city adopted architectural elements reminiscent of Moscow, infusing Harbin with foreign architectural traditions and cultural influences. Even after a century has passed, the city retains strong vestiges of Russian culture. Within Harbin, the convergence of Chinese and Western cultures, as well as the amalgamation of Chinese and Western architectural styles, are particularly pronounced. The city's architectural tapestry encompasses Russian-style structures, Russian Baroque designs, fashionable French-inspired buildings, classical European architecture, and the rustic charm of Russian wooden constructions. These features coexist with occasional hints of Chinese and Japanese architectural elements from the 1930s (Jiang, 2017).

The Middle East Railway, spanning the eastern provinces of Heilongjiang, Jilin, Liaoning, and Inner Mongolia, is a crucial railroad in China. It not only carries rich cultural significance but also a unique and valuable architectural culture. Constructed in August 1897, the entire line opened for traffic in February 1903. Centered in Harbin, it extends west to Manzhouli, east to Suifenhe, and south through Changchun and Shenyang to Lushunkou in Dalian. Alongside the

railway's development, numerous auxiliary and service buildings were erected, including station buildings, factories, churches, clubs, hospitals, schools, and other public structures, as well as railway residences and ancillary civil buildings. Many of these were uniformly planned and designed by Russian architects to meet various functional needs, with Chinese artisans often participating in their construction. The construction of the railway facilitated waves of immigration and the blending of diverse nationalities, languages, cultures, and religious traditions in Harbin, culminating in the modern Chinese–Western architectural culture of the city (Gao, 2008; Sun et al., 2014).

A number of scholars have explored the architectural evolution of Harbin from historical and cultural perspectives (e.g. Bakich, 1986; Sun et al., 2014). In addition, some researchers have focused on the influence of Chinese and foreign cultures on the architecture of Harbin during the Middle East Railway period (e.g. Ni, 2016; Zhang & Zhang, 2011; Zheng, 1987). In addition, the preservation of Harbin's architectural heritage during the Middle East Railway period has also received attention from researchers (e.g. Li & Liu, 2021; Zhang et al., 2018). However, the previous literature has not provided a more detailed about the history and development of architectural forms in Harbin during the Middle East Railway period. Additionally, there is a relative scarcity of research exploring the blending of architecture and culture that contributed to the formation of Harbin's architecture during the Middle East Railway period.

This study aspired to conducting a comprehensive and in–depth study of the history and development of architectural forms in Harbin during the Middle East Railway period and studying the blending of architectural form and culture in Harbin during the Middle East Railway period. The researchers employed a multifaceted approach, encompassing literature review, field investigations, and expert interviews, among other methods, to delve into the intricacies of the blending of architectural form and culture in Harbin during the Middle East Railway period. This study holds significance in shedding light on the previously underexplored relationship between architectural form and culture during Harbin's Middle East Railway period, providing valuable insights into the city's historical and cultural development. Furthermore, it offers a multidisciplinary perspective, enriching our understanding of this pivotal era in Harbin's architectural history.

Research Objectives

1. To conduct a comprehensive and in–depth study of the history and development of architectural forms in Harbin during the Middle East Railway period.

2. To study the blending of architectural form and culture in Harbin during the Middle East Railway period.

Literature Review

The Middle East Railway is a crucial component of the Trans-Siberian Railway, representing a place where Chinese and Russian cultures converge due to a significant population of Russian immigrants (Geng et al., 2021). Numerous scholars have long embarked upon the examination of architectural facets during the Middle Eastern railway era, scrutinizing them from distinct economic, political, and cultural perspectives.

Bakich's (1986) study described Harbin as a unique and charming city that served as a home to the Chinese Russian community from its establishment in 1898 until the 1960s. It focused on the pre-revolutionary history of Harbin, including reasons for its founding, shaping historical events, demographics, management, society, and cultural life. Zhang and Zhang (2011) discussed the positive role of urban planning theories in the formation and development of residential areas in the Middle East Railway, along with case studies of different levels of residential planning, characteristics, and typical layout. Zhang (2011) in his paper explored the threats facing the architectural structures on the Middle East Railway due to harsh conditions, natural disasters, and human destruction. He emphasizes the need for comprehensive protection of the Middle East Railway's architectural heritage. Sun et al. (2014) introduced Harbin as an important city in northern China whose spatial morphology is influenced by its unique geographical environment and long history. The paper divided Harbin's history into three stages, analyzing the evolution process and reasons for each stage. Ni (2016) in his article "Study on Architectural Characteristics of New Art Style in Harbin" discussed how the Middle East Railway initiated construction in Harbin, making it the largest city in northern China. Since its inception, Harbin has been known as the "Oriental Moscow" and the "Oriental Paris". The earliest "New Art Style" architecture was entirely transplanted from Russia. Liang (2017) analyzed how Russian culture was disseminated in Harbin, detailing the local culture's integration and collision with Harbin's development in areas like food, architecture, language, and music.

