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Received 16 June 2021
Revised 23 October 2021 Accepted 30 November 2021

# Ancient routes, new gateways: a systematic literature review of China's cultural route heritage 

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#### Abstract

Purpose - The study aims to understand how cultural route heritage is conceptualized and managed in China by systematically reviewing the research literature on Chinese cultural route heritage (CRH). The study intends to inspire further discussion on the theoretical and practical development of cultural routes since the development is still at a liminal stage in China. Design/methodology/approach - A total of 253 research articles related to Chinese cultural rote heritage from major Chinese and English research databases China National Knowledge Infrastructure (CNKI), Web of Science (WOS) and Scopus have been comprehensively identified and reviewed for the purpose of the study. Findings - Four major themes of research on Chinese CRH have been identified: conceptual evaluation, list of the routes and characteristics of the routes, conservation and utilization. The results revealed that China has very rich resources in CRH, many of which were formed a long time ago, which exist across vast geographic regions and have assumed multiple functions and undergone dynamic reciprocal exchanges among diverse cultures and ethnicities. Practical implications-The paper summarizes some major obstacles faced by CRH in China and proposes a strategic model to address the need for a more sustainable development of CRH in the Chinese context. Originality/value - The paper offers a comprehensive overview of CRH in China and discusses practical issues in management and development of heritage great in size, number and complexity.


Keywords Cultural route heritage, Chinese cultural routes, Cultural heritage, Heritage management, Heritage tourism
Paper type Research paper

## Introduction

Cultural heritage represents the shared memory of people in a community, a region, a nation or among nations. It bears witness to the formation of history and socio-cultural identity. Modern societies are increasingly aware of the importance of preserving their cultural and natural heritage so that future generations can also have access to the common memories that have shaped identity and reality for present-day people. This awareness led the United Nations

[^0]Journal of Cultural Heritage Management and Sustainable Development

Educational, Scientific Cultural Organization (UNESCO) to adopt the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972). By the year 2021, there are 1,154 heritages inscribed in the World Heritage List, which were distributed among 167 countries around the world (UNESCO, 2021). The heritage movement has acquired global momentum as one of the greatest collective human achievements of the past decades.

The understanding of the essence of cultural heritage has deepened through decades of multidisciplinary research and heritage management practice. For instance, in the last few decades of the 20th century, the development of a series of programs concerning linear heritage such as heritage canals and trails by the National Park Service (NPS) in the USA as well as the cultural routes of the Council of Europe (COE) program contributed to a significant advancement in the field of heritage conservation and utilization. Since the notion of "cultural route" first appeared with the Santiago de Compostela Declaration (COE, 1987) and the subsequent inscription of the Santiago pilgrimage routes into the World Heritage List in 1993, the conceptualization of cultural routes has attracted a great deal of scholarly attention and discussion. In 2005, the World Heritage Center of UNESCO included "heritage routes" as a specific term of reference to heritage in its operational guidelines, together with another category "canal heritage" (WHC, 2005), in addition to the existing categories, namely monuments, groups of buildings, sites, historical towns and town centers and cultural landscape. A milestone was reached when the advisory body of UNESCO's world heritage program, the International Council on Monuments and Sites (ICOMOS), defined this form of comprehensive and holistic heritage in the ICOMOS Charter on Cultural Routes (ICOMOS, 2008). In the document, a cultural route is defined as:
"Any route of communication, be it land, water, or some other type, which is physically delimited and characterized by having its own specific dynamic and historic functionality, which must fulfill the following conditions: It must arise from and reflect interactive movements of people as well as multi-dimensional, continuous, and reciprocal exchanges of goods, ideas, knowledge and values between peoples, countries, regions or continents over significant periods of time. It must have thereby promoted a cross-fertilization of the affected cultures in space and time, as reflected both in their tangible and intangible heritage; it must have integrated into a dynamic the historic relations and cultural properties associated with its existence." (ICOMOS, 2008).

