https://doi.org/10.37420/j.adr.2026.003

Research on Narrative Map Design Methods for Tourism Routes in Wuhan Hankou Red Cultural Scenic Area

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Abstract:
This paper takes the red cultural scenic tourist routes in Hankou, Wuhan, as its research object and explores the application of narrative maps in the design of red cultural tourism routes. In response to problems commonly found in conventional route maps, such as unclear storylines, route organization overly focused on navigation, and insufficient experiential guidance, the study proposes a design framework consisting of narrative unit extraction, narrative path construction, and experiential layer representation, based on a review of previous studies on red cultural tourism and narrative maps. Combined with the Wuhan Hankou case, the study classifies and organizes red cultural resources and translates them into narrative structures, thereby constructing tourist routes with both historical continuity and experiential rhythm. The study argues that the narrative map approach helps improve the readability, organizational coherence, and experiential quality of red cultural tourism routes, enabling route maps to shift from being simple navigation tools to visual media that integrate narration and cultural communication.

Keywords:
red cultural tourism, tourist route design, narrative map

1 Introduction

1.1 Research Background and Problem Statement

In the context of the integration of culture and tourism and the broader dissemination of urban culture, red cultural tourism has gradually shifted from simple site-checking visits toward meaning-centered experiences. Tourists not only need to arrive at commemorative spaces but also hope to understand event sequences, character relationships, and symbolic values during their journeys, so as to form continuous cultural cognition and emotional resonance. As one of the most important urban stages in modern Chinese history, Hankou in Wuhan gathers a wide range of red cultural resources and historical spatial carriers, providing a strong foundation for translating events, places, narratives, and integrated experiences into tourist routes. However, in actual cultural communication practice, red cultural tourist routes still often rely on guide texts, exhibition panels, or traditional route maps for information delivery. Common problems include dense point-based

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information but unclear storylines, route organization dominated by navigational logic rather than narrative logic, and experiential cues that remain slogan-like or decorative, making it difficult to support contemporary tourists' immersive understanding and active participation.

As an emerging branch of thematic cartographic design, narrative mapping emphasizes the organization of story structures and meaning production through map-based textual forms. Relevant studies have shown that narrative maps possess three basic characteristics: spatiotemporality, narrativity, and rhetoric. First, spatiotemporality refers to the use of spatial structures to carry temporal structures, thereby establishing a readable narrative framework between synchronic and diachronic dimensions. Second, narrativity emphasizes that events are not merely an accumulation of symbols, but are arranged into coherent plots through narrative deconstruction and structural organization. Third, rhetoric refers to the strategic use of cartographic language to generate identification and emotional experience through persuasive discourse (Su et al., 2023; Su et al., 2025).

Therefore, introducing narrative mapping methods into the design of red cultural tourism routes may help upgrade routes from simple spatial connections into meaningful reading paths, and integrate the educational, commemorative, and experiential dimensions of red cultural resources into a visual narrative system.

1.2 Research Significance

Although research on narrative maps has continued to grow in recent years, how to narrate remains one of the key challenges. Researchers need to address storytelling content at the story level, narrative methods at the cartographer level, narrative structure organization at the map-text level, and narrative understanding at the reader level. Existing theoretical discussions have already divided the representational mechanism of narrative maps into elements such as story, conception, text, expressive strategy, and decoding, thus providing a structured reference for methodological construction (Su et al., 2023). In practice-oriented studies targeting specific cultural spaces, some scholars have proposed taking expressive strategy as a breakthrough point and constructing a readability framework from carrier, clue, and unit to organizational structure. They further point out that this framework can be used to transform material entities into cartographic expression objects and connect entities, formal units, and spatial structures through spatiotemporal clues, thereby forming an operable design process for narrative mapping (Su et al., 2021). However, there is still a methodological gap in its further application to red cultural tourism routes.

