

Retraction

Retracted: Research Based on Visual Sensors and VR in the Field of Visual Culture

Journal of Sensors

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Manipulated or compromised peer review

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

In addition, our investigation has also shown that one or more of the following human-subject reporting requirements has not been met in this article: ethical approval by an Institutional Review Board (IRB) committee or equivalent, patient/participant consent to participate, and/or agreement to publish patient/participant details (where relevant).

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] Y. Li, "Research Based on Visual Sensors and VR in the Field of Visual Culture," *Journal of Sensors*, vol. 2021, Article ID 2013303, 11 pages, 2021.

Research Article

Research Based on Visual Sensors and VR in the Field of Visual Culture

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Visual sensors provide us with a wealth of multimedia data; one of the core parts of VR technology is to present people with a real and immersive simulation environment; the application of this technology makes the human narrative to achieve visual transformation and further strengthens the central position of visual culture. This paper studies the field of visual culture from two aspects of visual sensor and VR. In this paper, the HSV color model models task processing problems in visual sensor networks using separable load theory and studies ways to seek optimal task scheduling strategies to minimize the completion time of the visual task. This paper mainly uses literature research method, questionnaire survey method, and statistical analysis method to design a model image output process to explore the application of visual culture under the development of visual sensor and VR and analyzes the development status of film, game, and cultural tourism industry VR in the field of visual culture. Questionnaire data show that compared with traditional video games, more people chose games under the application of VR technology for entertainment; in VR game experience, more than 70% are satisfied with game color and style, operation form, scene design, and experience of VR game itself, which shows to some extent the role of visual sensor and VR in visual culture.

1. Introduction

In the context of globalization, the unique visual culture is facing the impact of global culture. It needs to be innovated on the original basis and promote cultural development with a new way of expression. Virtual reality technology can bring people more comprehensive information, and its science and technology also bring inspiration to the development of regional visual culture. With the development of Internet of Things technology and intelligent mobile devices, visual sensor network has been widely used [1]. Specialized in visual system to obtain rich multimedia data with the function of image collection and processing and data transmission capabilities, it has become an indispensable key sensing means of intelligent industrial robots [2, 3]. Virtual reality technology is a fusion of a variety of key technologies, including real-time computer graphics, three-dimensional modeling and rendering, binocular stereo vision, eye tracking, and sensory feedback and network transmission [4]. People using traditional text and pictures simple superposition of information

display is no longer satisfied, virtual reality technology is gorgeous, multisense display technology is more and more favored by people, and virtual reality technology conveys information to increase the user experience and improve the interaction with users; these factors promote the use of virtual technology in display design [5]. Virtual reality technology is different from the previous art expression form and interaction mode, which changed people's lives, changed people's feelings, and at the same time also changed the future marketing strategy, and can be applied in different fields, with important practical significance and practical value.

With the continuous development of VR technology, the academic community continues to explore the field of vision. Suarez introduced a CMOS vision sensor chip using standard 0.18 μm CMOS technology for Gaussian pyramid extraction. The Gaussian pyramid provides computer vision algorithms with scale invariance that allow for the same response [6], regardless of the scene distance from the camera. The chip includes 176×120 photoelectric sensors,

arranged into 88×60 processing elements (PE). The Gaussian pyramid is generated using a dual Euler Switch Capacitor (SC) network. Each PE includes four photodiodes, an 8b monoclinic-analog-digital converter, a related dual sampling circuit, and four state capacitors and their corresponding switches to achieve a dual Euler SC network. Lenero-Bardallo proposes a new event-based visual sensor with two operating modes, intensity mode and spatial contrast detection. These can be used in conjunction with two different readout methods, pulse density modulation and first spike time. The sensor is envisioned as a node of a smart camera network consisting of several independent autonomous nodes that send information to the central node [7]. The user can switch operation and read out mode through two control bits. The sensor has low delay (below 1 ms under average illumination conditions), low power consumption (19 mA), and reduced data flow when detecting spatial contrast. Maples-Keller reviewed virtual reality (VR) that allows the user to experience a presence in a computer-generated 3D environment. Sensory information is transmitted through a head-mounted display and a dedicated interface device that tracks head movement so that movement and image change naturally with the head movement [8, 9]. VR allows controlled delivery of sensory stimulation through the therapist and is a convenient and cost-effective treatment [10]. However, in their study, the sensor is prone to mismatch effect, too many variables involved in intensity mode and spatial contrast detection; the contrast detection research is difficult, due to the mismatch between the transmission and computing resources and the complexity of the visual analysis task; it is difficult to seek the optimal scheduling strategy to minimize the completion time of the visual task, the data in the detection process, so the experimental results are not rigorous and the authenticity of the experiment has yet to be studied.