As compared to other forms of cultural heritage, the ICOMOS (2008) definition highlights some distinctive features of CRH along with spatial, temporal, cultural and purposeful dimensions besides the outstanding universal values it possesses. For example, CRH emphasizes that temporal and spatial continuity for some routes can be significantly large in scale, traversing vast geographical regions, sometimes crossing continents; it includes great diversity in heritage forms and in landscape; it forms an integrative system itself, inseparable from its context and environment, and the value of the route as a whole is greater than the sum of its individual parts; CRH reflects the interactive, dynamic historical process of human communication and connection; the purpose of cultural routes as heritage projects has an overarching diachronical significance: it helps to the understanding and preservation of the reciprocal exchanges and ties among peoples and cultures in history, it serves as an instrument for sustainable territorial development today and it constitutes a platform for fostering cross-cultural understanding, collaboration and cohesion in the future (ICOMOS, 2008; Majdoub, 2010; Wang and Ruan, 2009; Shang, 2017; Gao, 2017).

Meanwhile, other conceptual frameworks concerning linear heritage have been developed outside the ICOMOS realm. Among them, the cultural route program of the COE and the National Historic Trails (NHT) of the NPS developed their own frameworks in order to meet the economic and socio-cultural needs in their respective contexts (COE, 2021; NPS, 2021). Some similarities and differences can be observed in the ICOMOS definition on cultural routes when compared to those of the COE and NPS. All three definitions adopt a holistic approach toward preservation management which takes into consideration both heritage and its contexts, both

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tangible and intangible heritage．Moreover，all programs promote the utilization of heritage for economic and social development（Laven et al，2010，Timothy and Boyd，2015；Guo and Yang， 2015；Liu and Shen，2017；Briedenhann and Wickens，2004）．Both the ICOMOS and COE highlight the historical and cultural aspects of a given route and emphasize cross－cultural exchanges and dialog（Guo and Yang，2015；Liu and Shen，2017），whereas the NHT aims at fulfilling recreational needs of the population and consider natural resources and landscape to be one of its key elements as reflected in the collaborative administration over the trails by the NPS and official authorities of land and forest（Timothy and Boyd，2015）．Furthermore，the ICOMOS definition is concerned primarily with heritage identification and conservation and it points to a physical delimitation of the routes and to a differentiation from tourism routes with cultural interests；however，the other concepts do not specify such focal points（ICOMOS，2008； Timothy and Boyd，2015；Guo and Yang，2015；Liu and Shen，2017）．

The research and management of CRH is still in its conceptual phase，and there is much to debate about the scope and the operational evaluation criteria to sufficiently define cultural routes and differentiate them from other linear heritage with similar heritage characteristics and elements（Wang and Ruan，2009；Ruiz et al．，2017）．Most of the scholarly studies on cultural route as heritage or tourism resources that are accessible in publications in the English language focused on the examples from the world＇s developed countries，which resulted in an unbalanced investigation of CRH from other regions such as Asia，Latin America and Africa，where there is abundant heritage resources of cultural route，such as the Silk Road，the Inca Trail and the Slave Route as a few examples（Timothy and Boyd，2015； Liu and Shen，2017）．China has a long－standing history of constant，extensive cultural exchange among various regions of the country and also with other countries in the world， which has left a legacy of very rich CRH resources in the territory（Shan，2009；Peng，2015）． Nevertheless，no systematic study assessing the overall current status of China＇s CRH has yet been conducted in the literature in English．Indeed，in the literature in Chinese，there are only two systematic literature reviews．One is an article which primarily documents the Chinese route－based heritage that has been studied so far by Chinese scholars（Dai et al．，2016）． Somewhat confusingly，the authors of this article do not distinguish between＂cultural route＂ and other heritage of linear form．The other review focuses on the research status of CRH in the Chinese literature but not on the routes（Lin et al．，2017）．Consequently，there is a lack of a comprehensive and conceptually consistent evaluation of the research literature in English on the CRH development in the Chinese context．This literature review aims to contribute to the academic discussion about CRH under the ICOMOS conceptual framework by addressing the questions as follows：How is CRH conceptualized in the Chinese context？Which Chinese cultural routes have been identified？How are they currently managed？

## Method

In order to clarify the research questions raised above，a systematic literature review on the topic has been conducted．To focus on quality scholarly work，this paper focuses on research articles published about the topic from the most reliable sources in both English and Chinese． It gathers information and generates insight from both Chinese and non－Chinese scholars． For literature in the English language，the articles were identified and selected from international databases such as WOS and Scopus；for literature in Chinese，this process was carried out from the largest full－text scientific journal database CNKI．The identification and selection process is illustrated in Figure 1.