Red tourism is not merely the presentation of cultural space; it also involves narrative rhythm and perceptual experience in the progression of routes, such as commemorative atmospheres, ritualized pathways, and cues for pauses and transitions entering the cartographic expression system. In other words, a narrative map design method is needed that can simultaneously address narrative structure, geographic route organization, and tourists' perceptual experience, so as to avoid a disconnect between content and form, namely, symbolic presentation without readable story progression or executable experiential guidance.

1.3 Research Objectives and Research Questions

Taking the red cultural scenic tourist routes in Hankou, Wuhan, as its object, this paper aims to sort out narrative map design methods on the basis of existing related studies and to verify their operability through case

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practice. Around this goal, the paper raises the following research questions.

First, how should red cultural tourism resources be structurally extracted as visual narrative units within the context of narrative mapping?

Second, how can spatial routes be translated into narrative paths so as to realize the coupled organization of story structure and geographic route?

Third, how can map design strategies rich in perceptual experience be constructed, so that experiential elements are transformed from formal decoration into mechanisms of information delivery and guidance?

2 Theoretical Foundations and Related Research

2.1 Narrative Characteristics of Red Cultural Tourism

Red cultural tourism is generally regarded as a form of tourism centered on revolutionary historical remains, commemorative spaces, and related spiritual symbols as core attractions. Some studies point out that red tourism can be understood as a patriotic and educational tourism activity "built upon the memorial sites and symbols, as well as the spirit and culture formed… during the revolution and war" (Wang, 2024). Other studies, based on policy frameworks, further emphasize that it "takes revolutionary memorial sites, monuments, and the revolutionary spirits they embody as attractions." Accordingly, the red cultural scenic tourist routes in Hankou, Wuhan, discussed in this paper are not treated as simple chains of scenic spots found in ordinary sightseeing routes, but are defined as integrated tour activities with red historical narratives as the content core, urban spatial paths as the organizational backbone, and emotional and value-based experiences as the guiding goals.

Red tourism is strongly driven by red stories. Its objects of visitation are often sites where historical events took place, commemorative facilities, and symbolic places. The experience process is naturally organized around the time, place, people, and events of historical occurrences, and meaning is generated through interpretive systems and scenographic presentation. Relevant studies explicitly point out that red tourism evokes memory and value understanding by "telling historical stories" and "delivering situational experiences." This means that if the organization of red tourism routes remains only at the level of spatial navigation, the core "logic of narrative progression" is likely to be lost, thereby weakening its educational and communicative functions (Wang, 2024).

Unlike ordinary leisure sightseeing, red tourism emphasizes emotional activation and spiritual experience. Some studies suggest that red tourism can evoke "mixed emotions, such as pride, excitement, sadness, and shock" (Liu et al., 2021), and on this basis affect the formation of national identity and behavioral intention. This indicates that route maps should not only clarify where to go, but should also carefully consider how design is to be felt by embedding emotional rhythm and experiential nodes in information organization, such as pauses in commemorative spaces, viewing sequences, and visual guidance.

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2.2 Overview of Narrative Map Design Methods

Research on narrative maps concerns how maps tell stories. In foundational theoretical studies, scholars have systematically defined the concept of narrative maps and identified three basic characteristics: spatiotemporality, narrativity, and rhetoric (Su et al., 2023). Furthermore, as a form of visual discourse, a narrative map may be described as a visual symbolic text jointly composed of map graphic symbols, image symbols, and textual symbols (Su et al., 2023). Accordingly, this paper defines the narrative map of a tourist route as a cartographic medium that translates red historical narratives into a readable, navigable, and experienceable spatial story structure. Its key is not simply to mark scenic spots on a map, but to organize narrative units of events, places, and emotions into a path with rhythm, and to form perceptible meaning guidance through visual rhetoric.