Studies have also directed their focus towards the architecture, culture, and cultural heritage of the Middle East Railway in China's northeastern region. Zheng (1987) explored extensive history of the construction and operation of the Middle East Railway from 1895 to 1952, encompassing historical facts related to politics, military, economy, culture. The study of Chen and

Liu (2017) explained that the architectural culture of the Middle East Railway is a product of the cultural blending of China's modernization with Western culture, with significant value in the world's architectural culture. Li and Liu (2021) elaborated on how linear cultural heritage is a unique cultural resource with a wide spatial range, rich content, and typical heritage value.

Some scholars put their perspective on the preservation and protection of railway buildings in the Middle East. Cultural heritage conservation plays a vital role in the research of architectural culture during the Middle East Railway era in Harbin. Tong (2013) mentioned that the Middle East Railway is one of China's few outstanding examples of large-scale linear cultural landscape heritage. It features complete spatial distribution, continuous historical evolution, diverse cultural content, and typical heritage value. Wang et al. (2017) primarily introduced the period from 1896 to 1949 as a crucial time in the development of modern historical and cultural buildings in Heilongjiang Province. This period reflected the social and economic development and cultural integration of modern Northeast China in the face of foreign aggression and humiliation. It also mirrored the world's architectural trends, features, styles, and flaws. Zhang et al. (2018) analyzed the total volume of Middle East Railway literature, research strengths, and research hotspots over the past 20 years, providing insights into the development, research hotspots, and future directions, serving as a reference for the research and conservation of Middle East Railway cultural heritage.

The Middle East Railway plays a pivotal role in China's northeastern region, not only in terms of economics and transportation but also in culture and architecture. Previous researches have provided rich data and perspectives on the history, culture, architecture, and cultural heritage conservation of the Middle East Railway. However, through the organization and analysis of previous literature, researchers have identified several research gaps.

1. The previous studies mentioned that Harbin's architecture during the Middle East Railway period largely adopted different styles from western culture, but there is a need for a more detailed classification and characterization of these architectural forms. This could involve studying the architectural elements, materials, and design principles used in Harbin's buildings during this period.

2. Although previous researchers proposed that Harbin became a crossroads of East and West cultures during the Middle East Railway period, it doesn't delve deeply into the influence and significance of this cultural intermingling on the development of Harbin's culture.

3. The majority of studies have primarily centered on architectural aspects, urban development, spatial morphology, preservation, and conservation. These investigations predominantly relied on content analysis to derive their findings. There is a potential for conducting expert interviews from a more multidisciplinary perspective. Collaborations between expects, such as historians, cultural anthropologists, and architectural historians could provide a more holistic understanding of the Middle East Railway period in Harbin.

In summary, the previous studies collectively affirm the Middle East Railway's significant role in shaping the cultural, architectural, and socio-economic landscape of China's northeastern region. They employed various theoretical frameworks and methodologies, ranging from historical analysis to urban planning theories, to explore the multifaceted impact of the railway. However, the review also identifies gaps in research, particularly the need for more detailed classification of architectural styles, deeper exploration of cultural intermingling effects, and a multidisciplinary approach to understand the period's complexities more holistically.

Conceptual Framework

This research is qualitative research. The researcher defined the research conceptual framework based on the cross-study of architecture and cultural geography, cultural communication theory, theories of historicization and social anthropology. The details are as follows.

