

DOTTORATO DI RICERCA IN

Studi sul Patrimonio Culturale – Cultural Heritage Studies (542)

Ciclo XXXI

Settore Concorsuale: 10/B1 – Storia dell'arte – History of Art

Settore Scientifico Disciplinare: L-ART/04 – Museologia e critica artistica e del restauro –
Museology and Restoration Art Theory

A HISTORY AND DEVELOPMENT OF CONSERVATION AND RESTORATION IN EUROPE AND IN CHINA

Presentata da: **SHAO Kangchunzi**

Supervisore

Prof. Donatella BIAGI MAINO

Coordinatore Dottorato

Prof. Raffaele SAVIGNI

Esame finale anno 2020

ABSTRACT

The history and development of cultural heritage conservation is a choice of the main body in charge or power. Based on the complex conditions of historical and cultural backgrounds, economic development levels, political systems and development conditions of cultural heritage, different modalities are formed and adopted by different countries or regions. Being originated from the philosophies and activities of cultural heritage hundreds of years ago, the European countries faced these subjects in many ways, and right now have taken positive actions to manage and restrict each behavior about and around the cultural heritage. Among these countries, Italy is a long-time practitioner, a strong enforcer and a major proponent of some new regulations and acts of the conservation, but also the restoration of cultural heritage. Furthermore, it helps China to complete some cooperation activities of the conservation and restoration projects.

Being absorbed some valuable experiences from the Europe and learnt the most useful lessons from Italy, the conservation and restoration of cultural heritage in China have been not too late at all, but have been developed to establish its own way to regulate and promote certain behind behaviors. As the terms from “antiquities” and “cultural relics”, then to “cultural prosperity” and “cultural heritage”, the fundamental conditions and a comprehensive system of the conservation and restoration in China have been described as well.

With the development of the conservation theory, the *Teoria del Restauro (Theory of Restoration)* of Cesare Brandi gained great attention, and has been translated in Chinese for two times. While maintaining the aesthetic side of a work of art, this book is the first pioneer to pay attention to the authenticity and integrity of the historical and material level of conservation objects.

Keywords: conservation and restoration, cultural heritage, cultural relics, cooperation, legal, regulation, public utilities, organizations, educational, training system, China, Europe, Italy, Brandi.

ACKNOWLEDGEMENTS

To complete this thesis is really a challenge for me, since I found a serious problem on my body few years ago. I do not know what I would have done if without the support and guidance of many people. Here I extend my sincere gratitude to each of them.

First and foremost, my heartfelt thanks go to my supervisor Professor Donatella Biagi Maino. This thesis would have not been possible without her help. Under her greatest influence on the continued support, deeply understanding and strong encouragement, I finally finish this thesis. I appreciate her more than she knows.

Then I am very thankful to Professor Giuseppe Maino for his useful advice, tiresome modifications and constant support. Besides these helps, the most valuable thing that he passed on me is the rigorous learning attitude that I will keep and use it in the future.

Next I express my appreciation to Dr. Antonio Fioravanti, the director of Neurosurgery at the Cremona and Mantua Hospital of Italy (Ospedale di Cremona and ASST di Mantova). It is him who did the surgery in my head and saved my life, thus I thank him more than anything else.

My special acknowledgements also go to CSC (China Scholarship Council) for providing me the possibility to perform my doctoral study in this excellent department at Unibo.

I would like to thank Elena Garagnani and Cornelia Prassler of Restoration and Conservation of the Art Works (Restauro e conservazione di opere d'arte). It was an important experience to visit their laboratory, and re-have a better understanding of tratteggio and the archives of art works after restoration.

I could not forget to express my gratitude to my friends Camilla Hilbe, Pier Xenofon Kotanidis, Dr. Raffaella Ferrari and Liu Wan. They have devoted their time and wisdom efforts to make my thesis writing active and smooth.

Last but not least, I want to thank my parents Shao Hong and Kang Xiaojun. Without their patience and unconditional support, this thesis would have been difficult to finish.

LIST OF FIGURES AND DIAGRAMS

0-1: Ge Fu Ji Ding at the Zhouyuan Museum in Baoji city, Shaanxi province, China.....	6
2-1: The Allegory of the Conservation(the logo of the ICR until 2006).....	41
2-2: Years as Directors of the ICR.....	42
3-1: The Gallery of Tomb Murals in Tang Dynasty of the Shaanxi History Museum, China.....	49
3-2: The Longmen Grottoes in Luoyang city, Henan province, China.....	51
3-3: The Sleeping Buddha of the Dazu Rock Carvings in Chongqing city, China.....	53
3-4: China-Italy Cooperation Training Center for Conservation and Restoration in 2004 and 2007.....	57
4-1: Statistics Category of Chinese Cultural Relics in 2011.....	68
4-2: Province Distribution of Chinese Cultural Relics in 2011.....	69
4-3: Statistics Category of Chinese Movable Heritages in 2016.....	71
4-4: Distribution Statistics of the Top Five Provinces and Cities of Movable Heritages in 2016.....	72
4-5: Statistics of the Preservative State of Movable Heritages in 2016.....	73
4-6: Statistics Category of Chinese Cultural Heritage Organizations in 2018.....	82
4-7: Statistics Category of Chinese Cultural Heritage Organizations (2008-2018).....	83
4-8: Statistics of the Number of Museums (1980-2018).....	84
5-1: <i>Teoria del Restauro</i> by Brandi in 1963, 2006, 2016.....	93
5-2: The Timeline of Brandi.....	95

TABLE OF CONTENTS

ABSTRACT.....	i
ACKNOWLEDGEMENTS.....	ii
LIST OF FIGURES AND DIAGRAMS.....	ii
TABLE OF CONTENTS.....	iv
Introduction.....	1
Chapter I: The Conservation and Restoration of Cultural Heritage in Europe.....	7
1.1 The Historical Development of Cultural Heritage and its Conservation Objects.....	9
1.1.1 Terminology.....	9
1.1.2 The Historical Development of the Conservation Objects in Europe.....	11
1.2 Analysis of Some Contemporary Restoration Reviews of the European Scholars.....	16
1.2.1 The Main European Schools Related to Restoration in 19 th century.....	16
1.2.2 Some European Art Opinions Related to Restoration in 20 th century.....	18
1.2.3 Some Italian Scholars Related to Restoration.....	19
1.3 The Historical Development of the Principles and Methods of the Cultural Heritage Conservation in Europe.....	21
1.3.1 The Concept of Authenticity and Its Development.....	22
1.3.2 The Concept of Integrity and Its Development.....	23
1.3.3 The Preventive Conservation.....	26
1.4 Summary.....	28
Chapter II: A History and Development of Conservation and Restoration in Italy. For Instance: a History of the ICR - from the ICR to the ISCR and to the ICR again.....	30
2.1 The ICR's Founding Period of Brandi: A Formal Redefinition of Restoration.....	33
2.2 The ICR's Innovational Period of the Urbani: The Preventive Conservation.....	35
2.3 The ICR's Predicament: A Short Stay on the ISCR.....	39
2.4 The ICR Again and Its Visit in China.....	42
2.5 Summary.....	42
Chapter III: The Cooperation Activities of the Conservation and Restoration of Cultural Heritage	

between China and Italy.....	45
3.1 Building the Conservation and Restoration Centers.....	46
3.1.1 The Xi'an Cultural Relics Conservation and Restoration Center.....	46
3.1.2 The Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum.....	48
3.1.3 The Longmen Stone Relics Center.....	50
3.1.4 The Dazu Stone Monuments Conservation Center.....	52
3.2 Building the China-Italy Cooperation Training Centers of Conservation and Restoration...	53
3.2.1 The China-Italy Cooperation Training in the Xi'an Cultural Relics Conservation and Restoration Center.....	54
3.2.2 The China-Italy Cooperation Training Center for Conservation and Restoration of Beijing in the CACH.....	55
3.3 Conducting Field Investigations in Real Places of Conservation and Restoration.....	58
3.3.1 The Hall of Supreme Harmony in the Palace Museum.....	58
3.3.2 The Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum.....	59
3.4 Summary.....	59
Chapter IV: The Historical Development of the Conservation and Restoration in China.....	61
4.1 The Chinese Thoughts of Cultural Heritage Conservation: the evolution of the term from “antiquities” to “cultural relics” and then to “cultural prosperity” and “cultural heritage”.....	63
4.2 The Fundamental Conditions of Chinese Heritage Sites.....	67
4.2.1 The National Surveys of Cultural Relics in China.....	67
4.2.2 The First National Survey of Movable Heritage in China.....	70
4.2.3 Analysis of Current Situations of Chinese Cultural Heritage.....	73
4.3 A Comprehensive System of the Cultural Heritage Conservation in China.....	75
4.3.1 The Legal and Regulatory System of Heritage Conservation.....	75
4.3.2 The Public Utilities and Organizations of Heritage Conservation.....	82
4.3.3 The Educational and Training System of Heritage Conservation.....	84
4.4 Summary.....	85
Chapter V: Inspiration Provided by Cesare Brandi to China.....	87
5.1 The Twice Translations of <i>Teoria del Restauro</i> by Brandi in Chinese.....	90
5.2 Discussion about the Main Ideas in <i>Teoria del Restauro</i> of Brandi.....	94

5.3 Comments to the Chinese Translations of <i>Teoria del Restauro</i>	98
5.4 Summary.....	101
Chapter VI: Conclusions.....	103
6.1 Answers to Research Questions.....	105
6.2 Recommendation for Further Research.....	109
6.3 Summary.....	110
APPENDICES.....	111
Appendix 1: Translation of the Ancient Murals in China through the Ages.....	111
1.1 The Palace Murals in the Qin Dynasty (221-206 BCE).....	112
1.2 The Tomb Murals in the Han Dynasty (206 BCE-220 CE).....	113
1.3 The Murals in the Wei, Jin, Southern and Northern Dynasties (220-589 CE).....	114
1.4 The Murals in Surrounding Countries.....	116
1.5 The Murals in the Sui, Tang, and Five Dynasties (581-960 CE).....	117
1.6 The Murals in Other Neighboring Countries.....	121
1.7 The Murals from the Liao Dynasty till the Jin Dynasty (907-1234 CE).....	122
1.8 The Murals in the Song and Yuan Dynasties (960-1368 CE).....	125
1.9 The Murals in the Ming and Qing Dynasties (1368-1912 CE).....	129
Appendix 2: Translation of the Categories of Ancient Chinese Murals.....	131
2.1 The Religious Murals.....	133
2.2 The Hall Murals.....	135
2.3 The Tomb Murals.....	135
REFERENCES.....	137
PUBBLICATIONS.....	137
WEBSITES.....	143
REPORT.....	145

Introduction

“The world Marco Polo explored is in many ways lost to history, but important aspects of his portrayal are strikingly contemporary (...) He understood that commerce was the essence of international relations (...) Throughout Marco's world, people lived according to absolutes, both political and spiritual, but he recognized that (...) the only absolute was the power of belief itself.”

Laurence Bergreen, “Marco Polo. From Venice to Xanadu”, 2007

I clearly remember that I read the following news some years ago: a local farmer found several broken pieces while digging in Fufeng county of Shaanxi province of China in the autumn of 1995. Later, the archaeologists cleared out 11 fragments of bronze ware, and confirmed that they belonged to the same piece of the Western Zhou period (about 1047-771 before the common era). Being an ancient cooking vessel, the “Ding”, which is the bronze vessel, it can be the symbol of destinies. And the sacrificial inscription on it reads “Ge Fu Ji”, which means the “Father Ji of the Ge branch”.

The restoration work of this bronze vessel was entrusted to the Xi'an Cultural Relics Conservation and Restoration Center (it changed its name to the Shaanxi Institute for the Preservation of Cultural Heritage). However, China and Italy had different views when the experts prepared to restore the bronze vessel. Because the two ear-parts and the two-thirds ventral parts of the bronze vessel are missing, the Chinese technicians suggested to reinvent the incomplete parts, especially the missing ear-parts of the bronze vessel. To restore the parts of the same period by modelling the shapes through computer software, the reinvented parts could be welded together. But the Italian experts insisted on the restoration theory of Brandi and thought that the missing parts or the incomplete ornamentation could not be complemented by any imagination or hypothetical reasoning.

After a long discussion, the two parties gave way to each other. Based on the size and shape of the Ding, they used the traditional Chinese casting technology to make a support available. And the eleven pieces were inserted into the support with clamps. However, the missing ears were not completed, as well as the support of the Ding was not decorated at all (see 0-1).

This was a story, which I could remember and tell in my childhood. Then, I chose to study at the Communication University of China in Beijing. Being started to read the wonderful stories in a unfamiliar language of Marco Polo, Odorico Mattiussi, Matteo Ricci, and Giuseppe Castiglione in my spare time, I began to feel curious to know what do they have done in other places or countries?

In 2011, thanks to the “Marco Polo Project”, my dream to go to the University of Bologna in Italy came true. And I chose to study at the Innovation and Organization of Culture and the Arts (GIOCA) for a master's degree. After stopping in Bologna, I walked in the oldest campus of university in the world. At that moment, all the things attracted my attention: The antique libraries, the emblems of families and the anatomy classroom at the Archiginnasio, the sculpture of *The Lamentation on the Dead Christ* (the Italian name is: *Compianto sul Cristo morto*) the in the Church of Santa Maria della Vita, and many other sites and antiquities. Besides praising those precious memories, I began to have new wonders: how could the ancient relics here are passed through hundreds of years, and not to fall down? Why do they have been preserved well enough, and can still be used today? When I visited many other cities in another European countries, the experience made me think extensively about why these countries could have so many cultural heritages? After walking through the ordinary houses, I ask myself why could they make frescoes or printers or paintings?

With the desire of studying the real foreign culture, I decided to continue my study at the same university for a doctorate degree in Cultural Heritage Studies since 2015. I hope to promote comprehensive and systematic approaches of cultural heritage conservation and restoration between China and the European countries, especially the difference and lessons between my country and Italy. Based on the viewpoints of history, sociology, and philosophy, and combined with the development of cultural heritage conservation, I would like to focus on the following issues.

1) Given that the longest history and the most mature of the European development of the cultural heritage conservation, how did/does it develop as the philosophical point of view and also as the principles of in practice in Europe?

2) How did/do the ideas, theories and researches on the conservation and restoration of cultural heritage shape and develop in Italy? In particular, what is the historical development of the Central Institute for Restoration (ICR) in Rome, Italy? As the “Italian model” is a successful example of the cultural heritage conservation and restoration, how did/does Italy assist China in establishing its own cultural heritage conservation mechanism?

3) Given its unique cultural characteristics and national conditions, how did/does the shape and the establishment of the cultural heritage conservation in China? What is the Chinese system of the cultural heritage conservation nowadays?

4) Considering the cooperation and exchange of the conservation and restoration of cultural heritage between China and Italy, what are the meanings of the Chinese translation books *Teoria del Restauro* once in 2006 and the other in 2016? How do the theories and advanced technologies continue to promote the sustainable development?

In order to find answers to the above questions, my research ideas are the followings. First of all, using a combination of methodologies of both descriptive and analytical research through literature research, the concepts, ideas, principles and approaches of conservation and restoration of cultural heritage in China and Europe are analyzed and summarized.

The history of the conservation system of emergence and development is illustrated based on the chronological order in Europe and in Italy, with a view of clearly describing the evolution process of cultural heritage preservation. At the same time, it elaborates the core ideas and key issues in the conservation of cultural heritage, and summarizes the successful experience(s) of the cultural heritage conservation and restoration at least in Europe on the basis of its development process.

Recently, the historical background and development process of management and support approaches for cultural heritage in Italy have been stated, as well as the ICR in Rome (its Italian

name is: Istituto centrale per il restauro, and the English name is: Central Institute of Restoration) has been clearly introduced, namely its goals and functions, the organizational structure and the main persons in charge.

Focusing on the experience and achievements of a long-term cooperation and on the exchanges of studied about conservation and restoration of cultural heritage between China and Italy, the Brandi's book *Teoria del Restauro* is noteworthy, especially with regards to the experience of publishing its Chinese version, in order to analyze its significant influence of conservation and restoration in Italy. And then, since it was translated into many other languages and spread around the world, I try to explore the reasons why it helped/helps to build the conservation system for Chinese cultural heritage, and then figure out what else we can do to keep and value the cultural heritage.

My doctoral research can be divided into six chapters. The main contents of each chapter are particularly noteworthy.

Chapter I describes the development history of the European conservation and restoration of cultural heritage. First of all, the differences of cultural heritage evolution, cultural heritage conservation and restoration, and other related concepts are explained and analyzed. Then, the principles and methods of the contents of cultural heritage conservation are illustrated in detail and summarized the main achievements. Lastly, the establishment of the legal and regulatory system in the cultural heritage conservation, the characteristics of heritage management models, and the guarantee mechanism in Europe are explained to give a global viewpoint.

Chapter II presents the history and development of the Italian cultural heritage conservation and restoration, focusing on the historical background, on its system structure and institutional responsibilities of the creation of the ICR. It is analyzed the establishment and development of the Institute from Brandi to the direction of Urbani, up to the post-Urbani period. Then, attention is devoted to the collaborations and the visits of restorers and scholars from Italy, especially the activities of the ICR in China.

Chapter III explores the background and history of China-Italy cooperation and exchanges of conservation and restoration. From the mutual visits between the leaders of the two

governments to the programs between institutions and organizations, it is focused on the long-term cooperation projects between China and Italy, especially the support of the ICR to China. Then, the important achievements of China-Italy cooperation are recalled, for instance the Xi'an Cultural Relics Conservation and Restoration Center, the Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum, the Longmen Stone Relics Center, and the Dazu Stone Monuments Conservation Center.

Chapter IV summarizes the development process of the conservation and restoration of cultural heritages in China. The evolution of Chinese words from “antiquities” to “cultural relics” and then to “cultural prosperity” and “cultural heritage” is stated. The fundamental conditions of Chinese heritage sites are described, for instance their number, classification, and preservation status. By separate sections from the legal and regulatory system, the national public utilities and organizations, and the educational system of heritage conservation, a comprehensive overview of the conservation and restoration system is analyzed, pointing out the main problems faced in China.

Chapter V is focused on the applications of Brandi's book *Teoria del Restauro* in China, as well as promoting research and diffusion. The two Chinese translations and publications of Brandi's book are introduced and critically discussed. Then, it is emphasized some new ideas brought to China by this book, and its impact in China.

After comprehensive comparisons of the development history of cultural heritage conservation and restoration in Europe and China, especially between Italy and China, some conclusions are drawn in Chapter VI. At the same time, some suggestions are also made on how to sustain the development of the conservation of China's cultural heritage.

In Appendix 1 and Appendix 2, a study of the development history of ancient Chinese murals and the classification of ancient Chinese murals is carried out respectively. And the list of publications and websites, as well as a report of my academic activities in the doctoral study are presented in the last.

By dealing with the development history of cultural heritage conservation between China and Europe, especially between China and Italy, my thesis tries to summarize the national

circumstances of the development and evolution of advanced ideas and concepts, as well as scientific theories and methods in the conservation and restoration. Looking back the successful experience of the cooperation of cultural heritage conservation and restoration between China and Italy, it is revealed that different cultural backgrounds have profoundly affected the ideas and methods of conservation and restoration. So, when the values of common cultural heritage conservation are judged and evaluated, it is this a more scientific and rational way to think about. Only by studying the principles and methods of conservation and restoration, we can promote common progress and sustainable development of international cultural heritage conservation.

However, as the Coronavirus had a great impact to my thesis writing, some originally planned and field visits were cancelled due to the traffic prohibition, which is leading to the lack of case studies and empirical investigations in this thesis. Although it takes a lot of time and energy to consult a variety of journals, government agency websites related to cultural heritage, the research institutions websites and other related materials, it is still difficult to ensure and collect enough data. Since the conservation and restoration of cultural heritage being an interdisciplinary field that integrates theory with practice, in the view of the limitations of my professional knowledge and possibilities, this thesis does not cover the detailed content of the conservation and restoration technology.



**0-1: Ge Fu Ji Ding at the Zhouyuan
Museum in Baoji city, Shaanxi province, China**

Chapter I: The Conservation and Restoration of Cultural Heritage in Europe

“Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time.”

Faro Convention

The conservation and restoration thought and practices relevant to cultural heritage have undergone a number of modifications and innovations, especially since the Age of Enlightenment in Europe. Here, both the philosophy and the activities of the development of cultural heritage preservation have originated for the first time. The relationship between “cultural heritage” and “identity” can always influence both current and next generations. As a leading figure, the Europe has participated in and presided over many conferences, as well as signed many international treaties, conventions, contracts and projects, etc.

First of all, let us figure out the meaning of some terms as a fundamental problem to our discussion. According to Matthew J. Gabel, the definition of European Union (EU) is an “international organization comprising 27 European countries and governing common economic, social, and security policies¹”. Those EU's members are “Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania,

¹ <https://www.britannica.com/topic/European-Union> (last consultation October 25, 2020).

Slovakia, Slovenia, Spain, and Sweden”. The United Kingdom just left the organization in 2020, following a popular referendum. Within the EU, there are 16 institutions or bodies and 51 agencies, including the Council of the European Union (European Council), the European Commission, the European Parliament (Strasbourg, Brussels or Luxembourg) and so on.

At the same time, there is an organization of the Council of Europe (CoE), which is the central organization for “human rights, democracy and rule of law”. It includes 47 member states since 1997 (27 are members of the EU, including United Kingdom), and 6 observer states. Inside the Herein System of Democracy, there are the main official documents in the field of heritage, which refer to Council of Europe, European Union and National legislations, plus the UNESCO (United Nations Education, Scientific and Cultural Organization) and ICOMOS (International Council on Monuments and Sites). Moreover, promulgated by the Council of Europe, there are 8 conventions, 4 declarations, various resolutions and other declarations adopted at ministerial conferences of Ministers responsible for Cultural Heritage, and several resolutions and recommendations of the Committee of Ministers.

Among them, the “European Cultural Convention” signed at Paris in 1954 is the first treaty that is still agreed by the European countries but not member states. It included 11 articles, which are very concise and understandable, thus it is yet a model in this respect.

Right now, another important document is the Faro Convention in Faro, Portugal, of October 2005, which is also named The Framework Convention on the Value of Cultural Heritage for Society, stating a leading role in the field of heritage. Considering the meaning and uses of every heritage, as Daniel Thérond argued (2009, pp. 102), the Faro Convention gives the overall definition of cultural heritage, which reads as: “it associates the need of most individuals to find something of themselves in one or more heritages with the right for all to participate in cultural life as construed in the Universal Declaration of Human Rights”. To the early 2020, 19 member states have ratified the Faro Convention, and 6 have signed it.

As far as my country, China, is concerned, some problems and questions arise: Why are there

² D. Thérond, “Benefits and Innovations of the Council of Europe Framework Convention on the Value of Cultural Heritage for Society”, in *Heritage and beyond*, Council of Europe, 2009.

enormous amounts of cultural heritage in Europe? How did/do they – the European countries - get the conservation and management? How do they restore to inheritance and pass on the heritage to the next generation? With these questions, the author is embarking on a journey to explore the historical development of the conservation and restoration of the European cultural heritage.

Although the development of the conservation and restoration of cultural heritage in Europe is here considered by a Chinese student, I think it is more helpful to get an overview of the European development situations, to summarize better which are to be promoted and which are common problems, and then to pass on to the next generation both in China and in Europe as well.

1.1 The Historical Development of Cultural Heritage and its Conservation Objects

These terms need to be explained and distinguished within the historical development of European countries, for instance the difference among “protection”, “conservation”, “restoration” and “preservation”, and among “cultural heritage”, “cultural patrimony” and “cultural property”, in order to get to know that the evolution process of conservation thought about cultural heritage is a gradually enriched, open and comprehensive dynamic evolution. Moreover, their conservation objects will be discussed in detail.

1.1.1 Terminology

Along with the quick shifting of time, the meanings of these terms are gradually transformed along the years. Nowadays, we agree with the definition of “conservation and restoration of cultural heritage”, not to deny the significant meaning of “protection” and “preservation”, also of “cultural property” and “cultural patrimony”. Understanding their meanings will help to analyze what activity is to be promoted and what should be stopped in Europe, at the leading part of the world, so as to achieve the correctness when formulating the national policy of the

own country.

On the Etymology dictionary, where the origin and provenance of each word is listed and investigated, the term of “protection” has assumed the meaning of “shelter, defense; keeping, guardianship” since the middle of 14th century. This term acquired also an “international economic sense” since 1789.

The term of “conservation” comes from “preservation of health and soundness, maintenance in good condition, act of guarding or keeping with care”, meaning assumed in the late 14th century. Later, it enlarges to the meaning of “preservation of existing conditions” since the middle of 15th century. This word has been broad used since the late 15th century.

The term of “preservation” cannot be ignored. It has been used in the early 15th century, and the relevant verb has been meant “keep safe” since the late 14th century. Then, the word has been transformed to a treatment of “fruit” since 1570s, and then of “organic bodies” since 1610s. And finally, it has taken a sense of “protected place for animals or plants” since 1807.

The word of “restoration” has been equaled to “a means of healing or restoring health; renewing of something lost” since the late 14th century. It then has been changed to “the repairing of a building” or “a restoring to a former state” from the middle of 15th century.

Then, the meanings of “property”, “patrimony” and “heritage” are also similar to each other. The term of “property” has been meant “nature, quality” at once, later “possession, thing owned”. From the early 14th century, it had a rare sense before 17th century. In the Oxford Learner’s Dictionaries, this word means firstly “a thing or things that are owned by somebody; a possession or possessions”, and secondly, “land or building”.

When searching “patrimony” on the Etymology dictionary, it is explained as “property of the Church”, and also “spiritual legacy of Christ” in the middle 14th century. This word is directly borrowed from the Latin word “patrimonium”, which originally contained “pater” and “mōnium”, and meant “a paternal estate, inheritance from a father”.

In a similar way, there is another word “heritage”, but it has a broader meaning. Derived from the Medieval Latin word “hereditabilis”, it meant “capable of being inherited” in the early 15th

century. It extended its meaning to “condition or state transmitted from ancestor” from 1620s.

The term “property” is relatively more specific than “heritage” and “patrimony”. And the terms “heritage” together with “patrimony” have been changed meaning from the connotation to the extension. It is the common cultural wealth left to mankind by ancestors, from the property belonging to the family, nobility and the Church to the property of a nation and a country. After experiencing the tragic world wars for two times in the 20th century, the extensions of “heritage” and “patrimony” have expanded from ordinary material wealth to both tangible heritage and intangible heritage, as well as from representing a family to represent traditions, customs and characteristics of a country or society that has been continued on, and passed on from one generation to the next. As Daniele Wozny and Barbara Cassin considered (2015, pp. 145), there is “no single heritage, only a multiplicity of patrimonies”, that can be “natural, cultural, intangible, tangible, secret or shared, ethnic, regional, national, or global”.

It is then worth pointing out that the meanings of “cultural heritage” and “cultural patrimony” are broader than the term “cultural property”, but there is very little difference between “cultural heritage” and “cultural patrimony”. However, the “conservation and restoration of cultural heritage” is the most common used way in Europe and also in the world. It records the evolutionary history of knowledge of human beings of themselves, nature, and the world.

1.1.2 The Historical Development of the Conservation Objects in Europe

The historical development of conservation objects in Europe can be grouped into four main categories. In the following parts, these categories will be explained and introduced the regular and legal actions to make us knowing better the conservation issues in Europe. These categories are:

- Historical Monuments and Memorial Buildings
- Natural and Cultural Environments
- Restoration
- Historic Districts and Protected Areas

First of all, the ancient and memorial buildings have probably been the earliest objects protected and guarded in Europe, and also have got the highest concern. As early as the Greek architecture to the ancient Roman architecture and to the Byzantine one, up to Middle Ages and Renaissance, there was a good tradition to protect historical monuments and memorial buildings.

With the scientific and technical developments since the beginning of the Age of Enlightenment, the value of important historical buildings started to be widely recognized. As Jukka Jokilehto argued in his doctoral thesis, it was the fundamental issue of the French Revolution, because it became the moment to appreciate “various developments in conservation of cultural heritage” (1986, p. 231).

In the 19th century, “signed by Cardinal Doria Pamphili of the first of October 1802”, just as Jokilehto states (1986, p. 124), the law issued by the Papal Chirograph “became the basic law for the protection of cultural property”. Since the Haussmann’s decree of 1852, France has ceaseless worked for “its innovative vision” of the urban patrimony (Versaci, 2016). Jokilehto went on to make a criticism that “ancient monuments and works of art were considered the pride of Rome, giving it a unique position in Europe and attracting scholars and artists, promoting tourism, commerce and industry.” (1986, p. 124). With such pride, the scholars, especially the restorers and architects of the European countries rethought about their careers and doctrines. The theory of evolution gradually became the mainstream of the European thought. The progress of the science led to the changes in the ideology and re-understanding of the value of cultural property. People begun to reinterpret the universe, nature, and the history of human development. They realized that protecting historic buildings was a necessary measure to give shape to the identity of a nation and a country. Since this period, the European countries have successively legislated to protect historic buildings. For instance, after the Greek independence, the kingdom of Greece received a law on the protection of historical monuments in the 1830s, “all objects of antiquity in Greece, as the productions of the ancestors of the Hellenic people, are regarded as the common national possession of all Hellenes” (Jokilehto, 1986, p. 234).

Secondly, the European countries have paid more attention to the natural landscapes and

cultural environments since the 19th century, but the process became mature in the 20th century.

Within that period of time, France strongly advocated the overall protection of individual buildings, building complexes and the surrounding natural landscape, so that the protected objects gradually evolved from the building itself to the surrounding natural and cultural environments. For instance, in April 1906, the law on the protection of natural sites and monuments of artistic character was voted in France (Versaci, 2016), stipulating that, in addition to buildings, natural landscapes of great artistic value such as trees, waterfalls, and cliffs are also included in the scope of the legal protection. This was the first time in Europe that the objects of cultural heritage protection had been extended from buildings and monuments or something created by humans to natural landscapes. After that, the law of *La Beauté de Paris et la loi* (French: The beauty of Paris and the law) was promulgated in 1913 (Versaci, 2016). Furthermore, France clearly stipulated that buildings and sites with historical and artistic value are integrated in the landscape and within a length area around it for preservation purposes. Next, France specially formulated the law of May 2, 1930, related to “the protection of natural monuments and sites of artistic, historic, scientific, legendary or picturesque interest”. Within this law, a new class of “protected zones” was defined to protect the natural sites and monuments (Versaci, 2016).

Greece was also commendable in this regard. For instance, Greek government promulgated “The Antiquities Act” No. 5351 of the Hellenic Republic on August 9, 1932. This law, as judged by Daphne Voudouri (2008), brought in a wide range of innovations, “such as the right of private persons to possess even important movable antiquities and a special regime for private collectors and dealers in antiquities”. In addition, it stipulated the role “of valuable assistants in the safeguarding and preservation of antiquities in the state, such as genuine antiquarian collectors”. Therefore, it derived the right and obligation to investigate these items, and keep them in appropriate public museums, which belong to the state.

At that time, some countries were too busy to attend anything else because of the hurried war, for instance Italy. However, it was also promulgated the law of *La tutela delle cose d'interesse artistico o storico* (Decree No. 1497, the English name: All the Things about Artistic and Historic Interest), which included the natural landscapes for national legal protection. In the next chapter,

we will talk about Italy more in detail.

Thirdly, human have created a large number of construction projects and handicrafts in the long process of civilization. "Restoration" is something that has been conceived from a very early time, but it was considered as a technology and single process until the late 18th century As Jukka Jokilehto states (1986, pp. 100), the "restoration gained official recognition in Milan in 1745", and then in Venice. And various techniques of detaching wall paintings in buildings, such as "stacco a massello", born in the Renaissance, right now have been used also by restorers, but only a few of them and generally only in emergency cases.

Time went on until June 1, 1939 when, for another instance, Italy promulgated the Law No. 1089 on the "protection of objects of artistic or historical value" under the Fascist ministry of culture, Giuseppe Bottai, which is the centerpiece of the next legislation. According to Francesca Cocco (2016, p.196), it "inspired a re-consideration of the measure", that attracted new attention.

After the World War II, some European countries made their structural and legal changes to the reconstruction and restoration work.

The redefinition of cultural heritage has a broader social function. According to the Spanish Historical Heritage Act (in Spanish: *Ley del Patrimonio Histórico Español*) in the Law 16/1985, the definition of "cultural or historic-artistic heritage" is "as a group of movable and immovable goods with artistic, historical, paleontological, archaeological, ethnographical, scientific or technical interest or value". This law includes "different possibilities of application", especially with opinions of "time and space" (Capote-Pérez, 2017, pp. 240).

Fourthly, since the 1960s, the European countries have generally begun to pay attention to the areas where the historical buildings and their surrounding environment were concentrated. Such areas were further expanded for the aim of the cultural heritage conservation. For instance, France experienced the urban renewal and redevelopment since the 1950s and 1960s (Kain, 1977). It promulgated the "Saved sectors (French: Secteurs sauvegardés)" in 1962, a law which extended the protection of cultural heritage to the historical districts of the city (Kain, 1977). The historical blocks included the houses, shops, gardens, and community activities. Then, the

Minister for Cultural Affairs of France approved the so-called Malraux act, which was “the most important and influential pieces of the European conservation legislation” in order to “conserve the old quarters of towns and to maintain the atmosphere of people, but to modernize living conditions, to regulate traffic and to reorganize the social and economic base ” (Kain, 1977). As a “protected area”, this regulation pointed out that urban environment is the object of cultural heritage protection and defined the areas with special architectural artistic value and historical significance (Kain, 1977). In 1976, the government further emphasized the planning and management of the historical districts and the protected areas in the Urban Planning Law (Kain, 1977).

It is not difficult to see that with the continuous deepening and improvement of cultural heritage protection practices, the European countries were constantly adjusting the categories and scopes of the cultural heritage conservation objects. This method has been recognized and adopted by the international cultural heritage conservation organizations as well.

From the changes and developments of conservation objects, it is not difficult to see that with the deepening of cultural heritage conservation practices, people will have more and more in-depth understanding of the background of human history development, and the importance of cultural environment has continued to increase, resulting in continuous types of protected objects to expand. From the initial protection of palaces, churches, temples and other architectural pieces to the conservation of general historical buildings, it has reflected the lives of ordinary people. This kind of the single cultural heritage conservation has developed to the conservation from the historical view around the buildings. And the environment has been developed to protect the entire historical districts, and even the complete historical ancient city. Thus, the objects of cultural heritage conservation are becoming more abundant, and their scopes have been integrated into the lives of ordinary people. Because the customs, systems, treaties and legislations established such a wide range of cultural heritage conservation, this fact enables countries represented by the Europe to have so many and extremely splendid cultural heritage.

