Abstract The game designer shall integrate the game scene design with national culture characteristics to produce games with more national connotations. By means of reading Hubei and Hunan building culture characteristics as well applying them for the template design, the author has produced game scenes rich in Hubei and Hunan culture characteristics. In addition to the above, the author also makes the designed game scene possess Hubei and Hunan culture foundation as well as unique Hubei and Hunan culture charming through application of 3D software. In a word, only the national game development is added with our own nationalized substances, can it be easily recognized and accepted; for only national makes international.

Keywords: Chinese game; game scene; Chu culture characteristics; scene design; scene making; 3D technology

1. Characteristics of the game scene design Currently, the Chinese game is mainly characterized by that the online game basically occupies the whole game market, which is mainly represented by 3D World of Warcraft and 2.5D Fantasy Journey to the West. Further, thought these two are with completely different game graphics styles, they have the common focus, that is the beautiful game scene graphics rich in native cultures. Generally, the reason why the game is attractive is depended on the game graphics and connotations. In other word, if the game is worth to play, the scene expression is one of the important factors. Accordingly, the scene design is in need of higher creativeness and stronger artistry; the game scene not only refers to scenic painting, which is different from the environment design. Moreover, it is a kind of space-time modeling art to the show the game and plots, complete dramatic conflicts, and portray personal characters. Moreover, it is formed based on the game design drama, role formation, and specific time cues. Also, the game scene design is vital to formation of the screen; in a manner of speaking, the scene space design can restrict the screen. Generally, in the design, the change of view filed view angle in the screen, the movement mode of shots, and the building of scene atmosphere and effect will be arranged based on the creative thinking of the scene space. Currently, the Chinese online game is very popular; however, games of Europe and America and Korea occupy the majority, and we can only act as the agent. As their game scene design is exquisite and rich in Available online at www.sciencedirect.com © 2012 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of Hainan University. Open access under CC BY-NC-ND license. Open access under CC BY-NC-ND license. 1300 Deng Shiyuan and Bai Junwei / Energy Procedia 17 ( 2012 ) 1299 – 1303 native cultures, they get a large success; we can also take advantages for our own game development. Currently, the Chinese online game is in the development stage, and the subcontracting occupies the majority. It is believable that, as China is a culture country with brilliant culture history of five thousand years and it contains numerous kinds of unique cultures, we can easily produce games with our own unique cultures as well as design high-quality game scenes under Chinese control. 2. Expression and modeling forms of the game scene space The space factors of the game scene mainly include material factors, which contain the scenery, building, property, character, and decoration; effect factors, which contain the appearance, color, and light source. If we increase scenes by means of the field depth, the scene space perception can be effectively enlarged. In addition to the above, the shadow can be used to model distance and depth perception, and the attraction perception can also be applied to produce different space effects. Also, the scene is easily to create crisis awareness and
mystique. And, through complex and interactive scene space, the suspense sense can also be emphasized. In terms of the scene design and making, the scene shall be rich and changeable, which shall be with as much information as possible; thus, audiences will not feel it is nonrealistic and dull. Also, as the animation scene making measures are diversified, the animation software with figure modeling can easily and conveniently create surrealistic and fantastic content. Further, the scene can also be designed to effectively assist magic effects to create the mystique. However, we can know that, all art creations should hold rational yardstick; rich and changeable scene spaces don’t require creators to blindly seek for the complexity, and excessive complexity will also cause fussy effects. And, the most proper game scene design is to rapidly and correctly convey messages and highlight topics in rich scene spaces, so as to make players enjoy rich and vivid visual effects. The high-quality game works shall be a perfect combination of content and style. And, the game modeling style is corresponding with the scene modeling style. The game scene exists for the game presence, which is in the unified aesthetics conception of the game modeling design; further, these two are co-resultant and form the harmonious integrity. Mostly, the game scene design takes the artificial portray. The reason is not restrictions from the making technology but the fact that the graphics drawn by the designer is rich in personal wisdom and feelings, and the expressed unrepeatabale and unique art beauty and human nature is completely different from visual and psychological feelings formed by the actually-shot scenery. The modeling form, especially the modeling form of the scene, is an important factor to reflect the integral form style and art pursuits of the film. And, the modeling form of the scene can directly reflect the game space structure, color matching, and portraying style, and the designer shall try to search for the relationship between the game integrity and locality and locality and locality, and form the basic style of the game modeling form. In addition to the above, the modeling style of the game scene shall absorb worldwide culture characteristics, and design and make game backgrounds with native characteristics to raise the gold content of games. 