In the search for literature in Chinese，the key words＂cultural route＂（in Chinese 文化线路 wenhua xianlu）were used．The last search for articles was made in January 2021．The time range is thus up to the end of 2020 but without terminus a quo in order to find all the relevant articles since the earliest time possible．The articles related to the＂Belt and Road Initiative＂ （BRI）were not included，since this paper discusses the Silk Road as a cultural heritage and


Note(s): *under the key word phrase "'cultural route' AND China"
**under the key word phrase 'Chinese cultural route'

Figure 1. Identification of articles
this is not the focus of BRI. The search initially generated 420 articles. After careful screening, irrelevant results were removed, and 244 articles were finally chosen and analyzed.

At WOS and Scopus the key word phrase "cultural route' AND China" was used to identify the relevant literature. No time limit was set for the starting year up to the end of 2020, and the articles related to the BRI were also excluded. The search initially generated 176 results in WOS and 189 in Scopus, although most of the results were not relevant to the topic, i.e. they were not related to either cultural route or Chinese cultural routes. Only six articles from WOS results and seven from Scopus results were related to CRH in China. Another search with the key words "Chinese cultural routes" was performed with both databases and it generated 112 results from WOS and 107 results from Scopus. After removing irrelevant articles, only two from WOS and one from Scopus were left. Some of these articles appeared in both databases. Thus, the final outcome was only nine separate and distinct articles. Among them, there was one article published in Spanish and another one in French. Both articles were highly relevant to the research topic and, therefore, were kept in the reviewing process.

For the purpose of this research, a total number of 253 articles (from which nine were in English/Spanish/French and 244 in Chinese) were selected and reviewed to map the current status of CRH in China.

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Table 1.
Evolution of the
cultural route concepts in China

## Results

Research themes and methods about the Chinese cultural routes
A total of 4 research themes can be identified from the 253 research articles on the Chinese CRH, namely conceptualization of cultural route, its identification and evaluation, conservation and utilization. The most widely researched theme is the heritage value assessment of the Chinese CRH, which accounts for more than half ( $N=133$, i.e. $53 \%$ ) of all the articles, followed by conservation ( $N=66$, i.e. $26 \%$ ), utilization ( $N=38$, i.e. $15 \%$ ) and conceptualization ( $N=16$, i.e. $6 \%$ ). In total, 221 articles ( $83 \%$ ) are case studies focusing on one specific route or one of the sections of the route, and the other 32 articles ( $17 \%$ ) discuss CRH as a general topic along the lines of the four themes mentioned above. In the case studies, the most commonly researched cultural route is the Silk Road ( $N=42$, i.e. $19 \%$ ), followed by the Ancient Tea Horse Road ( $N=33$, i.e. $15 \%$ ), the Grand Canal ( $N=32$, i.e. $14 \%$ ) and Shu Dao ( $N=15$, i.e. $7 \%$ ). The rest of the articles ( $N=99$, i.e. $45 \%$ ) focus on ten other routes. The majority of the articles ( $N=246$, i.e. $97 \%$ ) adopted a qualitative research design, with a few exceptions ( $N=7$, i.e. $3 \%$ ) on heritage value assessment that used quantitative methods: the cultural route evaluation model (CREM) to assess the heritage resources of the Ancient Nanxiang Road (Liu and Cao, 2018); the Delphi and analytic hierarchy process (AHP) for mapping heritage resource distribution and evaluating the weight of key factors in an evaluation model (Li et al., 2018; Li and Hu, 2019; Wang et al., 2019); the ArcGIS layer group technique as a data management model to improve management of complex data on cultural route resources over the Tea Road (Ren and Jiang, 2019) and finally, chemical analysis or dendrochronology to examine the characteristics of the cultural relics found along a given section of the Silk Road (Liu et al., 2012; Wang and Zhao, 2013). Scholars in Chinese CRH studies come from a variety of disciplines, such as architecture, geography, landscape, engineering, history, archeology and tourism (Lin et al., 2017).

