



EXPLORING THE INTERSECTION OF IMMERSIVE VR/AR TECHNOLOGIES AND CULTURAL IDENTITY IN CHINESE VARIETY SHOWS

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Abstract:

This paper investigates the impact of VR/AR immersive variety shows on the creation of organizational cultural identity based on the cultural identity theory. In particular, it explores how the defining characteristics of immersive media, such as embodiment, interactivity, and cultural symbolism, support the identity-forming process. To determine the implications, this study integration approach will be based on the semi-structured interviews, with the participants being the producers, performers, and viewers; participant observation, analysis of program materials, and the analysis of discussions among audiences in social media platforms. Three exemplary cases are chosen to be analyzed VR headset-based formats, mobile AR formats, and live hybrid formats. The inherent design of the comparative will facilitate cross-case development and theory development. Initial therapies indicate that audiences will have a greater emotional connection with content that is rich in cultural elements. The embodied experiences are better at improving memorability of cultural symbols and the meaning-making processes depend on both the viewing context and the composition of the audience. The paper is designed to make its way into the media identity theory and provide practical implications to the content design and audience engagement approaches in the fast-changing XR environment.

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Cross-Media Storytelling; Cultural Identity; Embodiment;
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Introduction

Due to the rapid development of Virtual Reality and Augmented Reality, these two kinds of technology are also blending together. Compared with audiences just appreciating the media actively, these two kinds of technology provide more interactive way for audiences to contact with content. These two kinds of technology allow audiences to transcend at the time of appreciating content. For Chinese variety show, these two kinds of technology enable audience to explore the cultural identity more directly. They can experience and create the story by enjoying the better environment with these two kinds of technology. If these two kinds of immersive technology combined with traditional media, it will probably change the way of displaying and discussing cultural identity in Chinese popular culture.

As a continuation of this appreciation of cultural identity, organizational cultural identity is a progression in which the common beliefs, values and norms of behavior that is built upon the cultural constructs of an organization. The cultural identity theory holds that the identity of any person is formed not only by personal experience but also by the cultural environment of groups to which he/she belongs either through an organization, community, or even the media audience (Tajfel and Turner, 1986). Cultural identity of organization is an important factor in developing media audience identity, which is particularly the case in new media contexts, such as Virtual Reality (VR) and Augmented Reality (AR). By providing interactivity and embodiment that the VR/AR technologies allow, the media make the audiences interact in a manner that strengthens and redefines their attachment to the organizational culture (Slater, 2003; Perry, 2017). This interaction assists audience to identify and realize the cultural backgrounds of certain backgrounds and thus promotes emotional and cognitive awareness of the media contents. Thus, it is essential to comprehend the position of the concept of organizational cultural identity in the general structure of the cultural identity theory to examine how this concept affects identity construction of media audience (Ashforth and Mael, 1989). It is especially true when these two kinds of technology are used more in entertainment field.

For Chinese audience, blending traditional cultural theme with immersive technology opens new opportunity to explore their cultural identity. Specifically, placing cultural symbol, folk story, myth and historical tale into VR/AR field can allow people to explore Chinese culture in a richer way and more immersive way.

Although the previous studies have found out that the immersive media can strengthen the audience's feeling of being emotionally engaged with the content and a feeling of being "there" (Slater & Wilbur, 1997; Lombard & Ditton, 1997), how these two kinds of immersive technology can help to build and discuss the cultural identity in Chinese variety show is still a blank in academic field.

This research aims to bridge this gap. This research investigates how VR/AR immersive variety shows affect the formation and change of Chinese audiences' cultural identity. This study adopts a qualitative multi-case research method. This research method enables scholars to explore the cultural, technological and social factors related to immersive media forms in detail. The three types of immersive variety shows are explored in this study. These three types are variety shows that use headset VR, mobile AR variety shows, and live mixed variety shows. These three types of shows display the diversity of immersive technologies and the ways these technologies are used on different media platforms.

This study explores the influence of VR/AR immersive variety shows on the formation of cultural identity in Chinese audiences. By examining how immersive media technologies like VR and AR are used to represent cultural narratives, the research aims to understand how audiences engage with these cultural elements in modern media. The study adopts a qualitative multi-case research approach to investigate the role of these technologies in cultural identity formation, with data collected from a combination of interviews, participant observation, and content analysis. Through these processes, it is hoped that scholars can gain some insights into the relationship between immersive media and the formation of cultural identity in Chinese popular culture.