1.2 Analysis of Some Contemporary Restoration Reviews of the European Scholars

As early as the ancient Roman era, the countries in Europe used the remnant monuments to build new places of worship. During the Renaissance, the historians and art critics began to study the historical and artistic value of cultural properties and historical and archaeological sites, and called for the establishment of a protection system to secure these precious cultural heritages. The architects and artists-restorers began to repair and rebuild historical buildings, thus starting the historical evolution process from ancient times to modern times for the conservation and restoration of cultural property.

Since the Haussmann's decree of 1852, France was the first country to portray a nationwide vision for a concept of protection, marking the official birth of the modern conservation ideas. However, the mainstream restoration behavior at that period was still reconstruction in accordance with popular fashion. The restorers erased the traces left by time to pursue the perfect visual effects and use functions of classical architecture.

Together with the development of the Western philosophy and aesthetics, the conservation and restoration cultural heritage gradually entered into the modern field of vision since the 19th century. Intellectuals with comprehensive qualities began to construct a restoration system for cultural heritage in the fields of aesthetics, philosophy, history, etc. At that time, the major restoration schools were formed, which were mainly represented by the European scholars in France, Great Britain, Italy, Germany, and Austria.

1.2.1 The Main European Schools Related to Restoration in 19th century

Since the Renaissance, the European history could be seen as a continuous development rooted from the classicism works of ancient Greece, Rome and the Middle Ages. After the Enlightenment movement, the history became a series of individual events, so everybody could distinguish the characteristics and the value of the artistic object - mostly of them are architectures. Thus, three major schools of heritage buildings preservation emerged in Europe.

Each school had its own fundamental representative figures, the relevant theoretical research works and the practical cases of restoration, and almost covered the main and basic principles of conservation and restoration of cultural heritage.

Eugène Emmanuel Viollet-le-Duc (1814-1879) played a “central position in the Parisian cultural establishment” (Hearn, 1990, p. 2), and was a representative figure of the restoration movement in 19th century, not just in France, but also in Belgium, the Netherlands, and Switzerland. As an architect and inspector, his main contribution was to point out the “stylistic restoration”. The term of “style” was originated from “stylus” merged with “stilus” in Latin and “stylos” in Greek. Its original meaning was a tool for writing or sculpturing. Later, it related from a personal writing mode in 16th century, to the “manner” of structure in 18th century, and to a unique feature in architectural decoration (Johnson, 1994, p. 407). In his writing and practice, the French architect stated, “...restoration and the thing itself are both modern. ... It is to reinstate it in a condition of completeness which may never have existed at any given time” (Viollet-le-Duc, 1875, p. 9). He believed that the purpose of restoring buildings is to restore them to the “condition of completeness” which was not necessarily the original state and existed before, not just mechanically protecting the original state of the current building, so it was possible to be deleted or added something on the architecture (Yazdani Mehr, 2019). However, although having a good knowledge and a rich practical experience of architecture, his bold choice of ancient architecture conservation was met with some hostility. His restoration was considered to have lost the sense of history and vicissitudes of the building, and his opinion has been criticized as showing an ignorance of history.

John Ruskin (1819-1900) was another main leader of the contemporary conservation movement. During 19th and 20th centuries, the argument between “restoration” and “anti-restoration” developed very keen. Based on the opinion of anti-restoration of Ruskin, the meaning of restoration was not clear to figure out, so people should concentrate on the preservation of the original state of the building within its own history and context (Yazdani Mehr, 2019). From his writings, it came to be born the Conservation Theory, which emphasized the historical realness of a building, including protection, maintenance and conservation, and was opposed to any subjective restoration action that tried to restore the wholeness of the building. Considering the

“age value”, the English scholar totally disagreed with doing the restoration, because it was “a lie from beginning to end” (Ruskin, 2016, p. 182). He believed that all that can be done to a heritage building is to maintain, and he opposed any form of restoration.

Ruskin together with William Morris (1834-1896), advocated the basic changes with the heritage buildings and the society by talking against the restoration breaking the original structure and appearance (Powell, 1999; Niglio, 2013; Yazdani Mehr, 2019). However, together with the school of Viollet-le-Duc, both of them had their limitations: the “stylistic restoration” emphasized the artistic value but disregarded the historical value of a heritage building, while the “anti-restoration” placed too much emphasis on the historical value, which led to inaction in the restoration activity. Under such a discovery that every era had its own unique value and artistic expression, the emergence of “Eclecticism” in 19th and 20th century, was precisely the way to circumvent the above problems of the theory of restoration, which advocated a comprehensive evaluation of both the artistic and historical value, in order to formulate the suitable goals for restoration.

1.2.2 Some European Art Opinions Related to Restoration in 20th century

Although the content of the major restoration schools in Europe in 19th century is all discussed in architectural practice, it can become the social background of our considered book of *Teoria del Restauro* by Brandi. In addition, some connections with this book can also be proposed here, for instance with some significant figures, such as Alois Riegl and Edmund Husserl.

Active at the turn of 20th century, Alois Riegl (1858-1905) was an Austrian art historian. He was considered one of the leading exponents of the Vienna School of art history. Based on the practical work of art and architecture, Riegl carried out interventions by adopting different values that would inevitably lead to different results in the restoration of art, architecture and monuments; they were “memory values” and “present-day values”. The memory value also included “age value”, “historical value”, and “intended memory value”, while the present-day value was inclusive of “use value” and “art value”. In turn, the art value was *Kunswollen* (his evolutionism and theory), including “newness value” and “relative art value” (Barassi, 2007).

Riegl pointed out that the heritage protection was no longer a simple restoration of a regretful past value with eventually a functional meaning, but the output of current heritage value, and the transmission of a future value. In the Riegl's opinion, the stylistic restoration and anti-restoration schools of the 19th century were both manifestations on the "historical value", but the restoration of the 20th century paid more attention to the "age value". He believed that the values were not a once-and-for-all issue, but a constantly changing and always open issue over time, so the effect of cultural heritage restoration depends on the evaluation and selection of these values. Moreover, as for the bipolar judgment of "artistic value" and "historical value" by Brandi, it is not difficult to find a trace here.

Edmund Husserl (1859-1938) was a German philosopher and the founder of the school of phenomenology in the 20th century. He formulated the basic principles and methods for phenomenology, and developed it into "transcendental phenomenology", trying to make the phenomenology a strictly scientific philosophy based on all the knowledge. The basic principles and methods, formulated by Husserl, are widely used today. For instance, the guidance of his methodology could be applied to the analysis of the book of Brandi.

1.2.3 Some Italian Scholars Related to Restoration

Since the 1870s, the Italian scholars have carried out a systematic research on the thought of the heritage protection. They insisted on the historicism, and believed that the purpose of the heritage protection is to continue the historical value of the protected object, which equals to the spiritual value exceeding the material style. Unlike the proposition of Viollet-le-Duc and the viewpoint of John Ruskin, the Italian scholar Camillo Boito (1836-1914 CE) believed that the value of ancient buildings is multifaceted, including the current situation of the buildings that must be respected. The newly restored parts are needed to be clearly identified. It is advocated to identify the historical record by writing down the restored time. This concept was later absorbed by documents such as the Athens Charter and became an important principle driving the restoration of heritage.

Benedetto Croce (1866-1952) was an Italian philosopher, historian, politician, literary critic and

writer. He was the main ideologist of Italian liberalism in 20th century, and the exponent of the neo-idealism as well. Following the German idealism, such as Kant, then Schelling, Fichte and Hegel, Croce put forward his own theory of intuition as to the aesthetic criticism. He believed that “intuition” or “expressions” were equivalent to “art” or “beauty” (Wedel, 1924, p. 484). He also believed that knowledge of art did not exist congenitally. If there was no such an intuitive appearance of aesthetic judgments, then the knowledge could not become to be; art is, then, intuition and expression: a pictorial image is not without some material support and coloring. This aesthetic theory was closely related to the need for restoration, which was demonstrated further by Brandi. Only to people who experienced this intuition art could appear as such. Croce theorized that only after the appearance of the “image” can there be works of art, and the “material” is the carrier of the works of art. However, with the material only, there may not necessarily be the work of art. And the distinguishing principle between “image” and “material” was pointed out in the second principle of Brandi’s theory, recalling Croce’s assumption: *only after the appearance of the “image” could there be art, and the “material” was the carrier of the art*. Giving his attention to Croce, Brandi changed from writing lyrics to explore the road that the foreign philosophers and historiographers went through, especially the German-born scholars, such as Edmund Husserl (1859-1938), Martin Heidegger (1889-1976), Walter Benjamin (1892-1940), and Erwin Panofsky (1892-1968) (Meraz Avila, 2009; Graham Burnett, 2010/2011). From this starting point and thinking way, Brandi gradually absorbed the writing methods, then applied to and concentrated them mainly on the principle subjects of the art works.

At the beginning of the 20th century, the Italian architect Gustavo Giovannoni (1873-1947 CE) supplemented and developed the theory of Boito, and put forward the idea of “scientific restoration” by abandoning the incorrectly restoration and the pure pursuit of increasing the value of artworks. The restoration of antiques was established the scientific heritage protection ideas and restoration methods, and finally laid the scientific foundation for the modern cultural heritage conservation theories, which have changed the concept of cultural heritage protection a lot. In 1939, based on the theory of Giovannoni, the League of Nations held an international conference in Athens, and adopted the *Athens Charter for the Restoration of Historical Monuments*. In the same year, Cesare Brandi (1906-1988 CE) founded the ICR (the English name: Central Institute of Restoration), which was dedicated to the research on the conservation and

restoration of the cultural heritages, restoration practices and the training of professional talents in Italy and other parts of the world.

In 1963, the book of Cesari Brandi, intitled *Teoria del Restauro* in Italian, was published. In this book, Brandi viewed the restoration into the perspective of “protection”, and organically he connected restoration and conservation together. He pointed out that the purpose of the conservation and restoration is to pass on to future generations. To extend the physical persistence of art works is for the responsibility of contemporary. So, a clear concept was established that the restoration is an important and significant action, because while fully respecting the historicity, authenticity, and aesthetics of cultural heritage, the participation of the multiple disciplines is crucial as well. The main principles in the restoration behavior to be here summarized are the principle of “least intervention”, the principle of “identifiability” and the principle of “reversibility” (Brandi, 2005).

The research results of Cesare Brandi indicated that Italy established a complete discipline system for the conservation and restoration of cultural heritage. This kind of disciplinary system was quickly stated and reached a consensus in Europe and even internationally. The second conference of the International Council on Monuments and Sites (ICOMOS) under the leadership of UNESCO, was held in Venice, Italy, and the Venice Charter for the Conservation and Restoration of Monuments and Sites was approved at the meeting from 25 to 31 May, 1964. On the basis of inheriting the spirit of the Athens Charter, the “Venice Charter” further clarified the concept of ancient architecture, that does not only include the building itself, but also the environment related to it. Therefore, it emphasized to use of all the science and technology tools to protect and restore ancient buildings.

As more topics are included in the scope of the conservation theory, the concept of heritage conservation has become more complete, and the focus of conservation has shifted from the initial basic protection of the physical entity itself to the emphasis on the continuous development of broader environmental and cultural possibilities. With the expansion of the concept and scope of conservation, the theoretical system of conservation and restoration is also continuously developed and improved.

With a comprehensive understanding of the history of human development, traditional culture and the surrounding environment, the conservation and restoration of cultural heritage has gone through several stages of development. Meanwhile, an ideology and theoretical system of scientific conservation and restoration is spread from Europe to other countries, promoting a common progress of the international conservation and restoration of cultural heritage.

1.3 The Historical Development of the Principles and Methods of the Cultural Heritage Conservation in Europe

In the development process of the conservation and restoration of cultural heritage in Europe, the “authenticity” and “integrity” are the most basic and important principles conservation. They represent not only a significant yardstick for measuring the value of cultural heritage, but also the fundamental framework for restoration.

1.3.1 The Concept of Authenticity and Its Development

The term of “authenticity” originated in the medieval Europe, and has the meaning of “authoritative” and “original” in Greek and Latin. When the religion was dominant in the Middle Ages, the “authenticity” was used to describe something of the religious scriptures and worship articles. When the term “authenticity” is applied to the field of cultural heritage, it refers to the meaning of “original, true and credible” of the cultural heritage itself and all related information (Etymology dictionary).

Adopted by the First International Congress of Architects and Technicians of Historic Monuments in Athens 1931, the document of *The Athens Charter for the Restoration of Historic Monuments* took Giovannoni’s *Carta del Restauro* as a reference. Moreover, it contained the budding of “authenticity” thinking. For instance, the VI article of it, named “The technique of conservation”, states “in the case of ruins, scrupulous conservation is necessary, and steps should be taken to reinstate any original fragments that may be recovered (anastylosis), whenever this is possible; the new materials used for this purpose should in all cases be

recognisable.” (Choi, 2012).

The concept of “authenticity” was officially incorporated into the field of cultural heritage in the 1960s. At the Second International Congress of Architects and Technicians of Historical Monuments, “The Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites” was agreed in 1964. At the beginning, the preamble of this charter wrote: “People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. It is our duty to hand them on in the full richness of their authenticity” (Venice Charter, 1964). Although the Venice Charter did not clearly define the definition of “authenticity”, the work of conservation and restoration has been carried out around “original” and “true” concepts, and both of them are the interpretation of “authenticity”. The document has been mainly proposed for the conservation and restoration of ancient European buildings and historical locations, looking “authenticity” as a fundamental principle for testing the cultural heritage, and directly using to guide the restoration of cultural heritage and historic sites. It received great attention in the practice of the European cultural heritage conservation, thus it has produced many restoration principles and methods.

It was the Convention Concerning the Protection of World Cultural and Natural Heritage in 1972 that truly made the “authenticity” of cultural heritage attract attention. The core of the Convention was to maintain the “authenticity” and “integrity” of the heritage.

In the Operational Guidelines for the Implementation of the World Heritage Convention in 1977, the “test of the authenticity” of the heritage was linked to the authentication of the “outstanding universal value” of the heritage. It was also clearly stated that the heritage must be submitted to the test of authenticity. By this way, it provided a specific standard for determining the authenticity of the heritage.

However, in the development practice of the cultural heritage conservation, people have gradually realized that there is a certain gap between the theory of authenticity and practice, so there are too many particularities that need to be dealt with in practice. Therefore, the concept of “authenticity” has its connotation in the process of practice. For instance, firstly, from the

authenticity of the heritage ontology evolves to the authenticity of the heritage information, the value of the heritage depends on the information carried by the heritage itself, and the information is the basis for judging the authenticity of the heritage. Secondly, from the static authenticity to the dynamic authenticity, after a long period of precipitation and accumulation, the heritage has left obvious characteristics of the times and historical imprints. The authenticity of the heritage is not the authenticity of a static point in time, but it accompanies the development history of the heritage itself. Thirdly, being differences between cultures, they lead to different standards for authenticity. Therefore, to investigate the authenticity of cultural heritage under different cultural backgrounds and in different times and spaces is not just a manifestation of respect for cultural diversity, but also an indication of the further deepening and maturity of human understanding of the authenticity of heritage.

1.3.2 The Concept of Integrity and Its Development

The term of “integrity” means “soundness, wholeness and completeness”, figuratively “purity, correctness and blamelessness”, which is derived directly from Latin (Etymology dictionary). This term changed to “wholeness, perfect condition” since the middle of fifteenth century.

In 1964, the “integrity” appeared in the protection regulations for historical sites in the “Venice Charter”. For instance, in the Article 14, it is stated that: “The sites of monuments must be the object of special care in order to safeguard their integrity and ensure that they are cleared and presented in a seemly manner. The work of conservation and restoration carried out in such places should be inspired by the principles set forth in the foregoing articles” (Venice Charter, 1964). However, there has been no more detailed explanation of “integrity”. In Article 13, it is argued that: “Additions cannot be allowed except in so far as they do not detract from the interesting parts of the building, its traditional setting, the balance of its composition and its relation with its surroundings” (Venice Charter, 1964).

The surrounding environment of cultural heritage here can be understood, which provides the possibility for the further improvement of the connotation of the integrity, and points out the direction to be pursued. As Jukka Jokilehto argued, “over three decades later the Venice Charter

continues to exercise its validity. Acceptance of the Charter has not been without criticism” (Jokilehto, 1998).

Next, the Operational Guidelines for the Implementation of the World Heritage Convention from its beginning in 1977 to 2019 will be judged carefully. These conventions are drawn up by the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the contribution of European experts.

The “integrity” was started to use as a principle of heritage protection to evaluate natural heritage. For instance, the Article 11 of the Operational Guidelines in 1977 stated that “the sites should also meet the conditions of integrity”. The requested place of “integrity” included the areas firstly “should contain all or most of the key interrelated and interdependent elements in their natural relationships”; secondly, they “should have sufficient size and contain the necessary elements to demonstrate the key aspects of the process and to be self-perpetuating; thirdly, they “should contain those ecosystem components required for the continuity of the species or of the objects to be conserved”; lastly, they “should be of sufficient size and contain the necessary habitat requirements for the survival of the species” (Operational Guidelines, 1977).

Then, the Operational Guidelines were modified in 1997, and the Article 24 stated that “a monument, group of buildings or site - as defined above - which is nominated for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purpose of the Convention when the Committee finds that it meets one or more of the following criteria and the test of authenticity...” (Operational Guidelines, 1997). At that time, “authenticity” and “integrity” were a unilateral correspondence with heritage types, which were the “authenticity” of cultural heritage and the “integrity” of natural heritage. The Operational Guide was a direct standard for determining the value of the heritage. In the actual operation, people found that the correspondence between the type of heritage and the principle cannot solve several practical problems.

The revised Operational Guidelines merged the original identification standards of cultural heritage and natural heritage into ten standards in 2005. The identification of cultural heritage

still needs to meet the requirements of “authenticity”. Being different from the Operational Guidelines of 1997, the Article 87 clearly stated that: “All properties nominated for inscription on the World Heritage List shall satisfy the conditions of integrity” (Operational Guidelines, 2005). Then, the Article 88 argued that: “Integrity is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes.” And it had four requirements of the property to examining the conditions of integrity (Operational Guidelines, 2005).

After stepping into 2011, the World Heritage Committee has met once a year to ensure the new concept, knowledge or experiences including the document of the Operational Guidelines. For instance, the Operational Guidelines in 2015 added Chinese version to the official versions. As for the “integrity” in II. E, many regulations on natural heritage have been added to the content. And it almost has no change of “integrity” part in the Operational Guidelines of 2019.

In the process of the conservation and restoration practices of cultural heritage, the concept of “authenticity” and “integrity” originating from Europe has been continuously expanded and improved. It has become the standard for the recognition of the cultural and natural heritage in the world. Thus, it is an important basic principle guiding the conservation and restoration. The conservation of heritage is no longer limited to historical and cultural meanings, not just to preserve historical witnesses, but to integrate into the development and modernization process of the entire city. Its holistic approach emphasizes the need of guiding the contemporary construction and functional changes through planning. With its unique way and its own historical and cultural advantages, making historical remains plays an important role in urban development of economic and social life.

1.3.3 The Preventive Conservation

Based on the definition of the ICOM-CC (International Council of Museums - Committee for Conservation), the “Preventive Conservation” means “all measures and actions aimed at avoiding and minimizing future deterioration or loss. They are carried out within the context or on the surroundings of an item, but more often a group of items, whatever their age and condition” (ICOM-CC, 2020). It implies a “mental shift”, as Gaël de Guichen (1995) argued, “a

change in thinking a conservation thing from how to why”.

Tracing the origins of the “preventive conservation”, it was formally proposed at the first International Conference for the Study of Scientific Methods Applied to the Examination and Preservation of Works of Art, which was held in Rome of Italy, October 1930. This conference was carried out by the Office International des Musées (OIM), and it established the network that activated the diagnostic methodology in Europe and America. Unfortunately, the follow-up work of the conference has never accomplished, but it was a fundamental issue to the heritage (Cardinali, 2017, pp. 225).

Another instance is the European non-governmental organization of Monumentenwacht (the English name is Monument Watch), which was founded in the Netherlands in 1973. This organization advocates the protection concept of “prevention is better than cure”, which prevents damage of buildings through regular inspections and minor repairs. Later, similar organizations appeared in various parts of Europe, such as in Belgium. They are responsible for the regular inspections and the targeted maintenance of the architectural heritage. Compared with the work of Monumentenwacht, their work of inspection and maintenance is relatively more static, but differs little.

Since the 1980s, the ideas and methods of preventive conservation have been widely discussed and studied. This is due to two reasons: on one hand, with the acceleration of globalization, plus the development of tourism, the environmental degradation and other factors, all these facts make the protection of architectural heritage facing more and more risks, so that the awareness of risk prevention has begun to increase. On the other hand, with the continuous progress of the modern measurement technology, the scientific monitoring gradually replaces the original empirical testing, thus it becomes feasible to analyze and evaluate heritage while facing environmental disasters and structural material damage.

Since 1991, the European Confederation of Conservator-Restorers’ Organisation (ECCO) was established by 14 countries. Currently, delegating nearly 6,000 scholars within 22 countries and 25 organizations, it reveals the area of cultural heritage preservation, both movable and immovable.

In 1992, the ICR (Central Institute for Restoration) of Italy proposed to carry out a plan of Risk Map of Cultural Heritage (the Italian name: Carta del Rischio). Aiming at the current situation of architectural heritage protection and the difficult environment, the GIS (Geographic Information Systems) technology is used to assess the environmental hazards, such as flood disasters, earthquakes and so on, as well as to monitor the protection status of the heritage, in order to manage control and take relevant protective measures more effectively. The project was firstly applied in Rome, Naples, Ravenna and Turin – the 4 cities, and then extended to the nationwide of Italy.

Since February 1st, 1993, the E.C. Environment R&D carries out the research on the “Expert system for evaluation of deterioration of ancient brick masonry structures”. The research collects damage from different architectural heritages from Belgium, Germany, Italy and the Netherlands, determines the type of damage through questionnaires and on-site inspections, and analyzes the cause of damage and damage process through continuous on-site monitoring and precise laboratory tests (Balen, Mateus, Binda & Baronio, 1997). Through this action, all the information is converted into computer, thus forms the “Damage Atlas”, and then the “Masonry Damage Diagnostic System (MDDS)” for the evaluation of the deterioration of ancient brick masonry structures. This system has revolved damage concerning with the interaction between materials and environmental factors (Hees & Naldini, 1995, pp. 462).

Since then, from brick building materials and structural damage diagnosis, the Monument Conservation Diagnostic System (MCDS) has also been formed. The largest contribution of this system consists in the establishment of a database on the damage of cultural properties and historical sites, which enables non-expert users to conduct professional analysis of the damage of architectural heritage through computer software operation, and becomes a monitoring tool for preventive conservation.

1.4 Summary

Tracing back to history, the historical features and characteristics of the European cultural heritage development gradually become clear and understood. From the establishment of the

concept of cultural heritage, conservation objects to the legislative management, the evolution of the cultural heritage conservation shows that the heritage has developed from a narrow concept of property to a modern meaning which is shared by mankind with outstanding significance and universal value.

Until the end of 20th century and by combing through the development process of the concept, principles and methods in Europe, it is revealed that in the practice, conservation objectives, restoration guidelines of cultural heritage conservation are mutually relationships of cause and effect. As Laura Di Pietro, Roberta Guglielmetti Mugion and Maria Francesca Renzi (2013) argument, "Culture plays a fundamental role in human development and in the creation of identities and habits of individuals, as well as communities." The European cultural heritage conservation system is summarized due to the explanations and the instances of authenticity, integrity and preventive conservation.

The next chapter will provide detailed information of Italy situation to discuss how it fixes up the management of cultural heritage, and the historical development of the ICR.

Chapter II: A History and Development of Conservation and Restoration in Italy. For Instance: a History of the ICR - from the ICR to the ISCR and to the ICR again

“The most precious cultural heritage of Italy is the context, the continuum between monuments, cities and citizens. And not only museums and monuments are an integral part of the environment, but also the culture of conservation that brought them down to us.”

Salvatore Settis³

As a tradition of history, the restoration is lasting for thousands of years, and is always respected by people. This land occupied the core of western culture, which is the origin of the Etruscan civilization, ancient Rome, Roman Catholicism, humanism and the Renaissance from ancient times to the 16th century. It has a long tradition on the cultural heritage conservation and restoration here.

As early as the period of the Eastern Roman Empire, Leo the Thracian gave an order to protect Rome: No one can damage or destroy any building, because the temples and the memorial buildings are built by our ancestors, so these buildings are built for the public usage or public entertainment. Then it came to the Pope Pius II who ordered in 1462: No one can destroy the ruins of ancient building; otherwise he will be sentenced to imprisonment or not allowed to join any church. To be stressed, there was not country until the establishment of Italy kingdom in 1861 (Woodhead, 2004). Because the political and social systems of these regions operated

³ Settis S. 2002, Italia S.p.A. L'assalto al patrimonio culturale, Torino: Einaudi, pp. 2.

independently before, its historical and cultural heritage still deserved particular attention.

Nowadays, according to the UNESCO, Italy has about 60% of the world's historical, archaeological and artistic resources. There are more than 3 million pieces of the most precious cultural heritages registered, including not only more than 2,000 archaeological remains, but also an alarming number of other immovable cultural heritage. The number of the world cultural heritage in Italy is as many as 55 places⁴. With a high point of the legal system, national awareness, science and technology, both of the theoretical and practical levels of conservation and restoration in Italy have always been in a leading position in the world.

The governments attach great importance to cultural heritage conservation in Italy. The earliest regulation on the conservation of arts and monuments could be traced back to the humanist Popes of the 15th century (Levi, 2008)⁵ at a time that the regulations were always weak in the face of conflicts and wars. Then it needs to be noticed that the law of *Editto Pacca* in 1820, which was the legal template for the modern cultural heritage conservation. To read carefully of the law, the motivation for artworks and monuments conservation was particularly interesting, which is to “attract foreign tourists, inspire curiosity of antique dealers, and cultivate high-profile artists” (Giacomini, 2003). Later, it was approved the first preservation law, which regulated the protection of historical, artistic and architectural works in 1902, and further improved by a second law (Benassi, 2013). After the conflicts and wars, this country putted the conservation of cultural and natural heritage into the national constitution in 1948 (Avanza, 2017)⁶. The article 9 of the 1948 Republican Constitution in Italy states:

The Republic promotes the development of culture, and scientific and technical research. It safeguards the natural landscape and the historical and artistic heritage of the Nation (1948).

⁴ <https://whc.unesco.org/en/list/> (last consultation October 25, 2020).

⁵ From Donata Levi, “The Administration of Historical Heritage. The Italian Case”, in the book *National Approaches to the Governance of Historical Heritage over Time. A Comparative Report*, ed. Stefan Fisch, pp. 103-115.

⁶ From Giulia Avanza, “The evolution of state museum governance in Italy”, in the book *Management of Cultural Firms*, eds. Paola Dubini, Fabrizio Montanari, Armando Cirrincione, pp. 99-101.

As a basic national policy, it included the cultural heritage conservation in the constitution in Italy, stressing that it could be seen a fundamental interest of the country through the cultural property in the territory. At that time, the central government uniformly performed the right of supervision, and should not be left to any local governments. It was not sufficient that it is created the Ministry for Cultural and Environmental Heritage (MiBCA) in 1974, which unified all competence and functions of “antiquities, fine arts, audio documents, archives, libraries, academics, publishing and the diffusion of culture” (Avanza, 2017)⁷. It needs to clarify that the MiBCA kept the existence of the Soprintendenza (English: Superintendence), which was dedicated in “a technical field” and took responsibility for activities at “regional” level (Avanza, 2017)⁸. It was integrated with the Department of Performing Arts, and was renamed the Ministry of Cultural Heritage and Activities (MiBAC) in 1998. At the same time, the government started a process of “decentralization of public administration” (Avanza, 2017)⁹. Under such conditions, the MiBAC was experienced a key reform: passing on part of the responsibilities and duties of Minister’s offices to “the General Directors (DG)” (Avanza, 2017)¹⁰. The Constitutional Reform (in Italian: *Riforma del Titolo V*) in 2001 caused a “radical change” to the implementation of article 9 of the constitution (Avanza, 2017)¹¹. The Code of Cultural Heritage and Landscape in 2004 helped to state the two functions of cultural and national heritage activities:

- Protection includes all activities relating to the identification of cultural heritage and to assuring its protection and conservation with the aim of public benefit;
- Enhancement entails all activities aimed at promoting knowledge of cultural heritage and ensuring the best conditions for the public benefit and use of cultural heritage (2004).

Then, the MiBAC was reorganized and restructured in 2010 (Avanza, 2017)¹². It changed to

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

Ministry of Cultural Heritage and Activities, and Tourism (MiBACT) in 2013 because it then covered all the activities involving tourism (Avanza, 2017)¹³. With the aim of consolidating the effect of the Ministry in “research and education”, and improving its validity to support the enhancement in procurement activities in a “local level” (Avanza, 2017)¹⁴, the reform (in Italy generally known as *Riforma Franceschini*) was launched in 2014.

In this country, there has been the *Carabinieri Command for the Protection of Cultural Heritage* (in Italian: *Carabinieri T.P.C.*) whose predecessor dates back to 1969, and it was the first military force in the world. This is specifically used to combat various types of artworks and antiquities criminal activities. Meanwhile, the attitudes of ordinary Italian people towards cultural heritage are deeply cherished. For instance, only a very small number of vehicles are allowed to enter the central and historical areas of cities in Italy, so reducing the damage caused by modern transportations to cultural properties.

Through the understanding of the political and management procedures about conservation and restoration of cultural heritage in Italy, these things are basically fundamental, for instance the tight organizations, the detailed laws and regulations, the advantageous economic policy, and also the scientific conservation thoughts and the advanced conservation technology in the 20th century. In the academic world, then, the Central Institute for Restoration (Italian name: *Istituto centrale per il restauro*, short for the ICR) in Rome occupies a significant position, not only in Italy but all over the world. Next, the history and development of the ICR will be sorted out from the founding period of Brandi to the Urbani period and till the post-Urbani period, trying to give suggestions to the development of other countries.

2.1 The ICR's Founding Period of Brandi: A Formal Redefinition of Restoration

From the ICR to the ISCR to the ICR again, it has been found back its name: Central Institute for

¹³ Ibid.

¹⁴ Ibid.

Restoration (Italian name: *Istituto centrale per il restauro*, short for the ICR), but it has undergone unimaginable and significant much more changes than what can be seen by the eyes of one person. The ICR is a research institute devoted to both the education and science of culture heritage conservation. The essential function of the ICR is to do researches, experiments, trainings, and other activities about restoration. Fortunately, it has a history to tell as far as the beginning more than 80 years ago.

Founded in 1939, it was originally established as the Royal Institute of Restoration (Italian name *Regio istituto del restauro*) with the project of Giulio Carlo Argan and Cesare Brandi in response to the national need to create an activity of restoration on a scientific basis and unify the interventional methods on the artworks and the archaeological finds. Accordingly to judge this significant matter, Giuseppe Basile (1989)¹⁵ states that: “The creation of this Institute constitutes a fundamental event aimed at the affirmation of a radical new mode of considering restoration and restorers. And it is (an important event) not only in Italy.” Considering about the project of Argan and Brandi, the founding of this institute could not simply put the strength of two persons or several persons alone. Acturally, it has been the dream for all Italian people for nearly three centuries. For instance, as early as the Venetian Republic, Pietro Edwards (1744-1821) was an academic professor and an art expert. He was also a member of the Venetian academy, a “master director”, and an “inspector for restoration” (Olivato, 1974). He tried the establishment of a restoration institute in many occasions but always failed (Olivato, 1974; Basile, 1989). Then, the time went till 1911, when Gaetano Prevati observed the professor Pasquale Farina negotiating with the Ministry to establish an institute of restoration (Olivato, 1974), which was the closest preparation of a school or an institute like that.

After the several years of the Second World War, the institute was inaugurated in Cesarini-Borgia Palazzo and part of the former convent of San Francesco di Paola of Rome in 1941. Looking back to that period of time, it was definitely an innovation to create the institute of restoration on the “international scene”, which truly revolutionized the “old empirical and artisanal concepts” of restoration¹⁶. It was a certainly political matter as well, for instance the

¹⁵ From Giuseppe Basile, 1989, *Cos'è il restauro*, pp. 49. It is translated by me.

¹⁶ <http://www.icr.beniculturali.it/pagina.cfm?usz=1&uid=2> (last consultation October 20, 2020).

law No. 1240 notes that the aim of entering this institute is join “a complete learning among the humanistic (art history), the technical (drawing and pictorial techniques) and the scientific (chemistry, physics and natural sciences) subjects, as well as a legislation on antiquities and fine arts; and finally the laboratory practice”¹⁷. Cesare Brandi was the first director of the institute. The first course of it dates back to 1943 (Basile, 1989). The Institute began to operate regularly until 1955. According to the description of Francesca Romana Mainieri, “from the start the Institute was equipped with laboratories and offices which became the model for all other restoration centers based on the modern principle of integrating practical science work with documentation and research” (Ministry of Foreign Affairs, 2014)¹⁸.

The time went to the 1970s. Not only that, because of the establishment of the MiBCA (Ministry for Cultural Assets and Environments, the Italian name: *Ministero per i Beni Culturali ed Ambientali*) in 1974, the institute was modified from the original “Regio” (this adjective was of course abandoned after the proclamation of the Italian Republic on June 2, 1946) to “Central” to form its name in the new Italian Republic, and from “of” (Italian word: *del*) to “for” (Italian word: *per*), because for the policy of the Ministry, so the name changed to the Central Institute for Restoration (Italian name: *Istituto central per il restauro*), and the abbreviation changed to the “ICR”, in a conference holding by the MiBCA in 1975.