## Evolution of the cultural route concept in China

Since the concept of CRH was first introduced in Chinese academia in 2005 (Li and Yu, 2005), it has undergone a development through several phases. Dai et al. (2016) refer to them as conceptualization and application and Lin et al. (2017) describe the phases as concept introduction, deepening and maturation. The current study proposes another classification: introduction, application and consolidation. The beginning of each phase was marked by some milestone events (see Table 1).

| year | Nur <br> (CNKI) | mber of articles published (WOS + Scopus) | $\begin{gathered} \% \\ (100) \end{gathered}$ | Major events |
| :---: | :---: | :---: | :---: | :---: |
| 2005-2008 | 20 | 0 | 8\% | CIIC-ICOMOS conference held in China (2005) official document on cultural routes published by ICOMOS (2008) |
| 2009-2014 | 79 | 3 | 32\% | Inscription of the silk road and grand canal as UNESCO world heritage sites (2014) |
| 2015 present | 145 | 6 | 60\% | Updated version of regulative document on cultural heritage including cultural route heritage in China by ICOMOS China (2015) |
| Subtotal | 244 | 9 |  |  |
| Total |  | 253 |  |  |
| Source(s): Authors' elaboration |  |  |  |  |

The first phase (2005-2008) started with the official introduction of "cultural route" as a new cultural heritage category for academia in China by Li Wei and Yu Kongjian in 2005. In the official document of the ICOMOS international conference in 2005, the definition, typical elements and preliminary identification criteria of CRH were outlined. In the same year, "heritage routes" was added in the operational guidelines of the World Heritage Center (WHC, 2005). As a result, more researchers joined the discussion on this topic, although the term "cultural route" was used interchangeably with other terms such as "linear cultural heritage," "route heritage" or "heritage corridor," which sometimes caused confusion (Yao and Li, 2006; Wang, 2010; Tong, 2016; Dai et al., 2016).

The second phase (2009-2014) began after the official release of a technical document prepared by the International Committee on Cultural Routes (CIIC) of ICOMOS in 2008: The ICOMOS Charter on Cultural Routes. Chinese scholars responded enthusiastically to the Charter. In 2009, some scholars in the field gathered in Wuxi, China, to call for high-quality research on Chinese CRH resources for more effective conservation (Tong, 2016; Ma et al., 2019). During this phase, China was actively preparing for the inscription of two cultural routes into the World Heritage List. All those initiatives and projects boosted further research to assess the heritage values of the Chinese CRH under the ICOMOS framework as reflected by an increase in research articles published on CRH, from 20 articles from 2005 to 2008, to 82 articles from 2009 to 2014.

The third phase (2015-present) was marked by the inclusion of CRH in the official regulatory document on cultural heritage in China: the updated version of Principles for the Conservation of Heritage Sites in China (ICOMOS China, 2015). In this document, the 38th principle applies to the conservation of cultural landscapes, cultural routes and heritage canals and emphasizes the holistic protection of these types of heritage as well as all their heritage elements. This phase witnessed a wider application and deeper reflection of the concept of CRH in the Chinese context. The amount of research conducted on CRH during this phase reached 151 articles, doubling that of the previous phase. In China, the term "cultural route" became the mainstream terminology and framework for conceptualizing and guiding the work on identification, evaluation, conservation and development of the route-based heritage.

Nonetheless, throughout the different phases of conceptual development, the application of the CRH concept in the Chinese context has been accompanied by some challenges. Some CRH scholars claimed that the ICOMOS definition was not clear enough to differentiate cultural routes from a wide range of linear heritage in China or to reflect its non-Western values and cultural diversity (Tong, 2016; Chen and Jones, 2020; Xu and Xiang, 2020; Zhang, 2020). Some authors attempted to address this lack of clarity by introducing non-ICOMOS concepts such as those of the COE or NPS especially in the tourism development of CRH, since other frameworks offer more successful application examples of meeting socio-economic needs and incorporating complex heritage elements and their diverse contexts (Li et al., 2015; Wang and Li, 2019; Meng et al., 2019).

## Identification and characteristics of cultural routes in China

In their review on Chinese cultural routes, Dai et al. (2016) summarized a list of 30 cultural routes in China. The authors adopted multiple concepts of linear heritage; for instance, some of the routes documented on their list such as the Three-Gorges Heritage Corridor, the Li River Heritage Corridor or the migration routes would not reunite enough criteria to be identified as cultural routes according to the ICOMOS but could instead be labeled as heritage corridors of the NPS. On the other hand, cultural routes such as the Tibetan (Buddhist) pilgrimage routes and the China Eastern Railway were not included, although similar routes such as the Mazu (Daoist) pilgrimage routes and the Yunnan-Vietnam Railway were listed.