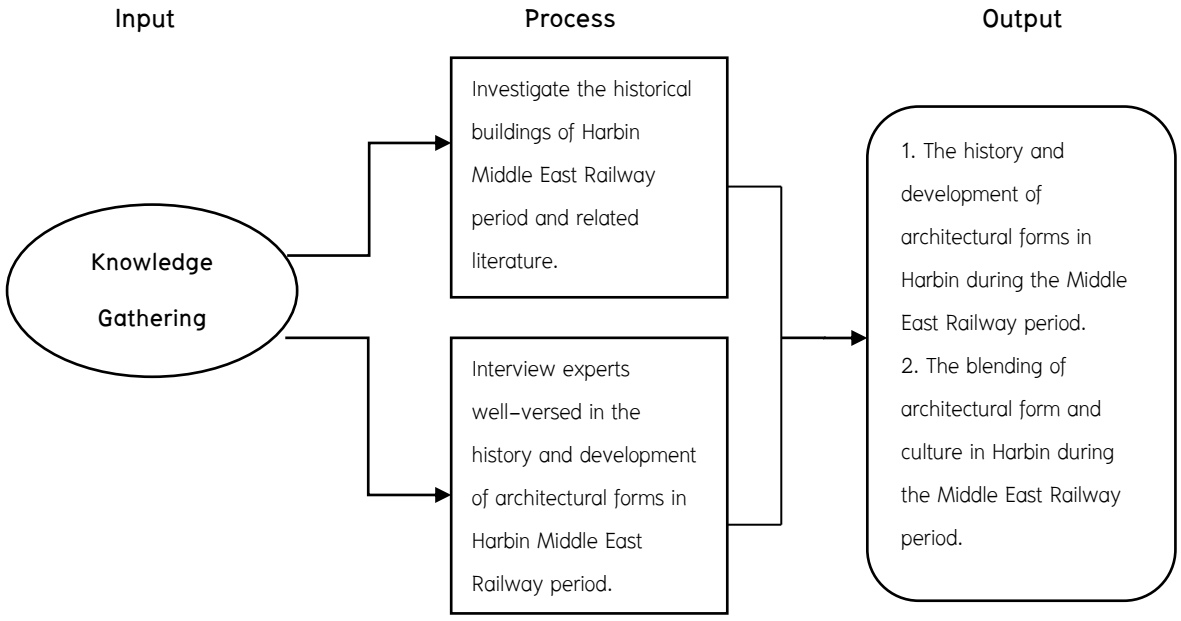

Fig. 1 Conceptual Framework

Research Methodology

This study employed a qualitative research methodology, which is outlined as follows:

Research Population

The population selection process for the study on architectural forms and cultural interactions during the Middle East Railway period in Harbin encompassed several key considerations. The researchers selected 219 buildings in the fifth batch of historical buildings in Harbin as the first group of population (Li, 2021). This choice allowed for a concentrated investigation into Middle East Railway–era architecture and the cultural blending phenomenon, thereby contributing valuable data and insights. Moreover, the selection criteria prioritized accessibility and the availability of data, leading to the inclusion of buildings with existing structures or well–documented historical records. This practical approach facilitated data collection and enhanced the understanding of Middle Eastern railroad architecture and its associated culture.

Within this batch of buildings, representative buildings were carefully chosen, including various types such as stations, factories, churches, clubs, hospitals, and schools. These selected structures served as focal points for the in–depth examination, revealing their architectural forms, styles, and cultural significance. Additionally, consultation was sought from experts in architectural history and cultural preservation organizations in the Harbin area to ensure that the sample selection aligned with academic and cultural preservation objectives.

The second group of population in this study were 10 experts and scholars who have studied Harbin's historical architecture for more than 10 years. The reason is that their experience in studying Harbin's historical architecture adds depth and expertise to the study, ensuring a comprehensive analysis of the subject.

Research Sample

According to Krejcie and Morgan (1970), the researchers selected 119 from 219 historical buildings as the sample size. Stratified random sampling was used to select Samples based on Grading Criteria for Architectural Samples as shown in Table 1 (Li, 2021).

Table 1 Grading Criteria for Architectural Samples

Sample Type Grade	Graded Historic Buildings (Class A)	Ungraded Historic Buildings (Class B)
Grade I construction	1. Category I Historical Preservation Buildings. 2. Buildings under Class II Historic Preservation that meet the requirements of Class B.	1. The number of floors of the building is not less than 3 floors. 2. Building area greater than 1000 square meters. 3. Located in the main street.
Grade II construction	1. Category II Historic Preservation Buildings. 2. Three types of historic preservation buildings that meet the requirements of Category B.	1. The number of floors of the building is 2–3 floors. 2. Building area of 500–1000 square meters. 3. Located in the main and secondary streets.
Grade III construction	1. Three types of historically protected buildings.	1. Number of floors 1 floor. 2. Building area less than 500 square meters. 3. Located on a secondary street.

Source: Li (2021)

As shown in Table 2, the researchers selected 5 Grade I buildings, 22 Grade II buildings, and 92 Grade III buildings from 219 historic buildings to make up a sample size of 119 through stratified random sampling.

Table 2 Population and Sample Size by Historical Buildings

Grade	Harbin five batch 219 historical buildings	Sample Size
Grade I Construction	9	5
Grade II Construction	40	22
Grade III Construction	170	92

Another group of participants selected for this study comprised 10 experts and scholars well–versed in the history and development of architectural forms in Harbin Middle East Railway period. This group included 2 historians, 3 cultural anthropologists, and 5 architectural historians (Meuser & Nagel, 2019).

Data Collection

The study employed various data collection methods to comprehensively investigate the history and development of architectural forms in Harbin during the Middle East Railway period and blending of architectural form and culture in Harbin Middle East Railway period. Firstly, Firstly,

a literature research method was employed to collect historical data, architectural culture, art, modeling, and pertinent literature (Snyder, 2019). The authors studied the architecture of Harbin in the Middle East Railway period based on such books as "Harbin Architecture Art", "Harbin Old Shadow" and "Middle East Railway history chronicle" (Chang, 1997; Li, 2000; Zheng, 1987). This approach facilitated an in-depth comprehension of the evolution of architectural culture associated with the Middle East Railway period in Harbin. Secondly, a historical research method focused on collecting and organizing archival materials to interpret historical events chronologically (Tan, 2015). It also aimed to understand architectural culture as a historical phenomenon and study its development and cultural integration systematically.