In this paper, we model the task processing problem in a visual sensor network using separable load theory and study methods that seek optimal task scheduling strategies to minimize the completion time of the visual task [11]. Parallel and distributed systems are more efficient than a single high-performance node and can complete large batches of numerical calculation by integrating low computing resources. Combining different scene views with a large number of image data and network resource restrictions, VR scenario characteristics, flow experience and experience willingness, and on the basis of S-O-R model theory, the theoretical model is determined [12]. To address the challenges of visual sensor networks, interdisciplinary approaches, combining visual culture processing, communication and networks, and embedded processing are needed to cooperate together.

2. Visual Culture and VR Applications

2.1. Visual Sensors and Visual Culture under VR. While the classics of the “literal age” are still lingering for a long time, the development of science and technology has led the society into the “image age,” and textual imagery has gradually become popular and quickly become a trend. Movies and

TV series adapted from classic literary works are just one of the products of the transformation of the times [13]. The fundamental difference between image and text in constructing image is that image can be directly connected with the external image of things. The author stores the information in the image, and the brain receives the information as soon as the eyes see the image, instead of receiving the information after the meaning is processed, like receiving the text. Digital images spread faster and more widely than paper texts. When cookie-cutter images are accepted by more and more people as first-hand information, the mindset of social groups gradually takes shape. The topic of “visuality” explored by the Institute of Visual Culture is a macroscopic manifestation of a visual turn, an evolution of a social phenomenon, and microscopically, it can be refined to the interaction and effects of each social individual with visual information [14]. The virtual reality technology display design itself is formed by the intersection of aesthetics, ergonomics, psychology, and other disciplines, and the visual culture is formed by factors such as the ecological environment, humanistic habits, and value pursuits of a certain region. It includes content that is very extensive. Virtual reality technology is a comprehensive application of multiple disciplines, including cutting-edge science and technology such as three-dimensional modeling technology, computer imaging technology, sensing technology, and network transmission technology [15]. Virtual reality technology realizes immersive visual experience and practical visual communication. Through the analysis of interactive design, information architecture, interface design, information design, perception design, etc. of the client’s VR visual cultural experience, the audience’s sensory cognition is the basic link. After the completion of the construction of the aesthetic mechanism of the audience, the follow-up behavior and psychology of the audience will also affect the communication effect, analyze the user experience and the problems in the user experience, and summarize the client-side VR user experience optimization strategy [16]. Visual culture breaks through the physical limitations of the naked eye, breaks through the time and space limitations of the naked eye, and visualizes thinking [17]. As the mainstream of contemporary mass culture, virtual reality technology is in line with people’s pursuit of a fast lifestyle [18]. It can express a certain thing in a virtual form and make its information more comprehensive and intuitively displayed in front of people through digital transmission [19]. Virtual reality technology has attracted more and more people’s attention due to its authenticity, speed, interactivity, and other advantages, and it affects people’s working methods and lifestyles.

2.2. Interaction between VR and Film and Television Culture. American scholars Skent and Cartwright believe that “the term visual culture covers many media forms, from fine arts to popular films, to advertising, such as visual materials in the fields of science, law, and medicine.” Films are a sign of the rise of visual culture. It is a very important form of media in visual culture. Balaz believes that the invention of

