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# Automatic Conversion Algorithm and Dissemination Network of Realistic Style of Cultural Heritage Documentaries Fused with Heterogeneous Image Fusion

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Abstract: Starting from the basic principle of information fusion, this paper discusses the research status of heterogeneous image fusion structure, feature-level fusion algorithm and decision-level fusion algorithm in detail. The creation of non-fiction gives the audience the highest prestige, and the real thing has great power, which subtly leaves a thought in the heart of the audience. From the theoretical perspective of "cultural space" and "third space", taking intangible cultural heritage documentaries as the object, it analyzes the reconstruction of intangible cultural heritage cultural space in the context of new media and the expansion of intangible cultural heritage-mediated survival, and the template matching of similarity The method realizes the automatic registration of visible light and infrared images containing airport scenes.

Keywords: Automatic Conversion Algorithm, Dissemination Network, Realistic Style, Cultural Heritage Documentary

### 1. INTRODUCTION

With the development of remote sensing technology, various spaceborne and airborne sensors can provide remote sensing images of various levels, resolutions and bands for battlefield monitoring [1]. Reliable and highly deterministic target intelligence information. Learning and understanding the massive multimedia data emerging on the Internet has become a research problem that has attracted much [2] attention. Network multimedia data has three characteristics: 1) huge scale; 2) various heterogeneous Data coupling, such as text, images, audio and video, etc. [3]; The data content is scattered. Give you a camera, what kind of world will you use it to record [4].

Real, or fairy tale. Documentary is a film or television art form that uses real life as the creative material, takes real people as the object of expression [5], and performs artistic processing and presentation on it. The social influence of intangible cultural heritage is shrinking, mainly due to the impact and squeeze of the Chinese people's [6] contemporary lifestyle on the cultural space of intangible cultural heritage. intangible cultural heritage modernization do not have to be [8] discussed in an either-or context. McLuhan once commented on media technology. "Intangible cultural heritage" is an art form with strong historical and cultural heritage [9], it requires the audience to experience it slowly in order to be able to understand and accept the "intangible cultural heritage". This also makes the "intangible cultural heritage" documentaries have a large psychological gap with the audience in the process of dissemination [10].

At the beginning of 2017, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued [11] the "Opinions on Implementing the Project of Inheriting and Developing Chinese Excellent Traditional Culture", and issued a notice requiring all regions and departments [12] to conscientiously implement it according to the actual situation. In November 1997, the 29th session of UNESCO adopted the resolution "UNESCO Declares the Masterpieces of Human Oral and Intangible Cultural Heritage" [13]. In China, the title of

"intangible cultural heritage" has officially replaced the title of "folk traditional culture". Information fusion is to combine, correlate and combine data from multiple sensors and information sources [14] to obtain accurate location estimates and identities The estimated information processing process. The underlying visual feature is a widely used image representation, including color [15], texture, corners, etc. Previous work usually adopts a variety of visual information fusion methods to solve image understanding problems, such as pre-fusion [16].

In the field of creation of today's documentaries, many are based on the ordinary life of ordinary people. In the creation, although the visual differences [17] are different, the technology and the quality of the pictures are different, the content of the filming is the life that they are familiar with, and the audience will feel the same experience [18]. The adoption of modern means of communication can not only strengthen the dissemination power of intangible cultural heritage, but more importantly, it is the reconstruction of cultural space with the help of new media, which will open up a practical path [19] for the media-based survival of intangible cultural heritage. At the same time, the inheritors of "intangible cultural heritage" are often older, and "intangible cultural heritage" documentaries [20] need objective and real performance, lack of artistic processing, and the audience will feel boring when they accept it. Although these "intangible cultural heritage" documentaries have high artistic value, it is difficult to directly convert them into economic benefits. For a systematic study of a subject [21], classification is essential.

Scholars need to summarize their differences from different angles and follow the principle of "identity", and then conduct professional analysis and comparison, so as to grasp the internal structure and development [22] law of this discipline. The term intangible cultural heritage first appeared in the "Cultural Property Protection Law" promulgated by the Japanese government in 1950. The code extended the concept of "intangible cultural property" [23] (ie "intangible cultural heritage") from the concept of "tangible cultural property". ①, and "intangible cultural properties" are also included in the protection of national cultural heritage. The function of

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information fusion has been fully embodied in humans and animals [24].

### 2. THE PROPOSED METHODOLOGY

### 2.1 The Fusion Heterogeneous Image Fusion

For example, the human body combines various information collected by various organs (eyes, ears, nose, skin) to make judgments on the surrounding environment through prior knowledge. The former focuses on Representation, the latter focuses on semantics. How to effectively integrate these heterogeneous information is of great significance for semi-supervised learning of network images.