Narrative map theory emphasizes the ability of maps to spatially express temporal sequences, events, and logical relationships. Caquard and Cartwright (2014) point out that the relationship between maps and narratives is not merely one of containment; maps themselves can function as narrative media participating in meaning production. Caquard (2017) further argues that an important value of online narrative cartography lies in organizing place sequences, story fragments, and readers' reading paths within the same framework, thereby realizing the coupling of spatial browsing and content reading. This theoretical perspective provides a methodological basis for cultural visualization. Culture does not have to be presented solely through written explanation; it can also be translated into readable spatial information through symbol systems, layer structures, and visual rhythm. In line with this, research on metaphorical maps suggests that cartographic language may be understood as a symbolic system oriented toward visual imagery, including image symbols, textual symbols, and map graphic symbols; metaphorical maps can generate emotional resonance and positive metaphor through polysemy and readers' experiential engagement (Su et al., 2024). For red cultural routes, such visual rhetorical mechanisms can be used to transform spiritual values from abstract concepts into perceptible experiences, for example through combinations of color semantics, symbolic objects, scenographic imagery, and spatial relations to strengthen revolutionary memory and commemorative atmosphere.

At the level of specific design methods, previous studies have proposed operable narrative frameworks. For example, in the design of narrative maps for historic and cultural districts, research has explicitly proposed a readability framework proceeding from carrier, clue, and unit to composition, and emphasized that material entities must first be identified as expressive objects before the history, events, people, and memories behind them can be released. At the same time, the shaping of cultural connotations should incorporate symbolic and color systems in order to evoke regional images and memories. This provides a direct methodological source for the framework proposed in this paper, namely, narrative structure, geographic path, and perceptual experience: taking carrier as the basis, clue as the organizing mechanism, unit as the means of narrative progression, and composition as the mode of experiential integration. This research path is consistent with the logic of this paper's study of red tourism route maps, in that both begin with deficiencies in existing expressions and propose reusable design processes and expressive strategies.

With the development of digital media, overseas narrative cartography has formed a relatively mature product system and research lineage. According to Caquard's (2017) review, narrative maps are no longer limited to static paper-based expressions, but can also organize routes, content, and experience in an integrated manner through multimedia and interactive mechanisms. For the red cultural routes of Hankou, Wuhan, this

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implies that future expansion into digital formats may allow the gradual disclosure of multi-level information within the same narrative framework, thereby reducing information burden and enhancing control over emotional rhythm.

3 A Narrative Map Design Framework for Red Cultural Tourist Routes

3.1 General Approach of the Framework

The map design of red cultural tourist routes should shift toward a methodological framework that moves from narrative organization to spatial translation and experiential guidance. This is because red cultural tourism is not a neutral activity of spatial consumption, but a meaning-laden tour process centered on historical events, people's actions, revolutionary spirit, and collective memory. Existing studies have shown that red tourism experiences are related not only to tourists' emotional responses and memorable experiences, but also further affect place cognition, value understanding, and behavioral tendencies. Therefore, route design inherently requires strong narrative and guiding functions (Zhou et al., 2022; Liu et al., 2021).

From the interdisciplinary perspective of cartography and narrative studies, the key to narrative mapping lies in organizing temporal, event-based, spatial, and meaningful relations into readable map texts. Caquard and Cartwright (2014) note that the relationship between maps and narratives is not merely one of carrier and content, as maps themselves can act as narrative media participating in meaning production. Furthermore, in his review of online narrative cartography, Caquard (2017) proposes that the core value of narrative maps lies in placing location sequences, story fragments, and readers' reading paths within the same framework, thus coupling spatial browsing with content reading. Chinese scholars have likewise emphasized that narrative maps need to address the relationships among narrative logic, map text, and readers' interpretation, and that their essence is not a simple addition of explanatory text to traditional maps, but a type of cartographic expression with independent methodological significance (Su et al., 2023). On this basis, this paper summarizes the narrative map design method for the red cultural scenic tourist routes in Hankou, Wuhan, into three successive levels: narrative unit extraction, narrative path construction, and experiential layer representation.