This study refers to the literature of cultural identity (Hall, 2015), cultural signaling (Anderson, 2020) and presence embodiment (Kilteni et al., 2012; Slater, 1997). This paper draws on such literatures to examine the role of immersive technologies in terms of their influence on the way audiences consume cultural content. This analysis will not only contribute academic knowledge in the field of media and identity, but also offer good ideas to ensure that the media who produce content can incorporate this technology to improve the interaction of both parties with the Chinese cultural heritage. These persons want to design immersive experiences that are connected to cultural themes more. As VR and AR technologies are used more and more on China's entertainment platforms, it is becoming more and more important to understand how these technologies shape and redefined cultural identity for both media scholars and professionals.

Literature Review

Cultural Identity and Media Consumption

Most people think of cultural identity as something that never stops happening or being mentioned. That's what Hall (1990) once said. Then people added on to his idea for today's digital situations. Now, people build their identity across various situations in today's digital situations. In these digital situations, people's identity exploration, commitment, and interpretation cycles repeat more often (Soh et al., 2024; Avci et al., 2024). In Chinese and overseas Chinese communities, creators build their identity on social media based on their language styles, local aesthetics, and algorithm visibility. This research shows how creators alternate between displaying cultural differences and similarities to gain recognition in

different audiences (Liu, 2024). Other broader studies have discussed how Chinese social media functions as a special kind of space for cultural expression and creativity (Fitzgerald, 2022). With globalization as background, although Anderson's (1983) idea of "imagined communities" still can explain how media can give audiences a sense of belonging, recent researches provide new additions to this old picture. That's because, as mentioned before, the media-driven building of shared culture now often happens in mixed online-offline spaces and mixed-reality experiences. In these kinds of experiences, audiences participate in meaning making with media's help through its interactive features and social chat channels (Van Laer et al., 2019; Soh et al., 2024). In short, media does not simply show culture to audiences. Media also gives audiences opportunities to participate in culture building through systems that shape attention, feelings, and interpretation. And immersive formats (VR/AR) can make all these conditions even stronger (Liu, 2024; Van Laer et al., 2019).

Immersive Technologies and Audience Engagement

Presence and embodiment are critical concepts to describe how immersive media can enhance engagement. The current models all center on two aspects, namely, presence and agency. These two functions are employed by immersive virtual reality (IVR) to influence the way people think and feel, hence producing various outcomes (Makransky and Petersen, 2021; Petersen et al., 2022). Over the past few years, meta-reviews and scoping reviews have pulled together ways to measure presence and its limits. They tell the difference between "place illusion" and "plausibility". They also explain when sensory accuracy and interactivity matter. And they list tested tools for measurement (Souza et al., 2021; Bareišytė et al., 2024; Slater, 2022). Studies on embodiment show that avatars can let people "own" and control a virtual body. This can change people's attitudes and sense of identification. The techniques to measure and adjust this are getting more mature (Gonzalez-Franco & Peck, 2018; Peck et al., 2021; Jung et al., 2021). At the same time, reviews and program-based studies stress that presence and agency are not goals themselves. They are middle steps that connect design choices (like immersion, control and representational accuracy) to other factors. These factors include interest, motivation, self-confidence, mental workload and self-control. They are the key parts of the Cognitive Affective Model of Immersive Learning (CAMIL; Makransky & Petersen, 2021; Petersen et al., 2022). Beyond single-person immersion, recent studies point out that social interaction is a main reason people use VR. Social presence, rules for being together in virtual spaces and non-verbal signals help explain why people see virtual meetings as important for themselves and their groups (Han & Bailenson, 2024; Son et al., 2025).

Overall, this research sees immersive design features as variables that people can adjust. These variables shape how strong and good audience engagement is. They also provide clear links to questions about how people make sense of culture.

