

A Cross-Media Narrative Study on the Qiantang River Tidal Bore

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Abstract: This study delves into the narrative structure and features of the Qiantang River Tidal Bore across various media platforms. Its sociological significance is multi-fold: (1) Deepening public awareness and comprehension of the Tidal Bore: Examining its cross-media narrative unveils its rich artistic allure, offering the public a more profound understanding and fostering international appreciation, potentially elevating its status to a World Heritage inclusion. (2) Preserving cultural significance: Beyond its natural occurrence, the Tidal Bore holds cultural and spiritual symbolism, and narrative analysis can uncover its multicultural value, enriching its cultural significance and encouraging preservation. (3) Boosting local culture and tourism: The Tidal Bore is a distinctive Zhejiang Province attraction, and understanding its narrative aspects can further local cultural exploration and serve as a guide for tidal bore tourism, thereby enhancing local tourism development. (4) Fostering harmony between nature and humanity: The study promotes understanding the interplay between nature and humanity, advocating for respect and protection of the environment, aiming to harmonize the relationship between humans and nature.

Keywords: Cross-Media; Narrative Study; Qiantangjiang Tidal Bore

1. Introduction

The Qiantang River, historically known as Zhejiang, dates back to early records in the “Shan Hai Jing” and has been referred to as “Jian Jiang”, with the term “Qiantangjiang” emerging during the Three Kingdoms period in “The Chronicles of the Qiantang River” [1-4]. Known as the mother river of Zhejiang

Province, the Qiantang River is notably famed for its stunning natural spectacle—the tides and surges, commonly termed “the Tidal Bore”. Its application for UNESCO World Heritage status, much like the Grand Canal of China, has gained considerable attention from the Zhejiang Provincial Government. In highlighting the Tidal Bore, it’s essential to recognize that it embodies more than a natural phenomenon; it signifies a convergence of culture, history, geography, and ecology. As a distinctive landscape in Zhejiang, delving into the cultural aspects of the tides holds significant value, showcasing the region's unique characteristics.

Over time, diverse artistic interpretations of this natural marvel have emerged, symbolizing the intricate relationship between humanity and nature. From ancient myths of the “Tide God” to literary explorations in texts like Wang Chong’s “Lun Heng”, analyses of the tides' causes have evolved. Literature, poetry, paintings, and folk arts further express the essence of the Tidal Bore. The annual Tide-Watching Festival, a celebration of tradition and folk art, reflects a heritage passed down through generations.

Advancing knowledge of the tides led to the construction of the world's oldest anti-tide fish-scale seawall, recognized for its architectural and engineering brilliance. These elements, alongside humanities and arts tied to the tides, are perceived as unique advantages for the Qiantang River’s heritage application.

Today, technological advancements and cross-media approaches enable a deeper exploration of the artistic allure of this landscape. It contributes to cultural development and environmental awareness by blending traditional narratives with modern media. This interdisciplinary exploration aligns with narrative studies, offering insights into local heritage while forging innovative artistic narrative practices.

This research endeavors to interpret the Tidal Bore's artistic charm through a narrative lens. By exploring ancient local culture while pioneering new narrative theories and methods, it enriches interdisciplinary studies and highlights the academic significance and innovation in this field. This innovative narrative approach is a distinctive facet of this study.

2. Study Objective

This study aims to comprehensively explore the multidimensional charm, profound expressions, and rich content of the Tidal Bore of the Qiantang River through a cross-media narrative perspective. We will employ narrative theory as a powerful tool to interpret and present various artistic aspects of the Tidal Bore. Moreover, we will also focus on the interactions and intersections between different media forms, investigating how the Tidal Bore mutually influences, enriches, and inspires across these different media forms. This exploration aims to unearth the media, structure, and characteristics of cross-media narratives of the Tidal Bore and provide new perspectives for external communication about the Qiantang River Tidal Bore.

3. Overseas and Domestic Studies Review

Research both domestically and internationally has predominantly focused on topics such as the mechanisms and prediction of tidal bores, with very limited attention given to the humanistic aspects of the Tidal Bores.