Then the institute changed its name again to the High Institute for Conservation and Restoration (Italian name: *Istituto superiore per la conservazione ed il restauro*, short for the ISCR) in 2008. Considering the function of having the advanced knowledge and experience, the ICR was one remarkable institution in Italy, which was specialized in the field of conservation and restoration of the artworks and cultural heritage. Following the Ministry of Cultural Heritage, Activities and Tourism, it belonged to the General Direction for Education, Research and Cultural Institutes (the Italian name: *Direzione Generale Educazione, ricerca e istituti culturali*) in Rome. Being an academic and political institution of a country with the richest collections of cultural heritage,

¹⁷ Ibid.

¹⁸ From Francesca Romana Mainieri, “The birth of the Istituto Centrale del Restauro”, from *Restoring in Italy. Art and technology in the activities of the Istituto superior per la conservazione ed il restauro*, pp. 25-35.

the ISCR has unique resources and perspective to face problems, and then to provide suggestions that needed other countries to learn.

After that, the name of the institute has changed back to the Central Institute for Restoration (Italian name: *Istituto centrale per il restauro*, also short for the ICR again) in 2020. The problems and challenges of this institute will be discussed in the third section.

Therefore, the name of the institute has been changed from the Royal Institute of Restoration (Italian name: *Regio istituto del restauro*) to the Central Institute for Restoration (ICR), then to the High Institute for Conservation and Restoration (ISCR), and back to the Central Institute for Restoration (ICR) again, so the functions and the characteristics of the institute also have been greatly changed. Directed by the MiBACT (Ministry of Cultural Heritage and Activity and Tourism, the Italian name: *Ministero per i beni e le attività culturali e per il turismo*) nowadays, the ICR has been an institute of conservation and restoration of cultural heritage in Italy, which brings together the specialists of many fields such as art historians, architects, archaeologists, physicists, environmental monitoring experts, chemists, and biologists, as well as restoration experts of each category of art works, such as murals, oil paintings, wooden art, textiles, papers, metals, pottery, stone, leather, etc. With their professional qualifications, they begin to cooperate to carry out various restoration works, and determine the best conditions for conservation and protection of cultural heritages. Furthermore, this institute has a strong professional attainment on the restoration of the murals, the conservation and restoration of open-air stone cultural heritages, and the conservation and restoration of underwater original sites and cultural heritages, so it is fundamental important to Europe, and even in the world.

In addition, “tratteggio” has been defined as the most important “pictorial integration technique” of the ICR. Not only that, there have been other significant facilities as well, for instance the library and archives. The Library *Biblioteca Adolfo Venturi* was born 1939 with the founding of the ICR. Regulated by the Superintendence, it is a national library of the restorations together with the Archive Photographic Document of Restorations (Italian name: *Archivio fotografico documentazioni restauri*) that collects the entail experiences of Italy to facilitate better target for intervention, research and study. It provides the online library also, which is named “*Catalogo della Biblioteca online*” with more than 54,000 volumes relating to the

conservation and restoration of cultural heritage. As for the archives, there is the ARES (Italian name: *Archivio Restauri online*), which contains also about 110,000 images, and 6,700 graphic and written documents.

2.2 The ICR's Innovational Period of the Urbani: The Preventive Conservation

After being directed firstly by Cesare Brandi, and then by Pasquale Rotondi, the ICR has seen a gradual process of achieving stability and improvement, and its third director was Giovanni Urbani, who was committed to the conservation project with regard to the natural environment in both private and public organizations of Italy and foreign countries. Such an idea was totally an innovational measure, which applied the organizational and technical-scientific methods to propose the “preventive conservation” with enhancement of the whole collections and their surrounding environment (Lambert, 2010). The “preventive conservation” is a “concept approach” for conservation (Lambert, 2010; Caple, 1994). It contains a “mental shift” of a change to think about conserved things from “how” to “why” (Lambert, 2010; de Guichen, 1995). Not only that, Urbani took another step forward, stressing to reconsider the activities of the institutes that was a part of the overall reorganization of the planned conservation system, and shifting his attention from “restoration” till “conservation of the entire cultural heritage” (Zanardi, 2009).

Being born in 1925, Giovanni Urbani was enrolled in the ICR at the age of eighteen in 1943. He was the third director of the ICR from 1973 to 1983. It should be stressed that the native formation of restorer was the essential reason for the original thought and judgment of Urbani. Keeping this judgment in mind, he guaranteed the collaboration between artistic heritage and the environment to implement the “preventive conservation” in relation to the natural environment. Under his leadership, the institute accomplished the most significant and innovative work. Later, he decided to resign, but continued to focus on publishing many articles and organizing events of the technical-scientific innovation of conservation and restoration with

the support of the political and bureaucratic leaders of the Italian ministry at that time. He was dead in 1994.

Giovanni Urbani fully engaged himself with the restoration activity of art works problems with a rigorous view to identify and deepen the sources. In handling such complex situations, he faced this relationship with the theoretical and practical activities of Cesare Brandi, he precisely learned the art history instead of being simply a restorer. Unlike any other type of history, the theory of restoration reconnects and reconstructs the objects in the presence, and it could find its exact value and specific meaning. The “preventive conservation” is the unavoidable condition for the investigations to deepen and explore the concerned areas. Not only a single masterpiece is the matter of study, but the historical, cultural and artistic witnesses that accompany the very history of the artifact and that therefore come to constitute a complex system of relationships and linked information. Therefore, it may not be enough to intervene on a specific work that needs to be restored after the damage has occurred, but it is very essential to prevent damages with an accurate maintenance policy, a constant control of environmental conditions that may affect its conservation, and a technical-scientific research on the behavior of the constituent materials of art works, so that people could judge from the deterioration to determine its causes and mechanisms. After Urbani, Michele Cordaro – the 7th director of the ICR – developed the planned restoration concept, and paid special attention to the planned regular maintenance standards.

With the direction of Giovanni Urbani, many projects were completed and still it could be learned from them. For instance, it was a paradigm model of the preservation and conservation state of the Giotto’s fresco in the Scrovegni Chapel¹⁹ (Italian: *Cappella degli Scrovegni*). Another instance was the large construction site for the fresco restoration in the upper church of Basilica of Saint Francis of Assisi (Italian: *Basilica di San Francesco d’Assisi*). The next instance was the recognition of the damage to the murals, caused by the Irpinia earthquakes²⁰, in order to determine an immediate intervention and to perform the restoration plan. Belonging to the ICR,

¹⁹ Michele Cordaro, “RICORDO DI GIOVANNI URBANI”, in *PIANO PER LA CONSERVAZIONE PROGRAMMATA DEL BEL CULTURALI IN UMBRIAL*, pp. 3-4, I translate it.

²⁰ The Irpinia earthquake took place in the south of Italy in 1980.

these instances can also be taken by other institutes and entities, which focus on implementing the “conservation science” by a definable historical connotation in Italy, and to introduce this methodology to other countries, like China.

Considering about the project approved by the Italian law and promoted by ICR, the “Risk Map” of Cultural Heritage (Italian name: *Carta del Rischio*) is fundamentally important including a territorial information system that provides administrative and scientific support to state and regional units being responsible for conservation and protection of the cultural heritage²¹.

Under the Risk Map, during the critical and emergency moment of the earthquake in the Marche and Umbria regions in 1997, the GIS (Geographical Information System) has proved to be exceptional useful for preparation of the cartographic and thematic data. Within it, there are three maps describing the different elements and geographical distribution in Italy: static-structural danger, environmental-air danger and anthropic danger²².

NORMAL is another significant organization, which was founded at that time. Since 1977, NORMAL established significant scientific collaborations with the National Research Center (CNR)²³ and the ICR. It is an acronym for “NOrmalizzazione MAteriali Lapide” in Italian, which means the Normalization of Stone Materials. The aim of the NORMAL is to create unified approaches for the studies of stone materials, and to control the effectiveness of the new treatments of conservation²⁴. The committee’s members come from different backgrounds of society, for instance the researchers of the CNR, the experts and officials from the MiBCA in 1970s, the university professors, the representatives of industries, freelancers, etc. They are about 200 different components, divided into groups and subgroups of work. And each group or subgroup is responsible in different scientific disciplines. Furthermore, they have issued the UNI-Normal standards, which included 24 working groups and covered the entire field of

²¹ <http://www.cartadelrischio.it/mappa.html> (last consultation October 20, 2020).

²² Ibid.

²³ National Research Center is the “*Consiglio Nazionale delle Ricerche*” in Italian, which is short for the CNR. It is the largest research national institution based in Rome, Italy.

²⁴ <http://www.cartadelrischio.it/mappa.html> (last consultation October 20, 2020).

conservation and protection²⁵.

Achieving high recognition, Giovanni Urbani received the Medal of Merit for Culture and Art (Italian: *Medaglia ai benemeriti della cultura e dell'arte*) from the President of the Italian Republic in 1995²⁶.

2.3 The ICR's Predicament: A Short Stay on the ISCR

During the years from 1983 to 2018, the ICR experienced its frustration and predicament period, and gradually it went again to the stage of development. Firstly, after Urbani, there were a number of considerable directors, but each director served a quite limited duration: from 4 or 5 years to even 2 years. They were Umberto Baldini, Michele d'Elia, Evelina Borea, Michele Cordaro, and Almamaria Tantilo Mignosi. Some of their efforts did commendable. For instance, referring to the organizing activities and training programs of Cesare Brandi and Giovanni Urbani, Michele Cordaro restarted the publication of the "Bulletin ICR, New Series" (Italian name: *Bollettino ICR, Nuova Serie*) since 2000. Besides that, there are also the Volumes ICR (Italiano: *Volumi ICR*)" and the "General list of publications" (Italiano: *Elenco generale delle pubblicazioni*), that present the volumes edited by the ICR and the list of publications by the authors who contributed to the ICR. Moreover, the ICR was cooperated with other organizations, such as the "Giovanni Secco Suardo Association".

Then, it was a new inflection since 2002. For instance, the term of Caterina Bon Valsassina was 7 years. Next, the term of Gisella Capponi was longer: 9 years. It is worth mentioning the remarkable changes that have done both these two scholars. When the director was Caterina Bon Valsassina, she promoted a strategy of "know-how" in the field of conservation and restoration abroad, particularly in China, India, Peru, Egypt. Later on, when the director was Gisella Capponi, she organized a large exhibition named "*RESTORATION IN ITALY: art and technology in the activities of the Istituto Superiore per la Conservazione ed il Restauro*". Edited by the Ministry of Foreign Affairs

²⁵ Ibid.

²⁶ Ibid.

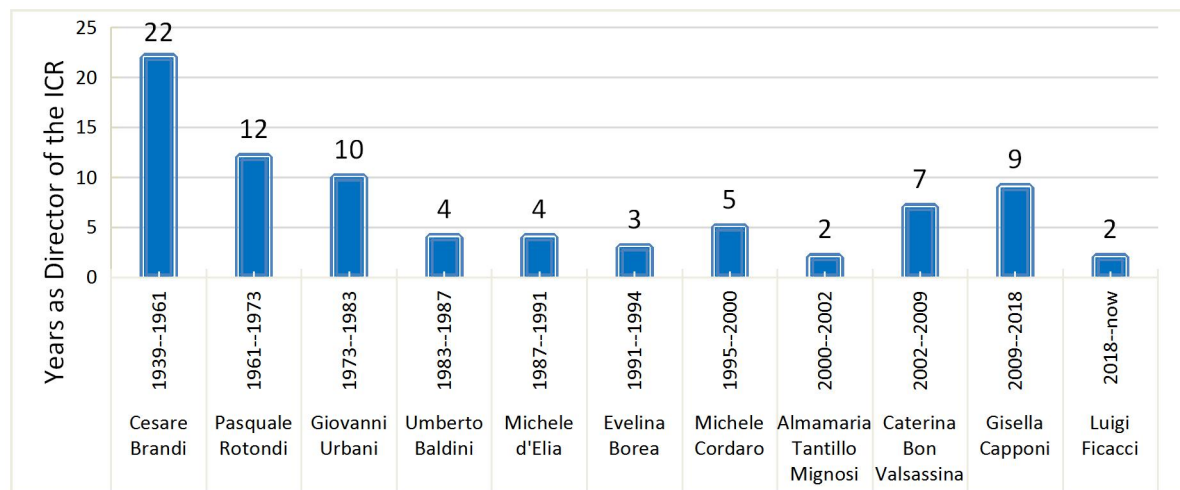
in Italy at that time, the book with the same title was published at the same time, and tells us the history and development process of conservation and restoration in Italy. Reflecting on the road that the institute is now walking on, it was named the Royal Institute of Restoration (Italian name *Regio istituto del restauro*) from 1939 to 1974, then changed to the Central Institute for Restoration (short for the ICR, with the Italian name: *Istituto Superiore per la Conservazione ed il Restauro*) till 2008, and later changed to the Higher Institute for Conservation and Restoration (short for the ISCR, with the Italian name: *Istituto Superiore per la Conservazione ed il Restauro*), and finally it has been changed back in 2020. Therefore, there were 12 years to be the ISCR instead of the ICR. The idea of changing to the name of the Institute to the ISCR was understood by a professional people, which specified the “Higher Institute” instead of the “Central Institute”, and represented that two fundamental things of “conservation and restoration” instead just one thing of “restoration”. But a new name could influence a lot of things, so that you don’t even know where you are from. That means that the unity of the Institute was interrupted. For instance, the old logo of the Institute was quite popular when the Institute was just founded (see 2-1). But people began to forget it with the story behind it. By Pier Leone Casella in the eighteenth century, it is an engraving that represents the allegory of the conservation. I think it should be used today and in the future.



2-1: The Allegory of the Conservation(the logo of the ICR until 2006)

2.4 The ICR Again and Its Visit in China

Up to now, there are eleven directors in the past and one current since the Institute was established eighty one years ago. In accordance with the time, they are (see 2-2):



2-2: Years as Directors of the ICR

Right now, the director of the Institute is Luigi Ficacci. Over this period, the most notably thing has been the change of the name back to the Central Institute for Restoration again from 2020. Being one of the top institutes of conservation and restoration in Europe, the ICR tries to teach the students to keep identity memory of Italy and itself as well, and helps to enhance the international cooperation to put equality of historical and scientific research together, and to redefine the process of conservation and restoration. The ICR has done many things to achieve this target. For instance, as for the cultural exchange between Italy and China, the training mode of the ICR has been introduced and presented to China as well. So, there was a collision and later an integration between the occidental and the traditional oriental concept of conservation and restoration.

The aim of conducting the training center of the cultural cooperation for conservation and restoration in China and Italy is based on building the regional and professional training

institutions, promoting the formation of a network structure for the professional training and the technical diffusion, and learning from the methods and experiences of conservation and restoration of international cultural relics through the combination of theory and practice. For instance, the training of conservation and restoration in Xi'an city, Shanxi province of China was an activity instance supporting by the ICR in Italy. It fully introduced advanced theories, technologies and experience of conservation and restoration of Italian cultural relics. For another instance, the training workshops of China and Italy holding twice in Beijing introduced highly specialized models.

2.5 Summary

As we all know, Italy has been a major leader and developer of the cultural heritage conservation movement in its own country and also worldwide in a way, for instance, the scientific conservation theories were invented here as well as many of the advanced conservation technologies, the rich restoration practical experiences, and many others items.

Through the literature dealing with the development history of the Italian cultural heritage, especially the history of the development and evolution of ICR, this chapter outlines the background and development of the formation and direction of cultural heritage conservation and restoration in Italy.

By this way, the developmental process of the ICR is a microcosm of the history of the Italian cultural heritage conservation and restoration. Italy pioneered the creation of the ICR, and so achieved landmark results; for instance, Brandi established a modern theoretical system of the conservation and restoration, and then Urbani put forward the ideas and methods of the "preventive conservation" which have been further improved by many other experts in this field. Furthermore, the ICR has made outstanding contributions to the heritage conservation and restoration in more than eighty years of development. Under the guidance of scientific restoration theory, it firstly created a new original model for the restorers to carry out the standardized restoration of works of art. Secondly, a new research model has been formed, which is a close integration of the conservation theory and restoration practice. These two

models are not only widely used in Italy, but also have been promoted models for China and other international communities to learn from.

Chapter III: The Cooperation Activities of the Conservation and Restoration of Cultural Heritage between China and Italy

“The enhancement of cultural heritage generates the phenomena of the sustainable development. Therefore, it is a concrete driving force that products tangible economic and social improvement.”

Giuseppe Deodato²⁷

Since their long history and brilliant ancient civilization take the national pride of the two countries, there is a close cooperation on cultural heritage between China and Italy to promote the exchange and improvement of concepts, standards and technologies based on projects. It is worth remembering that based on the common interests of the two countries, they established diplomatic relations in November 1970. In order to strengthen the friendly relationship and to develop cooperation in various areas, the two countries have started their visits in each other's places. For instance, Giuseppe Medici and Arnaldo Forlani, the Italian Ministers of Foreign Affairs (nowadays named *Ministry of Foreign Affairs and International Cooperation*), had their visits to China in 1973 and 1977 (Coralluzzo, 2008). Huang Hua and Hua Guofeng, respectively the Chinese Minister of Foreign Affairs and Premier and Chairman of the Chinese Communist Party, had their visits to Italy (Li, 2018; Coralluzzo, 2008). Then, Sandro Pertini and Emilio Colombo, President of the Italian Republic and the Italian Minister for Foreign Affairs at that time, had a trip in September 1980 (Coralluzzo, 2008). After that, as a prelude of the modern cooperation between China and Italy, the Italian government sent the first cultural delegation

²⁷ Giuseppe Deodato, in Micheli, M. & Zhan, C. (eds) 2006, *La conservazione del patrimonio culturale in Cina. Storia di un progetto di cooperazione*.

on archaeology and preservation of cultural relics to visit China in 1988 (Li, 2018). An Italian delegation, which was composed of the bronze restoration expert Mario Micheli, the mural painting restoration expert Giuseppe Moro and the archaeologist Roberto Ciarla, visited China. And it meant their stable and healthy cooperation started since then.

With the help of the Italian financial and human resources, using the ICR in Rome as a model, a series of Chinese projects are in progress or have been completed until recently. The ICR is the first academic institution to systematically introduce the scientific concepts and advanced technology of Italian conservation and restoration methods for cultural heritage to China. It has carried out cooperation and exchanges on the most extensive themes and the most in-depth contents with China for the longest time. Being inseparable from Italy, the following results have been achieved in China. All the results of these cultural heritage conservation organizations will be detailed discussed one by one to provide the testimony of friendship between China and Italy. Moreover, it is our noble responsibility given by history, an inevitable requirement for the continuation and sustainable development of human civilization, and a valuable cultural resource for the comprehensive construction of a harmonious society.

3.1 Building the Conservation and Restoration Centers

According to the professional standards and norms for the conservation and restoration of cultural heritage, there were the establishments of the conservation and restoration centers in China. None of these centers could be achieved without the contribution of Italy, for instance the Xi'an Cultural Relics Conservation and Restoration Center, the Gallery of Tomb Murals in the Tang Dynasty of the Shaaxi History Museum, the Longmen Stone Relics Center, and the Dazu Monuments Conservation Center.

3.1.1 The Xi'an Cultural Relics Conservation and Restoration Center

The Xi'an Cultural Relics Conservation and Restoration Center was established in 1989, formerly known as the Shaanxi Provincial Cultural Relics Protection Technology Center (Shao, 2004). It

was and is presently located in the southern suburbs of the ancient capital of Xi'an. Through learning the conservation and protection of cultural relic cooperation projects among the governments and the conservation agencies of Italy, Germany, Japan and other countries, this center built a place of laboratory construction, archaeological scientific analysis and restoration technology training and cooperative research (Li, 2006).

Using the ICR as the model, three institutional structures of China and Italy cooperated together to build the Xi'an Cultural Relics Conservation and Restoration Center from 1995 to 1998 (Li, 2006). These organizations were the Shaanxi Provincial Cultural Heritage Administration, the Italian Ministry of Foreign Affairs at that time and the Istituto Italiano per l'Africa e l'Oriente (IsIAO, which was closed in 2012). This cooperation resulted in a fully introduction of Italian advanced theory, technology and experience to China. And through this introduction, the Xi'an Center was equipped with a whole set of scientific detection and analysis instrumentations for archaeological investigation, on-site records, studies about preserving conservation, cultural relic materials, production techniques, and cultural relic disease mechanisms, as well as it has a specific laboratory for the conservation and restoration of cultural relics in emergency situations, for instance a camera, editing and production system for the conservation and restoration of cultural relics (Shao, 2004). Thus, the Xi'an Cultural Relics Conservation and Restoration Center became the first modern cultural relics conservation and restoration research center in China.

Moreover, organized jointly by China and Italy, the "special workshop on archaeology" was conducted in the field of archaeological excavation training in Baoji city of Shaanxi province in 2004 (Shao, 2004). During the workshop, there were forty-six trainees of restoration from provinces of Shaanxi, Shanxi, Henan, Gansu and other places, who communicated the thought of advanced archaeological techniques between China and Italy and discussed the application of modern scientific and technological methods in archaeological research. They played a positive role in promoting the integration of modern updated archaeological concepts with Chinese reality.

Since December 2010, the Xi'an Cultural Relics Conservation and Restoration Center changed its name to the Shaanxi Institute for the Preservation of Cultural Heritage (SIPCH), which belongs to the Shaanxi Provincial Cultural Heritage Administration. Following the good tradition of the Xi'an

Cultural Relics Conservation and Restoration Center, the SIPCH is one of the specialized institutions engaged in the conservation and restoration of cultural heritage, restoration and scientific research with some influence not only in the province but even in the whole country.

3.1.2 The Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum

The Gallery of Tomb Murals in the Tang Dynasty has unique and precious collections of the Shaanxi History Museum. There are nearly six hundred murals within more than twenty tombs, covering more than one thousand square meters (Qiang & Cheng, 2018). The murals of the Tang tomb depict the rituals, customs, costumes, entertainment, and architectural styles of the past time with unique architecture, simple and vivid characters, distinctive utensils, concise and lively landscapes, and lifelike animals and plants in the period between 618 and 907 CE. The murals are important data for studying social life in the Tang Dynasty, especially the life and spiritual pursuit of aristocrats. At the same time, the Tang tomb murals are extremely fragile, so that they require severe preservation conditions. In order to conserve and protect the Tang tomb murals, building a gallery of tomb murals in the Tang Dynasty has been decided to integrate functions of conservation, research and viewing.

The Gallery of Tomb Murals in the Tang Dynasty is a key tourism project of cultural relics determined by the Shaanxi Provincial Government. It is located on the basement floor of the East Pavilion of the Shaanxi History Museum. The total investment was about ten million euros, including more than two million euros provided by the provincial government subsidy amount, plus a soft loan of more than 4 million euros and a grant of one million euros of the Italian government (Qiang & Cheng, 2018). The construction area was 4,200 square meters, including an exhibition hall area of 3,400 square meters (Qiang & Cheng, 2018). Due to the special requirements of the soft loan, the showcases were purchased from Italy as well as the largest piece of equipment in the mural gallery. The showcase has anti-ultraviolet and laminated glasses, but the biggest advantage is the tightness, so that it provides a relatively independent and good preservation environment for the murals. In terms of service facilities, the gallery possesses a high-definition digital cinema, and produced movies by itself (Qiang & Cheng, 2018). It also equipped with a touch-screen query system and an automatic explanation system to help the

audience to understand the murals.



3-1: The Gallery of Tomb Murals in Tang Dynasty of the Shaanxi History Museum, China

As previously outlined, the construction of the Gallery of Tomb Murals in the Tang Dynasty received attention and support from the governments and relevant departments of the Shaanxi Province and all other sectors of society, even by the foreign governments. For instance, the Shaanxi Provincial Government formally approved the project at the end of 1999. Later, the Shaanxi Government began to handle the loans from the Italian government in 2000. The Chinese and Italian governments signed a memorandum of understanding on the use of loans from the Italian government in 2003. And finally, China and Italy reached an agreement on the content of the international bidding documents, and it started the bidding process in Italy in 2006. Then, in 2007, the constructing project started, involving the civil engineering and the interior decoration projects. In 2008, the Shaanxi Provincial Government signed the equipment procurement contract with the equipment supplier of the agreeing party (Qiang & Cheng, 2018). Nowadays, the main construction content of the project has been completed. Therefore, the Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum is opened to the public since 2011.

3.1.3 The Longmen Stone Relics Center

The Longmen Grottoes is located on both sides of the Yi River, which is 5 kilometers to the south of Luoyang city, Henan province. In the middle of today's China, it was excavated since before or after moving the capital to Luoyang of the Emperor Xiaowen of the Northern Wei Dynasty to the Tang Dynasty (316-907 CE). Nowadays, there are 2,345 caves and niches, nearly 110,000 Buddhist statues, more than 2,800 inscriptions on the stone tablet, and 43 pagodas at the site. It was announced as a “national key cultural relics protection unit” by the State Council in 1961. And then it was described as the first batch of the “national scenic spots”. Right now, it is on the “World Heritage List” by UNESCO since the November 2000, so the Longmen Grottoes are a splendid cultural treasure and one of the world's outstanding cultural heritages. However, since being excavated and being destroyed by nature and man-made damage for more than 1,500 years, the grottoes are suffering from the intensified diseases, such as the surrounding rock collapses, the water leakage in the caves, and the weathering of sculptures (Wang, 2017). Therefore, it is very important to carry out the conservation project and research of grottoes.

As an important way to learn the advanced foreign conservation concepts and protection technologies, there are mainly three international cooperation projects carried out in recent years. Firstly, the “Dual Cave-dwelling” Conservation and Restoration Project in the Longmen Grottoes was implemented jointly by China and Italy in 2004 (Chen, 2019). Under the guidance of the conservation and restoration experts from both countries, the project adopted the international advanced concepts and technical methods for conservation and restoration. Based on the comprehensive diagnosis and analysis of the diseases of “double cave-dwelling”, a series of complete repair procedures were performed, including cleaning, bonding reinforcement, sealing, etc., so that the many diseases have been treated, for instance the oil fume pollution, the rock falling-off, the surface weathering, etc. Thus, the “Dual Cave-dwelling” Conservation and Restoration Project was the first comprehensive conservation and restoration practice of the Longmen Grottoes on the surface disease of the whole cave (Chen, 2019). From those results, the Chinese conservators and restorers gained a lot of experiences, and this fact will be of significance for the work in the future.



3-2: The Longmen Grottoes in Luoyang city, Henan province, China

Secondly, it confirmed a low-interest loan of 2 million euros from the Italian government to establish the “Stone Relics Conservation Center” of the Longmen in Luoyang, which included building the chemical, mechanics, restoration laboratories, as well as an environmental examination equipment and an information management platform. The center was started to be built in 2012, and was completed in 2014, then it changed its name to “The Longmen Grottoes Cultural Relics Conservation Center” (Chen, 2019). Within such center, the works like the environmental monitoring, disease analysis, information processing, protection research, and restoration of stone cultural relics can be carried out effectively. This center was also approved by the National Development and Reform Commission and the Ministry of Finance in China.

Thirdly, the “China-Italy Cooperated Project of Investigation and Conservation of the Fengxian Temple” has been underway for many years. However, both the archeological experts of China and Italy have their own excavation data, so their data brought difficulties to a comprehensive understanding of the Fengxian Temple, which is the biggest temple of Longmen. Following consultations with the Italian side, the archaeologists in China could have the relatively

complete information, and resolve the remaining problems over the past few years. Moreover, The “Excavation Report of Fengxian Temple from 1997 to 2002” was compiled and published (Chen, 2019). This book provides detailed information for the comprehensive study of the temple's layout and the Buddhist culture.

3.1.4 The Dazu Stone Monuments Conservation Center

The Dazu Rock Carvings or the Dazu Stone Carving are the sculptures in Dazu District, Chongqing city. Among them, the five cliff sculptures of Bei Mountain, Baoding Mountain, Nan Mountain, Shizhuan Mountain and Shimen Mountain are included in the “World Heritage List” by UNESCO since December 1999. The county named Dazu is located in the east of Chongqing city, and covers an area of about 1,400 square kilometers. The Dazu County was established in the 758 CE, and has a history of more than 1,250 years. The Dazu Rock Carvings were created in the early Tang Dynasty (618-907 CE), passed through the late Tang and Five Dynasties (618-979 CE), flourished in the Song Dynasty (960-1279 CE), and extended through the Ming and Qing Dynasties (1368-1912 CE). Thus, the Dazu Stone Carvings provide precious images and historical materials for the study of Chinese social and cultural history at the end and after the Tang Dynasty. It is also representative of Chinese Confucianism, Buddhism and Taoism cultures, and therefore has significant historical value. Moreover, the Dazu Stone Carvings are a masterpiece of late Chinese grotto art, so they provided great contributions to the innovation and development of the Chinese grotto art.

The Dazu Stone Carvings are based on the natural cliffs and mountains, which are open spaces, and the niches have small depths. Therefore, the ability to shelter the sculptures from wind and rain is weak, and they are vulnerable to the erosion of natural forces such as wind, rain and sunshine (Wang, 2009). Secondly, with a lot of rain and mist, the climate is humid, and the atmospheric environment is polluted to a certain extent; in particular, the combination of water and polluting particles can easily form acid rain (Wang, 2009). Thirdly, the texture of the sculptures is feldspar sandstone, and the cements are mostly calcareous and argillaceous. Under the action of various weathering factors, especially water, the calcareous cement will dissolve, which will weaken the cementation and it can be easily damaged by erosion (Wang, 2009).



3-3: The Sleeping Buddha of the Dazu Rock Carvings in Chongqing city, China

As an outdoor cultural heritage, the Dazu Stone Carvings are then susceptible to erosion and man-made destruction (Wang, 2009). Due to historical and natural reasons, the state of preservation of the Dazu Stone Carvings is very fragile. It has been facing four major diseases: the rock mass instability, the water erosion, the stone weathering, and the biological erosion (Wang, 2009). In addition, there are the diseases of gold layer and painted layer as well.

With the help of a series of cooperation agreements signed by the governments of China and Italy, the two countries have carried out many extensive exchanges and projects, for instance the establishment of “The Dazu Stone Monuments Conservation Center” in 2007. Later, another project, “Collaboration for the restoration of the UNESCO site of Suchenyuan”, was signed by members of the Academy of Dazu Rock Carvings in China and the Venetian Heritage Cluster in Italy in 2017. These initiatives have laid a good foundation for the long-term protection and research of the Dazu Stone Carvings.

3.2 Building the China-Italy Cooperation Training Centers of Conservation and Restoration

A number of professional training courses of cultural relics conservation and restoration has been carried out in China, namely in Xi'an and Beijing. Based on the establishment of the

regional professional training centers, the China-Italy Cooperation Training Centers promoted the formation of a networked structure for professional training and technological diffusion, using a teaching model that combines theory and practice to learn from the methods and experiences of international cultural relics conservation and restoration institutions, and then to apply them to the practices of China's cultural heritage conservation.

The first training programme of the cultural relics conservation and restoration in the Xi'an Cultural Relics Conservation and Restoration Center was a replicated training model, introducing the advanced theory, technology and experience of the Italian cultural relics conservation and restoration in China. Later, the two China-Italy Cooperation Training Centers for Conservation and Restoration of Beijing were transformed from the Italian-style into a professional and Chinese training model.

3.2.1 The China-Italy Cooperation Training in the Xi'an Cultural Relics Conservation and Restoration Center

The China-Italy Cooperation Training was implemented in the Xi'an Cultural Relics Conservation and Restoration Center from 1995 to 1998. The Italian government donated 4.8 billion lire (about 3 million Euros at that time) to build an analysis and testing laboratory, a cultural relics restoration room, and also 19 instruments (Jiang, 2014). The complete set of facilities made it the first modern research center in China in the field of cultural heritage.

The training method adopted the three-year academic system of the ICR in Italy. Beside the staff inside the center, one student could pass one examination and join the training center. Forming a multidisciplinary collaborative training mode, the professional activities of training included ceramic restoration, bronze restoration, and scientific archaeological excavations.

Completing the conservation and restoration training course by China and Italy at the Xi'an Cultural Relics Conservation and Restoration, a graduation ceremony was held for the first 20 trainees of the center on August 4, 1998. Having full access to the advanced international concepts of cultural relics conservation, the trainees learned how to apply this modern technology to the conservation and restoration of ancient works of art for the first time.

3.2.2 The China-Italy Cooperation Training Center for Conservation and Restoration of Beijing in the CACH

After the Italian government provided 1.4 million euros to fund and support the new three-year plan in China in 2003, the SACH (the State Administration of Cultural Heritage) of China decided to build a training center of cultural heritage in Beijing. Compared with the Xi'an Cultural Relics Conservation and Restoration Center, which mainly served the restoration in the northwest region of China, this new training center would serve the whole country.

The China-Italy Cooperation Training Center for Conservation and Restoration was located in the China Academy of Cultural Heritage (short for the CACH) in Beijing. Its aim was to train a high-quality professional and specialized team in the conservation and restoration of cultural relics across the whole country, to improve the technical, scientific, and specific operational methods of the Chinese cultural relics conservation and restoration, and to develop the effective conservational forms and management strategies in the terms of theories, methods, planning and management strategies of cultural relics. So far, it was an international cooperation project on cultural relics conservation and restoration training, involving a largest range of the professional fields, a highest number of trainers, a widest coverage, and a longest time span of training.

According to *The Conservation of Cultural Heritage in China. The History of A Cooperative Project* (2006, the book name in Italian: *La conservazione del patrimonio culturale in Cina. Storia di un progetto di cooperazione*) by Mario Micheli and Zhan Changfa, the first round of the “China-Italy Cooperation Training Center for Conservation and Restoration” by jointly the CACH and the ISIAO, carried out in 2004. This training was addressed in four directions, including metal-ceramic restoration, stone restoration, material protection of buildings' surface, and procedures for archaeological site excavation. There were 67 trainees from all over China. Among their 10-month training, they studied in Beijing for 7 months, and conducted on-site research for 3 months. There were 28 Italian experts who arrived in China, and taught the knowledge of the modern conservation and restoration of cultural relics.

In order to continue this valuable method of training, Italy provided 1 million euros for

equipment purchase and personnel training. As the supporting funds to the free assistance by Italy, China also provided approximately 1 million euro, and provided nearly 1,000 square meters of the teaching practice space.

The second round of the “China-Italy Cooperation Training Center for Conservation and Restoration” was implemented in 2007. It was extended to cover new fields, including textiles, paper, murals, ancient building restoration, and conservation planning of historical sites; there were 19 Italian teachers, 28 Chinese teachers, and it was attended by 60 professional and technical students from China.