The field research method involves studying the architectural forms in different Harbin environments, considering geographical and cultural factors. Data collection was tailored to local backgrounds and customs, allowing for an in-depth examination of local architectural cultures (Van de Ven, 2017). The expert interview method was applied to gather first-hand information on architectural forms and cultural blending during the Middle East Railway period. This method provides insights into experts' perspectives (Meuser & Nagel, 2019).

Lastly, a multidisciplinary research method is adopted, encompassing various disciplines like architecture, cultural geography, cultural communication theory, historicization, and social anthropology (Egboka & Alike, 2018). This interdisciplinary approach enhances the research's comprehensiveness and objectivity, allowing for a more in-depth exploration of Harbin's modern architectural culture and heritage protection. Overall, these research methods together contribute to a holistic understanding of the Middle East Railway period architectural culture in Harbin.

The instruments for collecting the data were expert interview, observation and document analysis.

Data Analysis

For the textual materials from the document analysis and interview record, the researcher employed descriptive analysis and content analysis to summarize history and development of architectural forms in Harbin during the Middle East Railway period and blending of architectural form and culture in Harbin Middle East Railway period. The statistical tools used for descriptive analysis were frequency and percentage. As for the observation of historical buildings, the authors adopted content analysis to analyze the architectural forms in Harbin during the Middle East Railway period and blending of architectural form and culture in Harbin Middle East Railway period.

Research Results

Objective 1. Based on the results from observation and document analysis, Harbin boasts a diverse array of architectural styles, blending foreign and local influences, categorized into 17 distinct styles. These can be grouped into five main categories: foreign national architectural styles (Russian, Japanese, and Jewish), new wave architectural styles (Art Nouveau, Decorative, and Modernist), Western classic architectural styles (Eclecticism, Baroque, Renaissance, and gothic), local architectural styles (Traditional Chinese and Chinese Baroque), and miscellaneous styles (Early industrial and Mixed). Harbin's architectural landscape reflects its rich history and cultural blending, resulting in a unique and varied urban aesthetic.

Table 3 presented a breakdown of architectural styles of Harbin Middle East Railway period within a dataset, showcasing their respective frequencies and percentages. Eclectic style dominates as the most common architectural choice, representing 40% of the dataset, followed by Mix and Match style at 13% and Russian Traditional style at 8%. Other styles, such as Art Nouveau, Chinese Baroque, Railroad, and Neoclassical, also find their place with varying degrees of representation, ranging from 7% to 5%. Meanwhile, less prevalent styles, like Decorative, Early Industrial, Chinese Traditional, Modernist, Renaissance, Jewish, Byzantine, Baroque, Gothic, and Japanese Traditional, each account for 3% or less of the dataset, highlighting the diversity of architectural preferences in this context.

Table 3 Architectural Styles of Harbin Middle East Railway Period (N= 119)

Architectural style	Frequency	Percentage
Eclectic style	48	40%
Mix and Match style	15	13%
Russian Traditional style	10	8%
Art Nouveau style	9	7%
Chinese Baroque style	7	6%
Railroad style	6	5%
Neoclassical style	5	4%
Decorative style	4	3%
Early industrial style	3	3%
Chinese traditional style	3	3%
Modernist style	2	2%
Renaissance style	2	2%
Jewish style	1	1%
Byzantine style	1	1%

Baroque style	1	1%
Gothic style	1	1%
Japanese traditional style	1	1%

When considered the history and development of architectural forms in Harbin during the Middle East Railway period, the architectural landscape of the city underwent a fascinating chronological transformation, intricately woven with historical, cultural, and societal dynamics. In its early phases, Russian architectural influences, typified by churches and residential structures (as shown in Fig. 2). On September 27, 1923, the second reconstruction of Saint Sophia Cathedral began and lasted for 9 years, completing on November 25, 1932. It became the largest Eastern Orthodox cathedral in the Far East region. Saint Sophia Cathedral was designed by the Russian architect Koyashikov and was known for its grandeur, elegance, and magnificence. It stood at a height of 53.25 meters with a floor area of 721 square meters, capable of accommodating 2000 people. At the top of the main entrance was a bell tower, and the 7 bronze bells were precisely tuned to 7 musical notes, requiring skilled bell-ringers to produce melodious and rhythmic chimes. The cathedral's architectural layout resembled a Greek cross, influenced by Byzantine architectural style, while its main dome and bell tower featured traditional Russian "onion dome" and "tent roof" designs.