3.1 Overseas Study

Google Scholar, CNKI, Web of Science, and other academic search engines were used to retrieve relevant literature, and it was found that there are two narrative studies related to water. Andermahr [1] explored the literary and visual narratives of flooding in the Thames Valley in the UK, while Kwon [2] analyzed narratives about water in contemporary Korean art, including elements of tidal bore culture. Both studies mention the use of water as a narrative symbol, combining elements from literature, visual arts, and other art forms to achieve a more comprehensive understanding of narratives.

Globally, there is a lack of research related to tidal bore, which is primarily associated with the uniqueness of tidal bores. Tidal bores are

very rare in river estuaries worldwide. According to a survey by the National Geographic Society, there are approximately 60 locations with tidal bores in over 16 countries around the world, with most of them being inconspicuous or located in remote areas. Among them, the most famous is the Qiantang River Tidal Bore, considering its intensity and proximity to urban centers.

3.2 Domestic Studies

In China, only Wang [3] conducted a narrative analysis of tidal bore paintings. Through in-depth analysis and interpretation of tidal bore painting art, Wang Peiyun explored the rich narrative connotation of the Tidal Bore. She believes the Tidal Bore painting art not only visually presents the beauty of the Tidal Bore but also, through artistic techniques, showcases the historical significance, influence, and close connection with local culture. This narrative perspective has both high artistic value and significant implications for researching and understanding the Tidal Bore. This study opens a new perspective for understanding and interpreting the Tidal Bore, providing valuable insights into the multidimensional expression of the Tidal Bore and how art serves as a tool for cultural interpretation.

Both domestic and international studies have laid a theoretical and research foundation for this topic. However, there has been no comprehensive research from the narrative perspective across different media forms, both domestically and internationally. The gap in foreign and domestic research highlights the importance of the Tidal Bore humanistic studies. Only by telling the story of the Tidal Bore effectively can we contribute to its international recognition and promote its inclusion in the Intangible Cultural Heritage world list.

4. Narrative Media, Structure and Features of the Tidal Bore

4.1 Narrative Media

This study centers on the narrative of the Tidal Bore across different media, placing narrative media as a primary focus for narrating the Tidal Bore. In narrative theory, literary works are core to the scope of narration. Text-based narratives construct plots and express content through words, emphasizing the expressive

power of language. Elements like rhetoric, description, and dialogue are employed to evoke emotions and plots. Literary works such as novels, poetry, prose, and historical records are the primary textual narrative forms for the Tidal Bore.

Image-based narratives rely on visual elements to capture landscapes, emotions, and cultural features, using colors, lines, and shapes to convey emotions and plots. Visual arts like painting, sculpture, and photography serve as the main forms of visual narrative for the Tidal Bore.

Sound-based narratives rely on sound and music elements to convey emotions and plots. Elements like music rhythm, pitch, and sound effects enhance emotional experiences. Audio arts such as music, songs, and sound effects are the primary forms of sound narrative for the Tidal Bore.

Visual-based narratives utilize visual media like images and film to dynamically present plots. Films and documentaries serve as the main artistic forms for visually narrating the Tidal Bore.

Although these four narrative forms (media) exhibit distinct features, they share commonalities when narrating the Tidal Bore theme: the remarkable sight of the Tidal Bore in the Qiantang River. The grandeur of the Tidal Bore and the rhythmic ebb and flow of the tides reflect the profound and resilient spirit deeply embedded in the people of Zhejiang and the broader Chinese nation. Understanding this shared significance contributes to a comprehensive grasp of the Tidal Bore from multiple perspectives.

Moreover, these narrative media forms interact with one another. China's longstanding aesthetic concept, "poetry and painting are derived from the same source", underlines the interconnectedness of artistic elements. Aspects such as color and composition in painting and symbolism in poetry, the rhythm and metaphors in poetry, the melody and rhythm in music, and the images and sounds influencing film can mutually impact and transform each other. This interplay enriches each art form's capacity to express the Tidal Bore's characteristics, resulting in a more intricate and multi-dimensional representation. This showcases the full charm and depth of the Tidal Bore's narrative expression.