Later, the CACH received the third round of the Italian aid equipment in 2008, including the infrared ultraviolet video system, the laser cleaning device and the repair equipment, etc. The relevant installation, commissioning and personnel training were ended in February 2009. Therefore, the CACH organized many training courses, such as “Application of Laser Cleaning Technology in the Conservation and Restoration of Inorganic Cultural Relics”. These training courses were highly valued by the National Bureau of Cultural Heritage, the Ministry of Commerce in China, as well as the Italian Ministry of Foreign Affairs and the Italian Ministry of Cultural Heritage. In addition, organized by the State Administration of Cultural Heritage of China, the CACH investigated the earthquake damage of cultural relics in the L'Aquila region of Italy in 2009.

The First Phase of China-Italy Cooperation Training	
	
Stone Restoration Training Course	Ceramic and Metal Restoration Training Course

	
<p>Ancient Building Restoration Training Course</p>	<p>Archaeological Site Conservation Training Course</p>
<p>The Second Phase of China-Italy Cooperation Training</p>	
	
<p>Mural Restoration Training Course</p>	<p>Textile Products Restoration Training Course</p>
	
<p>Ancient Building Conservation Training Course</p>	<p>Paper Products Training Course</p>

3-4: China-Italy Cooperation Training Center for Conservation and Restoration in 2004 and 2007

Nowadays, the CACH collaborates closely with the National Research Council (shortly, Cnr in Italy). For instance, the CACH and the Cnr signed a cooperative project agreement in 2014. The

two parties would carry out academic research and talent exchanges in the field of scientific research of cultural heritage. In 2017, the “China-Italy Comparative Study on Water-saturated Wooden Cultural Relics Analysis and Detection, and Dehydration Reinforcement Method” was held by the CACH and the Cnr for 11 days in China. In 2019, according to the Bilateral Cooperation Agreement (2019-2021) between the CACH and the Cnr, the “China-Italy Research on the Conservation of Wooden Cultural Relics” was carried out in various related fields of wooden cultural relics.

3.3 Conducting Field Investigations in Real Places of Conservation and Restoration

From the preliminary explorations and researches to the formulation of restoration plans and restoration sample experiments, and then to formal restoration, the Italian experts participated in the entire process of the conservation and restoration in China, and trained a group of high-level restoration professionals for China.

The Italian experts and Chinese students went for the on-site field investigations in process of conservation and restoration, for instance the Hall of Supreme Harmony in the Palace Museum, the Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum, the CAFA, etc.

3.3.1 The Hall of Supreme Harmony in the Palace Museum

According to an agreement between the Palace Museum and the Italian Ministry of Cultural Heritage and Activities in 2003, the Palace Museum and the ICR jointly carried out the preliminary survey on the conservation and restoration of the Hall of the Supreme Harmony in the Palace Museum in 2005 (National Cultural Heritage Administration, 2009). Then, the ICR experts spent more than a year in China and they completed the preliminary surveying to perform disease detection, thus a plan of conservation and restoration was compiled out.

Under the guidance of experts and technicians from the ICR in Italy, there were 14 conservation and restoration technicians in China participating in the “Cultural Relics Conservation and

Restoration Professional Technical Personnel Training Course in the Palace Museum”. The experimental and partial restoration of the Hall of Supreme Harmony was tested and enriched the learning results in practice.

3.3.2 The Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum

The Shaanxi History Museum and the Italian Ministry of Foreign Affairs jointly organized the “China-Italy Cooperation Mural Conservation Seminar” from October 2009 to October 2011 (Qiang & Cheng, 2018).

The conservation of the tomb murals in the Tang Dynasty is a cooperative theme of mutual interest between China and Italy. Since 1999, China and Italy have opened 12 years of cultural exchanges and cooperation for a project in the Shaanxi History Museum. The main contents of the project include the construction of Tang tomb murals, the training of mural conservation and restoration technicians, and the cooperation between China and Italy to carry out the conservation and restoration of Tang Tomb murals.

3.4 Summary

The cooperation activities of conservation and restoration between China and Italy were described in detail in this chapter. With the continuous rapid development and an accumulation of artistic works for a long time, China pays deep attention to cultural heritage in any period, and tries to establish basic research academy, institutes and centers for conservation and restoration. But none of these places could be achieved without the Italian help. For instance, these places were the Xi'an Cultural Relics Conservation and Restoration Center, the Gallery of Tomb Murals in the Tang Dynasty of the Shaanxi History Museum, the Longmen Stone Relics Center, and the Dazu Monuments Conservation Center.

Then, with more accurate and precise knowledge, the China-Italy Cooperation Training Centers began to train the potential staffs of conservation and restoration in Xi'an and Beijing. The centers for the training courses have recently changed their names to the regional or national

institutes or academies, for instance the Shaanxi Institute for the Preservation of Cultural Heritage (SIPCH, the old name was the Xi'an Cultural Relics Conservation and Restoration Center), and the CACH.

Lastly, the field investigations carried out in real places of conservation and restoration were described and shown to be the quickest way to control the first hand information about the preservation planning. A few conservative places in field investigation were illustrated, for instance the Hall of Supreme Harmony of the Palace Museum, and the Shaanxi History Museum.

We cannot forget that the National Cultural Heritage Administration in China and the Italian Carabinieri for the safeguard of the cultural heritage jointly held an experience exchange meeting in Italy in 2016 on the fight against the cultural relics crimes, in order to compare and discuss the respective works in this field. Moreover, the directors of the Ministry of Economy and Finance in Italy and the Ministry of Finance in China attended “The First Italy-China Finance Dialogue” in Rome in 2019. Thus, the cooperation between China and Italy is rooted on a solid ground based on their long-time historical civilizations, adhering to mutual trust and benefits, and blooming brilliant flowers of friendship.

In the next chapter, the history and development of conservation and restoration in China will be illustrated, including a review of the establishment of Chinese intellectual basis on the cultural heritage conservation, the fundamental conditions, and a description of the comprehensive system of the cultural heritage conservation in China.

Chapter IV: The Historical Development of the Conservation and Restoration in China

“Chinese cultural heritage is complex, contested and evolving. There exist different understandings of the content and value of cultural heritage, and a diverse range of manifestations in terms of images, practices and experiences. Today many different actors are involved in debating, mediating, consuming and managing cultural heritage, in contrast with the situation in the past.”

Marina Svennsson²⁸

Being an ancient civilization with a long history, and because of the national amount of cultural heritage is very large, China is one of the truly large countries of cultural heritage. According to *The Third National Survey of Cultural Relic* and to *The First National Survey of Movable Cultural Relics* in China, there are more than 760,000 immovable heritage sites and 4,296 priority protected sites at national level in the whole country (ICOMOS China, 2015), which equal to 37 cultural properties, 14 natural properties and 4 mixed properties of the World Heritage List²⁹. All the achievements carry their testimony of a longstanding and never-ending feature of Chinese civilization.

On another front, experiencing the internal and external changes in their own systems, the occidental scholars have their views, sometimes different, on considering the relics, properties

²⁸ Svennsson, M. 2016, “Evolving and Contested Cultural Heritage in China: the Rural Heritagescape” in Matsuda, A. and Mengoni, L. E. (eds.) *Reconsidering Cultural Heritage in East Asia*, pp. 31-46, London: Ubiquity Press.

²⁹ <https://whc.unesco.org/en/list/> (last consultation October 20, 2020).

and heritages. Each of them has its advantage that makes the Chinese people to learn, especially from the Italian culture. However, the understanding of conservation and restoration of cultural heritage is in the heart of the Chinese people, and its national government has experienced a lot of years of studies and practices, from the original attitude of the traditional protection and restoration of cultural objects, to introduce and learn the philosophy, principles, technology and methodology of the European concept of the conservation and restoration. In particular, the attention has been paid to the distinguished theoretical work of Cesare Brandi, and then to apply scientific research to the field of conservation and restoration, building the Chinese preventive concept of the conservation and restoration, organizing professional centers for the conservation and restoration of cultural heritage, formulating the legal systems, the trading standards and the technical specifications for cultural heritage, and establishing the educational and training system for specialized people.

The development of conservation and restoration in China is constantly improving due to the exchange of information and the mutual learning between oriental and occidental civilizations. According to its own cultural characteristics and national conditions, China has embarked on a path of the cultural heritage conservation with distinctive characteristics and features. Moreover, as a consequence it has formed a complete and unique system of cultural heritage conservation in this land.

This chapter will review the establishment of the Chinese intellectual basis of cultural heritage conservation, in order to sort out the historical development trajectories of the legislation and regulatory system, the public utilities and organizations, educational and training system for specialized talents related to cultural heritage conservation. Furthermore, it will explore the specific progress and causes of the Chinese cultural heritage conservation and restoration policies in various periods, and summarize their developmental and historical characteristics.

4.1 The Chinese Thoughts of Cultural Heritage Conservation: the evolution of the term from “antiquities” to “cultural relics” and then to “cultural prosperity” and “cultural heritage”³⁰

Each term has specific meaning in Chinese, for instance the term of “Gǔ Wù 古物” or “Gǔ Wán 古玩” or “Gǔ Dǒng 古董” means “antiquity”; “Wén Wù 文物” in Chinese means “cultural relic” or “cultural treasures”; “Wén Huà Yí Chǎn 文化遗产” means “cultural property” or “cultural heritage”. The first two words can be found in past times as well as nowadays, while the last word is completely a new one.

The earliest use, which combines “Wén 文” and “Wù 物” together, can be found in *Zuo zhuan* in the late 4th century before the Common Era in China. It contains the major events from the visual angle of the State of Lu of the Spring and Autumn period³¹. For instance, in *Zuo zhuan*, for the second year of Duke Hwan of Lu (711 BCE-694 BCE), there is a record that reads as: “Now when thus virtuously thrifty and observant of the statutes, attentive to the degrees of high and low; his character stamped on his elegant robes and his carriage; sounded forth also and brightly displayed (Legge, 1872, pp.37)”, so “the moral behavior is frugal and restriction, knowing exactly about the degrees of high or low, to commemorate it with the ritual music and ancient laws, and to make a declare³².” Although the words of “Wén 文” and “Wù 物” meant the “ritual music” and “ancient laws and regulations” at that time, in this context it is completely different from the basic meaning.

As time went on to the Tang Dynasty (618 CE-907 CE), these two words of “Wén 文” and “Wù 物” began to combine together, and they referred to “ritual music” and “ancient laws and regulations”, but also have the same meaning as “cultural relic of the previous generation”. For instance, the poet Luo Bingwang (about 640 CE-684 CE) wrote a sentence to lament the failure coming too fast that is “although ritual music and cultural relics with historical and artistic value

³⁰ The particular terms are transcribed with Pinyin and Chinese characters. Moreover, the original Chinese texts with Chinese characters are citations in footnote, and are explained in the text by myself.

³¹ The Spring and Autumn period belongs to the slave society from 771 to 476 BCE in China.

³² The original Chinese texts are: “夫德, 俭而有度, 登降有数, 文物以纪之, 声明以发之” from the *Zuo zhuan* in the Spring and Autumn period, which can be also named as *The Ch'un Ts'ew with the Tso Chuen*. I translated it in English.

do not last very long, they will fail easily. The outstanding things always have their boom-and-bust cycle³³". Later, the poet Du Mu (803 CE-852 CE) associated this concept with the evolution of history, and expressed a strong sense that cultural relics did not exist anymore, but the landscape remained. So he wrote that: "Although cultural relics during the Six Dynasties have gradually disappeared, there is nothing left in the wilderness. However, there is no difference from ancient times when I look at the quiet sky and comfortable clouds³⁴."

Later, the studies on the bronze or stone carvings were called "epigraphy" since the middle of the Northern Song Dynasty (960 -1127 CE), and gradually scholars began to study various other ancient objects that were called "Gǔ Wù 古物". The most widely used title was "Gǔ Dǒng 古董" until the Ming Dynasty (1368-1644 CE) and at the beginning of the Qing Dynasty (1636-1912 CE).

However, "Gǔ Wán 古玩" term was used again during the years of the Emperor Qianlong in the Qing Dynasty. In 1906, during the Qing Dynasty, the government stipulated that the Ministry of Civil Affairs should be responsible for "preservation of ancient monuments and investigation of ancestral temples" (Jiang, 2014). The "Department of Antiquities" was set up under the Ministry of China (Jiang, 2014). Meanwhile, the Ministry of Education also set up a special department to manage affairs in libraries and museums (Jiang, 2014). Therefore, it can be seen that although the different names related to "antiquity" or "cultural relic" had appeared in ancient China, the meaning of the term was basically the same. The most popular term at that time was "Gǔ Wù 古物".

During the period of the Republic of China (1912 -1949 CE), it was extended the concept and content of "Gǔ Wù 古物". Firstly, the government established departments of antiquity management in the Ministry of Internal Affairs and the Ministry of Education after the birth of the new country. After the emergence of the independent activities of archaeological excavation in academic circles, the professional organizations of antiquity protection became an important part of the central management system of antiquities in the 1920s (Jiang, 2014). Then, the activities combining the academic management and the administrative management of

³³ The original poem is: "文物俄迁谢，英灵有盛衰" by Luo Bingwang. I translated this sentence in English.

³⁴ The original poem is: "六朝文物草连天，天淡云闲今古同" by Du Mu. I translated this sentence in English.

antiquity were held for the first time in the 1930s. Moreover, the “Preservation Law of Antiquities” promulgated by the National Government, stated that “Antiquities refer to all items related to archaeology, history, paleontology, and other cultures” (Jiang, 2014). So, here the concept of this phrase was far beyond the scope of “antiquities”, and it was more accurate to use instead “cultural relic”.

In the early 20th century, the term “Wén Wù 文物” which means “cultural relics”, has been introduced and utilized again (Jiang, 2014). Being different from the past, “Wén Wù 文物” has been already with a new connotation and meaning in the modern sense. Moreover, this concept has changed the habits of minds and behaviors of the people toward “antiquity”. So far, the understanding of the value of it has been also shifted from “material” to “cultural” object.

After the founding of the People's Republic of China in 1949, the term of “Wén Wù 文物”, which means “cultural relic”, continued to be used in a series of laws and regulations by the Government Administration Council of the Central People's Government at first and later the State Council. Based on *The Interim Provisions on the Preservation and Administration of Cultural Relics* by the State Council in 1961, the Standing Committee of the National People's Congress issued the “Law of the People's Republic of China for the Protection of Cultural Relics” in 1982, and then published the first revision of this law in 1991, and further improved versions in 2002, 2007, 2013, 2015, and 2017. Consequently, it has a legally fixed the meaning of the term and its content in China, as follows:

- Generally, “cultural relic” has three values: the historical, artistic, and scientific value. Each cultural relic does not necessarily have three aspects of value, but it must have at least one value, otherwise it cannot be called a cultural relic.
- “Cultural relic” represents the significant and typical object.
- “Cultural relics” protected by the state should be representative objects which reflect the social system, social life, culture and art, and science and technology of the past dynasties.

Consequently, there is a close relationship between the cultural relics in all aspects. According to the special characteristics and conditions of the Chinese cultural relic, the expert Xie Chensheng

has defined “cultural relics” for the first time, writing that “Cultural relic is the generic term for all valuable and tangible sites from historical development of human society, that are created by human or related to human activities. The definition of cultural relics includes movable and immovable objects. It is not only limited to ancient time, but includes also modern and contemporary periods (State Council in China, 2016)³⁵.”

In addition, supporting the economic growth and social development, China maintains active engagement in international conferences, and is ready to accept new approaches relevant to “cultural relics”. For instance, the Chinese government has signed the *International Convention of Protection of the World Cultural and Natural Heritage* in 1985. After that, together with 6 heritage sites at the first branch, China has joined the World Heritage List of UNESCO in 1987. Later, China has signed the *UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property* in 1989. By then, people pay special attention to the concept of “cultural property” and “cultural heritage”. The “cultural property” means “physical items that are part of the cultural heritage of society” (Sullivan, 2016). It belongs to every country based on religious or secular reasons, which has important archaeological, prehistoric, historical, literary, artistic or scientific value. While the “cultural heritage” means “the legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations³⁶”.

Nowadays, the similar meanings of “cultural relic”, “cultural property” and “cultural heritage” and their implications are widely recognized by the Chinese government and people. Based on the respect for the natural ecological environment, historical trajectory and inner worlds of human beings, the recognition of Chinese government and people enhances the national system construction of conservation and restoration of cultural heritage.

³⁵ From Xie Chensheng, “Introduction of Cultural Relics” of *The Encyclopedia of China*.

³⁶ <http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/unesco-database-of-national-cultural-heritage-laws/frequently-asked-questions/definition-of-the-cultural-heritage> (last consultation August 15, 2020).

4.2 The Fundamental Conditions of Chinese Heritage Sites

The National Survey of Cultural Relics has been carried out for three times and *the National Survey of Movable Heritage* only once in China, in order to document basic situations of quantity, spatial distribution, preservation and protection status of cultural heritage. Such a survey activity is fundamental to gain information about national conditions and strengths of cultural heritage, therefore it is a basic work to strengthen and improve as for conservation and management of cultural heritage.

4.2.1 The National Surveys of Cultural Relics in China

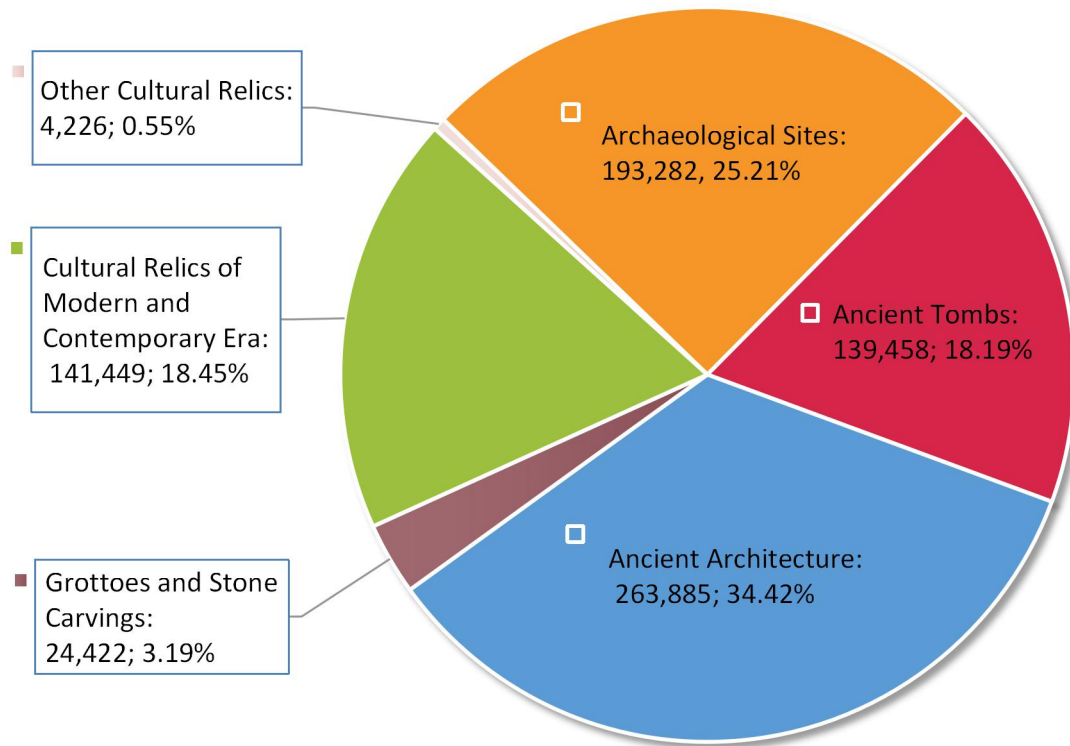
There have been three times of testing experiences on The National Survey of Cultural Relics in China.

First of all, it has carried out *The First National Survey of Cultural Relics* in China since 1956. According to *Notice on Protecting Historical and Revolutionary Relics from Capital Construction* issued by the State Council, it required that the survey of historical and revolutionary heritage sites had to be nationally conducted (Underhill, 2013)³⁷. For the first time, this survey proposed the concept of “protection unit”, which laid the foundation for subsequent building of the Chinese system of conservation and protection of cultural relics. Within three years, in 1959, it has basically completed the survey task in most provinces and regions of the country by figuring out the distribution of cultural relics in various places and finding a number of precious cultural relics. According to *The First National Survey of Cultural Relics*, more than 7,000 cultural relics have been recognized and compiled with a list of various provinces, autonomous regions or municipalities directly under the control of the central government (NCHA, 2009; Teng, 2020). However, due to the small scale and non-standardized catalogue items of *The First National Survey*, there was no specific statistics left.

Secondly, it was carried out *The Second National Survey of Cultural Relics* in China from 1981 to

³⁷ From Robert E. Murowchick, “Chapter 3: Despoiled of the Garments of its Civilization: Problems and Progress in Archaeological Heritage Management in China”, *A Comparison to Chinese Archaeology*.

1985. This survey has recorded 400,000 places of immovable cultural relics. Later, it was announced that 2,351 places of national and key protection units, more than 8,000 places of provincial protection units, and more than 60,000 places of city and county level of protection units were registered (NCHA, 2009; Teng, 2020). Although its scale and achievements were increased with respect to the first one, there were still omissions that could not fully reflect the real data of cultural relics and their states of preservation.

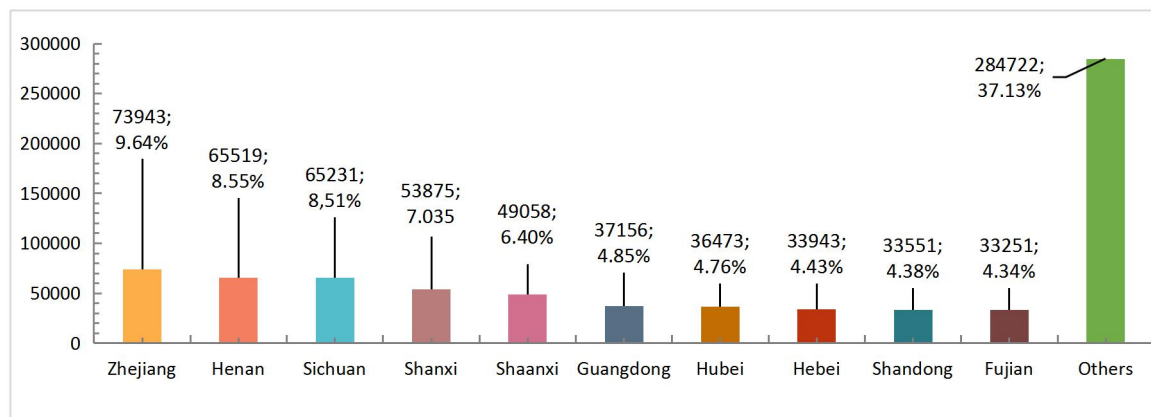


4-1: Statistics Category of Chinese Cultural Relics in 2011

Thirdly, due to the increasing process of urban and rural modernization, it came into operation *The Third National Survey of Cultural Relics* in China from 2007 to 2011. According to an announcement of the State Council in 2007, it requested the content of this survey focusing on newly discovered immovable cultural relics; meanwhile, it checked twice nearly 400,000 immovable cultural relic (NCHA, 2009; Teng, 2020). It was a survey containing name, geographic location, GPS coordinates, protection level, age, category, ownership, usage, preservation status,

damage reason, natural environment, and cultural environment of each object or site (Teng, 2020). In order to strengthen the organizational leadership and coordination, it was decided to establish a leading group by the State Council, whose main tasks were organizing, leading and solving major issues (Teng, 2020). The leading group office and the National Cultural Heritage Administration released basic information approved by the National Bureau of Statistics: the number of immovable sites reached 766,722 units, which was more than 200% increasing from the second survey, and there were 536,001 sites of immovable heritages, which accounted for 69.91% of the total number³⁸. For instance, there were 193,282 archaeological sites, 139,458 ancient tombs, 263,885 ancient architectures, 24,422 grottoes and stone carvings, 141,449 cultural relics of modern and contemporary era, and 4,226 others (Wang, 2017; see 4-1). There were top ten provinces and cities for Distribution of Chinese Cultural Relics (see 4-2). So, they were 62.89% of the total.

Therefore, through holding on *The National Survey of Cultural Relics* for three times, the following results are basically obtained: the total amount, distribution, type, age and other general conditions of immovable heritage sites in China. Furthermore, it has been determined the necessary information about the owners, such as ownership, usage, humane environment and natural environment. Lastly but not least, it has confirmed the basic conditions of each heritage, such as the protection level, conservation status and damage factors.



4-2: Province Distribution of Chinese Cultural Relics in 2011

³⁸ <http://english.www.gov.cn> (last consultation August 15, 2020).

4.2.2 The First National Survey of Movable Heritage in China

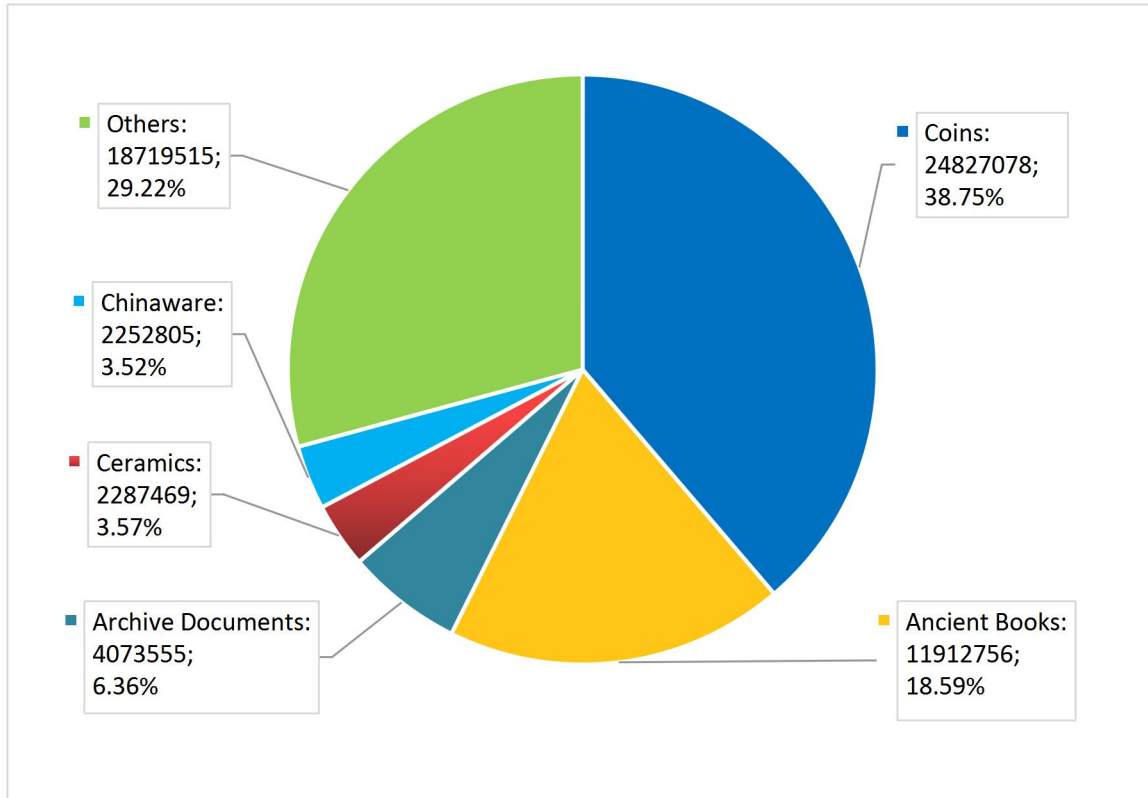
After the surveys of cultural relics carried out for three times, it has performed *The First National Survey of Movable Heritage* from October 2012 to December 2016 (Work Office for The First National Survey of Movable Heritage in the State Administration of Cultural Heritage, 2014). The Movable Heritage refers to important real objects, artworks, documents, manuscripts, book materials, etc. in various eras in Chinese history, which are divided into the “precious cultural relics” and the “general cultural relics” (Li, 2006; Li, 2018). The target of this survey is state organizations and offices, public institutions, nationalized enterprises, other state-controlled companies and state-owned units at various levels within China (excluding Hong Kong, Macau and Taiwan), and including “the movable heritage before the survey” and “the state-owned movable heritage newly identified”³⁹.

There were three stages of the survey: the first stage was set up from September to December 2012, aiming at developing standards and norms, implementing the relevant software, and conducting the training and pilot work. The second stage ranged from January 2013 to December 2015, and the main task was to conduct the investigations for heritage identification, information collection and review. Finally, the third stage proceeded from January 2016 to December 2016, with the main task of analyzing and aggregating the data, then building databases and publishing the results. Then, the State Administration of Cultural Heritage announced the results of this survey on April 7, 2017⁴⁰.

Firstly, there was a total amount of 108,154,907 pieces/sets of the state-owned movable heritage in China. Based on a uniform standard, there were 26,610,907 pieces/sets that were registered with complete information of heritage, and the paper archives at all levels were 81,544,000 volumes/pieces.

³⁹ Ibid.

⁴⁰ Ibid.

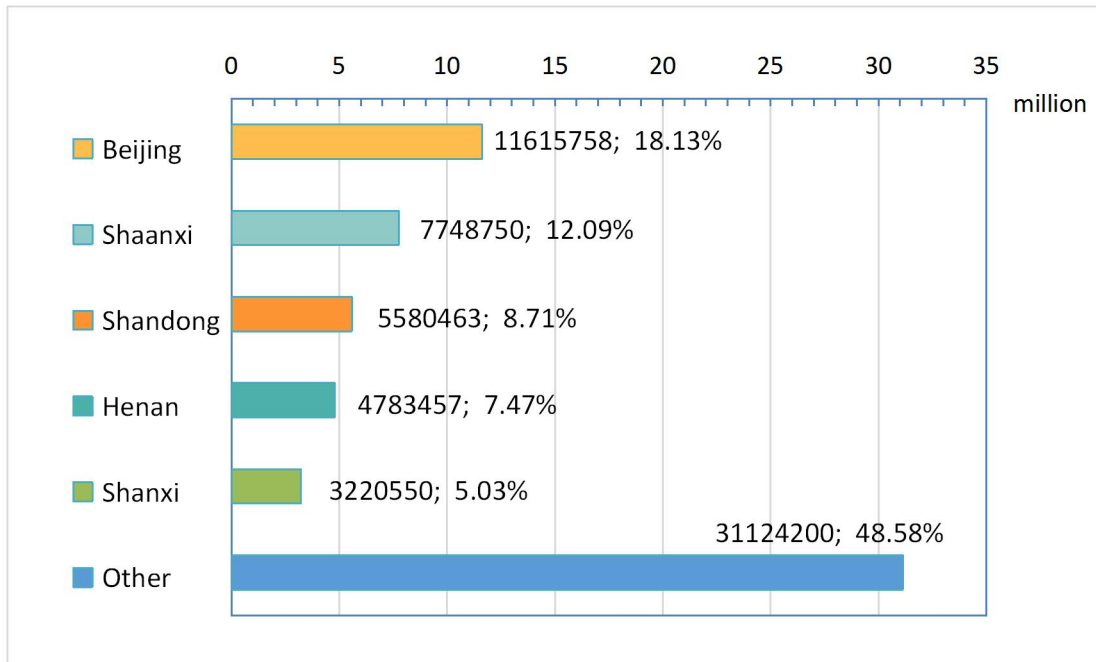


4-3: Statistics Category of Chinese Movable Heritages in 2016

Secondly, according to the Statistics of Categories of Chinese Movable Heritages (see 4-3), the five categories with the largest number were: coins with 24,827,078 pieces that accounted for 38.75%; ancient books were 11,912,756 pieces, that accounted for 18.59%; archival documents were 4,073,555 pieces, that accounted for 6.36%; Ceramics were 2,287,469 pieces, that accounted for 3.57%; and the Chinaware were 2,252,805 pieces, that accounted for 3.52%. In conclusion, the total number of the above five categories were 45,353,663 pieces, that accounted for 70.79% of the total pieces⁴¹.

Thirdly, the top five provinces and cities that own movable heritage were Beijing, Shaanxi Province, Shandong Province, Henan Province, and Shanxi Province (see 4-4). These five provinces and cities represent 51.43 % of the total.

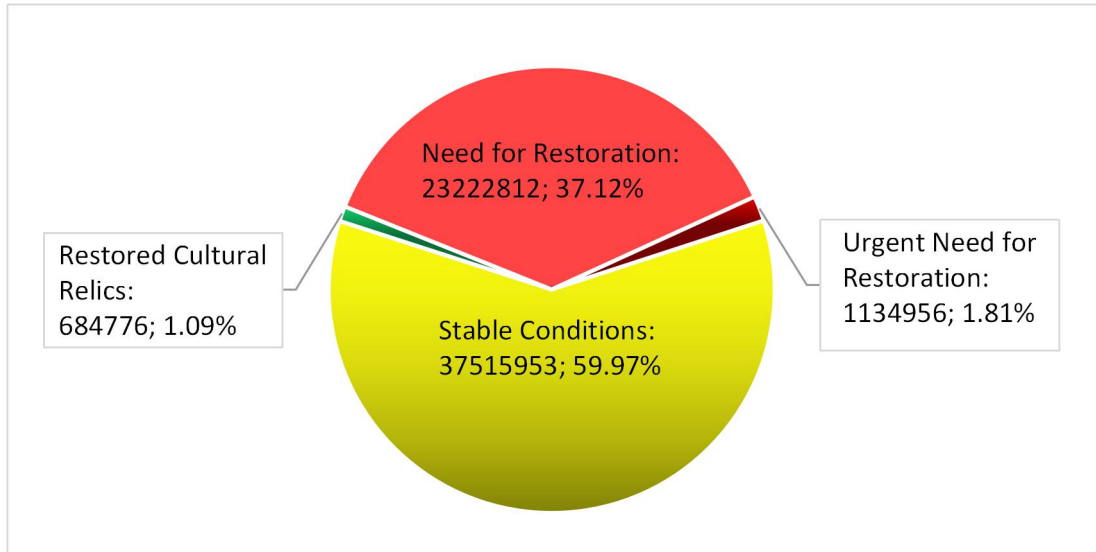
⁴¹ Ibid.