film marks the emergence or return of visual cultural forms. Before the invention of words, human life was dominated by visual culture, but the visual culture at that time was very different from the rich image content nowadays. After the creation of words, the role of vision begins to decline, and the transmission of meaning is through written or printed words rather than images or graphics [20]. “Visible thoughts become understandable thoughts, and visual cultures become conceptual cultures.” And the birth of the movie brings human beings back to the visual culture [21]. There is a deep connection of multiple entanglements and two-way interaction between literature and film and television art, such as adaptation. This means that there is a “different cooperation” relationship between the two [22]. There are roughly two different levels in the interactive adaptation of literature and film and television. One is the screenization of literary text, that is, the transformation of literary text into screen works with the characteristics of sound and picture art through the special screen modeling methods of film and television [23]. The other refers to film and television. The reading of text appears in the form of film and television media being converted into printed media [24]. The visual cultural characteristics and functions of movies are a form of popular culture art. Film as a visual culture shows the close relationship between the media form of the film and the daily audience. Nowadays, movies mainly refer to entertainment movies or commercial blockbusters, which fully embodies the tendency of popular ideas and artistic interest and also expresses the release of popular desire and psychological pressure [25].

With its unique appeal, virtual reality art realizes the interactivity of art, as if you are in a certain environment, you can enjoy the charm of art to your heart's content [26]. This is also a kind of art, and at the same time, with virtual reality art as a backing, a new art form was born, namely, virtual reality art. The rapid development of VR technology has a more profound impact on art. It not only provides an unprecedented mass media for art but also creates new art types and art forms, such as film art, television art, and multimedia art [27]. Contemporary visual cultural expressions are becoming more abundant, and various visual cultural products and phenomena have infiltrated the daily life of the masses [28, 29]. Visual cultural products such as paintings, TV dramas, movies, animations, and video games, as well as various social life phenomena related to consumption, enjoyment, leisure, and fashion, are all topics to be discussed in visual culture. In today's society, people's lives are inseparable from mobile phones, and mobile VR will also become a future development trend [30]. With the iterative upgrade of smartphone-based VR glasses, the price and experience of VR glasses are gradually being accepted by ordinary consumers, and more and more interested people have tried or started to wear VR glasses to experience VR content products on their mobile phones [31, 32].

2.3. Impact of VR Technology on Film and Television Culture. Gradually developed science and technology and gradually improved digital technology have brought tremendous changes to the film and television production industry. Dig-

ital technology has become an indispensable means of expression in film and television creation [33]. The development of digital technology has changed the traditional film and television production methods to a certain extent. The introduction of digital technology has played a role in promoting the creativity of film and television artists. The impossible picture became reality, which stimulated the creative enthusiasm of film and television artists and gave play to the imagination and creativity of film and television artists. The introduction of digital technology into the creation of film and television art has brought people a more novel visual experience [34, 35]. The colorful, wonderful, and mysterious special effects have brought people visual and auditory enjoyment. People have more novel visual feelings, but because of this now, many of the film and television works have appeared in the phenomenon of emphasizing form and despising content. With the rapid development of digital technology today, VR technology has created favorable conditions for the development of my country's film and television industry, and it is a challenge and an opportunity for my country's traditional film and television industry. Although the development time of digital art in our country is not long in our country, there are some shortcomings, but it is not so far from the developed European and American countries. The main problem in the development of digital film and television art in our country is that it is too pursuing the visual effects brought by digital technology, and it is easy to ignore the cultural creative concept and artistic aesthetics. Therefore, we need to have sufficient understanding of this aspect. It combines film and television sensory stimulation and inner beauty to develop together.

3. Related Preparation for Visual Sensor and VR Research

3.1. Experimental Data Collection

- (1) Collect by literature research method: by consulting literature and collecting relevant information about visual sensors and VR in visual culture, understanding the relevant research results and latest developments, and collecting the composition of visual sensors, to analyze, summarize, and judge the cognition of visual sensors and VR based on literature information media, analyzing the advantages of “VR + film, games, and cultural tourism” through market research and questionnaire

3.2. Empirical Method

- (1) Case comparison and analysis method
 - (a) Statistics on the number of VR experience users at three time points on weekdays, weekends, and holidays to obtain the average one-hour passenger flow of a VR experience hall in Changsha
 - (b) Analyzing the development status of VR in the film industry from the form of expression, visual structure, and interactive means

