

# Research on Interactive Media Art Helping Rural Revitalization — Taking Yim Tin Tsai in Hong Kong as an Example

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## Abstract

Yim Tin Tsai, a representative village located in Hong Kong, China, has experienced a process of establishment, relocation and restoration. Despite certain progress and achievements, the revitalization has encountered many bottlenecks due to the relatively traditional restoration and conservation of Yim Tin Tsai. As a product of the integration of art and technology, interactive media can helpfully provide more dimensional experience with new art forms and new vitality for rural revitalization. In the present study, we investigated rural revitalization with the assistance of interactive media art based on the background of Yim Tin Tsai, summarized its development value and studied its creation principles.

**Keywords:** interactive media, rural revitalization, Yim Tin Tsai

## 1. Introduction

With the development of China and continuous improvement of the people's living standards, it has become an ever-growing important issue to achieve balanced and adequate development and inherit the excellent traditional culture of various regions. Rural areas are the main activity spaces of human beings with multiple functions including production, life, ecology and culture. China attaches great importance to rural revitalization, and have adopted the law on the promotion of rural revitalization of people's Republic of China at the 28th meeting of the Standing Committee of the 13th National People's Congress. The current focus mainly concentrated in eastern, central and western regions in China. Hong Kong, with its vast villages and countryside, have achieved an extraordinary development of rural revitalization due to its unique natural resources, as well as historical and cultural background. Yim Tin Tsai, located in Sai Kung, Hong Kong, China, has experienced a process of establishment, relocation and restoration. The village is the only place in Hong Kong with the integration of the three different themes, namely, Catholicism, Hakka culture and natural ecological resources. With the assistance of multiple efforts including government, villagers and public figures, Yim Tin Tsai has implemented measures such as salt pan reconstruction, building reparation, tourism promotion of Hakka culture and Catholic culture and conduction of art festival in Yim Tin Tsai, and achieved certain progress and effectiveness. With the progress of various conservation work, Yim Tin Tsai has attracted attention and research from some people, accompanied with their own opinions. Traditional conservation measures and concepts in Yim Tin Tsai may not be able to meet the needs of all stakeholders, thereby making it a bottleneck in the current conservation work. The development of new media can helpfully make rural revitalization a part of the digital village. The application of interactive media can become a link between people and rural culture, and provide more dimensional experience with new art forms and new vitality for rural revitalization.

Therefore, in the present study, we aimed to investigate rural revitalization with the assistance of interactive media art based on the background of Yim Tin Tsai, summarized its development value and studied its creation principles.

## **2. The Background of Yim Tin Tsai**

### *2.1 Geography and History of Yim Tin Tsai*

Yim Tin Tsai is a small island in the inland sea of Sai Kung, Hong Kong, approximately 3km as the crow flies from Sai Kung Public Pier, and a 15-20 min ferry ride. The island possesses a small area, only about 0.24 square kilometers. In about 1700, Mengde Chen, a native of Wuhua in Meizhou, and his wife moved to Yantian village in Bao'an, Shenzhen, and then to Yim Tin Tsai Island in Sai Kung, Hong Kong. From then on, Yim Tin Tsai village was established. Due to the appropriate natural conditions, villagers in Yim Tin Tsai mainly live on salt making, agriculture and fishery. Yim Tin Tsai is rich in ecological resources. Mangroves, shrubbery and some rare animals are common on the island. However, in 1960s, the salt pan failed to compete with the international situation, and the profits were no longer to subsist. The villagers on the island began to move out to other parts of Hong Kong or to Britain, and the salt farm was gradually abandoned. In 1997, all the villagers of Yim Tin Tsai have moved away. In 2003, some villagers and social figures began to conduct restoration work on the abandoned village.