4-4: Distribution Statistics of the Top Five Provinces and Cities of Movable Heritages in 2016

Fourthly, according to the *Statistic of the Preservation State of Movable Heritage*, the numbers were like these (see 4-5): there were 1,134,956 cases “urgently needed to be restored” due to serious damage of corrosion; there were 23,222,812 cases with “partially need to restoration”; there were 684,776 cases which have been “already restored”; there were 37,515,953 cases in a “stable condition”. Therefore, there were a total number of 62,558,497 considered cases, and the sum of the two items of “Urgent Need for Restoration” and “Partially Need for Restoration” accounted for 38.93% of the total⁴².

⁴² Ibid.



4-5: Statistics of the Preservative State of Movable Heritages in 2016

In performing *The First National Survey of Movable Heritage*, it has been essential to keep a comprehensive picture of distribution, ownership, preservation status, and use management of state-owned movable heritage. In addition, it has created a national platform and database to check the information on cultural heritage. Through a quality random check of data by 31 provincial administrative regions, the error rate of data-filling was less than 0.5%⁴³.

4.2.3 Analysis of Current Situations of Chinese Cultural Heritage

Based on *The National Survey of Cultural Relics* for three times and *The First National Survey of Movable Heritage*, important current situations about issues involved of cultural heritage in China were so raised.

Firstly, the characteristics of cultural heritage in China are large quantities, multiple categories and widely distributed. The catalog distinguishes between tangible and intangible cultural heritage, and then tangible cultural heritage contains immovable and movable heritage. Besides the data which have already been described above, the immovable heritage sites in China reached 766,722 sites in 2011, among which there were 5,291 sites as the *Key and National Conservation Units*; 134 sites as the *National Historical and Cultural Cities*; 252 as the *National*

⁴³ Ibid.

Historical and Cultural Towns; 276 as the *National Historical and Cultural Villages*; and finally, there were 31 as the *National Historical and Cultural District*⁴⁴. Moreover, it has been collected 108 million pieces/sets of cultural relics in the state-owned museums in China, as well as a large number of private collections of cultural relics. Lately, there were 5,535 museums having been registered in China by the end of 2019. Among them, 1,710 were non-state-owned museums.

Secondly, the disappearance of some cultural heritage and the reduction of the number of statistics are quite large phenomena. For instance, there were 30,955 pieces registered on the first investigation but they disappeared by October 31st, 2009⁴⁵. The primary reason for this phenomenon is that although the governments and departments at all levels strive to avoid the cultural relics in their construction projects, there are still situations where the cultural relics cannot be avoided. Another reason is caused by major natural and geological disasters. For instance, the Wenchuan earthquake⁴⁶ caused severe problems to more than 100 national key cultural relics in Sichuan province, Chongqing city, Gansu province, and Shaanxi province (Teng, 2020). Another instance was the rainstorms in the southern country that posed a huge threat to the local cultural relics in 2009 (Teng, 2020). Meanwhile, the administrative violations, criminal offenses and the destruction of cultural relics by living activities have also caused the disappearance of many cultural relics.

Thirdly, the conservation state of cultural relics is still a troubling issue. All the basic units in poor storage conditions have outdated cabinets and small warehouse areas, so they cannot properly store cultural relics. Among them, there are a few of them without warehouses for cultural relics, so some precious culture relics are eroded by dust, light and harmful polluted gases in the air. At the same time, the incomplete equipment for conservation and restoration may also cause lack of technical conditions for the preventive conservation of cultural heritage.

Fourthly, there is a lack of professional people who are specialized for the cultural relics and the museums. According to the data giving by the National Bureau of Statistics in China, there have been 10,160 organizations relating to cultural relics and museums, among which there have

⁴⁴ <http://gl.sach.gov.cn> (last consultation August 25, 2020).

⁴⁵ Ibid.

⁴⁶ The Wenchuan earthquake happened in Wenchuan city, Sichuan province of China, in 2008.

been 4,918 museums, 3,550 regulatory organizations of cultural relics, 122 scientific research organizations of cultural relics, 64 cultural relics shops, and 1,506 other organizations of cultural relics by the end of 2018 (National Bureau of Statistics in China, 2019). For another instance, according to *The First National Survey of Movable Heritage*, the average custodian needs to keep movable cultural relics for 2,290 items (Work Office for The First National Survey of Movable Heritage in the State Administration of Cultural Heritage, 2014). From these relatively small numbers, an issue of professional education or training has become fundamental for development of heritage conservation.

4.3 A Comprehensive System of the Cultural Heritage Conservation in China⁴⁷

Recently, a comprehensive system of the cultural heritage conservation is implemented in China, based on respect for the natural and ecological environment, historical changes, shaping the fundamental and national legalization and regularization of conservation, aiming at conservation, preservation, utilization and inheritance of cultural heritage, taking into account the main mechanisms – social, cultural and economic of the whole society, and focusing on a suitable process of standardizing and normalizing of cultural heritage, which is guaranteed by the national financial special funds in China. Inside this program, three systems have emerged: the Legal and Regulatory System, the National Organization System, and the Educational and Training System of Heritage Conservation.

4.3.1 The Legal and Regulatory System of Heritage Conservation

Over a hundred years of exploration and practice, it has established a legal and regulatory system for cultural heritage conservation in China, centered around the legislation, whose main link is the public participation, and guaranteed by special funds. The history of this system could be divided into three stages.

⁴⁷ All the Chinese legal names here are combined with the English translations (which are translated by myself) and the Chinese characters together.

Firstly, there was an emerging phase before 1950. The earliest law in the protection of cultural heritage in the 20th century is representative of the rise of Chinese laws. But before that period, there were many other regulations and practices. According to the recorded history, the *Regulation on Methods of Cultural Relic Protection* (保护古迹推广办法章程) by the government of Qing dynasty in 1906 was the earliest regulation in the Chinese land (Li, 2018). This was the first national policy in the form of a government proclamation, so it has started a prelude of the legalization about this subject. Although the regulation issued by the government of Qing dynasty was not a law in the true sense, it still showed an awakening of cultural heritage protection in the government and people. This regulation contained two different aspects relevant, respectively, to the investigation matters and the preservation matters. That regulation made specific provisions on the protection of cultural relics, and required their implementation in each province. Although this regulation still left much to be desired, it was more tailored and practical to use. For instance, it stressed the social investigation and protection of the “original state” of cultural relics and historical sites, forcing on the historical and artistic value of cultural relics and historical sites, and making a special mention that using *The law of war* to protect cultural relics during the international wartime (Li, 2018). These all fitted well with the modern methods of preserving cultural relics. In addition, in the *Regulations on urban, township, and village self-government* (城镇乡地方自治章程), issued by the government of Qing dynasty in 1909, it is listed that the “self-government issues” refer to the “saving of historical sites” and the “poverty relief sector, the poor crafts sector, and the organizations of life-saving and fire” (Huang, 2012b). Moreover, this pioneering regulation was concerned with the “protection of antiquities and monuments”, and was more specific than that promulgated three years before. After the Republic of China was built up, the Ministry of Internal Affairs of the Beiyang government drafted the *Interim Procedures for the Preservation of Antiquities* (保存古物暂行办法) in 1916 (Huang, 2012b; Li, 2018). However, this document was only a temporary emergency document, and did not appear in the form of formal legislation.

The first national law of the conservation of cultural heritage with its modern meaning was *The Antiquities Conservation Law* (古物保存法) in 1930 (Huang, 2012a; Li, 2018). This law was issued by the National Government of the Republic of China, which was the central government in the modern Chinese history. It included a total of 14 articles, which clarified the meaning and scope

of antiquities, and made specific provisions on problems, such as the ownership, the excavation, and the circulation of antiquities (Huang, 2012a). In order to be better collaborated the implementation of this law, there were other laws being promulgated from 1931 to 1935 by the government of the Republic of China (Huang, 2012a). However, due to the turbulent situation and the state of internal and external troubles, the national sovereignty had to be protected, so the formulation process of this important law was still unclear at that time. Thus, these legislations and regulations were basically not implemented. Moreover, a large number of cultural relics were still in a state of unmanaged and considerable loss in various places.

Secondly, there was a growing interest during the period from 1950 to 1980. After the founding of New China, the conservation and protection of cultural relics or cultural heritage received the special attention of the Central People's Government, so the legislation of this topic entered into a growing period. For instance, the Government Administration Council of the Central People's Government in 1950 stipulated the protection measures for the historic sites, the precious cultural relics, ancient books and rare creatures, and issued the *Temporary Rules on Prohibition against the Exportation of Precious Cultural Relics and Books* (禁止珍贵文物图书出口暂行办法) and the *Interim Measures for the Investigation and Excavation of Ancient Cultural Sites and Ancient Tombs* (古文化遗址及古墓葬之调查发掘暂行办法), preventing the outflow of precious cultural relics inside China to abroad (Li, 2006). Later, the *Provisional Regulations on the Protection and Control of Cultural Relics* (文物保护单位暂行条例) was promulgated by the State Council in 1961, followed by the *Instructions for Further Strengthening the Protection and Management of Cultural Relics* (关于进一步加强文物保护和管理工作的指示) (Li, 2006). In accordance with these laws and regulations, a system of national key units to be protected was developed, and their news published. In the same year, it was announced the nomination of 180 "national key units to be protected" (全国重点文物保护单位) by the State Council (Li, 2006). Then, the *Interim Measures for the Protection and Management of Heritage Protection Units* (文物保护单位保护管理暂行办法) and the *Interim Measurements for Management Issues of Revolutionary Monuments, Historical Monuments, Ancient Buildings and Grotto Temples* (革命纪念建筑、历史纪念建筑、古建筑、石窟寺修缮暂行管理办法) were issued by the Ministry of Culture

of China in 1963⁴⁸ Furthermore, the *Interim Measurements for Management Issues of Investigation and Excavation of Ancient Heritage and Ancient Tombs* (古遗产、古墓葬调查、发掘暂行管理办法) was issued by the State Council in 1964, which was further supplemented and improved of the regulations of 1961⁴⁹. Moreover, regarding the action of digging graves and collecting treasures without approval in any place, the State Council promulgated the *Notice on Strengthening the Protection of Cultural Relics* (关于加强文物保护单位的通知) in 1974⁵⁰. This regulation was required to strengthen the protection of cultural relics so as to avoid loss of a group of precious cultural relics during the Cultural Revolution.

Thirdly, a prosperous stage started from 1980 and proceeds till today. Since that time, the opening up in China has been accelerated, so the country has increased the cultural exchanges and cooperation with other countries all around the world, especially Europe. A lot of international cultural scholars share their ideas and concepts of cultural heritage, for instance the work and book by Cesare Brandi from Italy had a profound impact on the concept of Chinese cultural heritage conservation, and promoted a rapid development period of it. In 1980, the State Council approved and transmitted to the State Administration of Cultural Heritage and the Construction Commission the *Report on Strengthening the Protection and Management of Ancient Buildings and Cultural Relics* (关于加强古建筑和文物古迹保护管理工作的请示报告) and the *Notice on the Enhancement of the Protection of Historical Monuments* (关于加强历史文物保护单位的通知) (NCHA, 2009), that they issued. These reports introduced effective measures to strengthen management and to stop destruction of cultural relics since the end of the “Cultural Revolution”. Thus, from this period, the protection work of cultural relics has entered a normalized track.

There were three major events in 1982. The State Council promulgated the *Law of the People's Republic of China for the Protection of Cultural Relics* (中华人民共和国文物保护法), which was the first law promulgated by the national highest legislature, and was also the first time in Chinese history that the protection work of cultural relics has been defined in the form of laws

⁴⁸ <http://gl.sach.gov.cn> (last consultation August 25, 2020).

⁴⁹ Ibid.

⁵⁰ Ibid.

and not simple regulations (Li, 2006; NCHA, 2009). It included 8 chapters and 80 articles, clearly stipulating the basic principles of definition of the objects, the scope and the relationships, covering immovable cultural relics, archaeological excavations, cultural relics in collections, cultural relics in private collections, cultural relics in and out of China, and legal liabilities, as well as clarifying the fiscal budget required for cultural relics protection (Li, 2006). Later, the State Council approved and transmitted to the Construction Committee, the State Urban Construction Bureau and the Cultural Heritage Bureau, the *Notice of Request Regarding to the Protection of the Historical and Cultural Cities of Our Country* (关于保护我国历史文化名城的请示的通知) that they immediately issued. This regulation marked the official launch of the system of the “historical and cultural cities”, and it announced the first batch of 24 “national historical and cultural cities” (国家历史文化名城) and the second batch of 62 “national key units to be protected” (全国重点文物保护单位). Meanwhile, China also strongly pursues museum development, and has included “historical sites, precious cultural relics and other important historical and cultural heritage under the protection of the State” in the Constitution of the PRC to ensure the development of the undertaking of museums from the basic legal level (NCHA, 2009). One year after these initiatives, the Chinese Society of Museums joined the International Association of Museums under the The United Nations Educational, Scientific and Cultural Organization (UNESCO), circumstance that marked the emergence of Chinese cultural relics on the international stage (NCHA, 2009).

In 1985, the Chinese government approved the *Convention Concerning the Protection of the World Cultural and Natural Heritage* by the UNESCO, and officially became a contracting party (ICOMOS China, 2002, 2015). This *Convention* stipulates the definition of cultural and natural heritage, national heritage conservation, and international conservation measures. At the same time, it is stipulated that each contracting party can determine the cultural and natural heritage within its own territory, and submit the list of heritage to the World Heritage Committee for reviewing and approving by the World Heritage Conference. Then, the first batch of 6 heritage items was included in the “World Heritage List” since 1987, which indicates that the heritage undertaking in China has further integrated with the world policy (ICOMOS China, 2002, 2015).

In 1989, in order to strengthen the international cooperation for the historical and cultural

heritage conservation, the Chinese Government also approved the *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property* by the UNESCO (ICOMOS China, 2002, 2015). Thus, the diverse names and meanings of “cultural relics, cultural heritage, and cultural property” have been widely recognized by the government and the Chinese people. Then in 1992, the State Council held a national conference on cultural heritage work in Xi'an, which clearly set out the policy for cultural heritage in this new political period. It has issued for “focusing on protected and giving the first place to rescue”⁵¹. Later, the State Council put forward the principle of “effective protection, rational use and enhanced management” in 1995⁵². This act allowed promoting and accelerating the development of a complete system of the cultural heritage conservation.

Furthermore, the Chinese government joined the *Convention on Stolen or Illegally Exported Cultural Objects (UNIDROIT)* that was signed in Rome, Italy, in 1995, and entered into force from 1997 (ICOMOS China, 2002, 2015). In the same year, the State Council issued the *Notice on Strengthening and Improving the Work on Cultural Heritage* (关于加强和改善文物工作的通知), clearly proposing a system of cultural heritage conservation which is focused on the national protection and the participation of the whole society⁵³.

In 2002, the revised *Law of the People's Republic of China for the Protection of Cultural Relics* (中华人民共和国文物保护法) was issued. The principle of focusing on “protection, giving first place to rescue, reasonably utilization and strengthening the management” has raised the national legal provision (ICOMOS China, 2002, 2015). Later, the State Council issued the *Notification of Strengthening Protection of Cultural Heritage* (关于加强文化遗产保护的通知) in 2005⁵⁴, which was introduced in order to clarify the ideology, overall goals and specific measures for cultural heritage conservation. Moreover, from 2006, the State Council has designated the “Cultural Heritage Day”, which is the second Saturday of June of each year⁵⁵.

In 2007, the *Notice of Conducting the Third National Survey of Cultural Relics by the State*

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

Council (国务院关于开展第三次全国文物普查的通知) was released, which was managed in the period from April 2007 to December 2011 (ICOMOS China, 2015). With this respect, all the national museums are freely accessible since 2008 (Li, 2018).

In 2012, the State Council issued the *Notice of the First National Survey of Movable Heritage* (关于开展第一次全国可移动文物普查的通知), that was performed in the period from October 2012 to December 2016⁵⁶. Furthermore, in 2015, the State Council promulgated the *Regulations on Museums* (博物馆条例) to bring the development of museums into the orbit of the national rules (Li, 2018). Moreover, in 2016, the State Council provided the *Guidance on Further Strengthening the Cultural Heritage Work* (关于进一步加强文物工作的指导意见), and held a national conference on cultural heritage to make comprehensive arrangements for this work in the new period⁵⁷. Later, in 2017, the General Office of the State Council issued the *Implementation of Further Strengthening the Safety of Cultural Heritage* (关于进一步加强文物安全工作的实施意见), which pointed out that “cultural heritage is the spiritual and cultural symbols of the Chinese civilization, and is the emotional support and material carrier of the national symbols and the national memory. The conservation of cultural heritage is equal to conserving the history of the national groups and keeping the nation's roots and souls of a country. Heritage safety...(is) an important content for promoting the traditional culture, building a socialist cultural power, and safeguarding national cultural security of China”⁵⁸.

Up to now, the concept of heritage conservation in China has shifted from the “rescue protection” to the “rescue and preventive conservation” and the “multifaceted conservation between heritage body and surrounding environment”⁵⁹. China has already reached more than sixty laws and regulations on the cultural heritage conservation, as well as it has joined four international conventions on the same subject. Assuming the system of the *Law for the Protection of Cultural Relics* (文物保护法) as the core, the administrative regulations and other various regulations have formally and practically taken shape.

⁵⁶ Ibid.

⁵⁷ Ibid.

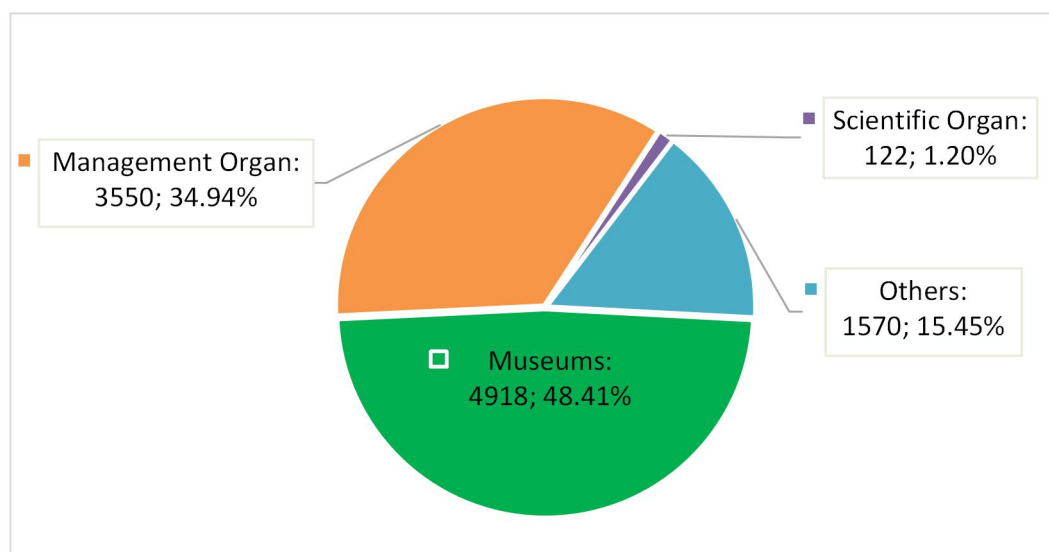
⁵⁸ <http://english.www.gov.cn> (last consultation August 28, 2020).

⁵⁹ <http://gl.sach.gov.cn> (last consultation August 28, 2020).

4.3.2 The Public Utilities and Organizations of Heritage Conservation

Generally, the public utilities and organizations of heritage conservation are managed by the government in China, as a significant component of the cultural undertakings. With the old name of the State Bureau of Cultural Relics, this administrative body was established under the Ministry of Culture at the end of 1949. After many twists and turns, the National Administration of Cultural Heritage (NACH) has been definitely established till now under the jurisdiction of the Ministry of Culture since 1988, and is responsible for the national heritage and museums.

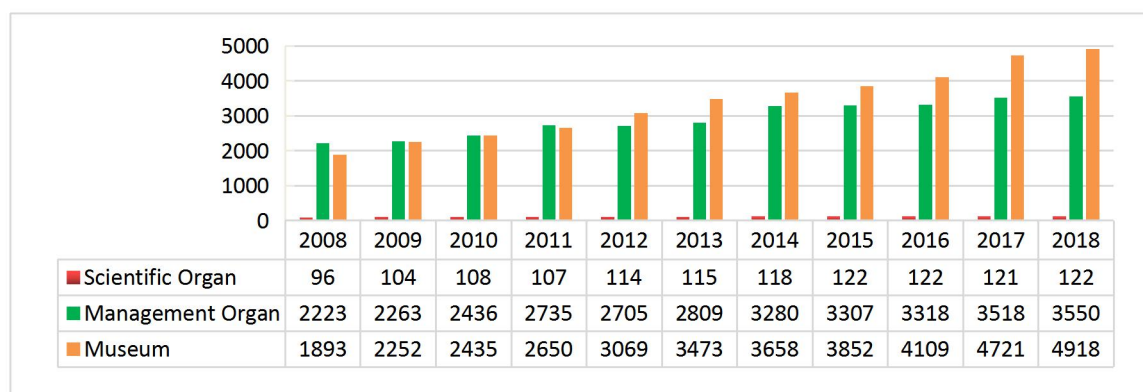
In China, the public utilities and organizations include three types: the management organization of cultural heritage, the scientific organization of cultural heritage, and the museums⁶⁰. All of them have been developed at a constant rate. According to the *China Statistical Yearbook 2019* by published by the National Bureau of Statistics of China, at the end of 2018. there were 10,160 of various public utilities and organizations of heritage and museums. Among them, 4,918 are organizations of museums, 3,550 management organizations for cultural heritage conservation, 122 scientific organizations for cultural heritage conservation, and 1,570 administrative bodies of other organizations (see 4-6).



4-6: Statistics Category of Chinese Cultural Heritage Organizations in 2018

⁶⁰ <http://english.www.gov.cn> (last consultation September 10, 2020).

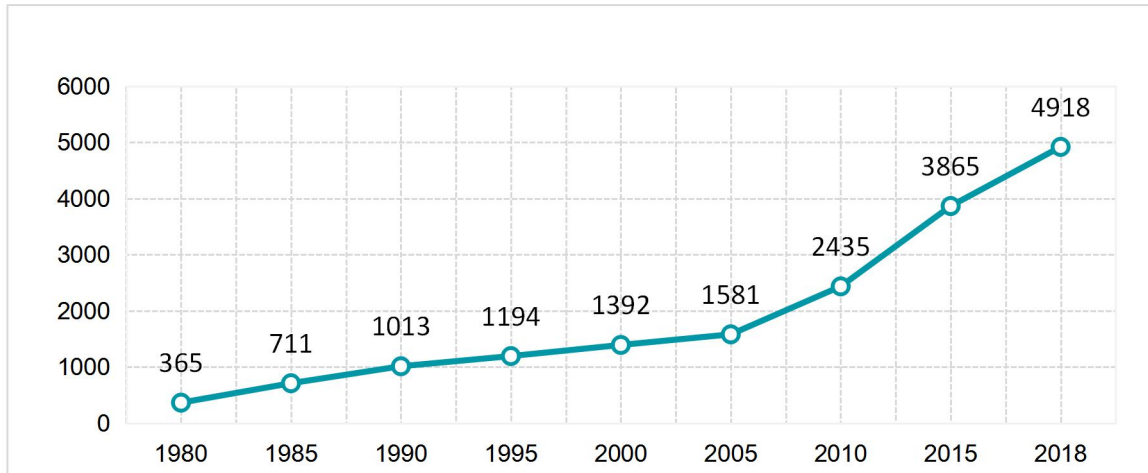
The number of the national public utilities and organizations are steadily growing from 2008 to 2018 (see 4-7). For instance, the number of museums has been increasing every year from 44.94% in 2008 to 57.25% in 2018. However, the number of the management organizations of cultural heritage has been going down from 52.78% in 2008 to 41.33% in 2018. Moreover, the number of museums has exceeded the number of management organizations of cultural heritage for the first time since 2012, and has continued to maintain a leading position among the public utilities and organizations of cultural heritage.



4-7: Statistics Category of Chinese Cultural Heritage Organizations (2008-2018)

In more specific terms, the museum is a place for collecting, storing, displaying and researching physical objects, which represent natural and human cultural heritage, as well as a social public institution, buildings and places that provide knowledge, education and appreciation to the public. With the rapid development of the advanced Chinese culture and technology, the number and variety of museums have grown substantially, forming a museum system with diversified types of the state-owned museums, provincial museums, private museums, and so on. China has been increasing its construction effort in specialized museums, memorial museums and comprehensive museums since 1980⁶¹. In particular, as already outlined, the number of various museums has expanded rapidly since 2005 (see 4-8).

⁶¹ <http://www.stats.gov.cn/english/> (last consultation September 10, 2020).



4-8: Statistics of the Number of Museums (1980-2018)

Moreover, all the state-owned museums have been free and open to the public since 2008, while 250 million euros of special funds are allocated by the Central Government every year to speed up the integration of museums into society, with unprecedentedly improvements of the cultural tradition and the social attention of museums, and further to enhance the public cultural service capabilities and social benefits⁶².

4.3.3 The Educational and Training System of Heritage Conservation

The cultural heritage conservation in China not only deals with a huge amount of heritage, but also with an enormous quantity of damaged objects. That is why a large number of skilled personnel in the field of heritage conservation and restoration is urgently required, whom have innovative and practical abilities. So the educational and training of specialists in conservation and restoration is a fundamental and important condition for any further development of the cultural heritage system in China.

With the implementation of the strategy to build a strong nation of socialist culture, the endeavor of conservation and restoration gradually moves from behind the scenes to the front stage. By this way, the public and the government have been aware of the trade and industry of

⁶² Ibid.

conservation and restoration. For instance, in 2005, eight professionals in cultural relic and museum field entered into the “development of key talent through focus area” by the *Shanghai Catalogue of Talent Development in Key Fields* (上海市重点领域人才开发目录), promoted under the Shanghai government: the talents of cultural management, the talents of ancient Chinese cultural heritage research, the talents of modern Chinese cultural heritage research, the talents of history and archeology, the talents of science and technology about cultural heritage conservation, the talents of cultural relics restoration, the talents of design for cultural relics exhibitions, and the talents of cultural relics business⁶³. Later, in 2020, the *Shanghai Catalogue of Short of Talents Development in Key Fields of (Industry)* (上海市重点领域(产业类)紧缺人才开发目录) was issued by the Shanghai government⁶⁴. The professional fields of these talents cover almost all the aspects of cultural relics and museums, so the duty to develop talents with high-professional levels and strong capabilities remains the top priority.

Concerning the adopted methods of training professionals of heritage conservation and restoration, there are general three modes: firstly, establishing the related disciplines, such as Archeology and Museum Studies in higher institutes, universities or colleges to give students professional education of bachelor, master or doctor levels; secondly, holding the short-term training or special training of vocational skills by the government agencies of cultural relics and museums, or jointly establishing the professional degree education of universities and the government agencies of cultural relics and museums; lastly, continuing to use the ancient Chinese traditional mentorship system to pass on the skills of conservation and restoration through talking the words of mouth or without any saying. At present, this method is limited to a few museums with a high level, such as the Palace Museum in Beijing.

4.4 Summary

The development of the cultural heritage conservation in the main land contains the unique spiritual values of thinking and imagination in China. As a country with a considerable number

⁶³ Ibid.

⁶⁴ Ibid.

of cultural heritage sites and objects, China has a long tradition of the inheritance and conservation of them. Thus, from the original concept of the traditional cultural heritage conservation and restoration to learning of the concept, principles, techniques and methods of the conservation and restoration of the modern cultural heritage from other nations, nowadays China has built three kinds of issues.

Firstly, the three major issues have been basically formed. They are the system of laws and regulations, the administrative management and the education and training for the cultural heritage conservation.

Secondly, the accurate situations of cultural heritage have been clarified, as well as the problems to be solved in the conservation of cultural heritage.

Thirdly, the strategy of the sustainable development of the cultural heritage conservation has been initially established. The form of the cultural heritage conservation has been changed from rescue protection to combination of rescue protection and preventive conservation together. Moreover, the subject of cultural heritage conservation has been transformed from the ontology of cultural heritage to the deep integration with surrounding environment.

Chapter V: Inspiration Provided by Cesare Brandi to China

In this regard, the Theory of Restoration is just a book of proof and principles, not a boring one only with theorems that seems to be imposed on others. For those who are already well aware of this proof process and principle, this book is indeed “old”; but for those who are not yet clear about where do the various concepts and principles in international conservation documents come from, such as the Venice Charter, and what do they mean for people, especially on conservation of material cultural heritage in China. This book is indeed very, very “new”. The translator believes that this is the most important significance of our introduction, translation and promotion of this book.

Lu Di⁶⁵

The conservation and restoration of cultural heritage has received unprecedented attention in the Chinese society of today, especially the management of the cultural heritage conservation. The emergence of some events and topics related to it has aroused the attention and discussions of people on cultural heritage. The understanding of cultural heritage importance has gradually surpassed the traditional value cognition level, and moved to a wider range.

However, the Chinese history of cultural relics has been quite far way, which has produced its own concept of cultural relics conservation and restoration long ago. Taking into account the

⁶⁵ From Lu, D. 2016, “Preface from a Chinese translator”, in *Theory of Restoration in Chinese*. This paragraph is translated by me.

restoration of the painting as an instance, in the Six Principles of Chinese Painting by Xie He⁶⁶ of the Southern Dynasties (about 6th century), he proposed a complete framework from expressing the inner spirit of the object and the personal emotion and evaluation of the object itself, to using the shape, structure and color of the object portrayed by the brush, as well as the composition and copy work. Later, these Six Principles became a standard and important aesthetic principle for the evaluation of works of ancient Chinese art. However, because our traditional context has not been systematically sorted out and studied, the abstract concepts in the theory of the conservation and restoration of cultural relics and heritage are often not correctly understood by people in practice. Later, in the Tang Dynasty (618-907 CE), the court set up special agencies about painting and calligraphy, in which papermakers and decorators were skilled, then engaged in the mounting and restoration of paintings and calligraphy in the palace (Chu, 2012). Unfortunately, this job entangled with “falsification” from the very beginning, so it has been difficult to distinguish which were the real cultural relics, and the concept of restoration become even more ambiguous. Moreover, the cultural relics in China are very widely in range of typologies. Therefore, the cognition of the meaning of cultural relics requires specific knowledge reserves, and art has a true universality with its intuitive spiritual feeling.

Currently, the theory of the cultural heritage conservation can be recommended from the European experience. Some discussions and studies on whether the contemporary theories of conservation and restoration are applicable to the Chinese cultural heritage conservation have always remained open questions in various fields of conservation and restoration of the majority of cultural heritage. To be in charge of cultural heritage is a quite complex task. What we need to face is not only the object itself, but also the intangible values of culture, history, ethnicity and beliefs behind it. However, the theory of conservation and restoration is proposed just to provide us with the basic methods and capabilities for helping how to view and judge these values. In order to build the theoretical system and practice standards of the oriental conservation and restoration of cultural heritage, it is undoubtedly one of the most convenient

⁶⁶ Xie He was a Chinese writer and art critic of Liu Song and Southern Qi Dynasties about the 6th century. He wrote the *Six Principle of Chinese Painting* (绘画六法) in the preface of the his book *The Record of the Classification of the Old Painters* (古画品录).

and important ways to understand and study the existing cultural heritage conservation theory in Europe, especially in Italy, who possesses one of the largest number of the historical, archaeological and artistic resources in the world, as well as a high degree of national protection awareness, a good regulation and a legal system and the advanced conservation technology. Thus, Italy has been a world leader in the theory and practice of cultural heritage conservation, thanks also to Cesare Brandi, founder and first director of the ICR and the author of this book.

As firstly published in 1963, then in a revised edition in 1977, this book named *Teoria del Restauro* (*Theory of Restoration* in English), has established the international principles in the field of contemporary heritage conservation and restoration, and has made one of the most significant contributions in the area of the research and education of the theory of conservation and restoration. The author is Cesare Brandi (1906-1988), the first director of the ICR in 1939 to 1961. He is a representative figure in the field of conservation and restoration in 20th century. His discussion on these topics plays a foundational role to the formation of the modern conservation theory of cultural heritage, summing up the decades of valuable experience in the practice of restoration of cultural heritage, and absorbing the latest achievements of modern western aesthetics and psychology of the theory of conservation and restoration.

After being translated in more than twenty languages, this book has been translated to Chinese by Tian Shigang and Zhan Changfa in 2006, and has been edited by the ISIAO (Italian: Istituto Italiano per l'Africa e l'Oriente, closed in 2012). His book has a very important reference significance for China in order to establish a modern cultural heritage conservation thought, and a system framework, and it played a positive role in promoting the rapid development of that field in China. Unfortunately, because of various reasons, this book was not formally published in China.

Later, the book has been re-translated to Chinese by Lu Di, and has been edited by the Tongji University Press in 2016. Consequently, this book had a wider spread in China once again. It produced strong repercussions among the museums, the cultural and creative sectors, and the professionals of conservation and restoration, as well as the students of universities in China. It is also an important academic reference literature for China to learn from the Italian advanced cultural heritage conservation concepts and restoration principles, technologies and

methodologies. The Chinese version of the book contributed significantly to the growth of cultural heritage conservation in China, not only by providing theoretical support for restoration of a series of precious cultural heritage, but more fundamentally it showed a group of specialized talents what we do think today for the future.

5.1 The Twice Translations of *Teoria del Restauro* by Brandi in Chinese

The book named *Teoria del Restauro* in Italian by Cesari Brandi, is not only a classic in the field of the European cultural heritages conservation, but also a masterpiece of the modern western applied aesthetics. It is the major work of his writings on this subject, which underlines the theoretical criteria inspiring the activities of the author, and gives the confirmations, insights and clarifications from artistic and aesthetic experience to the audiences, trying to apply the informative and theoretical tools to the real life. It was firstly published in Edizioni di Storia e Letteratura in 1963, then its reprint version sorted in Einaudi in 1977.

To the other side of the earth, this book was rarely known and understandable in China, because the original version was in Italian in 1963, and the English version was published only in 2005. And China and Italy have cooperated to carry out a number of professional training programs in the field of cultural heritage conservation combining theory with practice since 1995. These programs were basically carried out in China. In the training held by Xi'an Cultural Relics Conservation and Restoration Center and Beijing China-Italy Cultural Relics Conservation and Restoration Center, several experts of restoration from the ICR introduced the modern ideas and practical experience of Italy to the trainees. Among them, the book of Brandi with its new concept and method of restoration of cultural relics not only deeply attracted the focus point of the trainees, but also inspired their enthusiasm for in-depth study and research. Due to the difficulty of reading and teaching in Italian, the Chinese teachers and trainees urgently claimed a Chinese edition of the book to learn more about the concept, technical standards and operating practices for cultural heritage conservation and restoration of Brandi.