Among these, narrative unit extraction mainly addresses how to distill basic narrative objects from red cultural resources that can enter the map expression system. Narrative path construction addresses how the sequence of routes can be transformed from geographic linkage into story progression. Experiential layer representation focuses on how tourists' viewing, pausing, immersion, and emotional rhythm during the tour can be embedded in cartographic language. This framework responds both to the theoretical requirements of narrative maps regarding spatiotemporal organization, story construction, and rhetorical expression, and to discussions in tourism map studies concerning cultural information delivery and support for tourism experience (Caquard & Cartwright, 2014; Zhen et al., 2024; Yang et al., 2024). Therefore, this paper proposes a narrative map centered on red cultural resources as the content base, tourist movement lines as the structural backbone, and visitors' experiences as the expressive goal, ultimately forming a narrative map that combines readability, navigability, and value transmission.

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3.2 Method for Extracting Narrative Units

The first problem that narrative mapping must solve is the structured extraction of content before it enters the map. For red cultural tourist routes, the original materials usually include former-site buildings, commemorative facilities, urban block spaces, historical events, revolutionary figures, local documents, and spiritual symbols, among other heterogeneous resources. Without an intermediate extraction mechanism, these materials are easily homogenized into scenic point information on the map, resulting in dense points but unclear storylines. Related research on tourism map design indicates that the narrative capacity of a map largely depends on whether designers can select representative content objects from local culture, historical materials, and spatial resources, and organize them into recognizable and interpretable visual narrative elements (Zhen et al., 2024; Yang et al., 2024). Based on this understanding, this paper defines narrative units in red cultural tourist routes as the smallest narrative particles capable of carrying specific historical meaning and being translated into cartographic visual expression objects.

In light of the composition and narrative needs of red cultural tourism resources, these units may be divided into four categories. The first is the event unit, referring to content nodes that embody revolutionary processes, historical turning points, or social actions. The second is the character unit, referring to important individuals, groups, or organizational clues related to red history. The third is the place unit, referring to the concrete spatial carriers on which events depend, such as former sites, buildings, streets, lanes, or memorial sites. The fourth is the spiritual unit, referring to higher-level cultural meanings such as revolutionary spirit, collective memory, and symbolic values. These four categories are not isolated from one another, but together form a layered relationship on the map, moving from the concrete to the abstract and from space to meaning.

This extraction method is consistent with Chinese discussions on the representational mechanism of narrative maps. Su et al. (2023) point out that narrative maps are not mechanical reproductions of existing objects; rather, they transform objects into meaningful units within map texts through selection, organization, and expression. Meanwhile, Su et al.'s (2024) study of metaphorical maps further shows that cartographic language can express not only geographic facts, but also abstract cultural meanings and value positions through the coordination of image symbols, textual symbols, and graphic symbols. This is particularly important for red cultural routes, because many key contents are not entirely visible physical objects but require symbolic systems to translate abstract elements such as revolutionary spirit, historical memory, and commemoration into perceptible map information.

Thus, at the operational level, the extraction of narrative units should follow the basic steps of resource sorting, attribute identification, narrative classification, and expressive judgment. First, the red cultural resources of Hankou, Wuhan, should be systematically organized to clarify their historical backgrounds, event relations, and spatial distribution. Second, the primary narrative attribute of each resource should be identified, such as whether it serves an introductory, developmental, transitional, climactic, or concluding function. Third, resources should be assigned to corresponding narrative unit types in order to ensure clarity in content hierarchy. Finally, predictions should be made as to what form of visual expression is appropriate for each unit, such as emphasizing point-like nodes, linking linear action trajectories, or combining image-based symbols with explanatory text. Through this process, red cultural resources are transformed into content modules that can enter the narrative map system.

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3.3 Method for Constructing Narrative Paths

After the extraction of narrative units, the design of red cultural tourist routes enters the stage of narrative path construction. The path organization of traditional tourism maps usually emphasizes shortest distance, transport convenience, or maximum tour efficiency. By contrast, the narrative maps of red cultural tourist routes should better reflect the sequence of story progression, the logic of memory reinforcement, and the arrangement of experiential rhythm.

