
Ideological Risk Attribution and Governance Countermeasures of Generative AI in Tourism Marketing

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Abstract: While generative artificial intelligence creates innovative opportunities for tourism marketing, it also triggers latent and profound ideological risks. This paper comprehensively analyzes the formation mechanism of ideological risks of generative AI in tourism marketing from five dimensions: data root, algorithm black box feature, essence of capital logic, form of communication alienation and subjectivity crisis. The structural imbalance of data corpus, Western centralism, value manipulation in the algorithm black box, technology monopoly and digital colonization driven by capital, public opinion disorder caused by deepfake technology, and the decline of people's rational judgment ability jointly constitute the diverse attributions of risks. On this basis, a comprehensive governance framework covering data foundation, algorithm specification, technology governance, institutional system and social co-governance is proposed, including building a high-quality corpus with local characteristics, promoting algorithm transparency and value alignment, strengthening AIGC content traceability, improving regulations and implementing agile supervision, and enhancing the literacy and sense of responsibility of multiple subjects, so as to guide generative AI to develop positively in tourism marketing, assist the smooth communication of Chinese culture and maintain ideological security.

Keywords: generative artificial intelligence; tourism marketing; ideology

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1. Introduction

Generative Artificial Intelligence (GAI) refers to models and related technologies capable of generating text, images, audio, video and other content ^[1]. Marked by the popularity of ChatGPT, a general GAI tool, in 2022, it has rapidly expanded from laboratories to various industries, triggering a new round of technological and social transformation. In tourism marketing, GAI not only improves marketing efficiency and attractiveness through multimodal content generation, immersive intelligent interaction and efficient IP innovation, but also builds a marketing ecosystem with emotional connection, realizing the leap from standardized output to personalized creation.

However, the process of technology empowerment also hides non-negligible ideological risks. For instance, value deviation, cognitive misleading and ethical anomie have emerged in tourism marketing information, which will not only mislead tourists' cognition and distort the image of tourist destinations, but also weaken cultural identity and endanger

social values. Therefore, it is crucial to systematically analyze the root causes of ideological risks of GAI in tourism marketing to provide a basis for constructing an effective governance framework.

2. Literature Review

2.1. Foreign Research Review

Regarding the ideological issues caused by GAI, some foreign studies have recognized that GAI content may carry the risk of spreading cultural bias. Since the training data of GAI algorithms mostly comes from extensive channels such as the Internet, biased data (e.g., a large proportion of Western cultural data) may lead GAI tourism marketing content to strengthen the spread of Western cultural values while neglecting or misinterpreting other cultures to a certain extent.

Jackson Lu and Sharon Kim (2023) pointed out in *Cultural Mirroring in Large Language Models: How Prompt Language Shapes Value Expressions* that the cultural tendency of GAI is strongly correlated with prompt language. GAI tends to output collectivism-oriented expressions (e.g., emphasizing family and group connections) under Chinese instructions, and highlights individualism (e.g., focusing on individual needs and independent choices) under English instructions, forming a mirror mapping of “language-values”^[2]. This cultural bias will strengthen the spread of dominant cultures through tourism marketing and other scenarios. For example, the promotional content generated by GAI for non-Western tourist destinations tends to ignore local cultural characteristics and cater to the cognitive habits of Western audiences due to the value tendency triggered by language instructions.

Fabio Motoki, David Rozado et al. (2025) mentioned in *Systematic Political Bias in Large Language Models* that GAI has a left-leaning political stance bias. Its stance is highly consistent with center-left parties such as the US Democratic Party and the UK Labour Party in responses to economic policies and social issues, showing an implicit negative tendency towards right-wing views^[3]. The bias stems from the fact that most training data comes from institutions dominated by left-leaning positions such as mainstream media and universities, and this political ideological bias will indirectly affect the value orientation of tourism marketing content.

As a cultural product, the ideology contained in tourism marketing changes with social development, and the intervention of GAI technology may accelerate or change this trend. For example, GAI technology can strengthen or weaken the spread of certain ideological elements by quickly generating a large amount of content.

2.2. Domestic Research Review

Domestically, concerning the ideological risks brought by GAI tourism marketing, on the one hand, there is a concern that Western culture will further penetrate through tourism marketing content generated by GAI, impacting local cultural values. On the other hand, some domestic tourism enterprises, in pursuit of traffic and short-term economic benefits, use GAI to generate tourism marketing content with excessive entertainment and vulgar tendencies, which may negatively affect the values of audiences, especially teenagers.

Yu Jie (2022) pointed out from a macro perspective that ideological risks in the AI era present new features of concealment, globalization and dynamics, and proposed a resolution idea centered on intelligent equal rights and consensus cohesion for risks such as “intelligent gap-data bias-algorithm discrimination”^[4]. With the rapid development of generative AI, research has been further systematized and deepened.