After being translated in eight languages, this book has been translated to Chinese by Tian Shigang and Zhan Changfa for the first time, as previously quoted. On July 11, 2007, the Cultural

Section of the Italian Embassy in China organized an introduction event for this book, attended by many experts and scholars from China and Italy in the field of cultural art and relics conservation. However, this translation was not published in China due to many reasons, but this work is still worthy of attention and respect, because it is a pioneering stone for the communication and transfer of research results from Italy to China, and providing a suitable benchmark to check whether it is truly applicable or not to the Chinese reality.

Tian Shigang is a researcher of the Institute of Philosophy of Chinese Academy of Social Sciences, and a member of the International Gramsci Society now. He has devoted himself to the study of the modern Italian philosophy for many years, and his main works include *Remote and Condensation – The Italian Culture in the Twentieth Century*⁶⁷. He firstly graduated from Beijing Foreign Studies University with a Bachelor's degree in Italian. From 1978 to 1980, he went on to study under Professor Xia Zhentao in the Philosophy Department of the Graduate School of Chinese Academy of Social Sciences. From 1981 to 1983, he went abroad to gain a Master's degree of Theoretical Philosophy and Aesthetics of the University of Rome, under the tutelage of Lucio Colletti and Francesco Valentini. After returning to China, he worked at the Institute of Philosophy of the Chinese Academy of Social Sciences. Meanwhile, he also worked at the Cultural Section and the Research Office of the Chinese Embassy in Italy.

Zhan Changfa is a researcher in the cultural heritage conservation. He was the vice director of the Chinese Academy of Cultural Heritage (CACH), right now he is the secretary general of the China Foundation for Cultural Heritage Conservation. In history, he was the first Chinese person to be awarded with the medal of “Knight of the Benevolence Star of Italy” (in Italian: Cavaliere dell'Ordine della Stella d'Italia), conferred by the president of the Italian Republic. He graduated from the Department of Chemistry of Lanzhou University, China. In 1988, he was sent by the government to study to the ICR in Rome. In 1995, he returned to Xi'an with the project of the Xi'an Cultural Relics Conservation and Restoration Center (its name is Shaanxi Institute for the Preservation of Cultural Heritage right now) in cooperation with the Italian government. Then, he led a projects' group for the conservation and restoration under the guidance and advice of

⁶⁷ The name of the book is translated by me. The original one is 悠远与凝练——二十世纪意大利文化 by Tian, S. 1999, Beijing: Oriental Publishing House.

Italy, that executed important restoration works such as the Leshan Giant Buddha, the construction of the Sanxingdui Museum, the restoration center of the Chongqing Museum, and the maintenance of the Chongqing Huguang Building, etc.

That of Brandi is the initial book of our discipline, but as Jokilehto depicted (1999), "... its philosophical context is little known outside Italy". Nowadays, almost twenty years have passed, and the situation is different from the old days, when it was difficult for Chinese scholars to understand the cultural, historical and philosophical framework where a foreign learner was active, absorbed specifically in the restoration of artistic works of another culture; we still need much more spaces to do analysis, discussions, and explanations, trying to understand the restoration concepts of Brandi to be applied not only in Italy, but internationally, especially also in China.

Under the deep influence of the first translated version of *Teoria del Restauro*, China has not only restored a series of precious cultural relics, but has trained a group of specialized talents, which is a more fundamental aspect. This book is the backbone of the restoration of cultural heritage in China, as it was cultivated at that time. However, the problems facing China remained severe, for instance the lack of professionals and codes of practices, etc.

Since 2010, Tongji University in China and Pavia University in Italy have been jointly running schools. Each year, Tongji University selected a group of graduate students to study architectural heritage conservation for a master's degree in Italy. This book - the *Teoria del Restauro* of Brandi, so became one of the designated teaching materials for foreign students. Based on this motivation, in December 2016, Dr. Lu Di⁶⁸, an associate professor of Tongji University, re-translated the *Teoria del Restauro* into Chinese, which is published by Tongji University Press, and is spread in the whole China. This book includes the introductions of the Italian and English versions, some important introductions and supplementary readings, the complete original illustrations, and comments on the original text with examples of conservation.

In order to grasp the more accurate original meaning of Brandi and try to reflect his thoughts

⁶⁸ Lu Di, associate professor of Tongji University in China, a Doctor of Engineering, Tongji University, 2002; a Master of Architecture, Tongji University, 1998; a Bachelor of Architecture, Southwest Jiaotong University, 1993; he is engaged in teaching and research on the conservation architectural heritage.

more comprehensively, Lu Di compared all the versions of the *Teoria del Restauro* in different periods and languages during his second translation. However, to find out the first version is a very difficult task. According to him, because of the long history of the book that had its first edition in 1963, copies in many libraries in Italy have already disappeared, not to mention that the staffs of the libraries are puzzled by the search for such an “ancient book”⁶⁹.

As Caterina Bon Valsassina states for the English version of this book in 2005, “the culture of restoration and attention to conservation problems, as laid out by Brandi, have now been metabolized and are part of Italy's operational DNA⁷⁰.” However, I argue that the theory about restoration “as laid out by Brandi” in Italy is not a common sense in China, but a new kind of knowledge for us. This is perhaps because that China is still dealing with the conservation of objects based on experience, so its systematic exposure is not very long if compared with the European theory of cultural heritage conservation and restoration. Thus, to translate this classic work into Chinese and publish it in China is undoubtedly a journey for the Chinese cultural heritage conservation circles to seek the roots of modern conservation and restoration history.



5-1: *Teoria del Restauro* by Brandi in 1963, 2006, 2016

Compared with the first Chinese version, the second version presents the more complete

⁶⁹ From Lu Di, “Preface from a Chinese translator”, in *Theory of Restoration* in Chinese, 2016.

⁷⁰ From Caterina Bon Valsassina, “Presentation”, in *Theory of Restoration* in English, 2005.

background and the far-reaching influence of Brandi's theory to Chinese readers. It also becomes a long story to tell others the process of publishing a professional Italian book twice in China.

5.2 Discussion about the Main Ideas in *Teoria del Restauro* of Brandi

As a representative of the Italian school in the conservation and restoration of cultural heritage in the 20th century, Cesare Brandi (1906-1988) has played an important role in the formation of modern cultural heritage conservation theory. His important achievements, awards and careers are shown in 5-2.

Studies, Literatures and Awards	Year	Career
He was born in Siena, Italy	1906	
Bachelor's degree in law at the University of Siena	1927	
Second degree in literature at the University of Florence	1928	
	1930	In administration of Antiquities and Fine Arts with the Superintendence of Monuments and Galleries of Siena
	1933	Siena Academy of Fine Arts in Palazzo Bonsignori Inspector on the staff of the Administration of Antiquities and Fine Arts, Superintendency of Monuments in Bologna
	1934	Libero Docente (Lecturer) in Medieval and Modern History of Art at the University of Rome
	1936	Inspector in Direction of Education in Udine
	1937	Director of Government in the Governorship of the Italian islands in the Aegean Sea
	1938	Second-class Superintendent, setting up the Istituto Centrale del Restauro
	1939	Director of the Istituto Centrale del Restauro
	9/1943 to 1/1944	<i>A de facto</i> interruption in order to avoid collaboration with the Germans
Being secretary with G. C. Argan of the Journal: <i>Le Arti</i>	1947	

He became active in the international sphere	1948	
Founder of the Journal: <i>L'immagine</i>	1950	
	1953	First-class Superintendent on the staff of the Directorate of the Administration of Antiquities and Fine Arts
Awarded as Officer of the Academy by the French Embassy for fostering Italo-French cultural exchange	1954	
Awarded as Commendatore dell'Ordine al Merito della Repubblica (Italy)		
Awarded as Commander of the Order of Leopold II (Belgium)	1958	
Awarded as "Feltrinelli" Prize	1959	
Founder and Director of the Bollettino dell'Istituto Centrale del Restauro	1960	
Awarded as Gold Medal for "Benemeriti della Cultura" (Italy)		
	1961	Chair in Medieval and Modern History of Art at the University of Palermo
Passed away in Siena, Italy	1988	

5-2: The Timeline of Brandi⁷¹

It is the cornerstone of the research of restoration theory and education field. At the same time or following the theory of restoration, a lot of the charters with international influence and the formulation of the documents focus all on the theory of restoration of Brandi, such as the Venice Chart and the Restoration Chart in May 1964. Through the guidance of these international principles, Brandi influenced the restoration practice of countries around the world (Jokihehto, 1998, p. 229).

Inherited from Kant, Hegel and Croce, Brandi determined his own and a new approach to judge the aesthetic problems, which confronts against some current philosophical trends. Being different to the common sense of restoration, the restoration of a work of art has a precondition for the object being a work of art, which is significant for "re-creating" or "recognizing" between you and the work of art.

⁷¹ Based on *Theory of Restoration* in 2005, pp. 45-46.

As introduced in the Chapter 1 of the book, the definition of restoration by Brandi is based on the meaning of the work of art, namely that the object of restoration must be a work of art. For any work to be restored, the most fundamental thing is to treat it as a work of art. Any intervention on it, which is including the restoration intervention, must be based on treating it as a work of art. Involving a work of art, Brandi discusses the two fundamental elements distinguishing between “aesthetic case” and “historical case”. The former is consistent with the basic artistic quality required for becoming a work of art, whereas the latter is a work created by humans at a certain time and place, and exists in such “dual historical nature”. Obviously, we do not need to consider its practicality at all, and the practicality should be prioritized for other products, but it should not be considered separately in works of art. As a result, the direct link between restoration together with the identification and the act of appreciating a work of art has been reconstructed. After “re-establishing” a relationship between restoration and the appreciation of the work of art, Brandi focuses on the definition of the restoration of a work of art, not just “the common meaning”, but rather on the concept of it as follows: “Restoration consists of the methodological moment in which the work of art is recognized, in its physical being, and in its dual aesthetic and historical nature, in view of its transmission to the future” (Brandi, 2005, pp. 48).

As an entirely new perception, this definition of restoration of a work of art has laid the foundation for a series of guiding principles regarding restoration operations. The most significant issues are questions like “what is to restore” and “how to restore”; these two theorems are needed to clarify the object and the purpose of restoration.

The first principle of Brandi is that “only the material of a work of art is restored” (Brandi, 2005, pp.49). It draws a line between the value of individual artistic creation and the value of the material existence of the work. Although the value of the work arises from appreciation, it is clearly derived from the process of a work of art being accepted by individual consciousness. However, the premise of a work of art comes from the basic structure of it, while the its material nature is necessary firstly, because it embodies the real existence of the work of art being materialized, and also why it ensures the inheritance of the work of art from the past to the future, so making possible the acceptance of artistic thinking by human consciousness.

Therefore, although from the perspective of the understanding of a work of art, the artistic elements occupy the priority, but when considering how to ensure that the enlightenment obtained after this understanding can last for the possibility of vitality, it becomes crucial to understand and grasp the material nature of the work. So for an overall work of art, the attention and appreciation of people for it are based on the materials it presents. The various efforts, studies, protection measures are all planned to ensure that the materials of this work of art can last as long as possible. Similarly, only interventions aimed at this purpose will be legal, reasonable and necessary. In other words, the restoration of a work of art is an intervention in search of scientific support, true allowance and need for its conservation. Through this intervention, it is possible to keep the work of art as a fixed and unique existence.

The second principle of Brandi is: "Restoration should aim to re-establish potential oneness of the work of art, as long as this is possible without committing artistic or historical forgery, and without erasing every trace of the passage through time of the work of art" (Brandi, 2005, pp. 50). The material medium, which is relied on the transmission of the image of a work of art, is not attached to the image. On the contrary, the material medium and image are in a relationship of coexistence. In the process of preservation and restoration, the materials that constitute a work of art and the artistic image formed by the materials should not be discussed separately. A much more complicated situation arises when the material is not fully contained in the image of the work of art. If the existing condition of a work of art has to be modified, sacrificed or submitted to any other treatment of its materials, you must however respect its form and consider necessarily the requirements of aesthetics, and absolutely avoid to compromise the aesthetic features of the work of art itself. The aesthetic elements have always the priority. Compared to other things created by humans, the uniqueness of a work of art does not depend on its material existence, or even on its historical significance, but only on its aesthetic essence. Once the aesthetic essence of a work of art is lost, the rest is just a human relic.

The second point of view is relevant to the historical case of a work of art, which has "dual historical natures". The first one is the history of its creation, which represents the creative activities carried out by the artist at a specific time, place and occasion. The second one is the

history of its existence. This means that, given at a specific time, place and occasion, it lasts from a specific moment to another, while the time makes this work of art inseparable from the here and now. Thus, in the opinion of Brandi, what is really important is a work of the predecessors, not a reproduction or imitation work.

Then, the time and spatiality issues are the two main topics discussed by Brandi, which are very complex arguments. When considering “the time”, Sebastiano Barassi (2009) stated: “The *Theory* presumes in all cases a discontinuity between the time of creation and the present, and crucially the absence of the artist.” Brandi talked of “human consciousness” very often as he made a clear argument of the spatiality of a work of art.

The preventive restoration is the last thing in his book of Brandi, which later develops to “preventive conservation” in our time.

5.3 Comments to the Chinese Translations of *Teoria del Restauro*

After discussed how important the book of *Teoria del Restauro* by Brandi in 1963 is specially to the western society, the two Chinese translations of it cannot be ignored either.

Since the first translated version by Tian Shigang and Zhan Changfa came out in 2006, only a small number of Chinese people had access to the Chinese version, and the thought of Brandi is truly hard to grasp the original meanings, so the translated version is difficult to follow up. In an interview to the *Southern Weekend*⁷², which is a Chinese newspaper, in 2006, Zhan Changfa clearly stated that, about restoration, the book of *Theory of Restoration* by Brandi taught us that: “The restoration must be recognizable and easy to transform the characteristics of the times. The cultural relics, restored by us, must let future generations see that restorations were done by people of our time.” He continued, “The restoration of cultural heritage does not mean that you will complete the whole process of restoration. It must be passed on to future generations. ...This is a kind of inheritance, which is the true meaning of restoration.” Excluding

⁷² From Cheng Han, 2019, “The History of Cultural Relics Restoration Exchange in China and Italy”, *Southern Weekend*: <http://www.silkroads.org.cn/article-23254-1.html> (last consultation September 26, 2020). The article and the quoted citations are translated by me.

the native professionals, the most of Chinese people rarely think about this question, for instance the true meaning of restoration, even if they are truly living and passing away in this land.

Since 2016, the latest translated version has been published and delivered in all China, which makes the thoughts of Brandi be known, understood and gradually accepted by the Chinese readers. Although being three decades since the original publication, it still puts forward a novel conception to China: there is a need to affirm the inseparable connection between restoration and a work of art. Once the activities related to the restored works are closely linked to the judgment of the work of art, the connotation of the restoration is strictly determined. “Being the most important difference from the Italian restoration school with the French and British restoration schools”, Dr. Kong Duo made a comment on the translation of Brandi's book (2019), “... instead of continuing to summarize the value of artistic heritage as a manifestation of a certain fixed artistic essence on the basis of traditional western metaphysical theories, he (Brandi) respected the original intention of the creator, and the unique historical expression of each generation in history, on the basis of which the work of art can be generalized about a flowing object, a variation of thoughts and precious traces of changes in the cultural history.” The most important difference between the artistic heritage and the modern cultural production is whether there is a line that ordines technical standards. Thus, the original work of art decides the restoration mode, and the relationship between them shows a single direction, and is irreversible. From this kind of recognition, we can develop several clues for restoring only the material of a work of art, and presenting itself to others. In brief, the translated version of the book of *Teoria del Restauro* played a significant role in spreading the modern cultural heritage conservation theory, and it has also been very important for the Chinese people to learn from the Italian experience in developing modern theory and practice of cultural heritage conservation.

However, although I am not a student of academically or literarily translations, as far as the translated version of the book *Teoria del Restauro* of 2016 is concerned, I still think there are some important differences between the meanings either in the original version or in the English version of the book, so there will be misunderstandings in the reading and

comprehension of the Chinese translated version. Here are three examples.

Firstly, as the first definition the book gives, which is crucial for transmitting the meaning of the whole book, I think that it is forbidden to change the order of the format, or omit some words in the sentence. For instance, the definition of restoration in the Chapter 1 of the original book *Teoria del Restauro* in 1977 reads as:

“Il restauro costituisce il momento metodologico del riconoscimento dell’opera d’arte, nella sua consistenza fisica e nella sua duplice polarità estetica e storica, in vista della sua trasmissione al futuro.”

Still this sentence in the first chapter of the English translated book *Theory of Restoration* in 2005 is:

“Restoration consists of the methodological moment in which the work of art is recognized, in its physical being, and in its dual aesthetic and historical nature, in the view of the future.”

However, this sentence in page 75 of Chapter 1 of the Chinese translated book in 2016 changed the meaning of the last part to the first, and not directly giving the meaning of “the future”. These changes will cause some misunderstandings of reading, even if there is no problem on individual words.

Secondly, it is an interesting problem to translate into several different languages. In the original text, it does not appear any “I”, but it appears in the English translated version. For instance, it is written in the Chapter 6 of the original book *Teoria del Restauro* in 1977:

“Ci sembra che il valore di opera d’arte non sia così prevalente, nel Volto Santo, da poter cancellare l’importanza del suo aspetto storico, e pertanto noi saremmo d’avviso di mantenergli questo aspetto documentario che conserva e che di per se è reliquia storia importantissima, a parte l’intrinseco valore degli oggetti aggiunti.”

It is also written in the Chapter 6 “Restoration with regard to the aesthetic case” of the English translated book *Theory of Restoration* in 2005:

“In my opinion, the Volto Santo's value as a work of art is not sufficient great to offset the importance of its historical dimension, and so it is I feel that it should keep this documentary aspect, which, aside from the intrinsic value of the added parts, is in itself a highly important historical relic.”

In the Chinese translation of 2016, it does not appear any “I” as followed the original text. But when we are in a foreign language that is difficult to understand, even a native speaker, I think it is necessary to distinguish the views of “I” from what “we” do.

Thirdly, there are some other situations when the Chinese translated version could be improved. For instance, it is written in the Chapter 6 of the original book *Teoria del Restauro* in 1977:

“...il rudero della Muda era incorporato nel Palazzo cinquecentesco e non aveva ormai che una sua debole voce storica...”

It is written in the Chapter 6 of the English translated book *Theory of Restoration* in 2005:

“The ruin of the Muda had only been incorporated into the seventeenth century building and, by then, had only a weak historical voice.”

And in Chinese version of 2016, there is only the meaning of “the ruin had only...” without the meaning of “Muda” in Italian, which I think it is very important to transfer it, in whatever way, to arouse the new attention of the society.

5.4 Summary

By providing a significant contribution to the formation process of contemporary conservation and restoration, Cesare Brandi is one of the key international representative scholar of the 20th century, as well as an art critic, an essayist, a writer and a poet. The book of *Teoria del Restauro* in Italian is a significant writing of him, which underlines the theoretical criteria to inspire the restoration activities, gives the confirmations, insights and clarifications from the artistic and aesthetic experience of audiences, and tries to apply the informative and theoretical tools to the real life. It has been translated more than in twenty languages, including the Chinese twice.

Every country can have its own theory of conservation and restoration - the formative process and then the practical process of preservation and restoration, so it does in China. People do not just require the technical skills in practice, but focus more on the understanding of the concepts and principles of cultural heritage conservation and restoration. With the development of the archaeological studies and the conservation theory, the historical and scientific values of cultural heritage have gradually gained prominence. According to maintain the aesthetic side of the protected objects, they have begun to have regard for the authenticity and integrity of the historical and material levels. Therefore, if the cultural heritage conservation in Europe has begun with the restoration of functions and its “materials”, then the early restoration of China emphasized the recovery of the aesthetic value and its “images”. It is equivalent to standing at the other extreme of Brandi's theory from the beginning, and the main problems confronted by us are not the same as those faced by Brandi himself.

Nowadays, China active exchanges and transfers with the European cultural preservation circles, absorbs their strength in the field of humanities and social sciences, and improves the concepts, material and restoration methods in the process of cultural heritage conservation and restoration. In fact, this kind of relationship based on the system and the model is also a manifestation of seeking balance among various values.

Chapter VI: Conclusions

– *Who are you?*

– *I am Death.*

– *Have you come to get me?*

– *I have already been walking by your side a long time...*

The Seventh Seal

The above dialogue is from a European movie whose director is Ingmar Bergman in 1957. It is interesting because it reminds my own life. Some people spend their lives in a hurry, while others trade limited time for the eternity. If you can choose, how do you spend your life for? That is a question for me and also for you to think about.

Let's go back to our present topic. The development of the conservation and restoration of cultural heritage is a significant way to protect and inherit the achievements of human civilization. It is also one of the most convenient and effective ways to increase the international prestige and the influence of a piece of land.

Besides of many readers in Italy and other countries, the Chinese translated book *Teoria del Restauro* of Brandi is an especial important tool for the Chinese people to learn to “recognize a work of art”, then using the restoration treatment to “re-establish” and “re-create” the object and transmitting it to the future. Of course, the Chinese translated version has many insufficiencies compared to the original Italian book, even if some can be replaced or corrected, while others are linguistic mistakes that also can be modified, but the rest unfortunately cannot; however, this book brings a new idea and even new principles in practice from Italy to China, which can be feasible to pass our practice test. It will guide the route being built to strengthen the theoretical system of restoration as well as many related practical projects, and also waiting

for other books or papers in the same topic later.

In Italy, the book *Teoria del Restauro* was first published in 1963, and the second edition published in 1977. After Brandi, there have been many other people devoting their lives to conservation issues of cultural heritage, for instance, Giovanni Urbani. He was one of the students when the ICR was founded in 1939. He continued to work for the ICR when he graduated. While the long-term of working with Brandi and serving as the third director of the ICR, Urbani made a comparison of the aesthetic restoration with the scientific restoration, then analyzed the relationship between “the functionality of a work of art” and “the state of material conservation”, and how to consider and take into account “the conservation of the creative product” (Urbani, 1996)⁷³.

After more than half a century from the founding of the ICR in Italy, in another side of the world, the development of the cultural heritage conservation has entered a new stage in China. Although being a long history before, it has just developed from the perspective of national ideology and consciousness. Recently, it has built a complete mechanism for the cultural heritage conservation, including the regulations and laws, the administrative management and the personnel education and training for the cultural heritage conservation.

However, “due to the difference in the historical conditions, the ideologies, the aesthetic standards and the traditional values, the international mainstream conservation and restoration theory of today is quite complicated in practice, and the specific issues should be analyzed in detail” (Biagi Maino, Shao, 2016).

In this thesis, we have discussed about the details of the philosophy in Chapter I and Chapter V, while the main contents of the principles to be applied in practice are discussed from Chapter I until Chapter IV. In last chapter, some possible answers will be given to the research questions already posed in the introduction part. Furthermore, some recommendations are provided to be used by people who are mainly the Chinese conservators of cultural heritage, before the

⁷³ From Giovanni Urbani, 1996, “The Science and Art of Conservation of Cultural Property”, in *Historical and Philosophical Issues in the Conservation of Cultural Heritage*, pp. 445-450.

summary part at the end.

6.1 Answers to Research Questions

Through my thesis study, I would like to conclude my research questions as it follows.

1) Given the longest history and the most mature emergence of the European development of the cultural heritage conservation, how did/does it develop from the philosophical point of view and also as far as its principles in practice in Europe are concerned?

The discipline of the conservation of cultural heritage got birth in Europe since the Age of Enlightenment at first. About the philosophical point of view, in France Viollet-le-Duc with Prosper Mérimée supported the “stylistic restoration” thought, while in the United Kingdom Ruskin and William Morris were the representatives of the “anti-restoration” movement. After the debate of more than half a century, the “anti-restoration” gradually was more recognized and adopted by the European people. In the meantime, focusing on the historicism, the Italian scholars believed that the purpose of preservation was to continue the historical value of the protected object, which corresponds to privilege the spiritual value exceeding the material style. Differently from the above points of view, Boito argued that people should try to keep the value of ancient buildings, including the current situation of the buildings themselves that must be respected. Later, the Italian architect Giovannoni developed the theory of Boito, and put forward the idea of “scientific restoration”. Based on the theory of Giovannoni, the Athens Charter for the Restoration of Historical Monuments was signed in 1939. In the same year, Argan and Brandi founded the ICR in Rome. Furthermore, the latter published his philosophical and theoretical book *Teoria del Restauro*, which was a fundamental step in the preservation of cultural heritage and was translated in twenty languages. Following the Athens Charter, the Venice Charter for the Conservation and Restoration of Monuments and Sites was signed in 1964.

As for the principles of practice in a country, the historical development of the heritage conservation could be grouped into four main categories, which are, respectively, the historical

monuments and memorial buildings, the natural and cultural environments, the restorations, the historical districts and protected areas. And the principles of the system of the cultural heritage conservation in Europe could be also entrusted to three classifications, which were/are the concept of authenticity, the concept of integrity, and the preventive conservation.

2) How did/do the ideas, theories and researches on the conservation and restoration of cultural heritage take shape and develop in Italy? In particular, what is the historical development of the Central Institute for Restoration (ICR) in Rome, Italy? As the “Italian model” is a successful example of the cultural heritage conservation and restoration, how did/does Italy assist China in establishing its own cultural heritage conservation mechanism?

There has been a long and representative tradition and history in a country like Italy. The idea of the conservation and restoration of cultural property began as early as the period of Eastern Roma Empire. And Italy, as a country, had its first preservation law, which regulated the protection of historical, artistic and architectural works, in 1902. After some conflicts and two world wars, Italy established the conservation of cultural and natural heritage into the national constitution in 1948. Then, the Ministry for Cultural and Environmental Heritage (MiBCA) was created to unify all competences and functions of the cultural heritage conservation in 1974. It changed its name to the Ministry of Cultural Heritage and Activities (MiBAC) in 1998 in order to further decentralize the public administration. Then, the MiBAC was reorganized and restructured in 2010. Until 2013, it is known with the new name: Ministry of Cultural Heritage and Activities, and Tourism (MiBACT) to support the enhancement in the activities at a local level.

The ICR in Rome, which was founded in 1939, represented a good instance of developing the cultural heritage conservation, and providing both a theoretical framework and a technical study of the modern restoration theory in Italy. From its original name Regio Istituto del Restauro to that of Central Institute for Restoration (ICR), then to the High Institute for Conservation and Restoration (ISCR), and back to the Central Institute for Restoration (ICR) again, the functions and the characteristics of this institute have changed significantly. Nowadays, the ICR brings together the specialists of art history, architects, archaeologists, physicists, environmental monitoring experts, chemists, and biologists, as well as restoration

experts. In Italy, the other national governmental institute is the Opificio delle Pietre Dure in Florence, where many important advances both in theoretical approaches and scientific and practical applications have been carried out since the interventions after the dramatic flood of 1966 in Florence; moreover, there are a lot nowadays of other restoration laboratories and centers in Italy, for instance the Venaria Reale in Turin.

Furthermore, there is a close cooperation on the cultural heritage between Italy and China to promote the exchange and improvement of concepts, standards and technologies based on common projects. Italy helped China to establish the professional research academies, institutes and centers for conservation and restoration, for instance those places such as the Xi'an Cultural Relics Conservation and Restoration Center, the Gallery of Tomb Murals in the Tang Dynasty of the Shaaxi History Museum, the Longmen Stone Relics Center, and the Dazu Monuments Conservation Center. In addition, the China-Italy Cooperation Training Centers have begun to train the potential staffs of the conservation and restoration in the two places of Xi'an and Beijing.

3) Given its unique cultural characteristics and national conditions, how did/does proceed and take shape the establishment of the cultural heritage conservation in China? What is the Chinese system of the cultural heritage conservation nowadays?

Just like the meaning of "restauro" for the Italian people, the main idea underlying the Chinese terms "antiquities" or "cultural relics" is reviewed before the Common Era in China. These words began to carry the right modern meaning from the Tang Dynasty, which ranges from 618 to 907 Common Era. After many changes during the times, the similar meanings of "cultural relic", "cultural property" and "cultural heritage" are now widely recognized by the Chinese government and people. Their applications to the "cultural heritage" have been accepted by the latter in the twenty first century.

However, when the term "cultural relics" was still used very often in China, The National Survey of Cultural Relics has been carried out for three times. The first one was performed from 1956 to 1959, and there were more than 7,000 cultural relics being recognized. The second one was conducted from 1981 to 1985, when 400,000 places of the immovable cultural relics were

catalogued. Among them, there were 2,351 places of national and key protection units, more than 8,000 places of provincial protection units, and more than 60,000 places of city and county level of protection units. Finally, the third survey was carried out from 2007 to 2011, when the number of immovable sites reached 766,722 units, which result increased more than 200% with respect to the second survey, and there were 536,001 sites of immovable heritages, which accounted for 69.91% of the total number of them.

After those initiatives, from 2012 to 2016, the National Survey of Movable Heritage was performed once in China, in order to document basic situations of quantity, spatial distribution, preservation and protection status of cultural heritage. From this survey, we know that firstly there was a total amount of 108,154,907 pieces of the state-owned movable heritage in China. Then, the five categories with the largest number of items were: the coins, the ancient books, the archival documents, the ceramics and the Chinaware. Thirdly, the top five provinces and cities that own movable heritage were Beijing, Shaanxi Province, Shandong Province, Henan Province, and Shanxi Province. Fourthly, according to the Statistics of the Preservation State of Movable Heritage, the numbers were 1,134,956 cases with “urgently need to be restored”, 23,222,812 cases with “partially need to restoration”, 684,776 cases “already restored”, and 37,515,953 cases in “stable condition”.

Nowadays, a comprehensive system in practice of the cultural heritage conservation is basically implemented in China from the legal and regulatory system, the national public utilities and organizations, and the educational system of heritage conservation.

4) Considering the cooperation and exchanges of information and experiences in the field of the conservation and restoration of cultural heritage between China and Italy, what are the meanings of the Chinese translated books *Teoria del Restauro* once in 2006 and the other in 2016? How do the theories and advanced technologies continue to promote the sustainable development?

Since its publication more than half a century ago, the book of *Teoria del Restauro* by Brandi got many criticisms in Italy. Without discussing its validity or not, a subject that would require a thesis work it alone, by reading the 1977 version, I think it is quite important, because - by

applying philosophical approaches - Brandi summed up the human thoughts and activities, and put forward his own arguments based on these thoughts and activities, so that the “restauro” or “restoration” representing the human’s intelligence has been fundamentally clearly defined. Generally speaking, in contrast to what we often say “confirmation” and “clarification”, in his articles Brandi simply used “only” and “not” to define the things that humans have been practicing for a long time. Starting from this opinion, there are many things we can do, and many others that are waiting for us to do later. As for this book of Brandi, it straightens out the thing like restoration that we commonly encounter in our daily lives, and then some other things that can be derived from it.

After being translated into twenty languages, the Chinese translated versions of *Teoria del Restauro* are both significant to international relations between China and Italy, and to the field of academic research in China too. The first Chinese translated book dates back to 2005, while the second Chinese version to 2016. However, the latest Chinese translated book of *Teoria del Restauro* still has many insufficient and misleading places of translation.

6.2 Recommendation for Further Research

In order to establish the concept of the cultural heritage conservation and restoration, the development of science and technology makes the practice of conservation and restoration from the original traditional handicraft industry into a real scientific field. Nowadays, because of the progress of science and technology, some new concepts, new materials and new methods provide new opportunities for conservation and restoration of cultural heritage. At the same time, the devastating natural disasters and wars also remind us that the concept of the conservation and restoration needs to adhere to the philosophy of historical criticism in order to fully understand the aesthetic significance and historical value of cultural heritage. Thus, the restoration needs to complete not only the physical form of cultural heritage, but also requires other people to look for its historical and aesthetic significance as a work of art.

Appendices 1 and 2 present the literature translations of the background, artistic form, basic features and classification of the ancient murals in different dynasties in China. Based on my

special enthusiasm for the ancient Chinese murals, as a continuation of the present doctoral research, I will devote myself to study how to use information processing technology to construct the information management system of the ancient Chinese murals. There are two approaches for the construction of the system into two different phases. One is to realize the static management of the basic information about murals through digital processing of the relevant data on murals, such as the archaeological excavation process, the contents, the sizes, the materials, the subject matter classification, the creation times, the preservation status, the property management, the division of protection levels, etc. The other one is to automatically treat the environmental surveillance of the murals, the early warning system of preventive conservation, the abnormal processing and other affairs, so as to realize the dynamic management of murals.

6.3 Summary

In this chapter, all the four research questions of the introductory part have been answered one by one. In addition, because the conservation is the fundamental goal and the restoration is a necessary tool for cultural heritage, there are two recommendations for the further studies.

Learning from the scientific theories, advanced technology and practical experience of the development of cultural heritage conservation and restoration in Europe, especially in Italy, my purpose of study is to clarify the origin of this term “cultural heritage” in China from ancient times to the present, and to state the current situation of cultural heritage conservation in China. With unavoidable limitations, this study could be a tool involving the historical development of the cultural heritage conservation in China, as well as in Europe, particularly in Italy.

APPENDICES

Appendix 1: Translation of the Ancient Murals in China through the Ages⁷⁴

The Chinese murals reflect the transformation process of religious thought. Firstly, the generation of murals was closely related to witchcraft etiquette and totem activities. With the development of social economy, murals were used to decorate palaces, but also in some places of worship. At the same time, murals had become the means for the rulers to watch entertainment and promote rituals. Some images could be seen from lacquer paintings and portrait bricks before or in the Han Dynasty, such as the images of the early celestials, ancient sages, mountains, etc. These images and related decorative patterns were repeatedly depicted in temples or tombs which becoming the subject of murals, and also lately affecting the development of the Chinese murals. Buddhism was introduced to China from the Eastern Han Dynasty. Its forces continued to expand during the Wei, Jin, and Southern and Northern Dynasties. Buddhist art went deep into the life and thoughts of the people. In addition, the cave-temples from India began to rise in China. Many cave temples built around the Silk Road reflected the pomp of Buddhism in the Hexi Corridor⁷⁵ from the Han Dynasty till the Tang Dynasty. Through this channel, the Buddhist art is extended to the central plains of China.