Research on narrative maps has repeatedly emphasized the ability of maps to spatialize temporal structures. Caquard and Cartwright (2014) argue that through the organization of places, sequences, relations, and perspectives, maps can make the temporal logic of stories readable in space. Caquard (2017) further notes that one of the key advantages of narrative cartography lies in its ability to organize place sequences, story fragments, and readers' browsing paths within the same narrative framework. This means that, in the context of tourism maps, path design cannot simply be understood as connecting points with lines, but should actively construct the beginning, development, turning point, and conclusion of narratives (Caquard & Cartwright, 2014; Caquard, 2017).

Accordingly, this paper understands the narrative path of red cultural tourist routes as an organizational structure that arranges spatial nodes in sequence on the basis of the main storyline and assigns rhythmical relations to them. This structure contains at least four stages. The first is the introductory segment, which mainly serves to provide background explanation, thematic indication, and situational opening, so that tourists understand what kind of history the route is narrating. The second is the developmental segment, which uses continuous nodes to build event sequences, character relations, and spatial transitions, enabling tourists to form a continuous understanding of historical processes during movement. The third is the reinforcement segment, which highlights historical turning points, spiritual symbols, or core memory points at key nodes or symbolic spaces, thereby creating the narrative climax. The fourth is the concluding segment, which returns from event narration to value cognition and emotional sedimentation through commemorative spaces, summarizing texts, or symbolic layers. In this way, the route on the map is no longer merely a movement trajectory, but also becomes a reading track through which cognition and emotion are progressively advanced.

This idea directly echoes Chinese studies on readability frameworks for narrative maps in historic and cultural districts. Su et al. (2021) propose that narrative map design can be organized around carrier, clue, unit, and composition, and that the clue is not simply a traffic connection, but an organizational mechanism that links history, people, events, and spatial relations. For red cultural tourist routes, such clues may mainly be selected from three types: temporal clues, which organize the route according to the chronological order of historical events; thematic clues, which cluster content around revolutionary spirit, struggle themes, or core values; and character clues, which unfold around the activity trajectories of key figures or groups. In practical design, the red cultural scenic tourist routes of Hankou, Wuhan, may adopt a composite clue of time and theme, taking historical progression as the main axis and spiritual themes as the logic of local reinforcement, so that the map has both clear chronological order and value-based focus (Su et al., 2021).

Therefore, the essence of narrative path construction is not simply to draw a walkable route on a map, but to transform a geographic route into a story path. Only when the sequence of nodes, the rhythm of transitions,

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and the progression of themes form a coupled relationship can the red cultural tourism map truly achieve a transformation from navigation map to narrative map.

3.4 Expression Strategies Oriented Toward Tourists' Perceptual Experience

Whether the expressive level of a narrative map can genuinely act upon tourists' perception is crucial to the validity of the narrative map itself. The reason why red cultural tourist routes require narrative maps is not only that they need to explain historical content, but also that they need to guide tourists to pause, read, reflect, commemorate, and emotionally resonate during spatial movement. Therefore, map expression should not be understood as a later decorative layer, but rather as an important component of the narrative mechanism itself. Recent studies on tourism maps show that the value of tourism map design is shifting from the traditional communication of geographic location toward support for local cultural cognition, local image construction, and cultural experience. Zhen et al. (2024) argue that introducing a visual narrative framework can help tourists better understand local culture and obtain more complete cultural cognition while planning routes. Yang et al. (2024) further point out that the effectiveness of tourism cultural maps depends on whether a clear mechanism of information transformation is formed among cartographers, cultural information, and users. In other words, consistency needs to be maintained among the selection of expressive objects, the hierarchy of information, and support for cultural experience (Zhen et al., 2024; Yang et al., 2024).

Based on these insights, this paper summarizes experiential expression in the narrative maps of red cultural tourist routes into three aspects.

The first is the layered organization of information. Information on a red cultural tourist route map should at least be divided into a basic navigation layer, a narrative explanation layer, and an experiential prompt layer. The basic navigation layer provides orientation, routes, node locations, and access relations so as to ensure accessibility. The narrative explanation layer interprets event backgrounds, character relations, and historical meanings so as to ensure comprehensibility. The experiential prompt layer indicates where tourists should pause, observe, look back, commemorate, or transition so as to ensure perceptibility. These three types of information should not be mixed indiscriminately, otherwise reading burden and narrative fragmentation are likely to result.