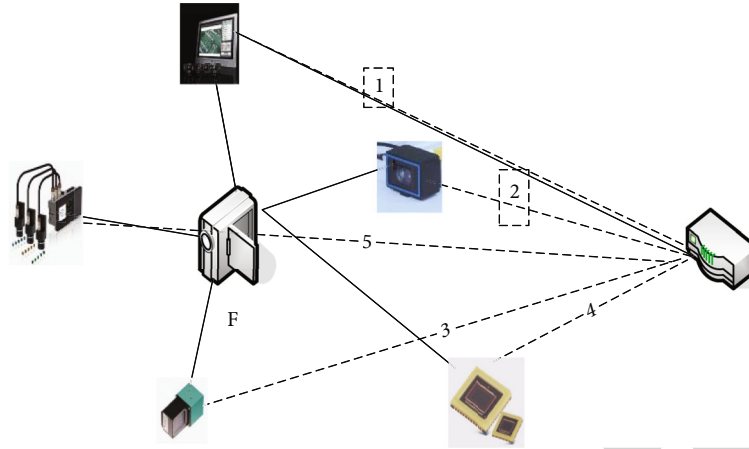


FIGURE 1: Operational model of visual sensor coprocessor.

(c) Analyzing the current development dilemma of cultural tourism by finding data summary

(2) Questionnaire survey method

(a) Questionnaire survey: 500 game hobby players analyze the differences between traditional game and VR video game user experience from the elements of operational perception, game characteristics, and user experience emotional response

(b) Analyze the advantages of passing through the “VR + tourism” mode from the customer point of view

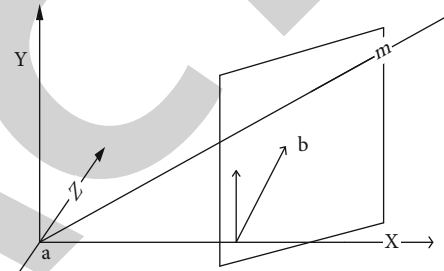


FIGURE 2: Three-bit spatial information mapping to two-dimensional image plane information map.

3.3. Data Statistics

- (1) Taking the analysis of the past five years of winning VR films in the film industry
- (2) Market research was conducted at a VR experience hall in Changsha
- (3) Invited 50 frequently traveling volunteers of all ages to participate in the questionnaire survey method during travel

4. Based on Visual Sensors and VR in the Field of Visual Culture

4.1. Composition and Basic Operation of the Visual Sensors. Visual sensor is the core of machine vision system, which is the information source with many environmental features. The main function of the visual sensor is to obtain the original image to be processed by sufficient machine vision system, an electronic image technology applied to the production device, bracket sensor technology, control theory, computer technology, artificial intelligence, mode recognition, etc., grasp the image through the visual sensor, and then transmit the image to the processing unit, through digital processing, to judge size, shape, and color information according to pixel distribution, color, and then control

the work of the production equipment according to the discrimination result. The working process of the visual sensor can be divided into four steps: image detection, image analysis, image drawing, and image recognition. The visual sensor has the ability to capture thousands of pixels from one image. Visual information is generally converted into an electrical signal through photoelectric detection, and the characteristic information such as the shape position of the object can be determined through the change of the image information. Visual sensor networks extend the application domain of traditional wireless sensor networks that can acquire and process multimedia signals such as stationary images and video. Virtual space is not too mature now, and it is limited by hardware and software technology, for the task scheduling problem of visual sensor network, a single scheduling model.

Visual sensor network includes a star network of camera node F and several cooperative processor nodes ($a, b, c \dots$); F distributes subtasks to each collaborative processor for calculation with simple model description in Figure 1; ordinary visual sensor imaging models are generally typical pinhole imaging model; a single visual sensor image process is to map three-bit spatial information to two-dimensional image (b) plane information in Figure 2, both of which are the basic image reception presentation and processing.

TABLE 1: Target image generation error data record table.

Deviation	Mean square deviation	Average value	Standard deviation	Max	Minimum
Figure (m)	0.053	0.051	0.012	0.912	0.007

TABLE 2: The performance parameter table of a certain model of Fuji camera in Japan.