3.Perfectly integrating the game scene design with splendid Hubei and Hunan building art style by 3D software Architecture in Chu State valued the cultural spirit of the harmonious combination between human and the nature. Take the pavilions of Chu State, for example, the space inside and outside is quite smooth, with open pavilions, pursuing the intimacy with the nature. On modeling, they applied the horizontal layers surrounding the eaves of all layers of corridor baluster, trying to weaken the feeling of vertical height in size, thus the sensation of looking back the earth is achieved, as if the buildings had matchless attachment to the mother earth. The application of partial curves in roofing, ridges adornment avoids the inflexible modeling, which made the buildings gracefully inlaid in nature, as if they are constituent parts of the universe, thus fully embodies the yearning and reverence of human beings to nature. Deng Shiyuan and Bai Junwei / Energy Procedia 17 ( 2012 ) 1299 – 1303 1301 The architecture in Chu State focused on the concept of a high degree of coordination, which is expressed in terms of location and layout of cities, towns and villages, tombs or residence; and the "Geomantic omen" doctrine as well as the distribution of the courtyard is the concentrated reflection. Early at the time when Wu Zixu designed Helü City, the capital of Wu State (now Chengxiang District of Suzhou City), in the "Annals of Wu" it is recorded: "Zixu Naishi phase soil water tasted like heaven and earth, building cities, forty weeks back Seven Mile. MISS eight to like the days of eight; water eight to France to eight Cong, building a small town, ten weeks, mausoleum door three. Not open the east who is trying to use never clearer. Li Chang door who the gate of heaven as the days wind
through the door. It is established by the snake door to families like to have. The prevailing doctrines like “interaction between Heaven and people”, “The existence of Four Gods”, “the existence of Yin and Yang” and “the existence of the Five Elements” are common architecture conscious in Chu State. Such kind of doctrines is the basis for the ancient Chinese geomantic omen theory. Geomantic omen theory in the area of landscape, focuses on the great balance between the cultural landscape and the natural landscape; while in the environment, it also paid special attention to the harmony between the artificial environment and natural environment. Its purpose is to survey natural and in harmony with nature, but also control the use and transformation of natural selection and create a suitable physical and mental health and behavior and human needs of the best built environment, so as to reach a perfect state—the balance between Yin and Yang, and between Heaven and people, as well as the mind and body. Buildings of Chu State take “room” as a unit to constitute a "single building", and then take "single building" to form enclosed "courtyards." The group distribution of the courtyards takes "a courtyard" as the basic unit, according to a certain degree of axial relationship, the principle of equilibrium distribution and the specific needs to constitute the whole group. For the architectural style, roof, wood components, cornices and other user-friendly design of the buildings in Chu State, are witty and clever combination of beauty and decoration of the structure itself, and also reflects the thought of the theory that man is an integral part of nature. The roofs of buildings in Chu State were generally huge, with the emergence of the house slope of a line "the letter of Fan in Chinese" and subsequent "lift off" approach. Although the curvature is small and angle of the building did not tilt, with dense vigorous momentum, it also reflected the initial thinking of "integrity between nature and man". Herringbone roof shape, which expands the sense of interior space, is also conducive to drainage. Also the Wooden-style architecture unique in Chu State is similar to the above styles; compared to the same period of flat roofs in Europe and cave in northern China, these practices had thought of "human" design and "integrity between human and nature", and are wisdom of ancient Chu working people. According to architectural decoration, Chu artist not only pay much attention to the unity of human and nature and expression of individual character freedom, but also get to the society and return to the rational reality. Take sculpture for example, something is found in the excavation of Chu ,such as: the head of the long neck bird which is twice as long as slim leg suddenly grows branches numerous birth, cutting-edge sharp paired antlers; The long neck colorful phoenix, raising its head with loud yell and winging to fly, stands to the tiger’s back on its own way, while its own back grows a pair of numerous branches of antlers; the female filling pretext with snake-body and human head and warrior with million-heavy chime music frame in hands, is the representation of force; the flying phoenix, singing phoenix, long snake, running deer, and abscesses belly of a frog in a field only modern humans possible cross the sea, the three-dimensional large-scale scuffle, is world of good and evil fight. These works, for underground dead, is send-off they wish them for the earth to live in heaven fairyland, the people that is to encourage them to natural, conquer nature, Most of the sculpture is practical implements, the shape of making many animal species of image, impose colored drawing or pattern, so shallow high-relief, carve etc, none showed an intriguing artistic charm, full of romantic emotional appeal, for decoration, and are very pleasing. The brilliant culture history of five thousand years has created the unique Chinese building in the world. However, as one part of Chinese civilization, Chu culture is a splendid and unique southern culture, which originates