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Table 2.
Cultural routes in China

This paper summarizes 19 Chinese cultural routes according to the framework described in the ICOMOS Charter on Cultural Route (ICOMOS, 2008) as illustrated in Table 2. The listing of 19 routes draws from several sources where some of the said routes were featured (Ding and Song, 2015; Dai et al., 2016; Lin et al., 2017; Tsohla et al., 2019; He and Chen, 2020).

Some linear cultural heritage might be arguably added to this list, but they are not included because they do not fulfill one or another of the basic criteria of the ICOMOS definition. For instance, the current list does not include the migration routes that lack clear delimited courses (e.g. the migration routes of the Hakka people, of the population of Guangdong and Hunan to Sichuan, of the population of northern and eastern China to northeastern China); some military routes with clear itineraries but not much cross-regional, mutually fertilizing communication (e.g. the Long March routes); the routes that are part of a larger route network (e.g. Nanxiang road as part of the Qin national road network); some religious pilgrimage routes without definite physical delimitations (e.g. the Buddhist, Daoist or Christian pilgrimage routes) or some small-scale cultural trails (the Chongqing city trail)

| No | Name | Time frame | Spatial range | Main function | Form |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Northern silk road/ | 3 rd century BC - | Trans-continental: | Trade | Land |
|  | Desert silk road | 16th century | Eurasia |  |  |
| 2 | Southern silk road/ | 5th century BC - | Trans-national: China, | Trade | Land |
|  | Plateau silk road | 17th century | Nepal and India |  |  |
| 3 | Steppe silk road | 5 th century BC - | Trans-continental: | Trade | Land |
|  |  | 16th century | Eurasia |  |  |
| 4 | Maritime silk road | 7th - 16th century | Trans-continental: | Trade | Water |
|  |  |  | Eurasia and Africa |  |  |
| 5 | Qin national road system | 3rd century BC Qing Dynasty | Trans-provincial | Transportation/ military | Land |
|  |  |  |  |  |  |
| 6 | Sichuan salt road | 5th century BC 20th century | Trans-provincial | Trade/transportation | Land |
|  |  |  |  |  |  |
| 7 | Shu road | 5th century BC 20th century | Trans-provincial | Transportation/ military/trade | Land |
|  |  |  |  |  |  |
| 8 | Lingnan road | 20th century 2nd century BC - | Trans-provincial | Transportation/ trade/military | Land |
|  |  | 20th century |  |  |  |
| 9 | Tang-Tibet road | 7th - 10th century | Trans-provincial | Transportation/ political | Land |
| 10 | Hui-Hang road | 7th - 20th century | Trans-provincial | Transportation/trade | Land |
| 11 | Tea Horse road | 7th - 20th century | Trans-provincial | Transportation/trade | Land |
| 12 | Grand canal | 7 th century present | Trans-provincial | Transportation/trade | Water |
| 13 | Baiyue ancient road | 12th - 20th century | Trans-provincial | Transportation/trade | Land |
| 14 | Courier road | 12th - 20th century | Trans-provincial | Transportation/ political | Land |
|  |  |  |  |  |  |
| 15 | Jingxi road | 12th - 20th <br> century | Trans-provincial | Transportation/ trade/military | Land |
|  |  |  |  |  |  |
| 16 | Huai salt road | 14th - 19th century | Trans-provincial | Trade | Land |
|  |  |  |  |  |  |
| 17 | Tea road | 17th - 20th century | Trans-continental and Eurasia | Transportation/trade | Land |
|  |  |  |  |  |  |
| 18 | Yunnan-Vietnam railway | 19th - 20th <br> century | Trans-national: China and Vietnam | Transportation/trade | Land |
| 19 | China eastern railway | 20th century | Trans-national: China and Russia | Transportation/trade | Land |
|  | (s): Author's elab |  |  |  |  |

that may not reflect the dynamic interactions across different cultures or groups but nevertheless possess significant cultural values and bear witness to major influences or traditions in history and culture (Ding and Song, 2015; Dai et al., 2016; Liu and Cao, 2018; Chen and Jones, 2020; He and Chen, 2020).