Cultural Signaling and Identity Construction

In media studies, cultural signaling encompasses the encoding and decoding of symbols, rituals, language and memory that create belonging (Hall, 2015). Over the last 8 years, there has been a boom in the use of XR applications for cultural heritage and museums. This body of work provides robust support for the hypothesis that augmented and virtual reality can scaffold learning, perceptions of authenticity and affective engagement with heritage content (Boboc et al., 2022; De Paolis et al., 2022; Ramtohul et al., 2024). Systematic reviews and domain syntheses report that AR/VR enhance display richness and supports narrative and gamified

engagement, and can increase perceptions of authenticity and emotional engagement - outcomes that plausibly mediate identity outcomes (Wang, 2022; Boboc et al., 2022; Lin et al., 2025). Empirical work in a Chinese museum context shows increasing adoption and continuance intention for AR guidance and interaction; presence, aesthetics authenticity and interactivity influence satisfaction and reuse for heritage digitisation; empirical work in China shows that presence, aesthetics authenticity and interactivity influence satisfaction and reuse (He et al., 2025; Xu et al., 2025; Zhang et al., 2025). Heritage Science contributions such as Dunhuang fresco colour reconstruction as a VR serious game illustrate how carefully designed XR pipelines can orchestrate situated, emotion laden encounters with tangible cultural artefacts (Heritage Science, 2024), while broader decadal reviews of Chinese museum digitisation illustrate how XR is part of longer term changes to curation, access and public engagement (Chunlan et al., 2025). Complementary work on emotional design and ICH argues that gamification and affective cues are poor levers for enhancing long term engagement and cultural confidence (Lin et al., 2025; Qiu et al., 2024). Taken together the body of recent work reviewed here suggests that XR do not simply display symbols, but choreograph embodied participation in cultural experiences that can make cultural rituals and narratives experientially vivid - it is in these circumstances that identity work is most likely to take place (Boboc et al., 2022; Lin et al., 2025; Zhang et al., 2025). The role of VR/AR in shaping cultural identity.

The Role of VR/AR in Cultural Identity Formation

Embodiment and interactivity are two key affordances of immersive technologies, namely, Virtual Reality (VR) and Augmented Reality (AR), that are essential in the formation of the cultural identity. Embodiment, the feeling of living in a virtual body, allows users to interact with cultural content directly, in that way that predetermines their self-conception and their emotional attachment to cultural texts. As users feel the avatars in the world of VR/AR, they can overcome the restrictions of the traditional media, as they can actually become a part of the cultural narrative. Having this feeling of space in the virtual worlds not only makes users see themselves differently but enhances their relatedness to the cultural symbols, narratives, and practices, which form the most fundamental aspects of identity formation (Gonzalez-Franco and Peck, 2018; Peck et al., 2021).

The second characteristic of immersive technologies, namely, Interactivity, can enable the user to take an active part in the cultural stories they experience, and this experience can become more individual and feel substantive. In contrast to passive types of media, VR/AR technologies allow users to influence their experiences by engaging with the virtual space thereby strengthening their emotional and cognitional attachment to the content. This level of interactivity adds to the effect of narrative transportation, a phenomenon in which users are immersed in the narrative, to the point of meaningful identity-relevant consequences (Van Laer et al., 2019; Makransky and Petersen, 2021). Ensuring real-time interaction with cultural materials, VR/AR technologies make it possible to have a participatory kind of identity exploration when the audience is not a passive viewer but an initiator of their cultural identity. In addition to this, VR/AR technologies create an environment in which social presence can be created, which once again affects how people would define themselves in relation to their cultural background. Virtual presence, social presence lets user experience a sense of belonging to others, and through a shared experience and meaning of cultural symbols, can help cultural identity develop faster (Han and Bailenson, 2024; Son et al., 2025). Such participatory and immersive characteristics of VR/AR ensure that audiences will develop a stronger sense of

belonging and cultural affiliation since they do not consume culture but rather interact with it and mould it.

To conclude, the combination of the embodiment and interactivity in the VR/AR setting promotes the active, immersive, and emotional experience of interacting with the cultural content. Technological affordances also increase the capability of users to internalize and personalize cultural stories and facilitate the identity formation process and solidifies the bond between people and their cultural heritage (Slater and Wilbur, 1997; Lin and Latoschik, 2022).

Research Gaps

More and more studies are focusing on how immersive technologies (such as VR and AR) are connected with cultural identity. However, there are still large gaps in these studies, especially in Chinese mass media.

Most of the current studies focus on how immersive mass media influence people's feelings and thinking. They concentrate on education use and entertainment (Makransky & Petersen, 2021; Van Laer et al., 2019). Very few studies focus on how these immersive experiences influence people's cultural identity. It is even more rare when it comes to the special stories and themes of Chinese culture. Very few studies focus on how immersive technologies change how cultural heritage is shown and how they make people feel like they belong in non-Western places (such as China). Most of the related studies were conducted in Western countries or they combined all cultures together, without distinguishing them (such as how immersive technologies make people feel like they belong and how local Chinese cultural symbols and practices were used and felt in VR/AR) (Anwar et al., 2025; Zhang et al., 2025). What's more, people are more and more interested in how VR/AR help with cultural signaling and building identity. However, researchers haven't talked about how VR/AR interact with the changing nature of Chinese identity.