Parameter	Screen size	Aperture range	Maximum aperture rate	Perspective	Focal length	Back focus	Object size
Index	1/2 type	F1.4-F16	1:1.4	14'35'-10'58'	25 mm	14.58 mm	38 * 29 mm

TABLE 3: The size of the screen of the mobile device commonly used in daily life to set the field of view.

Cellphone screen	5-inch half screen	5-inch 16:9	5-inch flip screen
Diagonal half field of view	42°	35°	32°
Equivalent to 0.5-meter display	35 inches	25 inches	29 inches
Equivalent 3-meter display	215 inches	140 inches	170 inches

For target image generation, considering the optical system inevitably produces errors, the study uses high-order polynomials to establish the mapping relationship between the spatial light modulator to the visual sensibilities and obtains the accurate target image by calculating the spot position, brightness, and radius in the target image in formula (9). Experiments have proved that the visual sensor shows the image error as shown in Table 1:

The data in the above table is evaluated for this paper algorithm with the standard dataset and adopts the standard dataset collected with high-precision cameras and inertial sensors, and the resulting deviation from the true trajectory is in the acceptable range.

The digital dynamic range of an image sensor simply describes the exposure value that the sensor can present in the vision system. In our daily life, the most common applications for visual image sensors are mobile phones and cameras. Here is an example of a certain model of Fujinon's million industrial fixed-focus lens and the setting parameters of the field of view of commonly used mobile devices and camera performance. The parameters are shown in Table 2, and the field of view setting parameters of the mobile device are shown in Table 3.

4.2. Application of VR Technology

4.2.1. Sense-Consciousness Foundation. Sense design thinking can fully mobilize people's subjective initiative and meet this understanding needs. Only by finally forming an objective understanding of various forms and an accurate understanding of the design concept can it be more in line with the fundamental purpose of the visual communication of the design art. Art aesthetic in the sense is often deeply rooted in the hearts of the people, rich hierarchy, rather than simply feeling moved; its composition process is subtle and complex from the perspective of the image characteristics which will be divided into three types: feeling movement, appearance superposition, and image exchange, and the use of VR technology is feeling move, surface superposition, and intention combination. Realize the movement of visual and auditory,



FIGURE 3: Indoor view of a VR experience hall in Changsha.

visual and tactile feeling; use emotion, express, reflect objective things, enrich the mixture of artistic spirit and aesthetic meaning; the purpose of connecting human subjective intention with external things. Human information is 85% from vision, the remaining 15% from other senses, so there is a very important role and significance in applying sense theory to visual communication design. In the appearance of VR, the boundaries of the screen is completely broken; like the real physical world, all directions are 360-degree panoramic video expression; in order to be able to see more picture and draw more information, users also need to twist their head and body and even walk, which can bring the audience extreme panoramic enjoyment and interactive pleasure and let the audience really achieve immersion. The interior scene of a VR experience hall in Changsha is shown in Figure 3:

Today, the popular place to experience VR belongs to the VR experience hall. We have conducted a market research in a VR experience hall in Changsha, counting the average passenger flow of VR experience for one hour, and the statistical data is shown in Figure 4.



FIGURE 4: One-hour average passenger flow of VR experience hall.

TABLE 4: Award-winning VR films of international film festivals and TV festivals in the past five years.

Production company	Title	Awards	Theme of the plot
Oculus Story Studio	<i>Lost</i>	2015 Sundance Film Festival Screening Name	The story of a robot arm lost in the Black Forest looking for its owner
Wei Rui Pictures	<i>Detective</i>	Screening at the Cannes Film Festival 2016	Two detectives investigating the murder of a VR developer
Google ATAP	<i>Pearl</i>	Best Animation Name of the 2017 Oscars	Growth line and father-daughter love in a classic car
Baobab Studios	<i>Invasion</i>	2017 Emmy Award winner	Tells the story of a rabbit and an alien invasion
Oculus & Magnopus	<i>Mission:ISS</i>	Nominated for the 2017 Emmy Awards	The character has to complete a space station spacecraft docking mission



FIGURE 5: Stills of *Lost* and *Invasion*.