The second is the collaborative construction of visual rhetoric and symbolic systems. A narrative map is not a neutral container of information, but a form of visual discourse with persuasive and value-oriented functions. Su et al. (2025) point out that the rhetorical system of narrative maps is essentially embodied in the strategic use of cartographic language, whose purpose is to activate readers' existing cognitive schemas and generate identification. In the case of red cultural tourist routes, this rhetorical mechanism may be reflected in the control of commemorative color schemes, the use of symbolic icons, the visual reinforcement of key nodes, and the arrangement of graphic-textual rhythm. For example, core commemorative nodes may adopt higher-contrast or more focal symbols to correspond to their climactic position in the narrative, whereas transition nodes should be moderately weakened so as to avoid equalizing all points and thereby dispersing the center of the story. At the same time, studies on metaphorical maps also show that the coordination of image symbols, textual symbols, and graphic symbols can enhance the perceptibility of abstract cultural meaning (Su et al., 2024; Su et al., 2025).

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The third is the embedding of emotional rhythm and immersive experience. Research on red tourism indicates that red tourism experiences are often accompanied by compound emotions such as pride, excitement, sadness, and shock, and that such memorable experiences and emotional responses significantly affect tourists' overall evaluation of destinations and subsequent behavioral tendencies (Zhou et al., 2022). Therefore, experiential prompts in route maps should not remain at the level of “recommended check-in points,” but should instead establish different perceptual rhythms according to narrative segments. For example, the introductory segment should emphasize entering the situation and recognizing the background, the developmental segment should emphasize continuous reading and spatial movement, the reinforcement segment should emphasize pausing, gazing, and commemorative experience, and the concluding segment should emphasize looking back, summarizing, and spiritual sublimation. Through such rhythmic arrangement, the map is no longer merely a route manual, but becomes an interface that guides tourists through a process of meaningful experience.

In summary, map expression strategies oriented toward tourists' perceptual experience essentially implant viewing methods, visiting order, and emotional rhythm into cartographic language. Only when experience is incorporated into the information delivery mechanism can the narrative map of red cultural tourist routes truly realize the unity of education, commemoration, and touring.

3.5 A Process-Based Design Model

Based on the above analysis, this paper summarizes the narrative map design method for the red cultural scenic tourist routes in Hankou, Wuhan, as follows: resource sorting, narrative unit extraction, narrative clue selection, path structure construction, experiential layer representation, and final map output. Among these, resource sorting is the foundational step, aiming to clarify the historical background, spatial distribution, and type differences of red cultural resources. Narrative unit extraction is the content translation step, aiming to transform original resources into narrative particles, such as events, characters, places, and spirits, that can enter the cartographic expression system. Narrative clue selection is the stage of structural choice, aiming to determine whether the route should be organized mainly according to time, theme, or characters. Path structure construction is the stage of spatial organization, aiming to couple story progression with the actual order of movement. Experiential layer representation is the stage of visual and perceptual integration, aiming to achieve effective communication to tourists through information hierarchy, symbolic systems, and rhythm prompts. The final map output is the external manifestation of the combined effects of the preceding steps. The process-based design model proposed in this paper is not only a temporary operational procedure for the case of Hankou, Wuhan, but can also provide a reference framework for the narrative map design of other historic districts, commemorative routes, and thematic cultural tourism paths.