### *2.2 Religion and Culture of Yim Tin Tsai*

Yim Tin Tsai is a village integrating Catholic culture and Hakka culture, with a history of more than 300 years. The village was the main missionary region in Hong Kong in the early days of Catholicism. Since 1864, two priests have visited and preached in Yim Tin Tsai. In 1875, all villagers had been baptized by Roman Catholics and converted to Catholicism (WAN, C. T., 2004). St. Joseph's church, the famous landmark building on Yim Tin Tsai Island, was built in 1890. The church still hosts Catholic activities in Yim Tin Tsai village up to now, especially on the first Sunday of May each year, and most of the residents are now clergy. As the ancestors of Yim Tin Tsai village, the Chen couple, whose ancestral home is Wuhua, Meizhou, not only developed the salt-making process, but also brought the Hakka culture. So far, the village is still in the Hakka habit of eating Cha kue during New Year's greetings, which is regarded as a major feature of cultural tourism in Yim Tin Tsai.

### *2.3 Restoration and Development of Yim Tin Tsai*

The restoration of Yim Tin Tsai has achieved certain progress and effectiveness. Since 2003, the St. Joseph's church and parts of buildings in Yim Tin Tsai have been restored under the organization of the village committee. Consequently, the St. Joseph's church has won the Award of Merit of UNESCO Asia-Pacific Heritage Awards for Culture Heritage Conservation. At the same time, villagers and some social figures has renovated the abandoned salt pan, therefore, tourists visiting Yim Tin Tsai can experience the salt-making process of traditional water flow method and purchase souvenirs made of sea salt. The project has won the Award of Excellence of Merit of UNESCO Asia-Pacific Heritage Awards for Culture Heritage Conservation.

Additionally, taking "Ecomuseum" as its restoration concept, Yim Tin Tsai give full play to the local cultural value. The concept of "Ecomuseum" was proposed by François Huppert and Georges Henri Riviere in 1971, aiming to take the whole community as a museum space, so as to record, protect and disseminate the cultural essence of the community and promote its development in various ways (Chou Chia Hua, 2014). During the restoration of Yim Tin Tsai, the historical relics, cultural traditions and natural resources on the island were combined to allow tourists to obtain more diversified cultural tourism experience in the process of salt-making, religious activities, Hakka food tasting, natural sightseeing, boat tour, exhibition halls and art festivals.

## **3. Interactive Media Art and Rural Revitalization**

### *3.1 Interactive Media Art*

As a novel form of new media art, interactive media art is a product integrated of modern science and technology and artistic concepts. Interaction indicates a process involving the actions or information input of tourists, spectators or users. Therefore, interactive media refers to the media involving the behaviors of tourists, viewers or users. Interactive media can create dynamic presentation including text, graphics, images, audio animation and video animation (Sudjono, G, 2012). Allowing the audience to use their feelings, thoughts, attention and interests to receive information, interactive media art can promote the communication between people and artworks. With the development of digital technology, artistic creators are gradually not satisfied with a single form of artistic expression. Instead, they hope to obtain more creative inspiration, conduct multi-sensory and all-round information interaction in artworks, reconstruct the spatial environment of art experience, change and expand people's spatial perception, and create an immersive atmosphere based on different media, technologies and interaction methods (Dixon, S, 2015).

### *3.2 Interactive Media Empowers Rural Revitalization*

The creative environment of rural culture and art has been thoroughly changed with the development of digital technology. Scenes such as rural scenery, archaic rhyme, agricultural production and folklore activities can be transformed into digital scenes through the digital application, so as to emerge vibrant rural culture in abundant

forms. In 2021, Central Document No.1 stressed the “implementation of digital rural village construction and development project”, pointing out the general direction of rural revitalization empowered by digital technology. In the creation of rural cultural and artistic works, creators can create a dimensional rural cultural sensory experience for the audience through elements such as sound, light, electricity and images. For example, creating virtual reality (VR) town (Liang Hanyan, 2022), building a multi-functional augmented reality (AR) tourism system (Liang Tianqi, 2020), and designing a rural intangible cultural app (Yang Huizhen, 2019). Such a development strategy has certain reference significance for Yim Tin Tsai, where the current restoration and conservation measures are still relatively traditional.

#### 4. The Development Value of Interactive Media Art for the Revitalization of Yim Tin Tsai

Interactive media has been found to have a great potential in the development of Yim Tin Tsai through the exploration of the background of Yim Tin Tsai and art form of interactive media.