As can be seen from the average data results of Figure 4, on weekends, there is a lot of passenger flow in the VR experience pavilion and on holidays, weekends, and weekdays, especially during the holidays, which also reflects the broad market prospect of VR technology and the audience's pursuit of visual improvement.

4.2.2. *Application of VR in Visual Culture: Take Film, Games, and Tourism Industry.* 3D films have gradually become the mainstream way of watching films, and the

development of these technologies inspires the development prospects of VR films. The unique terminal experience feeling of VR film no longer blindly pursues the visual shock brought by the vastness of the film screen, but puts more emphasis on really bringing the audience to the film from the first perspective. The definition of VR film has two aspects: (1) description of VR film with VR technology and combining computer system and sensor technology to form a human-computer interaction mode simulating human vision, hearing, touch, and other sensory organs and (2)



FIGURE 6: *Mission:ISS* stills.

TABLE 5: Selection of factors affecting the choice of VR game experience.

Options	Descriptions
A	Wearing the corresponding equipment can be carried out anytime, anywhere
B	Variety of game experiences
C	Somatosensory technology makes products more convincing
D	Faster and more intuitive performance scenes
E	Better feel the excitement brought by the game

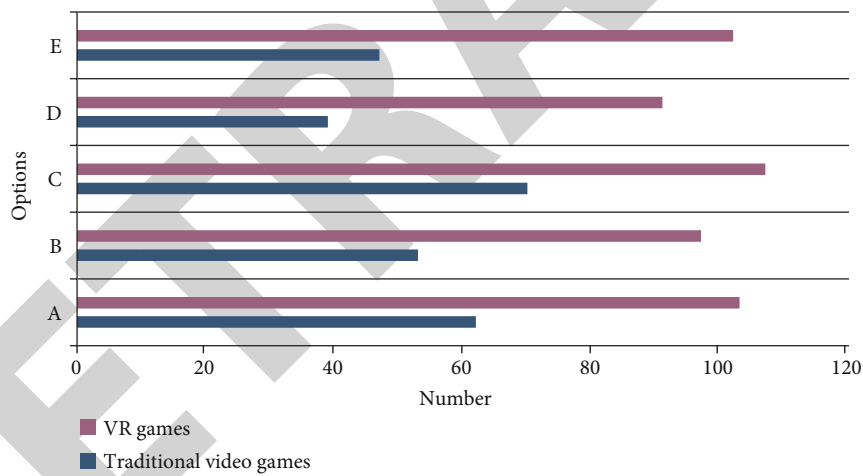


FIGURE 7: Statistics of game experience questionnaire survey data.

VR film is the integration of film, game, and drama. The advantage of the 720-degree full landscape film will give the audience an immersive experience after wearing the VR equipment and experience the audiovisual mutual communication. The application of VR films presented in the visual, auditory, tactile, olfactory, and other senses to realize the simulation and interaction, namely, the common sense, is the new force in the development of the film industry. Take the award-winning VR films of some international film festivals and TV festivals in the past five years as an example to analyze the development status of VR in the film industry, as shown in Table 4.

All of the above films have made an active exploration of the expression form, visual structure, and interactive

means of VR films. For example, All Detective witnesses and participates in the case information tracking in the first person rather than the third perspective, Lost Invasion challenges the other gaze in the interactive field, bringing the audience and the characters into the alien invasion, and the International Space Station Mission is a good interstellar-crossing experience for the general audience and international space lovers to truly feel the scene and operation of the space station. Both are shown in Figures 5 and 6.

Currently, adventure, action, racing, and role-playing video games are extremely suitable for combination with virtual reality technology. Traditional online games can only be operated through the mobile phone screen or