4 Case Practice: The Red Cultural Scenic Tourist Routes in Hankou, Wuhan

4.1 Case Overview and Explanation of the Research Object

This paper takes the red cultural scenic tourist routes in Hankou, Wuhan, as its case. In terms of resource

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composition, the red cultural scenic sites in the Hankou area include not only former sites of revolutionary meetings, but also different types of commemorative museums such as the Memorial of the August 7th Meeting, the Former Site Memorial of the CPC Central Committee in Wuhan, the Former Site Memorial of the Eighth Route Army Wuhan Office, and the Former Site Memorial of the Hankou New Fourth Army Headquarters. These sites are not only places where important revolutionary historical events occurred, but also important spatial carriers of Wuhan's modern urban memory. Therefore, the red cultural scenic tourist routes in Hankou, Wuhan, referred to in this paper are defined as integrated tourist routes that rely spatially on several core red former sites, memorial halls, and historic blocks in the Hankou area, take red historical narratives as their content mainline, and use walkable or connectable urban paths as their organizational form. Under this definition, the focus of the case study lies in extracting narrative structures from Hankou's red resources and constructing a visual narrative map accordingly.

4.2 Sorting Red Cultural Resources and Analyzing Narrative Materials

Based on official red tourism route materials of Wuhan and publicly available information on red memorial venues in the Hankou area, this paper preliminarily categorizes the core resources within the case scope into four types. The first type is former sites related to revolutionary decision-making, such as the Memorial of the August 7th Meeting. Such nodes usually correspond to major historical turning points and narratively undertake meanings such as transition, decision, and rescuing a critical situation. The second type is former sites of organizational institutions, such as the Former Site Memorial of the CPC Central Committee in Wuhan. Such nodes emphasize Wuhan's historical status as the central hub of Party leadership and organizational operation, and are therefore more suitable for expressing meanings such as center and organizational functioning. The third type is former sites related to anti-Japanese war and revolutionary activities, such as the Former Site Memorial of the Eighth Route Army Wuhan Office and the Former Site Memorial of the Hankou New Fourth Army Headquarters. These nodes are more suitable for showing the unfolding, contact, and continuation of revolutionary work in the city. The fourth type is urban historic landscape spaces, such as the Hankou Historic District and its adjacent streets and lanes. Although such spaces do not necessarily correspond to a single revolutionary event, they provide real urban scenes and spatial atmospheres for red historical narratives.

From the perspective of narrative materials, these resources are not suitable for being simply treated as homogeneous scenic locations. The uniqueness of the August 7th Meeting site lies in its role as the site where the CPC made a crucial turn at a critical historical moment. The uniqueness of the Former Site Memorial of the CPC Central Committee in Wuhan lies in the process-oriented history it carries, namely the work, decision-making, and operation of the CPC Central Committee in Wuhan. The Former Site Memorial of the Eighth Route Army Wuhan Office and the Former Site Memorial of the Hankou New Fourth Army Headquarters, by contrast, place greater emphasis on the liaison, organization, and practice of revolutionary forces within the city. This means that different sites play different roles in the narrative. Some are suitable as climactic nodes, some as developmental nodes, and some as background-setting or transitional nodes.

On this basis, this paper argues that the narrative value of Hankou's red cultural resources is reflected in at least three aspects. First, they can form a relatively clear sequence of historical events. Second, they preserve authentic spaces in which revolutionary activities actually took place within the urban environment. Third, they enable tourists to perceive both the revolutionary history of the CPC and the urban landscape of Hankou

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during the tour. It is precisely for this reason that the narrative map in the Hankou case should transform resources into content units with different narrative functions through selection and classification.

4.3 Results of Narrative Unit Extraction

Following the extraction logic of event units, character units, place units, and spiritual units proposed in this paper, the major resources in the Hankou case are translated accordingly. First, at the level of event units, the August 7th Meeting, as the most crucial historical turning-point event, is used to form the climax or key node of the route. Meanwhile, "the CPC Central Committee in Wuhan" is more suitable as a processual event mainline that explains why Wuhan became an important political center during the Great Revolution period. Second, at the level of place units, Poyang Street, Shengli Street, and related historic building clusters are not merely location coordinates, but also spatial evidence of the historical scenes where events occurred. Third, at the level of spiritual units, what these resources collectively point to is not only revolutionary historical facts themselves, but also value connotations such as decision-making in times of crisis, belief in organization, and perseverance in struggle. In specific map design, the above narrative units can be further transformed into different expressive roles.