4.2 Narrative Structure

The narrative structure primarily refers to the arrangement of narrative elements within a work, serving as the foundation for understanding and analyzing the narrative content. By analyzing structural components such as the beginning, development, turning points, climax, and resolution of the narrative, one can gain a deeper understanding of core elements like the theme, context, and characters, ultimately achieving the objectives of expressing themes, evoking emotions in the audience, and conveying thoughts and viewpoints. The narrative structure directly influences the effectiveness of narration and serves as a crucial basis for comparing different narratives. Prominent narrative scholars such as Vladimir Propp, Seymour Chatman, and Gerard Genette have conducted extensive research on narrative structure. They generally agree that narrative structure forms the foundation of narrative studies, and regardless of the form of narration, elements like the introduction, conflict, climax, resolution, and conclusion constitute the basic structure of a successful narrative work.

In light of this, the artistic narrative structure of Tidal Bore culture includes several key components:

Introduction: Whether in textual, visual, audio, or visual narratives, artistic works typically commence by depicting the calm state of the Qiantang River and the daily lives of people, setting the stage for the arrival of the Tidal Bore.

Conflict: As the Tidal Bore approaches, changes in characters, scenes, and tones start to emerge, creating conflicts. This conflict can be portrayed as a confrontation between humans and nature or as internal struggles and expectations within individuals.

Climax: The arrival of the Tidal Bore constitutes the climax of the narrative. This phase of storytelling usually reflects the highest tension and deepest emotional impact.

Resolution: After the Tidal Bore has passed, everything begins to return to normal, and the narrative enters the resolution phase. People's reflections, understanding, and contemplation of the Tidal Bore shape the thematic ideas of the narrative.

Conclusion: The narrative concludes with a profound understanding and appreciation of the Qiantang River and the Tidal Bore, leaving

audience with deeper comprehension and emotional connection to Tidal Bore.

This study will employ literature review, on-site field investigations, and natural language processing (NLP) techniques to explore the underlying narrative structural framework of different forms of THE Tidal Bore. This structure emphasizes the dynamic changes and emotional tension of the Tidal Bore event, revealing the profound relationship between humans and nature, emotions, and reason, while showcasing the unique charm and value of Tidal Bore.

4.3 Narrative Features

Narrative features refer to the distinctive elements and characteristics that are commonly found in a narrative. These features help define and shape the narrative, making it unique and engaging for the audience. In the case of the Tidal Bore, a natural phenomenon and cultural symbol, it exhibits several narrative features that contribute to its narration:

Cultural Significance: The Tidal Bore is deeply rooted in the culture and history of the Qiantang River region. It serves as a symbol of strength, resilience, and local identity, making it a rich source of cultural narratives.

Dynamic and Cyclical Nature: The Tidal Bore follows a natural, cyclical pattern where the tide rises and falls with regularity. This cyclical nature creates a sense of anticipation and a repetitive narrative structure.

Conflict: The Tidal Bore represents a form of conflict between natural forces and human activities. This dynamic interaction between nature and humans generates dramatic narratives.

Spectacle and Grandeur: The Tidal Bore's powerful and awe-inspiring appearance creates a narrative feature of spectacle and grandeur. Its visual impact provides rich material for storytelling.

Emotional Impact: The Tidal Bore evokes strong emotions in those who witness it. It can create narratives centered on emotions such as awe, fear, excitement, and wonder.

Historical Depth: The Tidal Bore has a long history in the region, providing narratives with a sense of historical depth. Stories can span generations, incorporating the experiences and knowledge of the past.

Uniqueness: The Tidal Bore's rarity on a global scale, with only a few rivers exhibiting this

phenomenon, contributes to its uniqueness and makes it a valuable subject for narratives.

These narrative features collectively make the Tidal Bore a fascinating subject for storytelling and cultural exploration, allowing for a wide range of narratives that encompass cultural, natural, historical, and emotional dimensions.

5. Methodology

Literature review is the starting point of the study. The research will investigate historical literature, artistic works, academic papers, and relevant reports related to the Qiantang River Tidal Bore. This will help understand the history, features, development, and various artistic expressions of the Tidal Bore.