Fig. 2 Saint Sophia Cathedral

Source: Liu, X.-S. (2019, December 16). *Harbin's most famous landmark. Sohu.* Retrieved from https://www.sohu.com/a/360628086_393023

Concurrently, traditional Japanese, Jewish, and Islamic architectural styles made their mark in the city, each with its distinctive period of prominence (Fig.3 depicts the site of the Jewish high school). In December 1918, the Jewish high school was completed and opened. This was the first Jewish high school in the Far East region. The building featured pointed arch windows on the second floor, windows adorned with the Star of David hexagram, a round-arched portico, tower columns on the parapet wall, and a beautifully domed roof, displaying a distinctive Jewish architectural style. Western architectural trends, such as Renaissance, Gothic, Baroque, and Neoclassical, also left their imprints at various points in time (Umi, 2018). The city experienced a surge of Art Nouveau and modernist architectural expressions, contributing a contemporary touch to its urban fabric. Traditional Chinese architecture remained a resilient local presence, particularly flourishing during the boom period but gradually diminishing after 1931. Moreover, mixed architectural styles, originating in the early years, gradually waned in significance after 1937. This intriguing chronological distribution of architectural styles exemplifies the multifaceted and dynamic architectural heritage of Harbin, reflecting the interplay of diverse cultural influences, evolving societal circumstances, and shifting architectural trends throughout this historical period (State Grid News, 2013).

Fig. 3 The site of the Jewish high school

Source: Umi. (2018, October 16). *Harbin Jewish site group visit guide*. Mafengwo. Retrieved from https://www.mafengwo.cn/gonglve/ziyouxing/174517.html

Objective 2. The architectural of the Middle East Railway period in Harbin exhibits distinctive characteristics related to cultural blending. These characteristics are evident in various aspects of the architectural culture according the summary of content analysis, field research and expert interview:

Pluralistic Innovation and Inclusiveness: The architectural culture of the Middle East Railway period is marked by pluralistic innovation and inclusiveness. It embraces diverse architectural styles, categories, construction standards, and artistic standards. This inclusiveness is most prominently expressed in the diversity of architectural styles and cultural types. It demonstrates the architectural culture's ability to integrate and innovate through the coexistence of various cultural elements.

Migrant Cultures and Ethnic Traditions: The movement of people during this period contributed to the flow and spread of cultures among different ethnic groups. Each ethnic group brought its traditional architectural culture and classic styles to the Middle East Railway dependency, resulting in a display of various architectural cultures. This includes Russian Slavic, Japanese, European classical, Islamic, British, Germanic, Korean, Mongolian, and more. The interaction of these diverse cultures led to cultural blending and the creation of unique architectural styles.

Industrial Civilization and the Age: The architectural culture of the Middle East Railway period also reflects the influence of emerging architectural styles related to industrialization and modernity. This includes early industrial architectural styles, Art Nouveau, modernist architectural styles, and Art Deco. These styles represent the transition from traditional to modern aesthetics, reflecting the influence of industrialization on architecture.

Local Culture and Regional Technology: There is evidence of the blending of traditional Chinese architectural elements into the architectural culture of the Middle East Railway. Russian architects adopted the style of classical Chinese architecture for some building projects, creating a blending of Russian and Chinese architectural traditions. This blending reflects the process of foreign and local culture coming together to form a unique architectural culture.

Cultural Diffusion and Fusion: The dissemination and transformation of architectural culture in the railroad dependencies and the northeastern region of China resulted in the fusion of modern elements from the West and traditional Russian culture. This fusion is evident in various aspects of

architectural style, space, and typology. The visible and invisible aspects of this cultural fusion contribute to the rich heritage of the architectural culture.

Geopolitical Character: The architectural culture of the Middle East Railway period often reflects a neutral style that blends Russian and Chinese influences. Art Nouveau style, for example, was used to create a modern and open cultural atmosphere, demonstrating the geopolitical nature of cultural integration in the region.

Overall, the architectural culture of the Middle East Railway period in Harbin is a testament to the complex process of cultural blending, where various cultural elements came together to create a unique and diverse architectural landscape.

Discussions

The objectives of the study were to conduct a comprehensive and in-depth study of the history and development of architectural forms in Harbin during the Middle East Railway period and to study the blending of architectural form and culture in Harbin during the Middle East Railway period. To achieve the objectives, the researchers selected 119 buildings in the fifth batches of 219 historical buildings in Harbin, as well as related books, documents and historical materials as research objects. Through qualitative analysis, the researchers tried to make a comprehensive and in-depth exploration of the architectural forms and the blending of architecture and culture during Middle East Railway period in Harbin.

Objective 1 of the research aimed to conduct a comprehensive and in-depth study of the history and development of architectural forms in Harbin during the Middle East Railway period. Through the study identified 17 distinct architectural styles, which were grouped into five main categories: foreign national architectural styles, new wave architectural styles, Western classic architectural styles, local architectural styles, and miscellaneous styles. The dominance of the Eclectic style, representing 40% of the dataset, highlights the city's penchant for blending different architectural elements. This diversity in architectural preferences reflects Harbin's unique history and cultural blending.

