



# Enhancing the Integration of Tramway Transportation and Cultural Tourism: Theoretical Significance and Practical Approaches

Jiaozhi Pu<sup>1,a\*</sup>, Zongxin Liu<sup>2,3,b</sup>

<sup>1</sup>School of Culture and Art, Chengdu University of Information Technology, Chengdu, Sichuan, 610103, China

<sup>2</sup>West China Hospital of Sichuan University, Chengdu, Sichuan, 610041, China

<sup>3</sup>School of Economics and Management, Southwest Jiaotong University, Chengdu, Sichuan, 610031, China

<sup>a\*</sup>pjz@swjtu.edu.cn, <sup>b</sup>liuzongxin@wchscu.cn

**Abstract.** The cultural and tourism attributes of tram transportation have been examined, and theoretical significance of integrating cultural and tourism aspects within tram development has been analyzed from the perspectives of system theory, evolutionary economics, and innovation theory. A practical framework for the integration of cultural and tourism elements into tram services has been proposed through methodologies such as literature research, online surveys, and case analyses.

**Keywords:** tram; integration of culture and tourism; theoretical connotation; practical path; future trend.

## 1 Introduction

After years of development, the cultural industry and the tourism industry have long been mutually permeable and interdependent, symbiotic and mutually beneficial, forming a new industrial form, namely the cultural and tourism industry. Trams not only serve as an important part of the public transport network, meeting the travel needs of residents along the route, but also often connect the city's tourism resources. Because they run on the ground throughout the journey, they are universally recognised for their role in carrying the cultural spirit of the city, and have become an important carrier for people to experience the history and culture of the city. Many cases at home and abroad show that in addition to emphasising the basic functions of trams as "public transport" and "promoting urban development," different cities have not neglected their "cultural tourism" attributes. However, the current development of tram cultural tourism integration is still in the stage of extensive development, with various practical problems such as serious homogenisation, low integration, and lack of participation, which greatly affect and hinder the deep integration of trams and the cultural tourism industry. Therefore, clarifying the theoretical connotation and practical path of the integration of tram

cultural tourism is of great significance for guiding the current integration of tram cultural tourism.

## **2 The Theoretical Connotation of the Integrated Development of Tram, Culture and Tourism**

### **2.1 The Cultural Tourism Attribute of the Tram**

Trams, as a form of urban transport, with the advancement of technology, their technical characteristics of being green and low-carbon, flexible in supply, appropriate in capacity, beautiful in appearance, low in noise, and high in comfort, have become a consensus in the industry, as they are highly compatible and adaptable to the transport needs, service quality, and landscape environment of tourist cities. The results of a large number of domestic and international scientific research and industrial practices have shown that the development of the transportation system has an important impact on the development of the cultural tourism industry[1]. Then, using the ideas of these research results, we can analyse the important impact of the completion of trams on the development of the cultural tourism industry along the route.

First, every change in transportation technology allows tourists to reach further places at a faster speed, cheaper price and more comfortably, based on the change in accessibility[2]. Centripetal force and connectivity are two core indicators used to assess the accessibility of an area[3]. After the tram is built, although the number of nodes in the tourist transport network remains unchanged, the number of transport routes has been effectively increased. This change not only improves the centripetal force of the network, i.e. the relative advantage of the destination compared to the starting point, but also enhances the connectivity, i.e. the tightness of the connection between the destination and the transport network, thereby improving accessibility. More importantly, if a tram stops at a tourist destination, the destination will be more easily integrated into the transport network, thereby attracting more tourism-related economic activities and promoting the prosperity of the local tourism industry.

Secondly, the cost of transport is undoubtedly one of the key factors influencing the choice of a tourist destination. This cost is made up of two components: time cost and cost of money[4]. Time cost can be divided into travel time and time spent at the destination. Given a limited amount of time, travellers always seek to maximise the use of time. To achieve this goal, they may seek more convenient and efficient means of transport to save travel time. However, if the transport situation at a tourist destination does not meet the needs of improving tourism attractiveness, then the interest of tourists may be reduced and they may choose other more attractive destinations. Therefore, if more time can be saved in transport within a given time limit, then the actual time spent at the destination by tourists will increase accordingly, which will undoubtedly enhance their travel experience and satisfaction.

Finally, from the perspective of promoting urban development and the development of the cultural tourism industry, the introduction of trams can greatly reduce the cost of the flow of various elements in the cultural tourism industry. The area covered by the

tram line has lower transportation costs, and the cost of industrial development will also be significantly reduced, which is conducive to the development of the cultural tourism industry along the line. Although the attractions along the line cannot be moved, due to the reduction in travel costs, tourists can use trams to easily move between scenic spots and attractions along the line, thereby promoting the development of scenic spots and attractions along the line.