from middle and lower reaches of Yangtze River and Jianghan Plain. Further, it is created by peoples of Chu state, which has played immeasurable roles during the creation and development of the unified Chinese culture. In terms of the building style, roofs, timber member, and overhanging eaves of buildings in Chu state are with the humanistic design, and the wisdom and smart combination not only embody pleasant structure and decoration, but also represent the thinking of nature and man in one. 1302 Deng Shiyuan and Bai Junwei / Energy Procedia 17 ( 2012 ) 1299 – 1303 Generally, roofs of buildings in Chu state are very large, which reflect the fold-line “inverse figure” and subsequent “raising-and-depression”. Although the curvature is moderate and the corner is not tilting, the simple and energetic manner can preliminarily reflect the thinking of “nature and man in one”. In addition to the above, the herringbone roof modeling can increase the indoor space sense and facilitate the drainage. Similarly, compared with European flat roof and cave of northern China in the same period, unique pile supported building style in Chu state is of more “humanistic” design and thinking of “nature and man in one”, which is the embodiment of the wisdom of the working people in Chu state. The buildings of Chu state are main parts of south China building culture of the “pile supported culture”, which are representatives with historical milestone significance of the integration period of the southern pile supported building and high-terrace building originated from the cave of northern China. Further, as a kind of building system with the timber structure as the main part, it is focused on the building system with the timber structure as the main part and high collaboration with nature, which esteems nature and reflects the realm of “nature and man in one”. In terms of the artistic character, it pays special attention to pursuit of neutralized, amiable, implicit, and deep beauty. Moreover, as for the material selection, as the timber is with implicit and deep natural beauty as well as integrated with easiness and toughness and easy processability, it matches with culture character of peoples of Chu state, it is the first choice for buildings of Chu state. Besides, as buildings serves human beings and Chu state in central plains has vast territory and abundant resources and abundant timber resources, it is unimaginable to build courts and palaces by timbers through hundreds of years. Therefore, it is necessary to select timbers. The timber member mainly refers to overhang stress member corbel arch except column and beam, and the ancient “corbel arch” is parallel to the cornice. Up to now, the deformed timber members of the found buildings of Chu state have very delicate arch members. And, “making” or timber members mainly refers to the mortise and tenon joint technology for the structure combination, which is completely formed by splicing, without nails or rivets. Moreover, the mortise and tenon joint structure which is originated from the southern ancient pile supported building is developed based on buildings of Chu state, which is of complete series and advanced technology. During the transition process from the bearing structure to the decoration member, these two functions are perfectly combined viewing from technology angle and beauty appreciation angle, and unique southern style is formed ultimately. Therefore, we shall fully discover the regional culture art of Hubei and Hunan, apply it for the game scene design, and make and design unique game scenes on the basis of referring to relevant data. In terms of creation tolls and creation methods, the occurrence of the digital technology has larger improvement and breakthrough; thus, the art designer can make brand-new art design styles. And, the digital scene design also has realistic, decorative, and comic styles. Based on different styles, it can be classified as following kinds, firstly, the scene design drawn and completed by the computer software, and the common software includes PHOTOSHOP and PAITER. Such scene designs have stronger painterliness.
Secondly, photomontage made by computer and scene model created by 3D software, and the familiar software includes 3DSMAX and MAYA. By applying aid design of 3D software, the graphics space depth and third dimension can be intensified. In a word, we can realize impossible effects in the past by computer software. However, as 3D software is very huge and complicated, the study will take a long time, and we can make improvements after having expertly grasped basic requirements. To achieve abovementioned target, we shall exercise 3D space imagination ability and grasp the position relationship between the view, coordinate, and object firstly, which are the basic content. Secondly, we shall master basic operating commands: selection, move, rotation, zoom, image, aligning, array, and viewing tools, as these commands are most frequently-used and fundamental, which will be used for almost all makings. In addition to the above, we shall also study 2D pattern edition on above basis, for many 3D object productions and effects are depended on 2D pattern. Finally, the scene design shall master the most fundamental special effect making, get hold of material quality parameters and mapping principles and application, and get familiar with the relationship between light parameters and material quality effect. Besides, the most important is to enhance art and knowledge accomplishment, this needs us to constantly improve the art accomplishment, strengthen color knowledge and regional culture knowledge, and constantly find out regional culture art. By this way, we can apply them for our game scene design, and design and make game scenes rich in Chu culture characteristics.

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