The chronological evolution of architectural styles in Harbin is particularly fascinating. Russian architectural influences held sway in the early phases, as evidenced by the presence of churches and residential structures. Concurrently, traditional Japanese, Jewish, and Islamic architectural styles made their mark, adding further layers of cultural diversity. Western architectural trends, such as Renaissance, Gothic, Baroque, and Neoclassical, also left their

imprints at various points in time. The city experienced a surge of Art Nouveau and modernist architectural expressions, contributing a contemporary touch to its urban fabric. Traditional Chinese architecture remained a resilient local presence, gradually diminishing after 1931. The waxing and waning of mixed architectural styles throughout this period exemplify the dynamic architectural heritage of Harbin, reflecting diverse cultural influences and shifting societal circumstances. This assertion finds support in Jiang's (2017) study, which posited that the urban architectural style of Harbin represents a distinctive blend forged through the amalgamation of Eastern and Western cultures. In addition, Jiang (2014) also supported that the formation of Harbin's architectural style stems from its geographical location and historical background, absorbing architectural culture from Europe, Russia and other countries, forming a multicultural city, known as the "Little Paris of the Orient", whose buildings not only carry the city's history and culture, but also show the deep historical and social value.

Objective 2 delved into studying the blending of architectural form and culture in Harbin during the Middle East Railway period. Through the content analysis on the expert interview and previous document. The research findings highlight six noteworthy characteristics of architectural and cultural blending. Pluralistic Innovation and Inclusiveness: The architectural culture of this period embraced diverse architectural styles and cultural elements, demonstrating the ability to integrate and innovate through the coexistence of various cultural influences. This finding was in line with Gong (2020) that the construction of railways and architectures in the Middle East were influenced by many countries, including Russia, Japan, and Manchuria, so Harbin's architectural style is exotic. Migrant Cultures and Ethnic Traditions: The movement of people from different ethnic backgrounds contributed to the diversity of architectural cultures in Harbin. This resulted in the blending of various architectural traditions and the creation of unique styles. Industrial Civilization and the Age: The influence of industrialization and modernity on architecture is evident in the adoption of early industrial, Art Nouveau, modernist, and Art Deco styles, marking the transition from traditional to modern aesthetics. Local Culture and Regional Technology: The integration of traditional Chinese architectural elements into the architectural culture reflects the blending of foreign and local cultures, creating a distinctive architectural identity. These findings were consistent with Sun (2012)'s, who believe that the shaping of historical buildings during the Middle East Railway period in Harbin is more the result of the integration of industrial civilization and local culture. Cultural Diffusion and fusion: The dissemination and transformation of architectural culture in the region led to the fusion of Western and Russian elements, contributing

to a rich and diverse architectural landscape. Geopolitical Character: The architectural culture often exhibited a neutral style that blended Russian and Chinese influences, reflecting the geopolitical nature of cultural fusion in the region. The findings of Wei and Liu (2013) supported that the exchange and evolution of architectural culture in the Harbin Middle East Railway period led to a diverse architectural landscape with Western and Russian influences.

The research results presented in this study shed light on the rich and diverse architectural heritage of Harbin during the Middle East Railway period. These findings provide valuable insights into the city's historical and cultural development and offer a deeper understanding of the architectural landscape that has shaped Harbin's identity.

Knowledge from Research

The study identified 17 distinct architectural styles in Harbin during Middle East Railway period according to the research findings, which were categorized into five primary groups: foreign national architectural styles, new wave architectural styles, Western classic architectural styles, local architectural styles, and miscellaneous styles. The emergence of this diverse range of architectural styles can be attributed to the characteristics of the blending of architectural form and culture in Harbin during the Middle East Railway period in six key factors, as illustrated in Figure 4.