The heritage value of the Chinese cultural routes was assessed according to their historical, esthetic, scientific, ecological, touristic, social and spiritual significance (Lin et al., 2017; Wang et al., 2019). The studies demonstrated that most of the Chinese cultural routes are ancient, large in scale, multi-functional and representative of very dynamic reciprocal cross-cultural exchanges throughout history (Sun, 2011; Dai et al., 2016; Ding and Song, 2015; Xu and Xiang, 2020). Discoveries from archeological excavations have shown that some routes existed as early as the period of the East Zhou Dynasty (8th century BC) and lasted a very long time right up to the 20th century when they were replaced by modern transportation. These cultural routes usually expanded in a linear or radial form, crossed various regions in China or connected China with its neighboring regions and even reached out to other continents, stretching over thousands of miles. Most routes are land based, except for the Grand Canal, the maritime Silk Road. Most cultural routes were opened for transportation and trading purposes, whereas others functioned initially as military, religious, political routes or courier infrastructures. It is also worth noting that more than half of the Chinese cultural routes identified operated in the western regions of the territory, which is characterized by challenging geographical environments, diverse ethnic groups and abundant Indigenous cultural heritage (Ding and Song, 2015; Dai et al., 2016; Tong, 2016; Wang, 2019).

## Conservation of the cultural routes in China

At the present time, the priority of China's cultural heritage management is conservation. The emphasis on conservation is also in line with China's overall cultural heritage management strategy as a tool for social cohesion, cultural identity and national image, and these subserving goals of cultural heritage explain the enthusiasm China shows for world heritage application projects (Wang, 2009; Ma et al., 2019; Sigley, 2010). The same emphasis on conservation applies to CRH management in China (Shan, 2009; Ged, 2013). Despite the progress in overall heritage conservation over the last few decades, the major challenges cultural heritage faces in China bear relation to heritage integrity and authenticity. Rapid urbanization; massive infrastructure construction; industrial pollution; the deterioration of the natural environment around cultural heritage sites; lack of attention to the intangible dimension of CRH; overtourism; insufficient research into heritage resources and conservation technology and scarce staffing all pose a threat to the conservation of CRH (Yao and Li, 2006; Ged, 2013; Wang et al., 2016; Luo et al., 2019; Chen and Jones, 2020). Although China has incorporated into its national management system the conservation of CRH (ICOMOS China, 2015), a lack of clear operational guidelines and cross-regional coordination makes conservation insufficient when it comes to CRH because of its integral, complex characteristics (Tong, 2016; He and Chen, 2020; Chen and Jones, 2020). The key strategies for CRH conservation proposed by scholars include further investigation into CRH conceptualization; more systematic assessment of heritage values and resources through research; drafting of new laws and regulations; development and implementation of a comprehensive monitoring system over major heritage sites and application of relevant technology such as geographic information system (GIS) and archive and information management system (AIMS) and coordinated management (Shan, 2009; Wang, 2009; Feng, 2016).

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Utilization of the cultural routes in China
Another major theme in the literature is how CRH in China has been utilized and developed. The topics covered by scholars include heritage display (Yang, 2015; Ma et al., 2019; Zhao, 2019), tourism development (Li et al., 2015; Gao, 2017; Fang et al., 2018; Yu and Mei, 2019, Wang and Xie, 2020; Yan, 2020) or rural and urban development (Long, 2017; Liu et al., 2018; Meng et al., 2019; Wang and Li, 2019; Xu et al., 2020; Chen and Jones, 2020). Most of the discussions were conceptual, and most authors avail themselves of the ICOMOS concept of cultural route. However, about one-third authors used the concept only as an innovative methodology to integrate multiple local cultural heritage resources to develop a tourist route with some elements of the cultural route in focus.