4.4 Construction of the Tourist Route Narrative Path

Based on the above classification of units, the red cultural scenic tourist routes in Hankou, Wuhan, are more suitable for a narrative path structure that takes temporal progression as the main clue and thematic reinforcement as a supplementary aid. Therefore, priority should be given to organizing three progressive layers of narrative cognition: how Wuhan became a center of revolutionary activity, how a crucial meeting changed the direction of history, and how revolutionary organizations unfolded within urban space.

Structurally, this path may be divided into four narrative segments. The first is background introduction, which uses the Hankou Historic District and surrounding spaces to introduce the historical background of modern Hankou as an important treaty-port city and a field of political activity, so that tourists first understand why this city could accommodate revolutionary activities. The second is center formation, which uses nodes such as the Former Site Memorial of the CPC Central Committee in Wuhan to illustrate Wuhan's central status at the level of political organization during the Great Revolution period. The third is the key turning point, which takes the Memorial of the August 7th Meeting as the narrative climax and highlights the main axis of decision-making at a critical historical juncture. The fourth is extension and resonance, which uses nodes such as the Former Site Memorial of the Eighth Route Army Wuhan Office and the Former Site Memorial of the Hankou New Fourth Army Headquarters to extend a single meeting event into broader revolutionary practice and spiritual continuity, thereby ultimately achieving value-based closure.

4.5 Presentation of the Narrative Map Design

At the level of map presentation, this paper argues that the narrative map should include the following information. The first category is basic spatial information, including major roads, water systems, block outlines, and node locations, in order to ensure navigability. The second category is narrative structural information, including segment divisions, node hierarchies, event titles, and brief historical explanations, in order to ensure readability. The third category is experiential prompt information, including recommended stopping

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points, viewing directions, commemorative nodes, walking transitions, and rhythm prompts, in order to ensure perceptibility. In this way, the map is no longer merely a route guide, but becomes a narrative interface integrating navigation, reading, and experiential guidance.

Visually, the Hankou case is especially suitable for a mode of expression that combines a historical urban landscape base map with highlighted red narratives. The Hankou area itself possesses a distinctive modern urban architectural and block morphology. In design practice, the street texture of the historic district may be used as the background framework, while highly recognizable node symbols, route color bands, and title systems are used to highlight the mainline of red events, so that urban space and revolutionary narrative are juxtaposed within the same cartographic text.

5 Conclusion

Taking the red cultural scenic tourist routes in Hankou, Wuhan, as its research object, this paper proposes a narrative map design framework for red cultural tourist routes on the basis of sorting out the narrative characteristics of red cultural tourism and relevant theories of narrative mapping. The study argues that the map of red cultural tourist routes should integrate historical events, urban space, and tourists' experience into a visual narrative system with meaningful progression.

In response to the research questions, this paper constructs a process-based method composed of narrative unit extraction, narrative path construction, and experiential layer representation. Among these, narrative unit extraction emphasizes the identification of content units such as events, places, characters, and spirits from red cultural resources. Narrative path construction emphasizes the transformation of geographic routes into story paths with the logic of introduction, development, reinforcement, and conclusion. Experiential layer representation emphasizes incorporating tourists' reading, pausing, and emotional perception into the cartographic expression mechanism through information hierarchy, visual rhetoric, and rhythm prompts.

The practice-based analysis of the Hankou case indicates that this method helps enhance the clarity of the storyline, the spatial organization, and the experiential guidance of red cultural tourist routes, thereby enabling route maps to shift from traditional guide tools to narrative media that combine reading, navigation, and value transmission. This study provides a reference for the design of red cultural tourist route maps and also offers useful insights for the narrative map practice of historic districts, commemorative routes, and other thematic cultural tourism paths.

This study still mainly remains at the level of method construction and case validation, and has not yet further examined the actual use effects of the map through tourist interviews, questionnaires, or behavioral data. Future studies may continue to deepen this topic in terms of digital narrative maps, interactive representation, and user perception evaluation.

Funding

This study is a phased outcome of the 2024 Open Research Project of the Wuhan Red Culture Research Center (WHHS20242013).

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