## **2.2 Basic Connotation of the Integrated Development of Tram, Culture and Tourism**

The tram industry, the cultural tourism industry and their related elements have gradually penetrated and intertwined, transcending the original industrial boundaries and element categories to form a new, mutually growing industrial symbiosis. From the perspective of systems theory, industry is regarded as a complex network of interwoven subsystems such as technology, enterprises, products, markets and institutions. From the perspective of evolutionary economics, industrial integration is not a one-off event, but a historical evolutionary process in which novelty and innovation constantly emerge and become the core driving force of industrial integration. Under this theoretical framework, industrial integration is given a new connotation of industrial innovation[5]. Evolutionary economic geography, in discussing the evolution of industrial innovation, emphasises the importance of spatial characteristics and advocates the use of a dynamic evolutionary perspective to reveal the spatial phenomena and laws of industrial activities. In addition, it introduces the concept of "co-evolution" to describe how interacting system entities adapt to each other in a continuous evolutionary process, exhibiting a complex interactive relationship and evolutionary mechanism[6]. This perspective further highlights the indispensable role of local, multi-scale, non-economic and other factors in the evolution of economic and social systems. In the integration and development of the tram and cultural tourism industries, this perspective of collaborative evolution is particularly relevant. The tram and cultural tourism industries show a close relationship of mutual benefit, symbiosis, mutual causality and interactive adaptation, and together constitute a complex collaborative system. The evolution of this system is not only reflected in the multi-dimensional collaborative evolution process and results between the tram and the main body of the cultural tourism system, but also more profoundly reflects the deep-seated changes caused by the emergence and sharing of novelty under the premise of the openness of the industrial system. From an operational perspective, the integrated development of the tram and cultural tourism industries can be expressed as the cross-industry, cross-domain, and cross-border expansion of tram resources through the comprehensive integration of demand, subjects, space, technology, systems, and supply, and the continuous derivation of new formats, new spaces, new fields, new models, and new kinetic energy, thereby promoting the tram and cultural tourism industries to achieve a higher level of coordinated development.

### **3 Practical Path for the Integrated Development of Tram, Culture and Tourism**

The integration of tramway and cultural tourism is a systematic project that covers the comprehensive development of tramway's functions in cultural tourism. Based on the theories of industrial chain, industrial association and industrial integration, the cases of tramway cultural tourism integration at home and abroad were sorted out and analysed through literature research and network investigation, and the following practical paths were proposed.

#### **3.1 Trams as a Cultural Landscape**

Trams are not only a means of transport in the city, but also an integral part of the cultural fabric of the city, becoming a beautiful landscape. For example, Dalian has a century-old tram line[7]. The wooden interiors and simple mechanical structure of these trams allow people to feel the atmosphere of life a century ago. These trams shuttle through the streets and alleys of the city, and their tracks are imprints of the city's history. Every stop and every line records the vicissitudes and changes of the city.

#### **3.2 Tram as a Series of Cultural Travel Destination**

Trams, with their unique tracks, closely connect various cultural and tourism destinations in the city. Whether it is museums, art galleries, scenic spots or nature reserves, trams can cleverly connect them together, presenting a colourful picture of the city's cultural and tourism landscape to visitors. Take Amsterdam's trams as an example. They travel through every corner of the city, connecting many iconic attractions, providing visitors with a convenient sightseeing experience.

#### **3.3 Trams as a Cultural and Travel Information Provider**

Trams are not only a means of transport, but also a vehicle for conveying cultural and tourism information. Through body painting and on-board multimedia, trams convey a wealth of local cultural and tourism information to tourists. For example, the trams in Wuhan have been re-created by artists, incorporating the city's cultural characteristics into the body painting, conveying a wealth of cultural and tourism information to tourists, and attracting the attention of a large number of tourists[8].

#### **3.4 Tram as a Place for Cultural and Tourism Experience**

Riding a tram is a unique cultural and tourism experience in itself. During the ride, visitors can enjoy the cityscape outside the window and feel the unique charm of the city. The environmentally friendly and energy-saving characteristics of trams also inject new vitality into the sustainable development of cities. In addition, some trams have also launched special cultural and tourism services, such as the 54th tram cultural

and tourism special train in Changchun, which has a coffee bar and cultural and creative product displays inside the car, allowing visitors to enjoy more cultural experiences during the ride.

### **3.5 Tram as a Cultural and Tourism Activity Organizer**

Trams can provide visitors with the opportunity to learn more about the history, culture and customs of a city by designing themed routes, holding cultural lectures and interactive activities. For example, Blackpool offers tram rental services to provide venue support for various special cultural activities such as weddings and corporate events, allowing visitors to experience the local culture more deeply while participating in the activities. In addition, some cities have launched activities that link trams with cultural venues such as museums and art galleries, allowing visitors to gain a deeper understanding of the city's cultural history while riding the tram.

## **4 Conclusion**

This paper comprehensively analyses the theory and practice of the integration of trams and the cultural tourism industry, pointing out that trams, as an important carrier of urban transportation and cultural experience, play a key role in improving the accessibility of tourist destinations, reducing travel costs, and enhancing the experience of tourists. In the face of the current challenges in the integration process, the practical path proposed in this paper aims to guide the deeper integration of trams and the cultural tourism industry, promote industrial upgrading and sustainable urban development through innovation and cross-border cooperation, and contribute new impetus to the cultural heritage and tourism prosperity of cities.

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