##### 4.1 Diversified Presentation of the Art Festival and Rich Works Forms

The carrier forms of media art work vary with different levels of scientific and technological development, which also directly affects the diversified presentation of works. An art festival with diversified works can attract more people to participate, thereby making it glow with greater vitality. Up till now, art festival in Yim Tin Tsai has been held for three times, and the art works exhibited are themed with “heaven”, “earth” and “people”, showing the unity of nature, earth and mankind. Thereinto, the number of art works exhibited in 2021 has been up to 31, reaching the maximum in the three art festivals (Press Releases of The Government of the Hong Kong Special Administrative Region, 2021). In terms of the work form (as shown in Figure 1), the vast majority of the works are non-interactive public art works located outdoors, with the concentration on the appreciating value. There is room for continuous optimization no matter in terms of the work number or the work form. Diversified presentation of interactive media art in the art festival can provide greater development value for Yim Tin Tsai.



Figure 1. Some artworks of the Yim Tin Tsai Arts Festival 2021<sup>1</sup>

##### 4.2 The Tourists' Sense of Participation Enhanced by Immersive Experience of Rural Culture

Interactive media art works mainly focus on the participation of the audience rather than one-way information output. The application of interactive media art in Yim Tin Tsai can create an immersive rural cultural experience environment for tourists, forming two-way or even multi-directional communication. Figure 2 shows the artwork by the artist, Ho Man Chong, *The Space of Salt*, in Yim Tin Tsai Arts Festival in 2020. This work built a space in which the forms of salt crystals were displayed and recorded. Without interactive elements of digital media, the application of interactive media in the space can not only improve the audience's sense of participation, but also enable them to immersively perceive the process of sea salt-making process, thereby providing support for workshops and other rural cultural activities that are not within the scope of the art festival.

<sup>1</sup> Retrieved from <https://sc.isd.gov.hk/TuniS/www.info.gov.hk/gia/general/202104/17/P2021041600489.htm>.



Figure 2. The Space of Salt<sup>1</sup>

#### *4.3 Building Cloud Experience to Break the Barrier of Time and Distance*

A major application of interactive media in museums is the virtual museum, which can be truly and completely stored in the computer network through virtual reality technology. With the help of relevant equipment, visitors can visit the museum without leaving home, thereby achieving the goal of “letting visitors personally participate in the experience” to a certain extent (Fang Fang, 2017), which also provides reference for rural revitalization measures of Yim Tin Tsai. Not every interested tourist can personally experience the rural culture of Yim Tin Tsai in Sai Kung, Hong Kong due to various reasons such as the epidemic and time limit. Cloud experience can be built by interactive media art, so as to allow tourists to break the barrier of time and distance to a certain extent, and experience the digital natural ecological resources and religious cultural activities of Yim Tin Tsai in the cloud through equipment anytime and anywhere, which is conducive to the promotion of rural culture in Yim Tin Tsai.

#### *4.4 Deepening the Cultural Identity of Local Villagers to Promote Their Return*

Despite the certain progress and effectiveness of the restoration in Yim Tin Tsai, the return of talents remains a difficult issue, which is also one of the problems that need to be solved in the implementation of rural revitalization strategy in other places. Local villagers are not only the inheritors of traditional culture, but also the core force to promote the transformation of Yim Tin Tsai. However, some of the younger villagers do not have clear recognition on their self-orientation in the return, nor do they comprehensively understand the importance of restoration, which is considered as the impediment to their own career (Lin Ziran, 2020). Interactive media art is characterized by advancing with the times and interdisciplinary due to its integration with the development of current science and technology, therefore making it both technically and culturally consistent with the career goals of the villagers, so as to deepen their cultural identity. The assistance of interactive media on rural revitalization can promote the return of local villagers in Yim Tin Tsai, which is of great development value.

### **5. Creative Principles of Interactive Media Art in the Rural Revitalization of Yim Tin Tsai**

In terms of the application in rural cultural tourism and conservation, interactive media art need to combine with the actual background and utilize appropriate creative principles to bring new vitality to rural revitalization in Yim Tin Tsai.