The development of Buddhism was extremely prosperous during the Sui and Tang Dynasties. For instance, there were more than 150 temples in the Chang'an City of the Tang Dynasty, which was the capital at the time. Therefore, it was presented in the murals of temples, grottoes and tombs that it was an integration of North and South Buddhism, and also a competition of famous artists. At the same time, the new artistic styles and themes introduced by the western

⁷⁴ I translate the Appendix A and B from the books of *Complete Works of Chinese Fine Arts*. For instance, *Complete Works of Chinese Fine Arts. The Paintings 17. The Grotto Murals like in the Maiji Mountain*; *Complete Works of Chinese Fine Arts. The Paintings 13. The Temple Murals*; *Complete Works of Chinese Fine Arts. The Paintings 12. The Tomb Murals*; *Complete Works of Chinese Fine Arts. The Paintings 16. The Grotto Murals in Xinjiang*; and *Complete Works of Chinese Fine Arts. The Paintings 15. The Dunhuang Murals*.

⁷⁵ Hexi Corridor is an important historical route in Gansu province, China.

regions also enriched the contents of the Chinese murals. After the An Lushan Rebellion⁷⁶ in the Tang Dynasty, China continued to have artists to avoid the chaos to live in Chengdu city, thus making the local Daci or Dashengci Temple the most concentrated place for murals. Until the Song Dynasty, under the pressure of the minority forces, Buddhism and Taoism were advocated to alleviate the suffering of the people's lives. Thus a lot of the Buddhist and Taoist temples were asked to construct. For example, when the Daxiangguo Temple⁷⁷ was rebuilt, there were many murals in the temple hall, which were from the hands of artists. At the same time, the Taoist figures created more murals, which were in a larger scale as well. In that period of time, the murals of many ethnic groups such as the ancient Tibet Empire, Uyghur Khaganate, Liao and Jin Dynasties, inherited the rich heritage of the Tang Dynasty, and also combined the different national cultures of the region. Each mural has its own characteristics. In the Yuan Dynasty, the temples preserved in Shanxi Province were the most abundant. For instance, the murals of the Yongle Palace were the most complete in their conception and unified design, whereas the murals in Fahai Temple in Beijing of the Ming Dynasty were exemplary. In addition, the water and land paintings in the Ming Dynasty are also very important research materials for Buddhism. Furthermore, the folklore subjects in the murals show different contents such as historical stories, literatures, and operas. After a brief description of the development of murals in various historical periods, we will focus on the each kind of murals of one historical period and express them separately.

1.1 The Palace Murals in the Qin Dynasty (221-206 BCE)

As I explained before, murals were used by the rulers to decorate the palace as a means of watching and playing, and promoting rituals when China went to the slave society. Lately, Qin unified China, but unfortunately, the palace murals before Qin have all disappeared. However, in the fragments of the murals at the site of the Qin Xianyang Palace, there are still patterns and ornaments left, so that we can imagine the details of the murals at that time.

⁷⁶ The An Lushan Rebellion was a devastating event against the Tang dynasty of China.

⁷⁷ Daxiangguo Temple is a Buddhist Temple in the eastern part of China.

During the insurrection against the Qin Dynasty, Xiao He (died 193 BCE) established the Weiyang Palace with the idea of “not magnificent, no threat⁷⁸”. Later, in the Weiyang Palace, Emperor Wu of the Han Dynasty (157 -87 BCE) asked the artists to show the persons who had rendered outstanding service the country since the founding of the country. Although the palace murals since the Western Han Dynasty have disappeared, we can still understand the general appearance of the murals at that time through the stone carvings of the Tang Dynasty.

1.2 The Tomb Murals in the Han Dynasty (206 BCE-220 CE)

Murals of the tombs from the Han Dynasty to the Northern and Southern Dynasties are constantly unearthed, providing valuable materials for understanding the artistic development since the Han Dynasty. We can not only based on the literature, but also understand the achievements of art. Moreover, it compensates for the lack of early handed-down art, and clearly understands some important aspects of ancient arts, especially the contents of ancient mythology. The remains of murals in the Han Dynasty were mainly murals of tombs. A lot of murals were found in Henan, Shanxi, Shaanxi, Hebei, Inner Mongolia, Liaoning, and Gansu provinces, and occasionally were found in Guangzhou and Jiangsu provinces. Among them, the jade burial suit of King Zhao Mo discovered in the tomb of the Emperor of Nanyue⁷⁹ of Guangzhou province filled in 13 the blanks of the remains of the murals in the early Western Han Dynasty. We can also take the tomb of Bu Qianqiu in Luoyang city, Henan province as an instance, which is tomb of the West Han Dynasty. The east end of the main room is covered with a scarlet bird, which has the head of a human being but the body of a bird, having an auspicious meaning. In the center, a male owner on a loong is holding a bow, meanwhile a female owner is holding the phoenix, 14 and under the guidance of the alchemists and fairies, all the things go into the otherworldly space protected by fairy birds and sacred beasts. One point must be mentioned is on these murals, all kinds of objects are full of life. Moreover, the hook lines are fluent and pretty, and the flowing-cloud patterns are entangled among many objects, which

⁷⁸ The sentence is from Xiao He to Emperor Gaozu of Han Dynasty. I translate it from *The Records of the Grand Historian*.

⁷⁹ Nanyue was an ancient kingdom, which is established in 204 BCE.

connecting and unifying the pictures. The layout of them is complicated and not chaotic, showing the skillful techniques of artists.

The other instance is murals in tombs of the West Han Dynasty, locating in No. 61st of Shaogou, Luoyang city, Henan province, which illustrating the real and historical stories. Behind a partition, the story of *Kill Three Valiants by Offering Them Two Peaches as Reward* can be seen in serial pictures. And the front wall of the next room depicts a banquet scene also in a serial pictures. From the above two contents of murals, it can be seen that the Han dynasty promoted the ethos of wisdom and loyalty. To sum up, there are many contents of the murals of the Han Dynasty to reflect the ascension of the soul of tomb owner. And the form and scale of the tomb also reflect the status of the tomb owner.

1.3 The Murals in the Wei, Jin, Southern and Northern Dynasties (220-589 CE)

From the Wei and Jin Dynasties till the Southern and Northern Dynasties, the people suffered due to the political troubles. They were eager to settle down seeking for the spiritual comfort of their hearts. Thus the Buddhism has developed rapidly. The mural art is an important form of the Buddhism communication. Therefore, the murals of this period have been greatly developed, and a new style of murals appeared.

In the tombs of ethnic minorities at that time, the murals included the images of the celestial phenomena such as the sun, the moon, the stars, and the clouds. They also consisted of the images of the immortals, the mythical animals, the flying deities, and the lotus flowers, which displayed the first appearance of eastward communication of Buddhism, and the combination of the Buddhism and the Taoism.

1.3.1 The Grotto Murals in the Northern and Western Wei Dynasties, and till the Later Liang Dynasty (386-923 C.E.)

From the Northern and Western Wei Dynasties (386 C.E.-557 C.E.), passing through Tang Dynasty (618 C.E.-907 C.E.) and till the Later Liang Dynasty (907 C.E.-923 C.E.), murals of the

Mogao Grottos in Dunhuang, Gansu province belong to the early works of Buddhism introduced to China. Therefore, the styles of these murals are rather rough, and not emphasizing the detailed elaboration. Such murals are drawn with large and complete strokes, not paying attention to the role of line drawings. Different from the murals or paintings in the center plains area of China at the same time, the color is processed in large volume. And the clothes streamers are often represented by the straight and curved structures. So they are the combination of the exaggeration and the realism to create a rich decorative effect, and providing a basis for the development of Buddhist murals in later generations.

Besides the general square Buddhist scripture, the murals at that time were also affected by scroll paintings, in order to express the transformed content in a long roll form. For instance, the mural called *Jataka Tales* of the No. 299 Mogao Grottos of the Northern Wei Dynasty (386 C.E.-534 C.E.). Although it describes the story of Buddhism, but it also reflects the ethical concepts of Confucianism.

1.3.2 The Tomb Murals in the Southern and Northern Dynasties (420-589 C.E.)

The murals of the tombs in the Southern and Northern Dynasties (420 C.E.-589 C.E.) are mainly discovered in Henan, Hebei, Shandong, Shanxi, Shaanxi, and Ningxia province of China. To be more straightly, the murals of the tombs for the nobility class at that time display the historical stories or mundane lives related to the deceased person.

For instance, the main discovery areas of the murals of the tombs in the Northern Qi Dynasty are Ci country of Hebei province and Taiyuan city of Shanxi province. They were the mausoleum areas for the nobility and royalty at that time. And they were the location of auxiliary capital Jiyang of the Xianbei⁸⁰. Moreover, they were the stronghold for the nobilities of that country as well. So the tomb murals of Lou Rui (531 C.E.-570 C.E.) in the Northern Qi Dynasty are included the imagines of trip, such as the guards, the cortege, and the cow maps, etc., among which the style of the guard's clothing is also clearly visible. Lou Rui was the richest relative of the emperor of the Northern Qi Dynasty, so just in time, the content of these murals reflects his noble and

⁸⁰ Xianbei was confederation of nomadic tribes that inhabited the steppe region to the north of China during the Jin Dynasty and the succeeding Northern and Southern Dynasties.

luxurious living customs. Look at the camels, horses, riders in groups, plus the blowing musicians, which were the portraiture of the nobles who went out from the public at that time. These murals have a clear order and a pleasing rhythm, so the artistic surpasses the previous generation. To appreciate the technique of these tomb murals, we can take a guess that the artist was named Yang Zihua (the date of birth and death is unknown) in the Northern Qi Dynasty, which was good at painting or making murals for the horses and the characters.

1.4 The Murals in Surrounding Countries

The ancient Goguryeo located in the northeast border of China, was centered on the Guonei city (located in Ji'an county, Jilin province nowadays). Until the Northern Wei Dynasty, its capital city moved to Pyongyang. So Ji'an became the accompanying capital of Goguryeo. Later, it was destroyed by the Tang Dynasty in 668 C.E., and the Ji'an area declined. However, the tomb murals of Goguryeo found near Ji'an were an important part of the remains of tombs murals of the Wei, Jin and Southern and Northern Dynasties. The early tomb murals of Goguryeo mostly represented the enjoyable life of the nobles and aristocratic family members. Like the same form of genre easel and panel forms, they were obviously influenced by the murals in the Han Dynasty and the Wei Dynasty in the mainland China, while the costumes of the characters on the murals had distinct national characteristics. For instance, inheriting from the Warring States and the Qin and Han traditions, the *Picture of Hunting* is the representative work of the early murals in Goguryeo, which reflecting that this country made important achievements in the mutual integration of national cultures, including the communications between Goguryeo and China proper. It can be seen that praying for the safety of the undead objects gradually becoming the main content in the middle term of tomb murals of Goguryeo. In addition, there is also a huge format of murals depicting dance music and mountain hunting activities, which showing the social life of Goguryeo. Finally, the tomb murals in the late Goguryeo like to use the theme of the celestial beings and ghosts. And the life images of social customs were completely extinct, reflecting the intensification of the social class contradictions in that country. At this time, the style of murals is the same as those in the mainland of China in the late Northern Dynasty. The traditional Goguryeo costumes disappeared, indicating that the culture and

communication between Goguryeo and the ancient China becoming more and more close.

1.5 The Murals in the Sui, Tang, and Five Dynasties (581-960 CE)

While the mural was the main artistic form, the mural creation was flourishing in the Sui and Tang dynasties (581 C.E.-907 C.E.). However, these art treasures can't escape the erosion of the years.

Today, when we face the mournful the relics in the Foguang Temple of Wutai Mountain in Shanxi province, we do not know whether we should be happy or sad. After all, we have lost too much, so the chain of culture is too thin and fragile at some points.

In the Sui Dynasty (581 C.E.-618 C.E.), Zhan Ziqian and Dong Boren enjoyed the same popularity of artist. Zhan used to create murals for several temples. And the copy of his original artwork *The Lotus Sutra* was widely spread until the Tang Dynasty, which was the earliest record of that book. Many murals in Dunhuang named *The Lotus Sutra* in the Sui Dynasty painted around the top of the cave, which were continuously displayed in several layers of longitude according to the murals, showing a delicate and beautiful style. The mural of *Transform of Maitreya* made by Dong Boren was another groundbreaking and large-scale work. It used the characters of the buildings he was good at, to forms a picture of real life. What was more, it opened the thread of the transformation of the figure of *Maitreya* in the Tang Dynasty.

The large-scale artwork in the early Tang Dynasty is quite magnificent. This can be seen in the Buddhist Scripture of the Dunhuang Caves, for instance *Transform of the Pureland in the West*, *Transform of Vimalayalam*, *Transform of Nirvana*, etc. In addition, some new themes have emerged. The mural of *Manjushri* by Weichi Yiseng was the beginning of Buddhist Tantra. During the prosperous periods of the Tang Dynasty, the activity of building temples became a custom of the country, which made the craftsmen focused on the decorative sculptures on the temples. So the famous artists emerged suddenly, and a large number of giant murals appeared, among which the most varied types were *Transform of of Buddhism*. In the middle and late Tang Dynasty, the secular preaching at temple were popular, and some murals were not directly

based on Buddhist scriptures, but were portrayed according to transformation texts. At this time, the religious artworks were alike to the folk literature, which were more of a mass character and more dramatic. From the late Tang Dynasty till the Five Dynasties (907 C.E.—960 C.E.), there were frequent wars in the central plains of China. Many temples of the previous generation were tragically destroyed, and the mural creations of temples were diminishing as well. This situation continued until the Song Dynasty was fundamentally changed.

1.5.1 The Murals in Foguang Temple during the Tang Dynasty (618-907 C.E.)

The number of murals in the Tang Dynasty is the crown of the previous dynasties, showing that the economy of the Tang Dynasty was prosperous and the temples were abundant. The participation of some well-known artists, such as Zhang Sengxi, Cao Zhongda, Wu Daozi, Zhou Yan, etc., made the murals of temples a peak of creation. Foguang Temple in Dou village, Wutai county, Shanxi province was rebuilt in 857 C.E.. The east hall of Foguang Temple is one of only a few Tang Dynasty wooden structures. And there remain murals in the Tang Dynasty on the arch eye wall (where the arches meet) and on the back of the Buddha seats.

On the arch eye wall, there is a Buddha who sits on the lotus platform, with the fearless seal and the wishful seal. There are two Bodhisattvas in front of the Buddha, however, two Bodhisattvas on the left and three Bodhisattvas on the right of the Buddha. Thus the left and right parts are centered on the Buddha, which are followed by some people. Those Bodhisattvas are dignified, furthermore their dresses wave in the wind. In the back of the Buddha, there are heavenly kings holding the sword, and the dragons, monkeys, ghosts, celestial maidens get together in a picture.

1.5.2 The Tomb Murals of the Sui and Tang Dynasties (581 C.E.-907 C.E.)

A large number of exquisite murals unearthed in the Sui and Tang Dynasties. For instance, murals are found in Shaanxi, Shandong, Shanxi, Xinjiang, Guangdong, Hubei provinces. The elaborate funeral of the Tang Dynasty became normal, so its tomb structure and the scale of murals even surpassed the previous generation. We can have a look at the royal funerals. The

walls of the tomb are decorated with blue dragons and white tigers. Below them, there are several occasions, such as huge travel ceremonies, hunting, polo, etc.

The tomb murals of the Tang Dynasty attach importance to social life. We can see from the murals of the trips, the feasts, or some guards just preparing for the trip. The screen murals also appeared at this time, which reflecting the social customs of different times. For instance, the screen murals in the Astana Cemetery in Xinjiang Uighur Autonomous Region show flowers and social customs of different times. From Han to Tang Dynasties, it can be seen that the murals not only reflect the social customs, but also show the elaborate funeral style which treating death as life.

1.5.3 The Tombs belong to the Princesses or Princes in the Tang Dynasty (618-907 C.E.)

The three tombs, which we are talking about are located on the southeast side of Qianling Mausoleum. They are the Tomb of Yongtai Princess, the Tomb of Crown Prince Yide and the Tomb of Crown Prince Zhanghuai. Totally there are seventeen subordinate tombs in the southeast of Qianling. Five of them are excavated, and these three are currently open.

While the princess of Yongtai named Li Xianhui was the seventh daughter of the Emperor Zhongzong of the Tang Dynasty, the prince of Yide named Li Zhonglan was the first son of him. The two men were killed because of their words against Wu Zetian. They were first buried in Luoyang city. Later, after the recovery of Emperor Zhongzong's power, they transferred to Qianling. The prince of Zhanghuai however was the second son of Emperor Gaozong (the son of Emperor Zhongzong) and Wu Zetian. He was falsely accused of the rebellion, then he was sent into exile and dead in Sichuan province. Once again, after the recovery of Emperor Zhongzong, the bones of his brother Li Xian were brought back to Shaanxi province, and was buried with him. These three tombs are composed of eight parts. All of them have the tomb's passage, patio, passing hole, room for putting the niche, front channel, front chamber, back channel, and back chamber. However, the length and width of the tomb base are different, so as the number of patios, passing holes, rooms for putting the niche. Among them, the Tomb of Crown Prince Yide the Tomb of Yongtai Princess the Tomb of Crown Prince Zhanghuai is the highest level, followed

by the Tomb of Princess Yongtai, and then the Tomb of Prince Zhang Huai again.

The mural of *Protocol Picture* in the Tomb of Prince Zhang Huai has six persons in total. In the east wall, there is a situation in which officials of the Tang Dynasty guided guests of all ethnic groups to meet the prince. It shows that the Tang Dynasty and the exterior domains had frequent political, economic and cultural exchanges, and this mural is a common subject in the Tang Dynasty. However, there are many large-scale murals in the Tomb of Yide Prince, the contents of which include the city walls, watchtowers, ceremonial ceremonies, and magic music, etc.. These murals show the different life scenes at that time.

1.5.4 The Murals in the Five Dynasties (907-960 C.E.)

During the Five Dynasties, most of the murals in the central plains of China were destroyed, while many of the murals under the regime of Cao Yijin in Dunhuang existed. Under the independent government in the northwest (minority nationalities, such as the Tubo, Uighur, and Western Xia in ancient China) and of the basins of the Yellow River and the Yangtze River, only area like today Sichuan province, plus the states of the Later Tang and the south China were more economically developed, because they were less damaged by the war. Among them, the artwork of Sichuan province was flourishing the most. And there were a lot of the famous local artists of murals in temples also. For instance, an artist named Zuo Quan (825 C.E.-859 C.E.) followed by the artwork of Wu Daoxuan (also named Daozi, 680 C.E.-760C.E.) and Zhou Fang (730 C.E.-800 C.E.), had the mural of *The Painting of Vimalakirti*, exactly matching the Tang Dynasty pattern preserved in Dunhuang. So this illustrates that the influence of the murals of the two capitals (Chang'an and Luoyang) of the Tang Dynasty went deeply into the west of Sichuan province. And there were also some new large-scale compositions and line drawings⁸¹ in murals of the Sichuan province, which adding the historical themes to reflect the secularization of religious murals.

⁸¹ Line drawing, original named Jiehua in Chinese, is a traditional technique of Chinese art, which uses a special brush or a straightedge to accurately draw the lines of a building.

1.6 The Murals in Other Neighboring Countries

Many other ethnic groups in this period have been interacting with China today. We choose two religious murals to discuss: one is Tubo, and another is Uyghur Empire to discuss the artistic features of the other nations and their relationships with cultural communication.

1.6.1 The Religious Murals in Tubo

Tubo was the ancient name for Tibet, which attempted to cement relations with Tang Dynasty, in this way to initiate Buddhism into its area. Later, it directly translated the Buddhist scriptures from the historical East Asian. It can be seen that Buddhism had a great influence in Tubo. The remains of early temple murals in Tibet are rare, only some of them can be seen in Dunhuang nowadays. There are also traces of murals of the Song and Yuan Dynasties at the site of the Guge Kingdom in Zada County, Tibet today.

Murals of the Tubo period in Dunhuang and Tibet include a statue of the Tubo king in the Dunhuang Grottoes, reflecting the history of Tubo and its influence of Buddhism. The newly emerged themes of Manjusri and Puxian in the Cave No. 159 are obviously influenced by art of the central plains of China. These new themes only appeared in the early Tang Dynasty, so to pick up the new themes of the central plains and have an experiment of murals in Tubo period was really a challenge for the people at that time. In addition, the mural of Cave No. 465 is tantra image of Tibetan Buddhism, which has the features of the tantric mural in Tubo. Furthermore, a form of Yab-Yum and a composition of Mandala have gradually arisen.

1.6.2 The Religious Murals in Uighur

Murals in royal temples were a manifestation of multi-ethnic culture of the later period of Uighur. And they were an expression of local customs as well. For instance, The Offering Bodhisattva and The Picture of King Travel in the ancient city of Beiting, nowadays in Jimsar village, Xinjiang province, are the models that illustrate the real life in the late period of Uighur. From them, we can see the scales of palace and temple at that period of time. We can also see

the custom of worshipping Buddha of Uighur, the luxury life of Uighur rules, and different people and their living conditions. These murals are typically style of Uighur, which is based on absorbing Han style and adding its national characteristics. From the religious murals of Uighur, we can see that Buddhist art is not only the fruit of the cultural integration of various nationalities, but also has a profound impact on cultural exchanges between North Korea, Japan, and China.

1.7 The Murals from the Liao Dynasty till the Jin Dynasty (907-1234 CE)

The existence of murals of the Liao Dynasty (907 C.E.-1125 C.E.) is very considerable. For nearly half a century, a large number of murals in the Liao Dynasty have been excavated and discovered with the efforts of cultural and arts workers. The contents of these murals are rich and colorful. Among them, there are many large-scale masterpieces with high artistic value and cognitive value. They provide valuable information for us to study the social life of the Khitan, and the relationship between them and the people of Han.

Murals of the Liao Dynasty consist of two parts: one is cultural relics, and the other is archeological excavations. The first one refers to the temples and towers in the Liao Dynasty, which are rare nowadays. However there are many murals in archeological excavated tombs. We will discuss on murals in tombs in the Liao later. Then we turn our eyes to the murals of the Jin Dynasty (1115 C.E.-1234 C.E.), which was a country hold by the Nuzhen people. After destroying the Northern Song Dynasty in 1127 C.E., Jin took away the total collections of arts and a large number of excellent artists in the Northern Song court. The rules of Jin attached great importance to study the regulations and other advanced culture of the Han nationality. For instance, the emperor Shizong of Jin learned from the commendations of the persons with outstanding achievements in tradition, and ordered a portrait of these people in 1168 C.E. and in 1174 C.E. Following him, the emperor Zhangzong of Jin's cultivation of culture was particularly profound. He could write poems and be good at calligraphy. He also had a passion for other types of the arts, and established a bureau for the arts under the supervision of the Secretary, so vigorously sought out the folk arts for collection. Driven by him, the collection

became a kind of social atmosphere.

1.7.1 The Temple Murals of the Liao and Jin Dynasties (907-1234 C.E.)

Temple murals are typical decorations of these periods. For instance, the Sakyamuni Pagoda of Fogong Temple in the Ying village, Shanxi province which was built in 1056 C.E. during the Liao Dynasty, is the earliest existing large wooden pagoda. The pagoda is octagonal in shape, which equals to 66.7 meters high. And the murals were made during the Liao Dynasty too. Around the inner wooden trough, there are the Buddha statues which are nearly 8 meters high. However, the other mural of four Heavenly Kings in the North and South doorways was made by the Jin Dynasty, which are valorous and intrepid.

The other two instances of murals were all made of the Jin Dynasty, and come down to modern times. The first one are the murals in the east and west walls of Wenshu hall in Yanshan Temple, which locate in Fanshi village, Shanxi province. The temple was completed in 1158 C.E. You can get a bird's-eye view of the panoramic composition, breaking the previous artistic style, which was centered on the Buddha's sermon and created a unified composition with the Gold-and-green⁸² landscape and Jie Hua⁸³. On these murals, the Buddhist scriptures are united in the splendid mountains and rivers, as well as the pavilions and pagodas. Besides the magnificent green mountains and waters, we can see that there are several circumstances in the palace or in the marketplace, as well as full of horses and donkeys. By meaning of religious subjects, these murals make the local customs and family life of the Jin Dynasty jumping on the walls. Here the court artist named Wang Kui (1099 C.E.-?) was the creator for the Buddhism stories, as well as the natural scenery.

Finished by the same artist, the next murals are situated in Chongfu Temple, located in Shuo village, Shanxi province, which was rebuilt in 1143 C.E. The murals include three *Buddha Sermon Illustrations* on each side of the east and west walls in Mituo Hall, *Thousand Hands Thousand Eyes Avalokitesvara* on the south wall and west end wall, and three *Buddhism* and three

⁸² Gold-and-green landscape means the landscape paintings with rich decorative patterns.

⁸³ Jie Hua refers to architectural painting, which is based on all the tools of architecture to paint.

Bodhisattva on the east end wall. All of them are delicate made, the faces and accessories of Buddha are in a style of the Jin Dynasty, which shows the Jin Dynasty inherited the emphasis on Buddhist affairs of the Song and Liao Dynasties, and the decoration of temple followed old systems, which maintained the original tradition.

1.7.2 The Tomb Murals in the Liao Dynasty and the Great Jin (916-1115 C.E.), and Grotto Murals in the Western Xia Dynasty (1035-1279 C.E.)

The Liao dynasty was established by the nation of Khitan during the 916 C.E. until the 1125 C.E., in which the people were liked to imitate the cultural relics, or simply food and clothes. Later, destroying the Liao and the North Song, the Great Jin was found in 1115 C.E., which formed a confrontation with the Southern Song Dynasty. Thus from the style of tombs in the Liao Dynasty and the Great Jin, we can see that the aesthetics at that time combine with the traces of the Han culture. And the contents of murals include the nomadic life, the sceneries of the four seasons, to enjoy a feast, to return from traveling, the flowers and birds, etc.

In the other place, the Western Xia occupied the area near the Hexi Corridor since 1035 C.E. The people of it believed in the power of Buddha, refurbishing the grottoes in the previous generations. Thus many traces of them were handed down. Among them, the murals in the Western Xia at the Yulin Caves in Dunhuang contained with rich Chinese national colour. The Yulin Caves are located in a mountain gorge to the south of Anxi villege, Gansu province. Among them, the existing caves are 41, constructing from the North Wei Dynasty (386 C.E.-534 C.E.). And there are totally 4 caves in the Western Xia period. The artworks named *The Transform of Wenshu* and *The Transform of Puxian* located in the No.3 Cave are both thoughtful and informative artworks. Both the patterns of Mount Wutai in the first mural and Mount Emei in the second are absorbing landscape, which are typical followed by copies from the Northern Song Dynasty. And there is a picture of *The Tang Priest's Journey for Scriptures* located on the left side of *The Transform of Puxian* is the earliest image of that story.

1.7.3 The Tomb Murals of Zhang Shiqing

The tombs of Zhang Shiqing located in the Xia Bali village, Xuanhua district of the Zhang Jiakou city contain 12 different seats, and the time was from the Liao Dynasty to the Jin Dynasty, which bridging over hundreds of years. The archaeologists discovered the tombs of the Zhang Shiqing who was the investigating censor during 1972 until 1993. The most precious collections in the Xia Bali are the murals, which are 98 pieces, and equal to more than 360 square meters. Among them, there is a mural called *Astronomic Map*, which is made on the top of mural. It is an innovation style, which combines the Chinese traditional Twenty-Eight Mansions with the western astrological sign, and it is the earliest found of the tea ceremony, the San Yue⁸⁴, and the matchup of Chinese chess so far. The tomb murals of Liao Dynasty in the Xia Bali village has been listed as a major historical and cultural site protected at national level from 1996.

In addition, we can see that the scenes of the Liao Dynasty from this tomb murals include several servants attending on Zhang Shiqin, the appearances of the waiters and the waitresses of him, and the travel situation etc., which illustrate the clothes, ornaments, and the living situation of that period in the Liao Dynasty, and vividly show the interpenetration and integration of the cultures at that time.

1.8 The Murals in the Song and Yuan Dynasties (960-1368 CE)

With the prosperity of the commodity economy of cities in the Song Dynasty, the urban population continued to increase, and the life of citizens was also colorful. Especially, it flourished in the Northern Song Dynasty, and the religious artists could be divided into the ones of central plains, and others of the West Shu⁸⁵. We can see that how flourishing it was to hold the Buddhist service in the Song Dynasty from the murals in the Daxiangguo Temple in the center of Kaifeng city, Henan province. Meanwhile, Taoism in the Song Dynasty also developed vigorously because the Taoism temples were constantly built.

Many murals are found in the tombs of the Song and Yuan Dynasties especially in the middle

⁸⁴ San Yue is a folk music that people like. It summarizes the general name of all the forms of folk music that have not yet received that official attention.

⁸⁵ West Shu is the Sichuan province of China.

and lower reaches of Yellow River, for instance in Henan, Shandong, Jiangsu, Hebei, and Shanxi province. Only a few murals were found in the south province, like Jiangsu, Fujian, and Jiangxi province. These murals were finished by the folk artists at that time different from the artists, which depict peaceful domestic life, watching musical performance and operas, displaying a lot of people being fond of entertainment, thus they aim to present the civilization, more active, and high harmony of the Song Dynasty (960 C.E.-1279 C.E.).

In addition, the common subjects of murals include dressing of ladies, working in the kitchen, and the stories of people who remember filial piety and fraternal duty, the content of which was rich and profound. It provides detailed evidence for future generations to analyze the customs of the Song Dynasty. The first example is the murals located in 1099 C.E. in the Baisha town, Yuzhou city, Henan province, which show the scenes of banquet and music. And the second examples are the scenes of drinking, eating, and cooking from the murals in No.1 Tomb in the Li village, Xin'an town, Luoyang city, Henan province. From those murals, we can see the ordinary life of the Song Dynasty.

1.8.1 Displaying the Life of the Yuan Dynasty (1271-1368 C.E.)

A large number of tomb murals in the Yuan Dynasty reflect the living appearance at that time. And these tombs in the Yuan Dynasty were much more found in Shanxi, Inner Mongolia, and Liaoning provinces. Besides the traditional life themes and entertainment dramas, there are also landscape artworks, for instance the murals on the subject of ink wash painting and the themes of Taoist child in the tomb of Feng Daozhen in Datong city of Shanxi province, which can be seen that the arts of the Yuan was influenced by the of Song. For another two instance, the mural in the tomb of Chang Dewen in the Shangwang village, Yuanqu town of Shanxi province depicts the scenes of eating and playing the music. And the mural of the tomb of the Yuan Dynasty in the Fujiadun town, Lingyuan city, Liaoning province describes the scenes of entertaining and visiting the sick people. These two murals meticulously illustrate the image and life of the Yuan Dynasty. In addition, many tomb murals also reflect that the popularity of miscellaneous drama in the Yuan Dynasty. For instance, we can see the miscellaneous drama at that time in the murals in the tomb of the Yuan Dynasty in Yuncheng city of Shanxi province, as well as in the

murals in the tomb of the Yuan Dynasty in the Wuling village, Xinjiang town, Shanxi province, which illustrate that the distribution of the stage and the use of musical instruments were influenced by the drama of the Song Dynasty. Thereby it reflected the rise of the contemporary poetry, song, drama art at that time, and this civic culture was showed in the arts and literature, which formed textbooks, novels and short stories. The murals of this kind were the mirror of the broad subject of social life, as well as the reproduction of folk style in Song and Yuan Dynasties.

1.8.2 The Taoism Statues in the Yuan Dynasty

The rulers of the Yuan Dynasty were enthusiastic about merit and doing Buddhist or Taoist things, and they built temples all over the country. The total number of temples reached 42,318, with 213,148 monks and nuns in 1291 C.E. And being respected by Kublai who was first emperor of Yuan Dynasty, the Lamaism has been stable developed. In the late period of the Yuan Dynasty, the majority of folk artists were no longer praised like the artist in the Tang and Song Dynasties, and their names and artworks were not recorded in history. Just in that situation, the preservation and conservation of the murals in temples in Shanxi province enriches and complements this deficiency in the art history.

Yongle Palace originally located in the of Yongle, Yongji County, Shanxi Province, and then moved to North Longquan Village, Ruicheng County also in Shanxi from 1958 to 1966, because of the building of Sanmenxia Dam. The highest art value of it is the large murals. They are not only an important masterpiece in Chinese history, but also a rare giant in the world history. The entire murals have a total of 1,000 square meters, which are painted in the Sanqing Hall (the Hall of the Three Pristine Ones), the Chunyang Hall and the Chongyang Hall.

The murals in Yongle Palace belong to the Taoist murals, which aim to reveal the doctrine and inspire the peoples' hearts. They were drawn slightly earlier than the European Renaissance, and kept almost the same tone with the Yuan Dynasty. The murals, which are inherited the painting techniques of the Tang and Song Dynasties, and integrated the characteristics of the artistic values of the Yuan Dynasty, forms the remarkable style of Yongle Palace. The murals were finished by Zhu Haogu, Zhang Boyuan and etc., and all of them were the folk artists in the Shanxi

province.

The Sanqing Hall enshrines the spiritual aspirations of the Three Purities⁸⁶, which is the main hall in the Yongle Palace and concentrating nearly half of the murals. The temple is full of murals that is covered an area of 403.34 square meters which contains 290 persons in the symmetrical form. Firstly taking *The Azure Dragon and White Tiger* in the south wall as the forerunners, the picture is drawn 28 main divinities. Around these main divinities, a troop of celestial soldiers is slowly expanded in the picture. In the picture, the military commanders are the most valiant, and the warriors are mighty and unrestricted. In the meantime the girl servants in fairyland are all good-looking and standing quietly. From the vast scene, we can say that the impetus is extraordinary, the subjects are full of variety, and the lines are smooth and beautiful. The complicated scenes of this picture are concentrated in the Taoist rituals of Taoist celestial beings worshipping Yuan Shi Tianzun (the celestial worthy of the original being), therefore the picture is called "*Chao Yuan Picture (the picture forward the original being)*".