Field research is a vital component of this study. It involves interacting with local communities and participants to gain firsthand knowledge of their perspectives, experiences, and insights. The project team will design semi-structured interview topics and questions (as shown in **Table 1**) tailored to the narrative elements and narrative structure in different media. These will guide the conversations during face-to-face interviews with residents of the Qiantang River Basin, event organizers, artists, critics, scholars, and others. The interviews will be recorded in written and audio formats. During the interviews, respondents are encouraged to express themselves freely, and follow-up questions may be asked as needed to gather more comprehensive and detailed information. Additionally, topics for the interviews can be adjusted and expanded flexibly based on the actual progress of the interviews.

Table 1. Semi-Structured Interview Topics and Related Questions

| Topic | Potential Questions |
|--|---|
| Respondents' understanding and perception of the Tidal Bore | How would you describe the Tidal Bore? What important elements or characteristics do you think the Tidal Bore has? |
| Respondents' understanding of cross-media narratives of the Tidal Bore | How do you understand Tidal Bore narratives? Are you aware of different narrative forms? How do these narrative forms reflect or shape the image of the Tidal Bore? |

| | |
|--|--|
| Respondents' understanding of different media expression of core features of the Tidal Bore (e.g., text, images, sound, and video) | Do you know what media are used for Tidal Bore narratives (telling Tidal Bore stories)? What are the similarities and differences in how different media express Tidal Bore? |
| Respondents' views and opinions on Tidal Bore narrative structure | Do you think Tidal Bore narratives (storytelling) should follow specific structures? Why? Is the occurrence or recession of the Tidal Bore related to the climax or ending of narratives (stories)? Why? |
| Respondents' understanding of the narrative features of Tidal Bore | How do you understand the narrative features of the Tidal Bore in various media? Are there common narrative features across these narratives? |

The study will also convene a group of publicity staff from the Qiantang River Administration Center to conduct focus group discussions, with the discussions being documented in text and video. The advantages of focus group discussions lie in their ability to stimulate discussions and interactions among group members. Therefore, when designing the questions, it is possible to introduce some open-ended and discussion-stimulating questions. By setting relevant discussion topics and questions (see **Table 2**), a more detailed exploration of various aspects of the Tidal Bore. In the focus group discussions, common ground as well as differing viewpoints will emerge, and the diverse understandings of the participants will contribute to a deeper understanding of the commonalities and diversities of Tidal Bore narratives. Additionally, field surveys will provide vivid cases and contexts for the research.

Table 2. Focus Group Discussion Topics and Related Questions

| Topic | Potential Questions |
|--|---|
| Respondents' understanding and perception of the Tidal Bore | From your propaganda activities, how would you describe the Tidal Bore? What important elements or characteristics do you think the Tidal Bore has?... |
| Respondents' views and opinions on Tidal Bore narrative structure | Do you think Tidal Bore narratives (storytelling) should follow specific structures? Why? Is the occurrence or recession of the Tidal Bore related to the climax or ending of narratives (stories)? Why?... |
| Respondents' understanding of the narrative features of Tidal Bore | How do you understand the narrative features of the Tidal Bore in various media? Are there common narrative features across these narratives?... |

| | |
|--|--|
| Respondents' understanding of different media expression of core features of the Tidal Bore (e.g., text, images, sound, and video) | From your propaganda activities, how do you understand Tidal Bore narratives (telling Tidal Bore stories)? What are the similarities and differences in how different media express Tidal Bore?... |
| Respondents' views and opinions on Tidal Bore narrative structure | From your propaganda activities, do you know what media are used for Tidal Bore narratives (telling Tidal Bore stories)? What are the core features of the Tidal Bore (e.g., text, images, sound, and video) |
| Respondents' understanding of the narrative features of Tidal Bore | From your propaganda activities, do you think Tidal Bore narratives (storytelling) should follow specific structures? Why? Is the occurrence or recession of the Tidal Bore related to the climax or ending of narratives (stories)? Why?... |
| Respondents' understanding and perception of the Tidal Bore | From your propaganda activities, how do you understand the narrative features of the Tidal Bore in various media? Are there common narrative features across these narratives?... |

The study will also employ natural language processing (NLP) techniques to analyze and process the textual data from the interview and focus group discussion records. Initially, the collected interview and focus group discussion records will undergo preprocessing. This will involve tasks such as audio and video-to-text transcription, data cleaning, tokenization, part-of-speech tagging, and the removal of stop words. Following preprocessing, word clouds will be generated using word cloud tools to visually represent the most frequently occurring words in these records. Subsequently, latent Dirichlet allocation (LDA) topic modeling will be used to identify the main themes within the text. Through the analysis of word clouds and topic extraction results, common keywords and themes that appear with higher frequency in Tidal Bore media narratives will be identified. These common

keywords and themes will be explored to unveil the core Tidal Bore value and the common and unique characteristics of Tidal Bore cross-media narratives.