#### *5.1 Fitting the Theme Contents*

<sup>1</sup> Retrieved from <https://xw.qq.com/cmsid/20210304A0C68300>.



In the creation of interactive media artworks, it is necessary to select the content and form consistent with the theme of cultural resources in Yim Tin Tsai, so as to express the theme more efficiently and enable tourists to have deeper cultural exchanges. For example, the application of concrete information elements such as plants, animals, salt pan and churches in Yim Tin Tsai, which can enable the tourists to resonate with the artworks psychologically. In 2012, the interactive installation work “The TOKYO SKYTREE Mural” (as shown in Figure 3) from the team of Toshiyuki Inoko exhibited in the Tokyo Sky Tower, Japan, vividly and meticulously displayed the grand landscape of Tokyo, accompanied by the detailed traffic and civilians and other concrete information elements, making the work fit the whole theme.



Figure 3. The TOKYO SKYTREE Mural<sup>1</sup>

### 5.2 Enhancing Interaction and Feedback

Interactive media attaches importance to “human-computer interaction” and “interaction between human and environment”. During the participation process, tourists can greatly improve the experience by triggering the feedback given by the artworks through a series of behaviors. The feedback can be divided into negative feedback and positive feedback according to the psychological changes caused to tourists. The feedback can also be divided into visual feedback, auditory feedback, olfactory feedback, tactile feedback, etc. according to the sensory stimulation form (Liu Kang, Jiang Xiao, & Li Shiguo, 2009).

Magic Water (as shown in Figure 4), an interactive exhibition of Canada Pavilion at World Expo 2010 Shanghai, displays the poetic dwelling in the city. The color of the water will change as the audience immerses their hands in it. Additionally, the pattern at the bottom of the water will change as the audience gently moves the water with their hands. This artwork mainly enhances the experience of tourists by enhancing visual feedback, which also provides reference in terms of creative principles for interactive media in Yim Tin Tsai.

<sup>1</sup> Retrieved from <https://you.ctrip.com/travel/d294-1368197.html>.



Figure 4. The interactive project “Magic Water” of Canadian pavilion in Shanghai World Expo 2010<sup>1</sup>

### 5.3 Utilizing Emotional Design and Focusing on Space Environment

The emotional resonance between tourists and villagers is particularly important based on the profound historical and cultural heritage in Yim Tin Tsai. The creation of interactive media art with appropriate utilization of emotional elements can not only enhance the emotional resonance between people and artworks, but also shorten the distance between people on the spiritual level, thereby promoting the rural sustainable development. Emotional interaction design mainly includes sensory elements, behavioral elements and environmental elements (Xin Xiangyang, 2015). The abundant natural ecological environment in Yim Tin Tsai provides conditions for the integration of interactive media and natural space environment. The physical properties of the interactive media and the natural properties of environment in Yim Tin Tsai can be integrated into the rural cultural artworks, so as to enable tourists to have an immersive and personalized experience, and interact with the artworks in the mangroves, grass, seaside or salt pan in Yim Tin Tsai. The emotional distance between people and rural environment in Yim Tin Tsai can be shortened through digital artworks.

## 6. Conclusions

Currently, despite the progress and effectiveness, Yim Tin Tsai has also encountered several bottlenecks due to its traditional measures in restoration and conservation. Although China’s new media started late, it has developed rapidly with the progress of science and technology. As the general trend of future development, interactive media is conducive to rural revitalization in Yim Tin Tsai, which is of considerable development value in terms of diversified rural culture, enhanced participative sense of tourists, eliminated barrier between time and distance and deepened cultural identity of local villagers. In the creation of interactive media, such essentials need to be focused on: the fitness of theme content, enhancement of interaction and feedback in artworks, appropriate utilization of emotional design and the integration of space environment in Yim Tin Tsai. It is hoped that some reference opinions can be provided for the Rural Revitalization of Yim Tin Tsai through the exploration of this paper, so as to ameliorate the problems encountered in the current restoration and conservation.

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<sup>1</sup> Retrieved from <http://expo2010.sohu.com/20100502/n271879804.shtml>.

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