The most widely researched line was that of CRH tourism development, where the current development status of a specific cultural route or a section of it was discussed and some measures were recommended. The most pressing issue faced by some historic cultural routes, such as the Silk Road, the Tea and Horse Road or the Salt Road in their tourist development, was the absence of overall planning and operation, fragmented administration and regulation, which resulted in an unbalanced development as a route and a lack of consistency among the key locations along the route in terms of route theme, features and embodied values (Li et al., 2015; Wang et al., 2016; Yan et al., 2017; Tan and Yang, 2017; Gao, 2017; Yan, 2020). A few authors also identified a lack of social and emotional connection of the CRH with the people in its tourist marketing (Ren, 2017; Liu, 2019; Zhang, 2016; Shang, 2017). The authors usually made some recommendations as a response to the problems identified with tourism development of CRH, which involves two major aspects: (1) improve heritage preservation and management in a holistic manner, enhance infrastructure and consider application for world heritage as an effective way for raising awareness and funding and (2) adopt specific tourism development models such as connecting key cities and areas with rich heritage resources along the cultural route; designing more engaging, experiential tourist activities to increase visitor satisfaction; integrating tourism into local industries and landscape or the "route plus" strategy to increase attraction; promote local economic and social development; contribute to economic diversification and avoid homogeneity of tourist products (Li et al., 2015, 2017; Liu, 2015; Gao, 2017; Fang et al., 2018; Liu et al., 2018; Yu and Mei, 2019; Wang and Xie, 2020; Yan, 2020; Wang et al., 2020).

Deterioration of natural landscape and ecological environment, aging and shrinking population are common challenges faced by many rural areas in China as a consequence of rapid industrialization and urbanization in the last few decades. This often left some villages along the cultural routes with risks of losing its traditional lifestyles and cultures, compromising the authenticity in some heritage elements of the route. Case studies on rural revitalization along the cultural routes recommended a development model capable of integrating local industries in which the tourism industry would act as a catalyst for other sectors, with local community stakeholders' interest prioritized, following preservation of traditional buildings and intangible cultural heritage as immediate measures (Long, 2017; Liu et al., 2018; Meng et al., 2019; Xu et al., 2020).

After having presented the results of this systematic literature review, this study wants to engage in a discussion to assess those points that still wait for a satisfactory response in the field of CRH in China.

## Discussion

Chinese scholars have invested much effort in research and witnessed much development since the introduction of the ICOMOS' concept of cultural route in China, which can be seen in the successful inscription of the Silk Road and the Grand Canal in the World Heritage List. However, they have also pointed out some major difficulties for a further development of CRH
in China, among which lack of conceptual clarity and operational guidelines, under-utilization and lack of cross-provincial coordination and of collaboration among stakeholders are the top concerns.

## Proposed framework for CRH development in China

In order to develop Chinese CRH more effectively, it is necessary to introduce some breakthrough perspectives in addition to the conservation plans so that the heritage will not only "survive" but also "live" (Liu, 2019; Ma et al., 2019). To help achieve the aforementioned goal, this study proposes an innovative and comprehensive strategic framework. However, the precondition for this strategy to be meaningfully implemented would be that all stakeholders reach a common understanding and consensus on the end goal for cultural route development in China. A plausible goal can be formulated as "let Chinese cultural routes fully play their role in promoting environmental integrity as well as sustainable and inclusive economic, socio-cultural advancement; let them function as a resourceful tool for personal wellbeing, cultural inheritance and social cohesion and let them serve as an inspiring platform for crossregional, cross-national and cross-civilizational mutual understanding and reciprocal exchange."

The innovative strategic framework for effective development of Chinese cultural routes comprises four building blocks, i.e. selective development, integrative planning, intersectorial collaboration and gradual proceeding.
(1) Selective development

It is noted that, although most Chinese cultural routes possess a high degree of heritage values and not all of them fit best for immediate, large-scale touristic development due to poor conservation conditions, low-scenic value, fragmented landscape or low accessibility in some sections. A selection of itineraries can be made to focus on those routes that can best fulfill the objectives with fewer obstacles. This does not mean that some routes should be ignored but rather that a prioritized development schedule would help things move forward more efficiently.
(2) Holistic planning

It refers to the inclusion of an array of elements in the recovery, construction and development of a given route. The development plans should holistically consider cultural and environmental aspects, tangible and intangible heritage elements, heritage authenticity as well as aesthetics and the interests of tourists as well as those of the host communities. It should also maintain a balance between the underlying thematic consistency of the route and its sectional highlights. Because this requires collaborative effort among relevant provincial administrations and stakeholders, holistic planning could also serve as a platform to foster collaboration across regions and sectors.
(3) Inter-sectorial collaboration

As a step toward a smoother and more sustainable implementation of any planning of CRH, this point requires not only coordinated actions across provinces, but the collaboration between public and private sectors as well. This is perhaps the most complicated part in fully developing CRH in the Chinese context. One can learn from best practices of CRH management around the world. Here the Saint James Pilgrimage Routes can provide some inspiration. In the successful development of this world cultural heritage route that is still in use in the modern time, the dynamic collaborative effort between the Galician government, academia, the touristic sector, the Catholic Church and the frequently non-confessional International Associations of Friends of St James demonstrate a great synergy in the