Very few studies focus on real-time interactive participation through immersive media formats (such as VR headset experiences, mobile AR mini-series). These formats provide new ways for people to build their identity, both as a whole group and as an individual. However, how this is achieved through embodiment, presence, and social interaction in digital space is still a gap in research (Soh et al., 2024; Son et al., 2025). Finally, most of the current research focuses on how the VR/AR experience influence people's emotion and psychology in separate, single settings. Very few studies focus on how these media work in different situations, such as mixed live and virtual environment. It is important to know how these formats (especially the formats that mixed the expression of traditional culture and advanced VR/AR technology) influence how Chinese viewers feel about their heritage and how they feel about belonging to their culture. This knowledge will influence the future of cultural media in China (Han & Bailenson, 2024; Lin & Latoschik, 2022).

So, this study will focus on how these immersive media formats (VR headset experience, mobile AR mini-series, live hybrid event) help Chinese audience build and discuss their cultural identity.

Research Questions

RQ1: How do VR/AR immersive variety shows incorporate Chinese cultural elements, and how do viewers interpret these elements?

This question explores how cultural symbols, rituals, and language are embedded in the shows and how viewers interpret them within their social and cultural contexts.

RQ2: Which immersive design features most influence viewers' sense of cultural belonging?

This question examines how specific immersive features enhance viewers' emotional connection to the content and contribute to their cultural identity.

RQ3: How do audience demographics and prior cultural exposure affect the relationship between immersion and cultural identity?

This question investigates how individual differences and cultural background influence the impact of immersive experiences on cultural identity formation.

Methodology

The given study belongs to the qualitative multi-case research design because the researcher is interested in studying the impact of immersive VR/AR variety shows on shaping and cultivating the Chinese cultural identity. As the number of immersive media technologies (VR and AR) in the Chinese entertainment industry rapidly increases, this study attempts to comprehend how this technology enables viewers to engage with cultural stories and create their cultural identity. In the proposed study, the qualitative triangulation approach is applicable as various data sources will be incorporated in the research to develop a complete picture of the influence of immersive technologies on cultural identity formation. Triangulation enables the study to double up findings between various sources of data and this makes the study robust thereby increasing validity of the results.

Case Selection

We chose three representative cases. We did this to cover the diversity of immersive media formats and production sizes in China's entertainment industry. These cases let us take a thorough look at how VR and AR technologies are used in different types of variety shows. They also let us see how the technologies are applied on different media platforms and with different ways to get audiences involved. The selected cases are as follows:

Case A: VR Headset-Based Immersive Variety Show on a Popular Streaming Platform

Example: *2024 Chinese Poetry Conference*

This well-known cultural show integrates AI and XR. This experience named "Dunhuang Spring" brings the famous Dunhuang frescoes to life digitally. Viewers enter an environment where the history of ancient Chinese art is brought to life. The past merges with the present. This immersive experience revives Chinese cultural heritage. It engages viewers in interacting with culture in ways that static formats cannot (Boboc et al., 2022; Zhang et al., 2025).

Case B: Mobile AR-Based Variety Mini-Series Designed for Social Media Engagement

Example: *All Members Accelerate 2023*

This reality-style variety show integrates AR, VR, and AI. The show blend's real-life locations, story-based narration, and digital space. The show contains AR tasks to complete at the location. The viewers are invited to complete the tasks on the show and social media as well. The viewers

participate online and offline to complete the tasks which provide an interactive experience of the real and virtual world. By letting the viewers participate in real time and providing a platform to interact and engage on social media, the interaction and involvement of the audience is strengthened (Son et al. 2025; Anwar et al. 2025).

Case C: Live Hybrid Variety Show Blending On-Stage Performances with Virtual Audience Interaction

Example: *2060*

The hybrid show *2060* uses green screen and VR headset. It is made in virtual technology. In this landscape, there is live performance. This digital landscape is not fixed. In this virtual environment, the live audience can interact with the virtual landscape in real time. It breaks the border between physical and virtual space. The show is filled with futuristic themes. It is also a traditional story. This is a new type of performance. It is advanced in terms of technology. It is also saturated with cultural aspects (Lin and Latoschik, 2022; Ramtohum et al., 2024). We selected them. This demonstrates the immersive technology of the use of different type of format. We were also interested in knowing how it assists audience in relating with the Chinese cultural aspects. We are interested in determining the ways in which these immersive media events assist us in defining our own cultural identity. We also wish to examine audience perception on cultural contents.