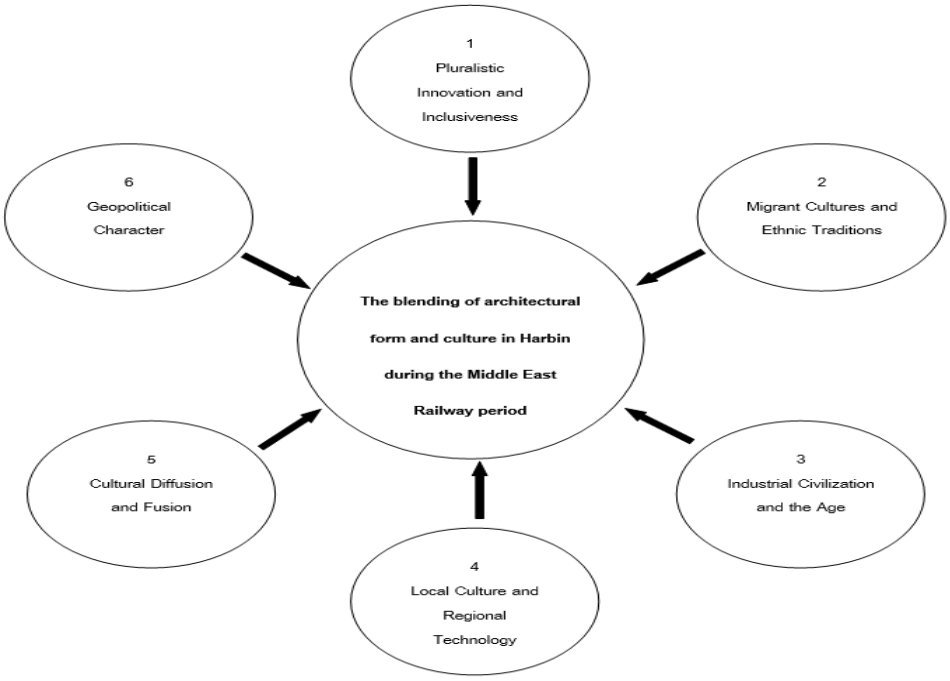

Fig. 4 The blending of architectural form and culture in Harbin during the Middle East Railway period

Conclusion

Harbin's architectural culture during the Middle East Railway period is a testament to the intricate and multifaceted process of cultural blending. The city's architectural landscape reflects the rich tapestry of its history, the interplay of diverse cultural influences, the impact of evolving societal circumstances, and the shifting architectural trends of the era. At this phase, Harbin's architectural styles, influenced by cultural amalgamation, have evolved into 17 distinct styles, as depicted in Fig. 5.

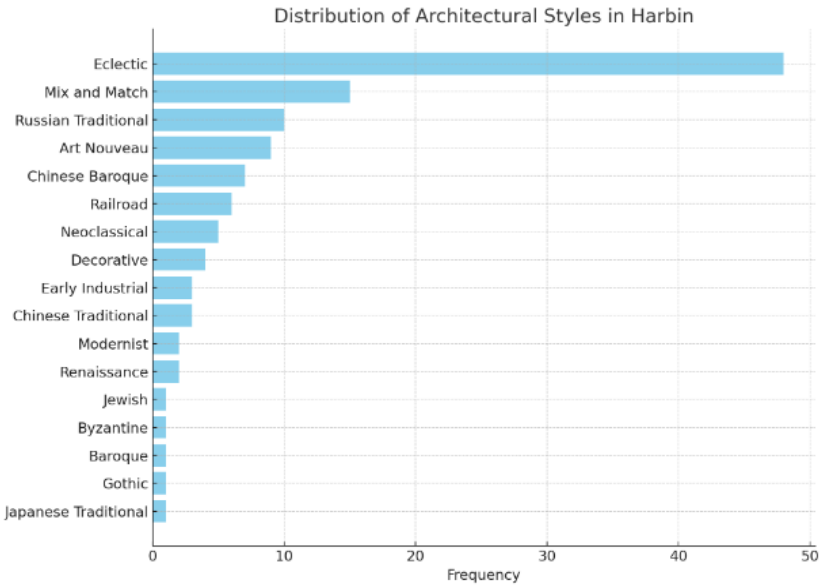

Fig. 5 Distribution of Architectural Styles in Harbin

Source: Created by authors

This research contributes significantly to our understanding of Harbin's architectural identity, offering valuable insights for scholars, historians, preservationists, and anyone interested in the captivating history and culture of this remarkable city. Harbin's architectural heritage stands as a testament to the enduring legacy of cultural exchange and creativity that continues to define this vibrant city.

Suggestions

Given the rich and diverse architectural heritage identified in the research, it is crucial for local authorities and heritage preservation organizations to prioritize the preservation and restoration of these historical buildings. Initiatives could include creating a comprehensive list of

historically significant structures, offering incentives for their maintenance, and collaborating with architectural experts to ensure that restoration projects are carried out accurately and in a culturally sensitive manner. Public awareness campaigns and educational programs can also help the community appreciate the value of preserving these unique architectural styles.

Further studies can pay more attention to investigate the specific mechanisms and instances of architectural influence and cross-cultural exchange during the Middle East Railway period in Harbin. Analyze the interactions between different ethnic and cultural groups and their impact on architectural styles. This research could involve detailed case studies of specific buildings or neighborhoods to uncover the nuances of cultural integration through architecture.

References

Bakich, O. (1986). A Russian city in China: Harbin before 1917. *Canadian Slavonic Papers, 28*(2), 129–148.

Chang, H.–S. (1997). *Harbin architectural art.* Heilongjiang Science and Technology Press.

Chen, Y.–M., & Liu, D.–P. (2017). *Analysis of the Cultural Integration Phenomenon in the Construction of the Chinese Eastern Railway*(Master's thesis). Harbin Institute of Technology.

