

B Digital repair and restore of the ceramic cultural relics

In ceramic archaeological research, repair and restore many rare but defect of ceramic artifacts, has been occupied an important position. For many years ceramic archaeologists unearthed a number of extremely valuables but it is the defect of ceramic artifacts, once upon a time, people usually use traditional craft to repair the broken ceramic artifacts, they often produced a large number of experiments and test products, but also may not be able to get good repair and reduction effect. With digital virtual reality technology, people can easily make, modify and repair the true colors of the ceramic artifacts reduction defects in a virtual world of computer, in order to achieve the best artistic effect. This point in time the physical production experiments will achieve a multiplier effect. This virtual reproduction technology also brings a number of ceramic artifacts expert research results together through the network, gambling house director of public, synthesis produced by digital technology to achieve the best results, which can be shared on the network so that more ordinary people can participate in researching and sharing of digital research.

C Digital reproduction and development of the lost ceramic cultural relics

In the ceramic archaeology research, reproduce many ceramic arts that lost in the world is also an important research topic. If the repair defects of cultural relics can be speculated through surviving physical residue of modeling, then in historical record has no physical works of ceramic art needed to infer from the imagination, and virtual reality technology can make this kind of imagination to get the maximum play. At the same time people can also have virtual development of ceramic works in the design impression and digital design, when come to a satisfactory shape color effect, collect scientific data characteristics, then do the physical production, which will greatly improve the success rate of the ceramic works of repair and reproduce.

III. PRESENT PROBLEMS AND MEASUREMENTS OF DIGITAL TECHNOLOGY SIMULATION AND THE REPAIR OF THE CERAMIC CULTURAL RELICS

A Ignorance of the establishment of the ceramic cultural relics restore files

Conservation files are generated in the process of repair activities of cultural relics; it has an important conservation value, as the real history in accordance with the file system, and centralized custody up the restoration of cultural relics information. Their performances are text data, tables, pictures, photographs, film and video from. Conservation file is an important manifestation of heritage restoration work more scientific and standardized; however, today there are many problems in the ceramic artifacts to create a recovery file, not only exist on the records of the content missing and various forms files of quality does not meet requirements, but the file record formats and record carrier has a defect of the type single. The use of modern means of science and technology can effectively increase the scientific and precision of

conservation file creation; it requires government departments to give a proper policy support, increased capital investment and to improve the previous antiquated archive storage.

B The lack of domestic technicians mastering ceramic cultural relics digital simulation and repair

According to my survey, only a handful of museum technicians in nationwide can repair the ceramic cultural relics of modern digital technology; this does not meet the need of repair and protection work of ceramic cultural relics. From the professionals reserves and education, many universities and research institutions are not set such a professional. Simulation and repair of digital technology on ceramic artifacts belonging to the cross-disciplinary professional computer and conservation, this cross-disciplinary often as interdisciplinary treatment, it is difficult to obtain strong support for personnel training and technical facilities, this situation is not conducive to the simulation of digital technology on ceramic artifacts and repair. To resolve this problem, we should attention and implementation from the height of the protection of cultural relics and historical cultural, increase efforts to train specialized personnel, set up specialized courses in professional institutions and to organize various types of training courses. At the same time also require to the existing heritage conservation workers fully understand the heritage value, the right to develop protection and restoration measures, in order to obtain the success of cultural relics conservation.

C The potential risks of intellectual property on the technology of domestic ceramic cultural relics' protection and restoration

China is a country with the most unearthed ceramic cultural relics, it has potential for the formation of independent intellectual property rights in the preservation and restoration of technology innovation. This modern technology patent and copyright protection should be included in the scope of legal protection in China; however, according to my survey, our country has not yet formed a system of legal protection of cultural relics. This situation sets the potential problems for our simulation technology innovation, prevention and resolution of such problems requiring the departments to enhance the "System first, Legal defense" consciousness, and do more useful system of reserves and improve measures for the application of digital technology in ceramic conservation escort.

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