Zhu Huanghe and Ling Xuewu (2025) analyzed the endogenous, derivative and scenario-derived risks in the three stages of technology preparation, operation and application from the perspective of the full life cycle of technology, and constructed a governance framework combining technology regulation, value discipline and institutional norms^[5]. This research evolution from phenomenon induction to mechanism analysis and from single-point governance to collaborative governance has laid a solid theoretical foundation for the ideological risks of generative AI, providing a theoretical lens for the in-depth analysis of value guidance, cultural representation and cognitive shaping risks in specific application fields such as tourism marketing.

3. Ideological Risk Attribution of Generative AI in Tourism Marketing

3.1. Data Root: Training Data Bias and Cultural Hegemony Embedding

The structural imbalance that English data accounts for 59.8% of global Internet corpus while Chinese data only accounts for 1.3% results in obvious Western centralism characteristics in the semantic structure output by the model^[6]. When trained with such unbalanced corpus, GAI will subconsciously beautify and highlight Western tourist destinations and cultural narratives in tourism content generation, and package Western aesthetic standards, historical views and lifestyles as “universal values”. When depicting “ancient town tourism”, GAI tends to output Oriental landscapes under Western aesthetics while weakening the real inheritance function of Chinese culture, thus quietly realizing the penetration of cultural hegemony.

3.2. Algorithm Black Box: Value Manipulation and Deviation in Tourism Cognitive Guidance

Algorithm recommendation forms an “information cocoon” by “catering to preferences”, leading to narrow user cognition and information bias, making it difficult to access heterogeneous views^[4]. In tourism marketing, users who prefer Western urban tourism may gradually ignore domestic red tourism and other products carrying mainstream values under algorithm reinforcement, hindering the cohesion of value consensus. A deeper problem is that if a specific value model is injected into the algorithm in the data labeling stage, reducing the recommendation weight of patriotism education bases, revolutionary memorial halls and other sites, GAI will cause implicit deviation in guiding tourism cognition.

3.3. Capital Logic: Technological Monopoly and Alienation of Tourism Cultural Resources

At present, the core technologies and large models of global GAI are mainly monopolized by a few Western technology giants. In the new round of intelligent technological revolution led by monopoly capitalism, advanced algorithm models are used to safeguard the special interests of capitalist countries, groups and individuals^[7]. Relying on their market positions, these “capital-technology” complexes define the technical standards and value preferences for tourism marketing content generation. For example, the rich cultural tourism resources of developing countries may be simplified into spectacular consumption symbols, profound historical and cultural scenic spots into “check-in” backgrounds, and complex folk traditions packaged into easily consumable entertainment projects. Their profound historical and cultural connotations are stripped away, reducing tourism experience to a commodity in the chain of capital appreciation.

3.4. Communication Alienation: Deepfake and Crisis of Tourism Public Opinion Ecology

Deepfake technology can synthesize fake videos and images indistinguishable to the naked eye when generating tourism marketing information, which will undermine the trust foundation of “seeing is believing”. For example, lawbreakers or ill-intentioned forces may use this technology to forge videos of scenic spots being overcrowded, luxuriously equipped or experiencing fake safety incidents for profit, slandering competitors or even creating social panic. Meanwhile, GAI can generate fake travel notes, guides and reviews in batches. If combined with public opinion attacks possibly manipulated by overseas forces^[8], it will not only disrupt the order of the tourism market, but also impact the credibility and leadership of mainstream ideology by deliberately smearing specific scenic spots or tourism policies.

3.5. Subjectivity Crisis: Cognitive Outsourcing and Dissolution of Tourism Experience Value

Tourists’ over-reliance on GAI for attraction selection, itinerary planning and other decisions leads to the phenomenon of “cognitive outsourcing”. Their blind trust in GAI standardized guides gradually degenerates their independent thinking and critical thinking ability in tourism decision-making, and their subjectivity dissolves in technological convenience. This promotes the expansion of instrumental rationality in tourism experience—value rational pursuits such as historical perception, cultural immersion and dialogue with nature are marginalized. Tourists are alienated from “subjects” with independent thinking ability to “objects” passively accepting algorithm recommendations, weakening the essential value of spiritual sublimation and cultural identity through tourism^[4].