Egboka, P. N., & Alike, U. G. (2018). Principals' Application of Communication Skills as a Correlate of Teachers' Job Performance in Secondary Schools in Anambra State, Nigeria. *EPRA International Journal of Multidisciplinary Research (IJMR), 4*(7), 229–236.

Gao, F. (2008). *A Comparative Study of Culture Evolution of Modern Architectural Phenomenon of Shenyang and Haerbin in Cultural Distance Perspective*(Master's thesis). Harbin Institute of Technology.

Geng, S., Chau, H.–W., Wang, T., & Yan, S. (2021). Influences of Russian Culture on Harbin's Urban Planning from 1898 to 1931 and Conservation Recommendations. *Journal of Chinese Architecture and Urbanism, 3*(1), 1–25.

Gong, C. (2020). *A Study of the Practical Functions of Harbin Middle–East Railway Buildings Based on Preservation*(Master's thesis). Harbin Normal University.

Jiang, J.–Q. (2014). *Research on Protective Development of Civil Buildings During the Chinese Eastern Railway Period in Harbin*(Master's thesis). Northeast Forestry University.

Jiang, X. (2017). The Evolution of Architectural Culture of Harbin under the Dual Structure Characteristics. *Advances in Social Science, Education and Humanities Research, 86*, 173–176.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610.

Li, H. (2021, June 9). *The fifth batch of 219 historic buildings in Harbin list released | 108 new, where are they?.* Retrieved September 12, 2023, from https://baijiahao.baidu.com/s?id=1702015061211513232&wfr=spider&for=pc

Li, Q., & Liu, D.–P. (2021). *Research on the Environmental Risk of the Architectural Heritage Area of the Chinese Eastern Railway from an Evidence–Based Perspective*(Doctoral dissertation). Harbin Institute of Technology.

Li, S.–X. (2000). *Harbin Old shadow.* People's Fine Arts Publishing House.

Liang, X. (2017). Research on the Influence of Russian Culture on Contemporary Harbin. *Финансовая Экономика, 5,* 392–394. [In Ruassian]

Liu, X.–S. (2019, December 16). *Harbin's most famous landmark. Sohu.* Retrieved September 22, 2023, from https://www.sohu.com/a/360628086_393023

Meuser, M., & Nagel, U. (2009). *The Expert Interview and Changes in Knowledge Production.* Palgrave Macmillan.

Ni, X. (2016). *Study on Architectural Characteristics of New Art Style in Harbin.* In Proceedings of the 2016 3rd International Conference on Education, Language, Art and Inter–cultural Communication (ICELAIC 2016).

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research, 104*, 333–339.

State Grid News. (18 October, 2013). *Harbin: the concentration of diversity and differentiation.* Retrieved October 1, from https://news.hexun.com/2013–10–18/158844030.html

Sun, H.–T., Zhang, L.–L., & Bai, X.–W. (2014). The research of evolution of spatial morphology of Harbin. *Applied Mechanics and Materials,* 603–606.

Sun, Y. (2012). *A Study on the Historical Architectural Value of Hengdaohezi on the Middle–East Railway*(Master's thesis). Northeast Forestry University.

Tan, J. J. (21 April 2015). *Historical Research: A Qualitative Research Method.* Retrieved September 25, 2023, from https://www.academia.edu/24276932/Historical_Research_A_Qualitative_Research_Method

Tong, Y.-Q. (2013). Distribution and Integrity Protection of the Chinese Eastern Railroad Heritage. *Urban Development Studies, 20*(04), 41-46.

Umi. (2018, October 16). *Harbin Jewish site group visit guide.* Retrieved September 21, 2023, from https://www.mafengwo.cn/gonglve/ziyouxing/174517.html

Van de Ven, A. H., & Poole, M. S. (2017). Field Research Methods. *The Blackwell Companion to Organizations,* 867–888.

Wang, F., Gai, L., & Zhu, F. (2017). Characteristics, current situation and protection suggestions of modern historical and cultural buildings in Heilongjiang. *China Cultural Heritage,* (1), 26-30.

Wei, X., & Liu, S. (2013). A Gathering of Various Architectural Styles in the Historical Buildings of the Middle-East Railway. *Chinese Cultural Heritage,* (1), 20-27.

Zhang, B., Zhao, Z., Zhang, B., & Li, P. (2018). Research status and hot spots on the Middle East Railway from the perspective of urban heritage. *Urbanism and Architecture,* (22), 104-107.

Zhang, J., & Zhang, Y. (2011). *Analysis of the distinctiveness of the planning of Harbin Middle East Railway residential area.* In Proceedings of the 2011 International Conference on Electrical and Control Engineering.

Zheng, C.-C. (1987). *A Chronology of the History of the Chinese Eastern Railway: 1895-1952.* Heilongjiang People's Publishing House.

Zheng, C.-Z. (1987). *Middle East Railway history chronicle.* Heilongjiang People's Publishing House.