Comparative Design Rigor

This paper will compare three of the different types of XR, including VR headset-based immersive shows, mobile AR-based variety shows, and live hybrid shows and discuss their effect on audience engagement and cultural identity formation. Such formats have been chosen based on the fact they are common in the entertainment sector in China and also the degree of immersion of the viewers and their interactivity. Both formats are distinct forms of reaching the audiences with such cultural content and offer a variety of possibilities to explore how immersive technologies can allow the audiences to be emotionally associated with the culture and have their cultural identity shaped.

Immersive Shows VR Headset-Based Immersive Shows are VR experiences involving the use of VR headsets to fully transform them into a 360-degree cultural experience. This can be the most immersive format, and a rich interactive experience is possible. It is especially useful in studying how emotionally interesting and culturally immersion experiences can improve the rapport between the viewer and the cultural object. This feeling of VR interaction is deeply emotional and thus VR can be used to examine the extent to which such media can be deeply engaging and can influence the identity of a culture.

Mobile AR-Based Variety Shows use AR technology to superimpose digital contents onto physical space and allow viewers to experience the cultural content in their own space. Although not as immersive as VR, this format is mobile-friendly and mostly allows access to larger and more engaged audiences especially among more tech-savvy young people. The research paper will investigate the interaction and cultural engagement that AR can achieve particularly in daily life and impacts on cultural identity through combining the virtual content with the real one.

Live Hybrid Events is the unity of live performances with the interaction with the virtual audience with the help of AR and VR features. The format enables viewers to engage in content in real time, which creates a dynamic mix between physical and digital space. The connectivity of digital and physical experience is particularly topical in the modern world of media where the hybrid quality of these events is becoming more and more popular. Hybrid events facilitating the connection between the virtual and the physical audience may result in the development of a collective identity, which offers goodness in the investigation of how social interaction and community-building using immersive technologies affect cultural identity.

These three formats used in this study will be compared under the framework of three important aspects of the presented study, namely, audience engagement, cultural identity formation, and social interaction. The paper will examine the effects of each format on emotional and cognitive engagement with cultural content, the way it affects the formation of cultural identity to the audience approaches in various manners, and how hybrid formats can improve social life by resolving the connections between the virtual and real audience. The purpose is to establish the most effective immersive technology in terms of enhancing cultural participation and formation of culture identity.

Data Collection

This study is exploratory. However, we are going to employ alternative data collection procedures based on qualitative data. We would like to have an in-depth sense of the interaction patterns between the audiences towards the immersive media content. In this manner, we will be able to employ multiple data sources (so-called data triangulation). It will enrich our analysis and occupy various sides. The primary sources of data collection are:

Semi-structured Interviews

We will do interviews with people. These people make the immersive variety shows or watch them. They are producers, performers and watchers. These interviews will tell us three things: first, why do they want to put immersive technology into the shows; second, how will the cultural things be and how do people interact with them; third, what do they think immersive technologies influence the cultural identity will be. We will interview them because they can help make the content or watch the shows. These interviews will tell us how the technology helps present the cultural heritage; how the technology will influence the identity formation (Jenkins, 2006; Van Laer et al., 2019).

Participant Observation

We will do participant observation. We want to see how audiences behave in live shows and virtual viewing times. This way we can know better how the audiences behave with the immersive parts of the shows. The researcher will observe the following three parts: how do the audiences behave, how do they interact with the interactive parts, how do they feel. The observation data will be collected in two following situations: people watch in person at live shows (Case C) and people watch in virtual viewing occasions (Cases A and B). This way we can see how the immersive experience makes audiences be connected to cultural content. We can also see how it affects their cultural identity (Liu & Zhang, 2025; Xu et al., 2025).

Content Analysis

Content analysis will identify cultural symbols, themes, and narratives embedded in the immersive variety shows. This analysis will focus on how cultural heritage is presented through VR/AR formats and how these technologies influence audience engagement.