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promotion and preservation of the tangible and intangible heritage of the route and of the local culture and also in responding to the needs of pilgrims/tourists (Tilson, 2005; Zabbini, 2012).
(4) Gradual proceeding

This refers to a step-by-step implementation of the integrative cultural route development, for instance choosing the most accessible section within one specific province with the most available resources to initiate development actions. Evaluations can be conducted before and after the intervention, and lessons can be learned from success and error to improve the following proceeding until the entire route is fully operative. This could on, one hand, lower the barrier of cross-provincial administration and, on the other hand, lower the cost for initiating such projects.

Four principles need to be observed while implementing this framework. First, the principle of integration: as explained in point two of the framework, the design and management of a cultural route should be holistic. Second, the principle of sustainability: the evaluation criteria for the implementation strategies and measures should include environmental indexes (biodiversity, water quality, air quality and natural risk management) and socio-economic indexes (host community involvement and employment prioritization, preservation of local cultural traditions and values and positive experience and well-being of the visitor). Third, the principle of scientific research and action: in-depth research into conceptualization, methodology and technology should be introduced in the whole process of route development including planning, operation and evaluation. Lastly, the principle of innovation: breakthroughs from regular ways of proceeding that have stagnated. This requires a creative and critical mindset. In the case of the cultural routes in China, conservation-oriented practice and fragmented management must be modified to allow individuals and groups to "live out" the routes like their ancestors did in a sustainable manner instead of letting the value of such historical richness stay "frozen" in literature or in museums. In order for this to happen, it is worthwhile learning from the global experience of CRH development (Yang, 2015; Zhang, 2016; Ma et al., 2019; Gao, 2020). These principles do not only apply to the existing cultural routes, but also to emerging cultural routes - those that are fostering reciprocal exchanges in the contemporary era.

## Conclusion

This study aims to understand the current situation of Chinese CRH through conducting a systematic literature review. According to the literature, Chinese scholars adopted the concept of "cultural route" as a new category of cultural heritage at the beginning of this century. Since 2008, the ICOMOS definition of cultural route has been the most widely studied and applied; however, the conceptual frameworks of the COE or NPS have also been employed when it comes to utilization and development of Chinese CRH. Following the ICOMOS definition, nineteen cultural routes have been identified and listed as the most representative Chinese CRH. Many other routes are yet to be identified as the conceptualization of CRH acquires more clarity. The common characteristics of China's cultural routes are their long-time span, their large spatial scope, their multi-functionality and their having witnessed active cultural exchanges between peoples and cultures. The conservation of CRH has been incorporated into China's national heritage management system, which generally prioritizes preservation over development. Utilizing cultural routes for touristic or rural development is still in a theoretical phase and presents many challenges in practice. In the future, China's CRH needs to be developed with a clarified goal, following the principles of sustainability, integrity, scientific methodology and innovation. If this is achieved, cultural routes can play their role afresh in the new era to respond to the needs of
individuals and societies while functioning as a tool in achieving the UN 2030 sustainable goals. As the old Chinese saying goes, friendship between nations lies in the closeness of the people and the closeness of the people lies in the communication of hearts. This is the value and function of CRH: it is a bridge that connects peoples and cultures and a gateway that opens to new perspectives and possibilities. The richness of CRH resources should not vanish into oblivion.

Some limitations of the current study come from the fact that this research focuses on Chinese cultural routes from a heritage perspective rather than from a historical, geographical, cultural, geopolitical or touristic point of view. Thus, it only focuses on research articles published about the subject of CRH. Nonetheless, other conceptual frameworks of route-based heritage and other relevant academic sources such as graduate theses, conference papers or newspaper articles could also contribute to the depth of CRH conceptualization and application. Continuous interdisciplinary investigation, more quantitative research and more case studies on best practices of international cultural routes, especially on their cross-administrative mechanism and stakeholders' involvement in management and utilization, would all contribute to a prosperous and sustainable development of CRH in China and generally of the CRH around the world.

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    Funding: Universidad Pontificia Comillas has funded the publication through open access for this article.