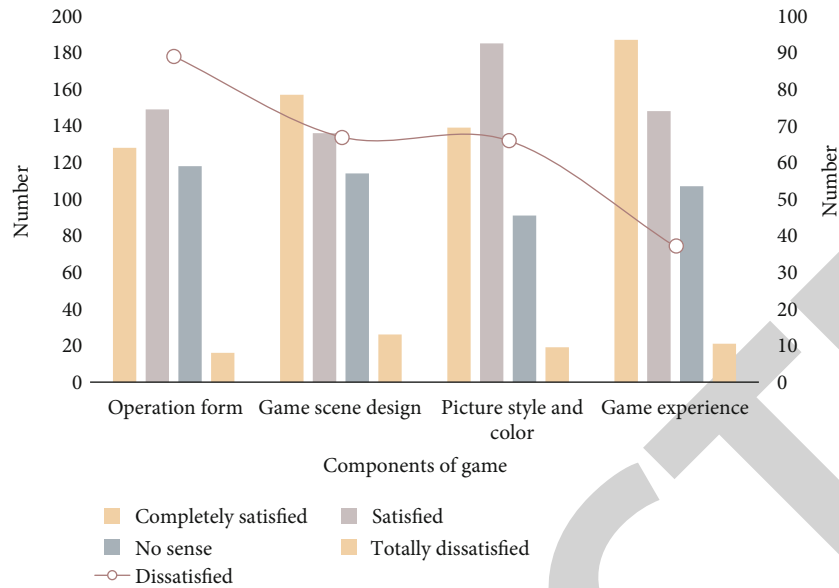


FIGURE 8: A statistical table of satisfaction surveys in four aspects of VR game operation form, scene design, screen style and color, and game experience.

mouse keyboard, game rod in various set characters in the game, which cannot achieve a real sensory experience. When the game is combined with the VR, the player uses a series of wearable devices to combine with the character in the game to simulate the abstract spiritual material in the human brain.

This study compares the traditional online game industry with the emerging video game industry under the combination of VR. A questionnaire survey of 500 game hobby players analyzes the user's sense of gaming experience from factors such as operational perception, game characteristics, and user experience emotional response. The analysis content is shown in Table 5.

The comparative analysis of data in Figure 7 found that compared with the traditional game scene, 3D game scene is more real, users can really interact with the outside world, by working with teammates, and can better feel the excitement in the traditional adventure games; users through the game interface operate characters, experience game selection diversification, and have strong sensory experience. For the given description, completely satisfied, satisfied, dissatisfied, completely dissatisfied, combined with the game color and style of the game screen, operation form, scene design, and game experience. Figure 7 is the basic information of VR game experience.

Through the data collation and analysis in the four aspects of Figure 8, the experience sense of VR game users is more than 70% praised on any hand, and the scene design and picture style color are the aspects that most groups care about. Therefore, for the development of VR technology in video games, we can summarize the following suggestions: design more scientific, interesting, and beneficial scenes according to the actual needs of users, corresponding to the design principles of VR game scene, draw game scenes and game pictures; the experimenter can

integrate into 3D games, combined with the color style of the game scene, to create an interesting game scene and picture for users.

Film and television culture is an important part of the cultural industry. Film and television communication promotes the leap-forward development of the tourism industry, and film and television tourism is an important way for the integration and common development of culture and the tourism industry. VR after the combination of film and television communication and cultural tourism industry can produce "1 + 1 greater than 2" effect; based on this conclusion of tourists through the induction of film and television works, to a certain region or scenic spots, or through the promotion of film and television works, the audience will have "—change attitude—travel willingness" and a series of complex psychological activities; this formed the causality of film and television tourism.

According to statistics, for the whole year of 2020, the number of domestic tourists reached 3.09 billion, and the total income was about 10.23 trillion yuan. The comprehensive contribution rate to GDP exceeded 11.04%, of which cultural creativity accounted for more than 40%. This shows that the role of tourism in driving the national economy and delivering vitality to social development is becoming more and more significant. However, the current development of cultural tourism industry has problems such as inadequate management mechanism, low adhesion between culture and tourism, insufficient capital investment, incomplete cultural tourism industry chain, low quality of tourism personnel, and lack of management experience. To this end, this article invited 50 volunteers of all ages who travel frequently to participate in filling out the questionnaire for troubles during the travel process, and the data obtained are shown in Figure 9.