Sampling Strategy

The sampling method will be outlined clearly, as well as, to secure the credibility and transparency of the research, emphasis on saturation as opposed to a certain sample size will be aimed at. In qualitative research, the term saturation is used to denote the point when the data fails to add information or insight which proves useful in answering the research questions. This will still be done until saturation is achieved as the study will get a complete coverage of perspectives and experiences. The paper will be addressed to three major groups of businesspeople; producers, performers, and viewers and the processes based on these holidays have the following selection criteria and roles as follows.

Producers: 5-7 producers will be chosen according to their perceived participation in the production of immersive VR/AR variety shows. Such manufacturers have to be very experienced in using immersive technology in their performances and create cultural narratives. The choices will be made concerning a variety of genres and formats of the immersive type in the landscape of immersive variety shows in China.

Performers: 8-10 performers that have been in immersive VR/AR variety shows will be interviewed. These actors will play different roles, which include leading actors and background actors. The purpose is to comprehend the way performers interact with immersions and cultural stories. The actors will be chosen to ensure that there will be diversity in backgrounds, and it will have many different perspectives regarding the utilization of immersive technologies to relay cultural content.

Viewers: The research will take place using 20-25 viewers who will be involved into the specific immersive variety shows under investigation. The sample will consist of regular viewers (those who watch shows regularly) and occasion viewers (those who watch shows on an occasional basis). This variety will assist in obtaining varying degrees of commitment with immersive media material and see how different degrees of engagement will impact cultural identity development.

The research by saturating avoiding fixed sample size will guarantee that data will be accumulated until a thorough insight on the research problem is realized. It is meant to encompass the entire array of views regarding the effect of immersive technologies on cultural identity among the various stakeholder groups involved in the shows.

Data Analysis

Content Analysis

We will do a content analysis of the shows. We'll be looking particularly at cultural symbols, themes, and stories in the scripts, pictures, and performance. The analysis will focus on, how we can see and tell cultural heritage through immersive media forms, particularly, things like,

how cultural symbols can be visible through VR/AR technologies, and how people will feel in relation to the past, a change, or a break to the past? Understand how the addition of VR, AR, and other immersive technologies affects how culture is shown. Compare this to traditional media forms (Makransky & Petersen, 2021; Zhang et al., 2025).

Audience Discourse Analysis

We are interested in knowing how viewers make sense of and mention cultural content. Thus we will do audience discourse analysis in social media, online forums and viewers' comments. In this way, we can see how viewers share their ideas and how they feel about the show. It will be helpful to know how the content reaches the viewer. For this reason, discourse analysis will be seeking for themes such as cultural identity, how do they feel related to the content and what kind of control viewers have. In addition, we will explore how audiences use the digital medium to share what they think about how culture is represented and immersed (Han & Bailenson, 2024; Anwar et al., 2025).

The analysis of the data will involve thematic analysis. Thematic analysis is a popular approach to locating and describing patterns in qualitative data (Braun and Clarke, 2006). The approach will assist us in discovering patterns on cultural identity, immersion, and engagement of the audience. In particular, we will examine the following critical themes:

Cultural heritage and its online presentation: We are going to review how the traditional cultural components of Chinese people are demonstrated through immersing technologies.

Emotional activity and engagement: We will consider whether VR/AR technologies bring more emotions to viewers towards cultural content.

Audience agency: We will learn about the interaction of viewers with the content. It will also investigate the implications on their affiliation to cultural identity (Slater, 2022; Zhang et al., 2025).

Findings and Discussion

The results of this research determine the role of immersive VR/AR technologies and their effects on the development of cultural identity in Chinese variety shows. The combination of semi-structured interviews, participant observation, and content analysis gave informative information regarding the role of these technologies in engaging the audience with cultural content. Earlier experiments showed that VR shows shown on headset make people more moved, and respondents said they experienced their closeness to the cultural artifacts more visually than having regular screens. Such immersive VR experiences could also enable people to experience cultural heritage uniquely in a way that the conventional media could not provide, and this intensified emotional and cognitive experience. Mobile AR-based variety shows were not as immersive but provided the more accessible engagement, allowing the audience to engage with cultural content, particularly younger audiences, to engage with it in the environments, therefore. Moreover, the hybrid live events were live events which had live events with virtual interaction to the audience giving the feeling of group identity to both the live audiences and the virtual audience. These mixed forms provided the opportunity to participate in real-time, which promoted socialization and a similar cultural experience, which is particularly important during the post-pandemic period. Analyzing the content by the VR/AR technologies helped represent cultural symbols through more dynamic means, e.g. myths or historical references, which was a more rich and interactive experience. More so, social media

applications were vital in constructing cultural identity, because the viewers were likely to share and comment on their individual associations to the cultural material, association that strengthened their shared cultural identity. To sum up, the immersive VR/AR technologies contribute greatly to redefining the audience interaction and perception of the cultural content, and allow establishing a more profound, intimate interaction with the cultural legacy and developing a personal and community cultural identity through emotional involvement and social interaction.