The Chunyang Hall was built to worship Lü Dongbin. Lü was one of the Eight Immorals⁸⁷. The murals inside the Chunyang Temple narrate the mythical comic stories from the birth of him until he becoming a celestial being, or he becoming immortals in a fairyland and playing in the human world. It is worth mention that the mural of *The Dialogue about Taoism of Zhongli Quan and Lü Dongbing*⁸⁸ in the back of the shrine is extremely precious artwork on which the characters are 27 extremely successful and the scenes blend very well. In the picture, we can see that the two men sit opposite on the stone, behind of which there is an old pine twined by withered vine. Gazing at Lü, Mr. Zhongli was eager to hear his answer. He told Lü Dongbing that there were two paths to choose from holding out two fingers of the left hand. Listening to his teacher's instructions, Lü Dongbing was straight sitting to answer the meditation of his own head. The whole mural has a vivid charming character with its brushwork of great delicacy.

Lastly but not least, the Chongyang Hall is a temple dedicated to the Quanzhen Sect leader of

⁸⁶ The Three Purities represent the three highest celestial beings in Taoism.

⁸⁷ The Eight Immorals are a group of legendary immortals in Chinese mythology, and revered by the Taoists. Lü Dongbing is one of them.

⁸⁸ Zhong Li is one of the Eight Immorals as the same as Lü Dongbing.

Taoism, whose name is Wang Chongyang and his disciples. It is in the form of a comic strip to describe from the birth of Wang Chongyang until story, which he helped his seven disciples getting the enlightenment and finally becoming the Taoist real men. Although the comic pictures in Chongyang Hall describe the story of Wang Chongyang, it demonstrates the activities of people in feudal society full of humour and wit. Such pictures are a microcosm of a living social life. A wide variety of dynamics jumps on the wall. For instance, the normal peoples dress up, eat tea, cook rice, farm, fish, chop wood, teach, collect medicine, as well as chat with others. Meanwhile, the sons of the aristocracy and the rich worship the emperor, and the masters of Taoist community set up an alter and chant quietly. In the mural, a very sharp contrast has been formed by the starving people, unhappy chef and musicians, and also simple hardworking farmers, to the fat-bellied emperors and courter nobles.

1.9 The Murals in the Ming and Qing Dynasties (1368-1912 CE)

Only temple murals of the Ming Dynasty remain to this day, among which the murals of the Fahai Temple in Beijing city are prominent.

1.9.1 The Murals of the Ming Dynasty in Fahai Temple in Beijing city

The Fahai temple is twenty kilometre to west suburb of Beijing. It locates in the south of Suiwei Mountain, and was built in 1439 C.E.-1443 C.E. The murals named *Śakra and Brahma Making Homage the Buddha* of in the north wall of the main room highly represent the Buddha and the guardians of Buddhism, together with *20 the heavens*, which contain the personal characters, the flowers, the beasts, and etc. to describe the smooth lines and colorful composition of their own expressions. In these pictures, although the symmetrical walls are completely separated on both sides of the door, which are respectively depicted, the internal connection of the murals is emphasized due to the echo of the opposite characters, and forms the integrity of the whole picture.

The artists not only noticed the relationship between the images of each mural and the interaction of the characters, but also the correspondence between the several murals. For

instance, the mural of *Mahsaāttva*⁸⁹ (they are the Guan Shiyin Bodhisattva, Manjusri Bodhisattva, and Puxian Bodhisattva) on the back forms a triangular correspondence relationship with the mural of the north wall. The three scholars sit in the bright part, and the heavens come relatively slowly. The Buddhas who are sitting down and the heavenly beings, who are walking on, they are both lively and coordinated, but also full of change. The murals in Fahai temple not only have the fine tradition of the previous generation, but also have the prominent features of the Ming Dynasty. They were finished by fifteen court artists like Zhang Ping (1333 C.E.-1385 C.E.) and Wang Shu (1416 C.E.-1508 C.E.), which is a costful inheritance that mirrored Buddhist murals of this old nation.

1.9.2 The Temple Murals in the Qing Dynasty

After the Yuan and Ming Dynasties, the murals in Buddhist and Taoist temples were extremely flourishing. Under the mutual infiltration of the Buddhism and Taoism, the mural influence in the temple presented a more complex and diverse phenomenon. The folk artists created an image or a composition, which was full of pure flavor. And the interaction of other arts added new themes and vitality to the temple murals. However, the Qing Dynasty started to conciliate and harmonies each ethnic group, and protected the Lamaism. So for the Tantra temples, it was a blossom period of time. But for the creation of Buddhist and Taoist murals, it gradually lost its eager and brightness to finish just one artwork. According to the programmatic method, the temple murals in the Qing Dynasty mainly focused on repairing and fixing them of old generations. Thus it reflected the decline of the mural creation.

The artworks of the Qing Dynasty were few, but representative. For instance, the mural of *Great Deity of the Eastern Peak in the Tai Mountain* locates in the Dai Temple of Mountain Tai, Shandong province, which is one of the three royal palaces, and depicts the spectacular scenes of the tour and return. The original works were finished in the Tang and Song Dynasties, but the survivals of the artworks were done by Liu Zhixue (unknown) who was a folk artist from Tai'an city, and the group of him. Since then, the murals have been redrawn in the two times of the Qing Dynasty. After thousands of years, the magnificent artworks are formed in front our eyes.

⁸⁹ Mahsaāttva means “great man” which is a general term for the Bodhisattva.

Appendix 2: Translation of the Categories of Ancient Chinese Murals

Mural is a kind of art with clear social function from ancient times to the present. The rise of the past, such as the brilliant genre of the Dunhuang murals, is due to the social needs driven by the faith and all beings. To judge from the aspect of function, murals are an important component of environmental art. They use to build the space, indoor and outdoor walls, or ceilings. But unlike other kinds of the arts, they must be organically integrated with the building and their environment, which limits the creation of murals. Meanwhile, because of their vast space and long-term preservation (consistent with the life of the building), to decorate a mural requires more ideological and social features, thus people often classify them as “monument” art forms. The technique types in ancient China include the type of painting and the type of craft. On one hand, the type of painting is mainly based on painting techniques, which is that people used the hand-painted method to finish on the wall. On the other hand, there is also a craft type, which means that the final effect of the mural must be reflected by means of craftsmanship. Such murals, due to the characteristics of the craftsmanship, and the texture and texture effects of various materials, can show the special artistic effects that other painting methods cannot achieve. The base of murals includes stone wall, mud wall, wooden board, or the surfaces of other materials. Otherwise, the classification of pigments includes strong colour paintings, light colour paintings, acrylic paintings, oil paintings, etc. Based on the robust properties of these materials, the durability of the murals can be preserved to prevent natural damage, especially for large outdoor murals.

Tracing the history of Chinese murals, except for petroglyphs of rock art in a primitive society, when China entered a class society, it did not only give life to the large buildings, but also kept a valuable tradition of mural art. According to *The School Sayings of Confucius*⁹⁰, Confucius was visited Ming-Tang (Bright Hall) and saw an image of Duke Zhou and King Cheng of the Zhou Dynasty (the 11th Century B.C.E.-256 B.C.E.), which up to now historically there are more than two thousand years of time. After visiting many murals, Confucius once said: “This is why the Zhou Dynasty was prosperous.” It can be seen that these paintings are the art based on moral

⁹⁰ The School Saying of Confucius is a book, which had existed since at least the early Han Dynasty (206 BCE-220 CE).

education, so they are belonged to the kind of persuasion painting. However, due to the fact that Chinese buildings were dominated by wood structures, the buildings were not preserved by war and natural damage, and so as the precious murals. For instance, the Efang Palace in the Qin Dynasty was beautifully decorated, but burned cleanly for more than three months. At that time, whether or not existed the murals still remained a mystery of the ages. After the establishment of People's Republic of China, archaeologists dug a large number of mural fragments from the ground, and the colours are also very rich, which are many kinds of red, yellow, blue, black and white. This has become a material evidence of a large number of murals in the Qin Dynasty. Although due to the problems of the surrounding buildings, the murals are closely related to the reputation of masters and the style that he creates. For instance, Gu Kaizhi painted *Vimalakirti* in Wuguan Temple located in Nanjing city in the Eastern Jin Dynasty. Today, we can only see his work by the words of Zhang Yanyuan, who was about 500 years later. Zhang wrote "the artist painted out an amiable smile and an introverted beauty⁹¹". With the same reputation of Gu Kaizhi, there were two persons at the same period of time: Lu Tanwei and Zhang Sengyao. an oral tradition story who tells us: Zhang understood the physical body of people, Lu understood the bones of people, meanwhile Gu understands the spirit of people, so Gu was the best of all. Later, Cao Zhongda of the Northern Qi was famous for the Buddhism murals. He liked to draw the clothes and pleats of Buddha or people, whose clothes closely relate to people's body, just like comes out of the water. So people praised him by saying that "the clothes of master Cao can leak water". Then came to the Tang Dynasty, Wu Daozi became the master of murals because of creating the style "the belts of master Wu can be used as wind". After the Song Dynasty, people who made murals were mostly folk artists. Their relationships were fathers and sons. Moreover, they had far-reaching influence, but not to be recorded by historians.

Besides temples and halls, Chinese murals are also decorations for government offices, post stations, tombs, and grottoes. Because of the war and the natural reasons, unfortunately, the murals minimalist remain, but their impact in the central plains of China and the Western Regions is significant. So we can see the clues of the murals of dynasties.

⁹¹ This sentence was firstly talked by Zhuang Zi (369 -286 BCE), and then it was used by Zhang Yanyuan.

Our discussion keeps the topic of the feudal society in ancient China, which starts from the Qin Dynasty, after many dynasties, to the end of the Qing Dynasty. During this time, the Chinese murals experienced a process from prosperity to decline.

After specifying the time frame, I divide the murals in ancient China to religious murals (temple murals and grotto murals), hall murals (the palace murals and normal-house murals), and tomb murals. Next, we will discuss the specific murals separately.

2.1 The Religious Murals

The most significant function of religious architecture is to spread the doctrines among the followers of Buddhism or Taoism. However, the classics of them are full of obscurities. The religion's function of persuasion is not easy to express by relying on the space created by the building itself. Because of this reason, it is a good way to use murals to express religious doctrine. So, the murals are with a clear theme and easy to understand, making the originally inanimate wall to promote religious ideas. At the same time, these murals also give the architectural space a mysterious symbolism that becomes more sacred and meaningful.

Among the commemorative architectures, “the spiritual function” of the murals is the most prominent, thus the art achievements of the mural paintings in such buildings are extraordinarily brilliant. The religious murals include temple murals and grotto murals.

2.1.1 The Temple Murals

The earliest temples can be traced back to the 67 C.E. in the East Han Dynasty, when the monks Kasyapa Matanga and Dharmaratna came to the capital city Luoyang. They resided firstly in Honglu Temple. Later it changed its name to White Horse Temple. The Buddhist temples in ancient China were a reconstruction project from the government office, and keeping the office name with establishing a Buddha statue inside the temple. Meanwhile, the earliest murals in temples can be seen in Mozi's article also in the East Han Dynasty. Furthermore, the common practice in the Eastern Jin Dynasty was that scholar-bureaucrats liked to give up their normal residence and establish the temples. So the structure of temple was inevitably similar to

traditional residential buildings.

According to *Past Famous Paintings* of Zhang Yanyuan in the Tang Dynasty, there were 370 artists who made murals at the time. Meanwhile, the artists had their detailed explanation to Buddhist and Taoist temples, just as the artists we are asking for have to be personally original, and to establish a personal style. Moreover, the colors of temple mural majorly are red, yellow, blue, green, and white. And the color matching is based on two aspects, which are religious and artistic effects. Thus they are showing different themes of murals.

The compositions of the temple murals have different characteristics, which basically include the centered composition, the loopback composition, and the sub-format composition, etc. Firstly, the centered composition is the most common form of composition, which is mainly used for a creation of characteristic attitude. The major figure of this composition mode is to put the important people in the center of the frame, expand the depiction of the storyline along the top, down, left, and right side of the figure, and then protrude the differences in body sizes and colours to distinguish the difference between the main body and the background, so that the picture is well-defined and the composition is balanced. Secondly, the loopback composition is the main composition of the historical story scene. It arranges the story screens into a comic strip structure based on a certain order, and then add a brief explanatory note to the pictures, so that the historical story can be displayed by the murals not only clear but coherent and firm. Lastly but not the least, the sub-format composition is used to draw Buddhist stories and Buddha murals, which arranges different Buddha statues and each episode of Buddha stories inside the grids of various shapes. Then to write the texts of each frame to fill in the grid below the corresponding mural, as a result forming the murals to a dotted pattern.

2.1.2 The Grotto Murals

Each ago has its own grotto murals from the Wei (220C.E.-265 C.E.) and Jin (266 C.E.-420 C.E.) Dynasties to the Yuan (1271C.E.-1368 C.E.) and Ming (1368C.E.-1644 C.E.) Dynasties. In addition, their composition forms have different styles and characteristics.

For instance, the rhombic patten of the mural on the top of Kizil Caves is a major feature. Each rhombic is painted with a Buddha's story or a fable story. Another instance the top murals of the

No. 21 cave in Gukou District of Kumtura Caves is a radiation pattern, whose composition is centered on the circular pattern structure in the zenith, and extending 13 trapezoidal grids lattices around. In each lattice, a story of Buddha was painted vividly and lively. The third example is the mural of *A Deer of Nine Colors* in the Dunhuang Cave 257 in North Wei Dynasty (386 C.E.-534 C.E.). The composition of this painting is the lateral expansion. Another composition form is to deal with the huge and numerous scenes. The mural is centered on the main Buddha, which are distributed around the main Buddha by other Buddha, peoples who offer a sacrifice, musicians, dancers, pond, lotus, and etc. And the atmosphere of it is solemn and active.

2.2 The Hall Murals

The hall murals include the palace murals and the normal-house murals. As early as the slave society, the murals made by artisans have become an important decoration of the palace hall. Another example is the author named Mozi talking about the palace walls and the cultural murals at the Yin and Shang Dynasties (about 1766 B.C.E.-1122 B.C.E.). Furthermore, either the ceremonies or meeting with important men, the Ming-Tang was full of murals in Zhou Dynasty (the 11th Century B.C.E.-256 B.C.E.), which caused the admiration of Confucius. We remember clearly enough that in his book *Past Famous Paintings*, Zhang Yanyuan in the Tang Dynasty recorded origins and stories of many murals. So we can conclude that the early hall murals play the missionary role of enlightenment and education.

2.3 The Tomb Murals

As early as the Neolithic times, the ancestors added special decorations to the tomb to express their respect for the dead people. The tombs of the Qin period were mainly decorated with luxurious decorations in the place where the nobles lived. The tomb mural is the only form of murals in the Han Dynasty that can be seen today. In addition, the tomb mural of the Han Dynasty (including the portrait bricks) is basically in the form of drawing and stone carving. We

continue to say the tomb murals in the Wei and Jin Dynasties. During that period, the political situation was turbulent and unsafe. As a result, many people in the central plains of China moved to the northeast and northwest. Therefore, most of the murals found in the tombs have been in these areas. Time went on to the Southern and Northern Dynasties. A large number of tomb murals appeared in some royal aristocratic tombs at that time. After it, we go to the Sui and Tang Dynasties, the murals of the tombs were mainly composed of figure paintings or figure carving. Because of the prevalence of thick burial, the murals also displayed many different kinds of subjects. Then we move to the Song, Liao and Jin Dynasties, the political turmoil and thin burial were prevailing, while the murals were mostly undertaken by folk artists. Therefore, it was inferior to the Sui and Tang Dynasties in terms of artistry and scale, while the murals of the tombs of Liao Jin and Yuan Dynasties reflected many of the national customs. Finally, we go on to the Ming and Qing Dynasties, the murals of the tombs have gradually declined.

REFERENCES

PUBLICATIONS

- Balen, K. van & Mateus, J. & Binda, L. & Baronio, G. (1997). *Expert System for the Evaluation of the Deterioration of Ancient Brick Structures. Scientific background of the damage atlas and the masonry damage diagnostic system*, Luxembourg: European Communities.
- Barassi, S. (2009). *Dreaming of a Universal Approach: Brandi's Theory of Restoration and the Conservation of Contemporary Art*, presented at the seminar Conservation, dilemmas and uncomfortable truths, London, 24 September 2009.
- Barassi, S. (2007). *The Modern Cult of Replicas: A Rieglian Analysis of Values in Replication*, London: Tate Papers.
- Basile, G. (1989). *Cos'è il restauro*, Rome: Editori Riuniti.
- Benassi, L. (2013). "Reuse of Historic Buildings in Italy. A Conflicting Policy Based on Financial Public Strategy and Heritage Preservation", in *Researchgate*, November 2013.
- Bergreen, L. (2007). *Marco Polo. From Venice to Xanadu*, New York: Alfred A. Knopf.
- Biagi-Maino, D. & Shao, K. (2016). "Formation and Development of Contemporary International Mainstream Conservation and Restoration Theory of Artistic and Cultural Heritage", *Research on Heritages and Preservation*, Vol. 6, pp. 38-47.
- Brandi, C. (2016). *Teoria del restauro*, trans. & ed. by Lu D., Shanghai: Tongji University Press.
- Brandi, C. (2006). *Theory of Restoration*, ed. Zhan C. F., trans. by Tian S. G. to Chinese, Beijing: Istituto Italiano per l'Africa e l'Oriente.
- Brandi, C. (2005). *Theory of Restoration*, ed. Giuseppe Basile, trans. by C. Rockwell to English, Florence: Nardini.
- Brandi, C. (1977). *Teoria del restauro*, Turin: Einaudi (first edition Rome: Edizioni di Storia e Letteratura, 1963).
- Caple, C. (1994). "Preventive conservation with conservation training programs", *Preventive conservation practice, theory and research*. Preprints of the contributions to the

Ottawa congress, 12-16 September 1994, ed. A. Roy and P. Smith, London: IIC, pp. 65-68.

- Capote-Pérez, L. (2017). "Cultural Heritage and Spanish Private Law", in *SAACLR*, No. 2 (3), pp. 237-254.
- Cardinali, M. (2017). "Technical Art History and the First Conference on the Scientific Analysis of Works of Art (Rome, 1930)", *History of Humanity*, Vol. 2 (1): 221-243.
- Cassin, B. & Wozny, D. (eds). (2014), *Les Intraduisibles du Patrimoine en Afrique Subsaharienne*, Paris: Editions Démopolis.
- Chen, J. (2019). "Discussion on Preventive Protection of Longmen Grottoes", *China Cultural Heritage*, Vol. 1, pp. 75-81.
- Choi, B. (2012). "Reconsideration of the Athen Charter (1931)", *Journal of Architectural History*, Vol. 21(4).
- Chu, Q. (2012). *A History of Chinese Murals*, Beijing: Beijing Arts and Crafts Publishing House.
- Coccolo, F. (2016). "Law No. 1089 of 1 June 1939. The Origin and Consequences of Italian Legislation on the Protection of the National Cultural Heritage in the 20th Century", in *Cultural Heritage, Scenarios 2015-2017*, ed. Simona Pinton and Lauso Zagato, Venice: Edizioni Ca'Foscari, pp. 195-209.
- Coralluzzo, V. (2008). "Italy's Foreign Policy toward China: Missed Opportunities and New Chance", *Journal of Modern Italian Studies*, Vol. 13, 2008, pp. 6-24.
- Di-Pietro, L. & Guglielmetti Mugion, R. & Renzi, M. F. (2013). "Cultural Technology District: A Model for Local and Regional Development", *Current Issues in Tourism*, Vol. 17 (7), pp. 640-656.
- De-Guichen, G. (1995). "La conservation préventive: un changement profond de mentalité", *Study Series. Committee for Conservation (ICOM-CC) v. 1*, Paris: ICOM, pp. 4-5.
- Dubini, P. & Montanari, F. & Cirrincione A. (eds). (2017). *Management of Cultural Firms*, Milan: Bocconi University Press.
- Editorial Committee of Complete Works of Chinese Art, 1993, *Complete Works of Chinese Fine Arts. The Paintings 15. The Dunhuang Murals*, Beijing: Cultural Relics Publishing House.
- Editorial Committee of Complete Works of Chinese Art. (1989a). *Complete Works of*

Chinese Fine Arts. The Paintings 16. The Grotto Murals in Xinjiang, Beijing: Cultural Relics Publishing House.

- Editorial Committee of Complete Works of Chinese Art. (1989b). *Complete Works of Chinese Fine Arts. The Paintings 12. The Tomb Murals*, Beijing: Cultural Relics Publishing House.
- Editorial Committee of Complete Works of Chinese Art. (1988). *Complete Works of Chinese Fine Arts. The Paintings 13. The Temple Murals*, Beijing: Cultural Relics Publishing House.
- Editorial Committee of Complete Works of Chinese Art. (1987). *Complete Works of Chinese Fine Arts. The Paintings 17. The Grotto Murals like in the Maiji Mountain*, Beijing: Cultural Relics Publishing House.
- Fisch, S. (ed.). (2008). *National Approaches to the Governance of Historical Heritage over Time. A Comparative Report*, Amsterdam: IOS Press.
- Giacomini, F. (2007). "Per reale vantaggio delle arti e della Storia", *Vincenzo Camuccini e il restauro dei dipinti a Roma nella prima metà dell'Ottocento*, Roma: Quasar.
- Graham-Burnett, D. (2010/2011). "Cesare Brandi and the Question. How to Recover What was Lost?" *Cabinet: Facing the Unknown*, Issue 40: Hair, pp. 39-46.
- Hearn, M. F. (ed.). (1990). *The Architectural Theory of Viollet-le-Duc – Readings and Commentary*, Cambridge: MIT Press.
- Hees, R. P. J. van & Naldini, S. (1995). "The Masonry Damage Diagnostic System", *Restoration of Buildings and Monuments*, Vol. 1: Issue 6, pp. 461-473.
- Huang, H. (2012a). "The R.O.C.'s Antiquities Conservation Law and its Implications Difficulties (1930-1949)", *Academia Historical Journal*, Vol. 32, pp. 41-83.
- Huang, H. (2012b). "Background Analysis of the Birth of Legalization of Antiques Preservation (1911-1930)", *Academia Historical Journal*, Vol. 34, pp. 1-44.
- ICOMOS China. (2002). *Principles for the Conservation of Heritage Sites in China*, Beijing: Cultural Relic Press.
- ICOMOS China. (2015). *Principles for the Conservation of Heritage Sites in China (Revised 2015)*, Beijing: Cultural Relic Press.
- Istituto Centrale del Restauro. (1976). *PIANO PILOTA PER LA CONSERVAZIONE PROGRAMMATA DEI BENI CULTURALI IN UMBRIA*, Rome: TECNECO.

- Jiang, L. (2014). "Controversy about the System of Cultural Relics Conservation during the Republic of China", *Journal of Jiangsu Normal University: Philosophy and Social Sciences Version*, Vol. 3, 2014, pp. 61-66.
- Johnson, P. A. (1994). *The Theory of Architecture*, New York: Van Nostrand Reinhold.
- Jokilehto, J. (1986). *A History of Architectural Conservation. The Contribution of English, French, German and an International Approach to the Conservation of Cultural Property*, D. Phil Thesis, The University of York, Institute of Advanced Architecture Studies.
- Jokilehto, J. (1998). "The Context of the Venice Charter (1964)", *CONSERVATION AND MANAGEMENT OF ARCHAEOLOGICAL SITE*, Vol. 2, pp. 229-233.
- Kain, R. (1978). "Conservation Planning in France: Policy and Practice in the Marais, Paris", *Urbanism Past & Present*, No. 7, *CITY PLANNING AND EUROPEAN URBAN POLICIES (WINTER 1978-79)*, pp. 22-34.
- Kong, D. (2019). "Introduction of Cesare Brandi's Theory of Artistic Restoration", *Art Magazine*, Vol. 1, pp. 130-133.
- Lambert, S. (2010). "Italy and the history of preventive conservation", *CeROArt*, EGG 1.
- Legge, J. (1872). *The Chinese Classics: With a Translation, Critical and Exegetical Notes, Prolegomena, and Copious Indexes*. Vol. V. Part I., Containing Dukes Yin, Hwan, Chwano, Min, He. Wan, Seuen and Ch'ing; and The Prolegomena, Hongkong and London: Lane, Crawford & CO. and Trübner & Co., 60, Parternoster Row.
- Li, C. (2018). "Analysis Regulation on Methods of Cultural Heritage's Conservation", *Journal of Urban Studies*, Vol. 39 No.2, pp.8-14.
- Li, J. (2006). "The Conservation and Restoration of Cultural Heritage: A Comparative Study of Theoretical Modes", *Literature & Art Studies*, Vol.2, pp. 24-40.
- Matsuda, A. & Mengoni, L. E. (eds.). (2016). *Reconsidering Cultural Heritage in East Asia*, London: Ubiquity Press.
- Meraz-Avila, F. A. (2009). *Architecture and Temporality in Conservation Philosophy: Cesare Brandi*, the doctoral thesis, University of Nottingham, Nottingham.
- Micheli, M. & Zhan, C. (eds). (2006). *La conservazione del patrimonio culturale in cina. Storia di un progetto di cooperazione*, Roma: ISMEO-ISIAO (ISTITUTO ITALIANO PER L'AFRICA E L'ORIENTE).

- Ministry of Foreign Affairs in Italy (ed.). (2014). *RESTORATION IN ITALY. ART AND TECHNOLOGY IN THE ACTIVITIES OF THE ISTITUTO SUPERIORE PER LA CONSERVAZIONE ED IL RESTAURO*, Rome: Gangemi Editore spa.
- National Cultural Heritage Administration in China. (2009). *Compilations of Regulations and Documents of Cultural Heritage in China (from 1949 to 2009)*, Beijing: Cultural Relics Publishing House.
- National Bureau of Statistics in China (ed.). (2019). *China Statistical Yearbook*, Beijing: China Statistics Press.
- Niglio, O. (2013). *John Ruskin: The Conservation of the Cultural Heritage*, Kyoto: Kyoto University.
- Olivato, L. (1974). *Provvedimenti della Repubblica veneta per la salvaguardia del patrimonio pittorico nei secoli XVII e XVIII*, Venezia: Istituto veneto di scienze, lettere ed arti.
- Powell, K. (1999). *Architecture Reborn: The Conversion and Reconstruction of Old Buildings*, London: Calmann & King Ltd.
- Qiang, Y. & Cheng, J. (2018). "The Preliminary Proposal on the Eastward Expansion of Shanxi History Museum", *Collected Essays of Shaanxi History Museum*, Vol. 00, pp. 9-15.
- Ruskin, J. (2016). *The Seven Lamps of Architecture, Milad Ghodsi as the illustratore*, Boston: Dana Estes & Company.
- Settis, S. (2002). *Italia S.p.A. L'assalto al patrimonio culturale*, Torino: Einaudi.
- Shao, F. (2004). "Xi'an Cultural Relics Conservation and Restoration Centre", *Relics and Museology*, Vol. 2, pp. 19-21.
- State Council in China. (2016). *The Encyclopedia of China, The Third Edition*, Beijing: Encyclopedia of China Publishing House.
- Sullivan, A. M. (2016). *Cultural Heritage and New Media: A Future for the Past*, the doctoral thesis, Chicago: The John Marshall Review of Intellectual Property Law School.
- Teng, L. (2020). "Reflections on the Practice of Cultural Relics Protection Unit System and Protection in China and Utilization in the New Era", *China Cultural Relics News*, No. 1, 2020.
- Théron, D. & Council of Europe. (2009). *Heritage and Beyond*, Strasbourg: Council of Europe Publishing.

- Underhill, A. P. (ed.). (2013). *A Companion to Chinese Archaeology*, West Sussex: John Wiley & Sons Ltd.
- Versaci, A. (2016). "The Evolution of Urban Heritage Concept in France, Between Conservation and Rehabilitation Programs", *Procedia - Social and Behaviour Sciences*, Vol. 225, pp. 3-14.
- Viollet-le-Duc, E. E. (1875). *Dictionnaire Raisoné de l'Architecture Française du Xie Au Xvie Siècle, English Edition on Restoration*, London: Sampson Low, Marston Low, and Sear.
- Voudouri, D. (2008). "Greek legislation concerning the international movement of antiquities and its ideological and political dimensions", *the 3rd Supplement Athens, A Singular Antiquity*, pp. 125-139.
- Wang, J. (ed.). (2009). *Dazu Grottos Conservation*, Beijing: Cultural Relics Press.
- Wang, W. (2017). *Yearbook of Archaeology in China 2017*, Beijing: China Social Science Press.
- Wedel, T. O. (1924). "Benedetto Croce's Theory of Aesthetic Criticism", *Studies in Philology*, Vol. 21, No.3, pp. 480-491.
- Woodhead, L. (2004). *An Introduction to Christianity*, Cambridge: Cambridge University Press.
- Work Office for The First National Survey of Movable Cultural Relics in the State Administration of Cultural Heritage. (2014). *The Handbook for The First National Survey of Movable Cultural Relics (Revised Edition)*, Beijing: Cultural Relics Publishing House.
- Yazdani-Mehr, S. (2019). "Analysis of 19th and 20th Century Conservation Key Theories in Relation to Contemporary Adaptive Reuse of Heritage Buildings", *Heritage*, 2(1), pp. 920-937.
- Zanardi, B. (2009). *Il restauro. Giovanni Urbani, Cesare Brandi e le due Teorie del restauro*, Milan: Skira.

WEBSITES

- Associazione Amici di Cesare Brandi, viewed on April 30, 2020, <http://www.cesarebrandi.org>.
- Carta del Rischio, viewed on June 30, 2020, <http://www.cartadelrischio.it/index.asp>.
- Council of Europe, viewed on September 1, 2020, <https://www.coe.int/en/web/portal/home>.
- The Faro Convention: the way forward with heritage, viewed on September 17, 2020, <https://rm.coe.int/the-faro-convention-the-way-forward-with-heritage-brochure/16809e3627>.
- Document of Pavia, Preservation of Cultural Heritage: Towards a European profile of the conservator/restorer, European summit, viewed on May 9, 2020, <http://www.episcon.scienze.unibo.it/episcon/bologna-document>.
- European Union, viewed on September 16, 2020, <https://europa.eu>.
- European Confederation of Conservator-Restorers' Organisation, viewed on September, 2020, <http://www.ecco-eu.org>.
- ICOM-CC Website, viewed on September 11, 2020, <http://www.icom-cc.org>.
- ICR Website (Istituto centrale per il restauro), viewed on May 2, 2020, <http://www.iscr.beniculturali.it>.
- IFAR, Legislation for Greece, viewed on September 14, 2020, https://www.ifar.org/icp_legislation.php?docid=1217461459.
- Law of the People's Republic of China on the Protection of Cultural Relics, 1982, 1991, 2002, 2007, 2013, 2015, and 2017, viewed on July 10, 2020, <http://www.asianlii.org/cn/legis/cen/laws/pocr304/>.
- Ministry of Foreign Affairs of the Peoples's Republic of China, viewed on July 20, 2020, https://www.fmprc.gov.cn/mfa_eng/.
- Monumentenwacht, viewed on September 18, 2020, <https://www.monumentenwacht.be>.
- National Bureau of Statistics of China, viewed on July 17, 2020, <http://www.stats.gov.cn/english/>.
- National Cultural Heritage Administration of China, viewed on July 15, 2020,

<http://www.ncha.gov.cn>.

- Online Etymology Dictionary, viewed on September 1, 2020, <https://www.etymonline.com>.
- Oxford Learner's Dictionaries, viewed on September 9, 2020, <https://www.oxfordlearnersdictionaries.com>.
- The Central People's Government of China, viewed on July 16, 2020, <http://www.gov.cn>.
- The Operational Guidelines for the Implementation of the World Heritage Convention (1977, 1997, 2005, 2015, 2019), viewed on September 11, 2020, <https://whc.unesco.org/en/guidelines/>.
- The Third National Survey of Cultural Relics in China, viewed on July 7, 2020, <http://pucha.sach.gov.cn>.
- UNESDOC, Report by the Director-General on the feasibility of establishing category 2 institutes and centers under the auspices of UNESCO, viewed on May 10, 2020, <https://unesdoc.unesco.org/ark:/48223/pf0000191671>.
- UNESCO World Heritage Convention, viewed on June 2, 2020, <http://whc.unesco.org/en/list/>.
- Venice Charter, Architecture and Monument Preservation, viewed on September 11, 2020, http://charta-von-venedig.de/venice-charter_home.html.

REPORT

During my doctoral study, I was actively involved in the cultural exchanges between China and Italy. For instance, I contacted Professor Liu Fengjun from Institution of Art and Archaeology of Shandong University in China to invite him to visit the University of Bologna together with his collaborators. On June 6th, 2017, he gave a lecture of *The Discovery and Research of Gukewen and Early Stages of Chinese Writings* in Sala Rossa of Palazzo Marchesini in Bologna, headquarters of the Institute of Advanced Studies (ISA, Istituto di Studi Avanzati dell'Università di Bologna). Professor Luca Ciotti, Professor Antonio Fiori and Professor Donatella Biagi Maino attended the conference and listened to his lecture with their students. Professor Liu Fengjun was awarded ISA Honorary Fellow of Alma Mater Studiorum of University of Bologna by the ISA director, Professor Dario Braga.

Moreover, the paper "Formation and Development of Contemporary International Mainstream Conservation and Restoration Theory of Artistic and Cultural Heritage" by Professor Donatella Biagi Maino and myself was published in the international Chinese scientific journal, *Research on Heritage and Preservation*, Volume 6, 2016, pages 38-47.

Finally, I helped Professor Donatella Biagi in the organization of two international conferences, on *Science for Preservation of Cultural Heritage at Risk*, International study conference on the occasion of the European Year of Cultural Heritage 2018: Celebrating the diversity and richness of our European heritage - "Our heritage: where the past meets the future", June 13-14, 2018, Accademia delle Scienze dell'Istituto di Bologna and Dipartimento di Beni Culturali dell'Università di Bologna, via degli Ariani, 1 Ravenna, and on *ABC Accoglienza e Beni Culturali - Hospitality and Cultural Heritage*, ISA Topic Event "Identity: one, none, one hundred thousand", October 24, 2019, Sala Nera, Palazzo Marchesini, Bologna.

Right now, I am translating two books in Chinese. One book is *Verità nascoste sui muri dei Maestri. Michelangelo, Raffaello, Perugino, Pintoricchio e gli altri in Vaticano* by Maurizio De Luca (Artemide Editoriale, Roma, 2016). The other book is *Pittura murale: proposta per un glossario*, whose editor is Mara Nimmo of Regione Lombardia and Associazione Giovanni Secco Suardo (2001).