4. Governance Countermeasures

4.1. Consolidate the Data Foundation: Build a Localized Corpus System in Tourism

Led by cultural and tourism authorities, a “cultural and tourism corpus” will be constructed in conjunction with local cultural and tourism institutions and scientific research institutes. It will focus on collecting characteristic resources such as tourism resource data, local chronicles, folk custom records, intangible cultural heritage materials and red stories of various regions, and build a data base that accurately reflects the characteristics and values of Chinese culture through scientific digital processing and semantic annotation^[5]. Collect tourism resources, historical classics, folk customs, red stories and other materials across China, and conduct scientific annotation and classification to provide abundant and pure “Chinese nutrients” for GAI.

Meanwhile, a strict data cleaning and ethical review process must be established before cultural and tourism corpus warehousing and during data training. Technical means and manual review shall be adopted to identify and eliminate historical prejudices, cultural discrimination and false information in the corpus to ensure the purity and fairness of training data.

4.2. Standardize Algorithm Operation: Realize Value Alignment in Cultural and Tourism Scenarios

The principles of algorithm filing and transparency should be implemented, requiring tourism GAI platforms to file core algorithm mechanisms with regulatory authorities, and developing interpretable GAI technologies to enhance decision-making traceability. Meanwhile, socialist core values should be embedded into algorithm models to raise the priority of red tourism, intangible cultural heritage experience, rural revitalization and other themed content, so that algorithms are organically integrated with mainstream values^[9].

In addition, algorithms with “cocoon-breaking” functions should be designed to actively recommend diverse tourism content to users with single preferences, such as interspersing rural or historical site recommendations for users who prefer urban tourism, so as to break information cocoons and promote comprehensive cognitive development^[4].

4.3. Strengthen Technological Governance: Establish Full-Chain Supervision of Tourism GAI

Develop GAI content traceability and identification technologies, and develop special deepfake recognition and content authentication models for common scenic spot images, promotional videos, travel notes and guides in tourism scenarios. Promote the application of digital watermarking and blockchain technology in tourism promotional materials to conduct source authentication and communication tracking for promotional materials issued by official tourism departments and authoritative media.

Meanwhile, establish a tourism GAI content monitoring and early warning platform. Jointly build a national-level monitoring platform by cyberspace administration, cultural and tourism departments and other authorities to scan tourism marketing content across the network in real time, automatically identify and warn information with high ideological risks such as deepfakes and false publicity, so as to achieve early detection and early disposal.

4.4. Improve the Institutional System: Build an Agile Supervision Framework for the Tourism Industry

On the basis of the *Interim Measures for the Administration of Generative Artificial Intelligence Services* promulgated and implemented in 2023, further introduce implementation rules for GAI applications in the tourism industry, and clarify the main responsibilities of content generators, platform operators and technology providers in tourism marketing; establish a “graded and classified supervision mechanism for tourism GAI content risks”, implement mandatory pre-audit for content involving sensitive issues such as historical events, ethnic policies and red culture, and adopt post-hoc supervision for general tourism information. Establish an “agile governance” model adapting to technological iteration, dynamically adjust regulatory strategies, and balance security and development.

4.5. Build a Co-Governance Pattern: Cultivate a Healthy Tourism Ecology

Strengthen government leadership and departmental collaboration, establish a linkage governance mechanism led by publicity departments and coordinated by cyberspace administration, cultural and tourism, industry and information technology, public security and other departments to coordinate technological development and ideological security. Tourism platforms and GAI enterprises must put social responsibility above commercial interests, and integrate socialist core values and ideological security strategies into the core architecture of their technological innovation and service supply^[9].

The foundation of governance lies in people. Through publicity and education, media guidance and other ways, improve users' intelligent literacy and establish people's rational subjective status^[4]. For example, carry out a national action to improve tourism digital literacy, help the public understand the limitations of GAI through publicity and education, cultivate critical thinking about tourism marketing content, encourage tourists to obtain information through multiple channels, maintain rational judgment ability, and become modern tourists with digital literacy.

5. Conclusion

Generative artificial intelligence brings paradigm revolution opportunities to tourism marketing, but also accompanies latent and profound ideological risks. These risks are rooted in data bias, algorithm black box, capital logic, communication alienation and subjectivity crisis, intertwined to form a complex challenge network. In response, we must neither give up eating for fear of choking nor let things drift, but respond with systematic and dialectical thinking.

By consolidating the data foundation, standardizing algorithm operation, strengthening technological governance, improving the institutional system and building a social co-governance pattern, we will guide GAI to develop in a "positive and upward" direction. Ultimately, ensure that GAI truly becomes a constructive force for spreading Chinese culture, enhancing cultural confidence and meeting people's needs for high-quality tourism in tourism marketing, and avoid it becoming an alien force that dissolves tourists' subjectivity and value identity. This requires the collaborative promotion of technological innovation, institutional design and cultural confidence construction, which is an important issue related to the healthy development of the future tourism industry and national cultural security.

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