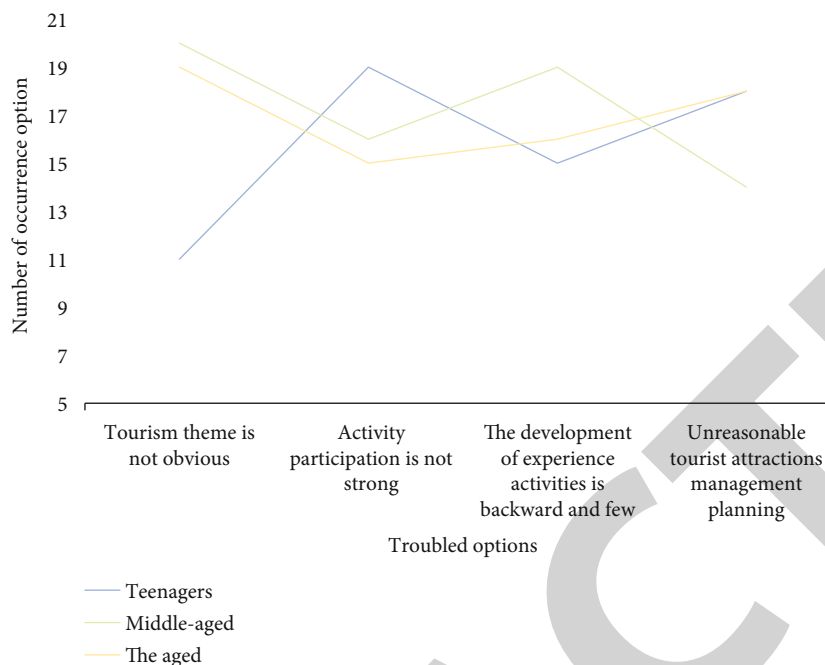


FIGURE 9: Summary table for filling out the questionnaire for trouble items during travel.

TABLE 6: Evaluation of the “VR + tourism” model.

	Diversified themes	Immersive	Convenient	Innovative	Meaningful activity
Teenagers	18	15	20	14	13
Middle-aged	14	11	16	20	15
The aged	9	8	8	7	9

Through statistical analysis of data, it is found that the tourism theme is not obvious, the activity participation is not strong, the experience activity development is backward and few, and the tourist destination management plan is unreasonable. Tourists are troubled by the four major problems in the tourism process; experience activity development during the tourism process backwardness, lack of choices, and lack of fun are the issues that three different age groups have been paying attention to. This is also a problem in the traditional cultural tourism industry. Therefore, the development of the “VR + tourism” model is extremely necessary. In order to thank these 50 volunteers for their participation, after the questionnaire survey, they were invited to participate in the VR experience tour, and their experience and evaluation were recorded, as shown in Table 6.

Various themes, immersive, convenient, and innovative “VR + tourism” virtual reality technology brings new tourism experience for tourists, effectively solves the information asymmetry between users and scenic spots and scenic spot management chaos, provides a new channel for tourists to understand the destination, and helps users to travel efficiently.

5. Conclusion

W.J.T. “visual culture separates culture from language-centered rationalism,” Michelle said. Visual culture not only

marks the transformation and formation of a cultural form but also means a transformation of the paradigm of human thinking. Visual culture is a kind of turning trend of image and culture. This paper enriches the research on visual culture, which develops rapidly and vitality, with less relevant research, especially empirical research on the audience. At the present stage, the research of visual sensor mainly focuses on six aspects: network architecture of visual sensor, deployment and coverage of sensor node equipment and nodes, transmission of media information, image information integration and reproduction, and task reconstruction of visual sensor nodes. The dual choice of technology and culture makes the virtual art no longer be realistic. The audience does not simply pay more attention to the interaction and experience with the virtual environment in the face of the picture. Under the virtual artistic conception, an artificial space and time are constructed through association, so as to change the length of time to achieve the effect of “virtual” reality and bring an “immersive” experience to the audience. The traditional visual communication methods are also affected by virtual reality technology. In the past, the relatively single communication methods of pictures, words, and voices have been challenged by virtual reality technology, forcing the traditional industries to carry out technological reform and transformation. Media extension gives the audience greater initiative, and the aesthetic activities from

the perspective of audience psychology will also change accordingly. Virtual art is an individual starting to experience independent thinking and unique experience, so as to distinguish everyone's inner state of mind and shape a unique aesthetic psychology.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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