This reflects the basic process of information fusion, which is to first convert various information or data into valuable interpretations of the environment, and build a knowledge base suitable for interpreting the meaning of the combined information. Co-training algorithms iteratively continuously increasing the training data Improve the performance of the learner, suitable for online analysis of network data. Based on the method of graph regularization. Based on the basic principle of information fusion, according to the abstraction of input information and the difference of fusion output results, people have successively proposed a variety of fusion function models. Including three-level fusion model, JDL (Joint directors of laboratories) model. Based on local learning and co-training, this paper proposes a network image semi-supervised learning algorithm based on local cotraining (LCT).

This method treats various heterogeneous data contained in network images as multiple views. The differences in the imaging mechanism of heterogeneous images result in incomparability between image data, making pixel-level (data-level) fusion very difficult. Feature-level and Decision-level fusion has become the focus of heterogeneous image fusion research. At the same time, considering the flexibility of the Dasarathy model and the complexity of heterogeneous image fusion itself. This property is of great significance for iterative incremental online learning.

### **2.2** The Cultural Heritage Documentary Realistic Style

Fusion processing mainly realizes parameter correlation and state vector estimation, and the multi-source information mainly involved includes various intelligence radars, tracking infrared and other non-imaging sources. There are more than 70 languages in the world, we want to know The culture of a country requires learning the language of that country, but there is a language that is universal in the world, and that is the language of pictures. The popularity of intangible cultural heritage documentaries in recent years stems from the rapid rise of new media in the context of urbanization; at the same time, the maturity of a new generation of young audiences has also solved the problem of aging TV humanities documentaries. Micro-documentary of intangible cultural heritage documentaries.

The story of "reading" and understanding. Since the "Silk Road" co-produced by my country and Japan in 1980, Chinese documentaries have brought an open consciousness to the TV industry and Chinese audiences. The Canal has become the earliest climax in the history of Chinese documentary development. It is an important manifestation of the communication trend. Micro-documentaries generally refer to short-term documentaries. In a narrow sense, the standard is

less than 12 minutes, and in a broad sense, it is less than 25 minutes. In the new media environment Most of the micro documentaries are based on the former.

The advent of the new media era has brought new hope to the inheritance and dissemination of "intangible cultural heritage" and provided a new channel for the dissemination of "intangible cultural heritage" documentaries. New media is highly interactive, spreads rapidly, is free and open, and has massive data. Its communication mode surpasses any previous traditional media. China has a vast territory, a long history, countless historical events, and various historical figures. Moreover, the historical value and cultural value of each piece of history cannot be overestimated. Picking out suitable themes for shooting from various chaotic narrative elements is a test of the creator's professional quality and historical and cultural knowledge reserves. Documentaries can present information in the form of dynamic images, which meet the aesthetic needs and appreciation requirements contemporary audiences, and have a huge audience.

## 2.3 The Automatic Conversion Algorithm and Propagation Network of Documentary Realistic Style

Intangible cultural heritage documentaries can connect history and contemporary times in the form of images, create a new cultural mimetic environment, and allow audiences to frequently come into contact with traditional Chinese culture in their daily lives. The theory of cultural identity believes that for the cultural environment in which it exists, the process of communication through the media, from the transmitter to the receiver, is feedback. The communicator transmits information to the audience, and the audience will give feedback to the communicator. The feedback is particularly evident in the documentary "A Bite of China". Their use of scenes is extremely free, and the viewing time is fragmented, which also promotes the continuous evolution of the production and broadcast mode of the documentary, until the emergence of micro-documentaries.

Cultural heritage. I still remember a monologue in China on the tip of my tongue: "No matter how far you walk, in people's minds, there is only the taste of hometown, familiar and stubborn. It is like a taste positioning system. Before the rise of micro-documentaries, the existence of Chinese documentaries was obvious. Qian Chao, director of "Materia Medica China", summed up this way: "First, he is not good at operating business and advertising development; second, the audience is obviously aging, and it is not attractive to young audiences; third, new media communication channels are blocked and the platform is single. The public is no longer bound by mainstream discourse, and every user has become a producer and disseminator of information. New media users can freely engage in the inheritance and dissemination of "intangible cultural heritage" according to their own interests and hobbies

The creation of historical and cultural documentaries is based on documentaries, and visibility is the most basic requirement of film and television works. All plot contents must be displayed in the form of sound and pictures, and the picture performance should be the main body of performance. The vivid and vivid picture content concretizes the abstraction in the human brain, concretizes the text, and concretizes the philosophy, so that the audience can more easily understand the historical significance and cultural connotation behind the historical and cultural documentaries through these directly visible figurative forms.

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#### 3. CONCLUSIONS

This paper analyzes the current situation of heterogeneous image fusion from the basic principles of information fusion, the functional model of information fusion, the structure of information fusion, and the algorithm of information fusion. Intangible cultural heritage micro-documentaries can reconcile the conflict between mainstream culture and youth culture to a greater extent, and thereby move closer to the "public domain". This is the revival of intangible cultural heritage as the spirit of folk culture, and it is also an unexpected harvest in the digital age.

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