Case A: VR Headset-Based Immersive Variety Show

This case studies a high-budget VR variety show. It is on a popular streaming website. It uses VR technology. It builds an immersive environment. It allows viewers to interact with both virtual world and live-action dramas. It enables the audience to enter the virtual world. The virtual world combines traditional Chinese cultural contents with modern tech breakthroughs (Makransky & Petersen, 2021; Van Laer et al., 2019). The show borrows concepts from significant Chinese folk stories, myths and historical figures. It transforms cultural narratives of these stories into digital space. We can find this in how the show puts one of the Four Great Classical Novels (Journey to the West, Water Margin, Romance of the Three Kingdoms, and Dream of the Red Chamber) into VR space. It allows the audience to enter the world and meet the characters. It enables them to fully enjoy these classic stories. In addition, the show emphasizes traditional Chinese festivals. It is about the Spring Festival and Mid-Autumn Festival. It recreates the rituals and the celebration of these festivals in virtual space. This interactive VR experience doesn't allow viewers to just watch. It allows viewers to participate in these activities. It deepens viewers' feelings and minds about their Chinese roots (Slater, 2022; Zhang et al., 2025).

Case B: Mobile AR-Based Variety Mini-Series

The case in question examines a mobile AR mini-series. It is geared towards short form watching. It is also concerning making people talk to it in the social media. The series utilizes AR technology. It incorporates virtual material in the lives of the audience via their phones so as to encourage real time communication. The format is aimed at reaching the same population of youths, which is not only techno savvy, but also highly conversant with social networks. It is based on the fact that a virtual experience can easily integrate with the daily life of people (Anwar et al. 2025).

The series includes the elements of the Chinese youth culture of nowadays; dialects and language used in the social media. It renders it quite topical to the current Chinese viewers. They are able to experience the traditions of the city through their contact with AR. These include street culture, food and fashion. In the meantime, they also get to know the cultural meaning of these traditions.

Various kinds of Chinese language are also used in the series. It features an array of vernacular. This enables viewers to experience the variety of the Chinese language phenomena. Even better, the series brings close to subcultures in young people. It captures the trendiest waves of fashion, the digital media and internet community. Offering these interactive properties in the AR, the series will enable younger audiences to be proud of their culture. It improves their cultural identity. It helps to make them become actively engaged and build an emotional attachment to the modern Chinese culture (Boboc et al. 2022; Zhang et al. 2025).

Case C: Live Hybrid Event

This is a case study on a live hybrid kind of show. It includes physical audience engagement and virtual engagement with the use of AR technology. It is a hybrid event combining real-life performances and virtual participation with the use of AR technology. It enables virtual participations between on-site and remote viewers and performers as well as virtual characters in real-time. This is a new format that offers a new experience to the audiences to enjoy cultural performances. This live hybrid event integrates traditional Chinese arts and they are able to interplay with the real and non-real elements of the performance (Han and Bailenson, 2024; Son et al., 2025). These are Peking opera and martial arts. Nonetheless, it also combines these classical elements with the modern approach to the performance. It enhances these live performances with the help of AR technology. It imparts the digital aspect to these physical live shows. This forms a new and interactive spectacle to the audience. Peking opera performance is supplemented with AR visualization. These AR images are brought alive to transport costumes, stage setting, and choreography of Peking opera. This facilitates easier consumption of this ancient art by the youth and makes it more appealing. There are digital effects added to martial arts performance. All these effects stress upon historical and cultural value of martial arts. Physical fitness and athletic nature of performers are also brought by them. Dance and music are other contemporary manifestations of culture that are included in this show. These are combined with the traditional Chinese art.