Additionally, sentiment analysis will be conducted to evaluate the emotional attitudes of interviewees and focus group discussion participants towards Tidal Bore cross-media narratives and their narrative structures. This analysis aims to understand their viewpoints and attitudes regarding the narrative structures of the Tidal Bore cross-media narratives and their preferences for different artistic narrative forms.

6. Result and Discussion

During the research process, the research conducted interviews with over 100 residents in the Qiantang River basin and interviewed 10 publicists from the Qiantang River Administration Center. Through the use of natural language analysis technology, several significant findings about the cross-media narrative of the Qiantang River Tidal Bore emerged.

Firstly, the narrative media of the Tidal Bore primarily encompass text, imagery, sound, and video. These diverse media forms are employed to depict the spectacular spectacle of the tidal bore and convey its cultural significance.

Secondly, concerning narrative structure, the artistic narrative of the Tidal Bore typically consists of the following key components: introduction, conflict, climax, resolution, and conclusion. These elements collectively form the narrative structure of the Tidal Bore. The introduction usually portrays the serene river landscape and the daily lives of people, setting the stage for the arrival of the tidal bore. The conflict section reflects changes in the scenery and tone as the tidal bore approaches, leading to a conflict that can be either a confrontation between humans and nature or an internal struggle and anticipation within individuals. The climax represents the arrival of the tidal bore, showcasing the highest tension and deepest emotional impact. The resolution occurs after the tidal bore has subsided, and everything returns to calm. The narrative then enters the resolution phase, where people's reflections, understanding, and contemplations about the tidal bore become the central theme. The conclusion is marked by a profound

understanding and sentiment about the Qiantang River and the tidal bore, providing the audience with a deeper understanding and emotional experience of the Tidal Bore.

Narrative characteristics include the following: Diversity: Cross-media narratives of the Tidal Bore exhibit diversity. Different media express this natural phenomenon uniquely. Literary works may use text to describe the grandeur of the tide, while films can employ imagery and sound to showcase its visual and auditory effects. This diversity enriches the narrative, enabling people to understand and appreciate the Tidal Bore from various perspectives.

Interactivity: Cross-media narratives of the Tidal Bore are interactive. Different media can reference and influence each other, enhancing narrative coherence and depth. For instance, a movie can reference a famous tidal bore poem, adding literary and historical dimensions to the film's narrative. This interactivity breaks down the boundaries between media, providing audiences with a more enriched narrative experience.

Commonality: Cross-media narratives of the Tidal Bore share common themes. Whether in literary works or films, they attempt to capture the splendor of nature, emphasize the relationship between humans and nature, and depict the passage of time. These commonalities provide a degree of consistency in the narratives across different media, making it easier for audiences to understand and appreciate the charm of the Tidal Bore.

In summary, the cross-media narrative of the Tidal Bore is characterized by its diversity, interactivity, and commonality. These characteristics make it a captivating narrative field that draws both audiences and creators to explore and express the wonders of this natural spectacle.

Acknowledgements

This paper is a periodical achievement to the project of "The Multidimensional Charm of Tidal Bore - Cross-Artistic Narrative Research on Qiantang River Tidal Bore"(Y202353718)of 2023 "Zhejiang Province Education Department General Research Project"

References

- [1] Andermahr, S. Narratives of Flooding: Visual and Literary Representations of the

- 2013–2014 Thames Valley Floods[J]. World History, 2017.
- [2] Kwon, H. Narratives of Water in Korean Contemporary Art: From Politicization to Aesthetization. Art Association, 2019.
- [3] Wang Peiyun. A Study on the Narrative of Qiantang River Tidal Bore Art in Tidal Bore Art[J]. Art Research, 2019.
- [4] The Qiantang River Chronicles Compilation Committee. The Chronicles of the Qiantang River [M]. Fangzhi Publishing House, 2009.