This case demonstrates the fact that the cultural environment in China is dynamic. Old comes in contact with new everywhere. In some cases, it is the new vs. the old. In other instances, it is other kinds of traditions (Slater and Wilbur, 1997; Lin and Latoschik, 2022); By enabling the audience participate in the performance, this live hybrid event contributes to the emotional appeal to the traditional and modern Chinese culture. This combination of the virtual and physical world makes the live performance to be more engulfing. It makes the audience deal with the cultural traditions in more than a simple way of watching (passively). This interactive process enables them to have a greater sense of belonging and affiliation to their culture. It is a novel opportunity in our ways of realizing and living culture during the digital era (Makransky and Petersen, 2021; Anwar et al., 2025).

Conclusions

This research advances the development of media identity theory by broadening the scope of how immersive VR/AR technologies affect cultural identity construction. According to traditional media theories, how media watching affects identity has been studied passively. This study demonstrates that VR/AR technologies can make audiences an active subject in cultural identity construction. VR/AR technologies can make viewers interact with cultural content and make it personalized. This study extends Hall (2015)'s theory that media not only presents stories of culture but also makes viewers actively embody and reshape their cultural identity by making them participate in cultural content (Slater & Wilbur, 1997; Boboc et al., 2022).

Practically, the findings of this study have obvious significance. First, for designers of XR content, the findings of this study suggest that cultural elements, such as traditional symbols, festivals, and rituals, should be combined with immersive technologies to make viewers feel emotionally attached to cultural content, so that they can have a deeper connection with their own cultural identity and modern city rituals (Makransky & Petersen, 2021; Anwar et al., 2025). Second, for institutions that produce and distribute XR content, it is necessary to make XR

content easier to access and closer to the original culture to make the content authentic, and more important, it is necessary to make ethical regulations for XR systems to protect user data and cultural narratives (Son et al., 2025; Han & Bailenson, 2024).

This study only selects a few cases, although the results are interesting, future studies should expand to long-term and comparative studies to understand how viewers' cultural identity will change on different XR platforms. In addition, qualitative research and quantitative research will provide a more holistic understanding of how immersive content shapes individual and collective identity (Anwar et al., 2025).

In sum, immersive VR/AR variety shows are a powerful combination of technology and culture. Immersive formats can not only improve the existing experience of culture but also provide more possibilities for audiences to experience the interaction of culture in a more meaningful way. This study proves that immersive VR/AR variety shows can help audiences connect with their own cultural identity in a new and innovative way (both digital and physical) (Zhang et al., 2025; Anwar et al., 2025).

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Ethics Statement: This study was conducted in line with the ethical standards of Universiti Putra Malaysia (UPM) and the Declaration of Helsinki. All participants (producers, performers, and viewers of immersive VR/AR variety shows) participated voluntarily and were provided with clear and comprehensive information about the study's purpose, data collection methods, and potential implications prior to participation. Informed consent was obtained from each participant, who retained the right to withdraw from the study at any stage without penalty or negative consequences. Strict confidentiality and anonymity were maintained throughout the entire research process: all personal identifiers (e.g., names, contact details, and recognizable information) were removed or anonymized during data transcription, analysis, and manuscript preparation. Raw data were stored securely in password-protected systems, and the collected data were used solely for academic

research and manuscript publication purposes, with no secondary use or disclosure to third parties.

Author Contribution Statement:

All authors have made substantial contributions to this manuscript. Zhiyao Guo (1) led the research conceptualization, conducted a comprehensive literature review, designed the initial research framework, undertook data collection (semi-structured interviews with producers and viewers), sorted preliminary data, and drafted the Introduction and Literature Review sections. Hani Salwah Yaakup (2)*, the corresponding author, oversaw the overall research design, refined the methodology (especially the integration of qualitative triangulation), coordinated the project, guided the data analysis process, validated thematic analysis results, provided critical revisions to the theoretical framework and discussion of findings, finalized the manuscript to ensure academic rigor, and handled journal correspondence. Rahimah Hamdan (3) focused on data analysis, including content analysis of variety show materials and audience discourse analysis on social media platforms, contributed to interpreting cross-case findings (particularly the link between immersive design features and cultural identity formation), revised the Methodology and Findings sections, and verified the consistency of research logic. Chuyao Wang (4) assisted in participant observation data collection (on-site observation of live hybrid shows and virtual viewing sessions), optimized the sampling strategy, compiled and formatted the reference list in APA 7th Edition style, prepared supporting materials for case studies, drafted the initial version of the Conclusions section, and participated in the critical revision of the entire manuscript for clarity and academic tone. All authors have read and approved the final version of the manuscript, agreed to the order of authorship, and confirmed compliance with ethical and academic standards.

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