Copyright Protection for Scientific Models

Comments on Foraminifera Model Case Ruled by Supreme People's Court

He Huaiwen

The concept "model works" is expressly stipulated in Article 3(7) of the Chinese Copyright Law and further defined in Rule 4 (13) of the Implementing Regulations of the Copyright Law as "three-dimensional works made on the basis of the shape and the structure of an object to a certain scale, for the purpose of display, test or observation". However, the definition of this legal term is apt to cause legal dilemma.

For instance, in Zheng Shouyi et al. v. Yantai Environmental Art Management Office et al., an appeal relating to a copyright dispute ruled by the Supreme People's Court (hereinafter referred to as "foraminifera model case"), 1 Shandong Higher People's Court indicated that, on the one hand, "the enlarged foraminifera models sought for protection by Zheng Shouyi are proportionally enlarged 3D works of real objects for displaying the shapes and structures thereof, which have the characteristics of the model works", and on the other hand. "the foraminifera models reflect the characteristics of the foraminifera and are the embodiment of personalized choice and expression of Zheng Shouyi, so it is a subject matter eligible for copyright protection." Since the foraminifera models in dispute were enlarged in proportion to the real objects, how can the personalized choice and expression of Zheng Shouyi be reflected? In addition, the Shandong Higher People's Court stated that foraminifera models made by Zheng Shouyi showed her understanding of foranimifera and are created through artistic abstraction and aesthetic adornment based on objective things." It was hard for Academician Zheng Shouyi, as a scientist, to accept this fact, wondering how the foraminifera models that reflect the objective reality become "semi-artworks"? She is engaged in scientific research, but why does the court regard it as a highly subjective "artistic job"? It can thus be seen that there are plenty of contradictions if scientific models are protected in such a way as "model works".

The current academic research in China cannot overcome such an impasse. Some scholars in China point out that the legal concept of "model works" is self-contradictory and shall be reconstructed as "three-dimensional aesthetic works made on the basis of the shape and the structure of an object, a person or an animal". 2 Accordingly, a living creature with a calcified shell, such as a foram, may be regarded as an object, and the model thereof can enjoy copyright protection as a piece of artwork only if it "has an aesthetic value that is independent and separable from its practical functions".3 If Academician Zheng Shouyi insists that the foraminifera models should reproduce the morphological

characteristics of foraminifera in a scientific way, the courts have to deny copyright protection to the foraminifera models due to lack of aesthetic value. Moreover, "model works" was deleted from Article 5 of the Chinese Copyright Law (Draft) (2014) (hereinafter referred to as "Draft"). Instead, "threedimensional works" is stipulated in Article 5 (14) thereof, namely, "three-dimensional works made for product manufacturing, geographical terrain demonstration, theory or structure illustration". Even if scientific models can be deemed to be "three-dimensional works", there still remains a question, i.e., how can scientific models, such as the foraminifera models, be both scientific and innovative?

This article intends to delve into the copyright protection to scientific models mainly from the following three aspects: first, the legal concept of "model works" is not applicable to analyzing scientific models in spite of being called models; second, scientific models can be works with both scientificity and originality, and it is the scientific value, rather than the aesthetic value, that enables the scientific models to be subject to copyright protection; and third, "three-dimensional works" defined in Article 5 (14) of the Draft shall include "scientific model works" only, exclusive of three-dimensional works created for "product manufacturing".

I. Scientific model being different from the "model" in the sense of "model works"

Scientific models, though being called models, are not those in the sense of "model works". "Graphic works" and "model works" are listed in parallel in Article 3 (7) of the Copyright Law in China, so the term "model" does not mean the one that is made in proportion to a real object in a common sense, but has a particular legal meaning and should be limited to "industrial product design models". Only in this way can "model works" be parallel to graphic works such as drawings of product designs and engineering designs.

As a matter of fact, many disputes in connection with model works in China involve product designs, for instance, "foreign currency detector" in Shenzhen Qiaokai Industrial Development Co., Ltd. v. Shenzhen Saikede Intelligent Technology Co., Ltd.; 4 "product photographs of an air switch external copper-bar transition conducting device" in Li Shizheng v. Shantou SEZ Nanyue Electric Appliance Co., Ltd.; 5 "pen pots with miniatures of terra-cotta warriors and

horses" in Xi'an Qintang Shangpin Culture Development Co., Ltd. v. Bai Zhentang. 6 In the case of "foraminifera models", the Shandong Higher People's Court clearly indicated that "model works ... as a type of industrial products ", which at least implied that the model works belonged to industrial designs. There were also cases where the courts treated showroom arrangements as "model works" 7, which arose from the negligence of the fact that showroom arrangements pertain to construction structures8 and therefore "construction works". Notably, construction designs also belong to industrial designs and can be applied for patent protection as designs in light of the Chinese Patent Law. 9 As shown, "model works" under the current judicial practice in China are substantially industrial designs that are eligible for patent protection as designs.

From the perspective of the source of law, "model works" in the Chinese Copyright Law originated from the term "model" in the Berne Convention for the Protection of Literary and Artistic Works ("Berne Convention" for short), referring to a design model of industrial products. When formulating the Copyright Law, terms were borrowed from the Berne Convention directly, or even provisions in the Berne Convention were translated literally into Chinese, for the sake of fulfilling the international obligations to enter into the Berne Convention. 10 The term "model" was only found in Article 2.7 of the Berne Convention. The first entry of "model" in Oxford Advanced Learner's English-Chinese Dictionary (7th edition) is "a copy of an object, usually larger than the real object", 11 which accords with the wording used in Rule 4(13) of the Implementing Regulations of the Copyright Law.

However, it must be noted that the term "model" does not appear alone in the said provision of the Berne Convention, but in combination with "industrial design and model", in such a way that its meaning is restricted and literal translation thereof is not feasible. To trace back the history of the said provision, it was found that the provision was newly added to the Berne Convention revised in Brussels in 1948, mainly for the purpose of resolving the legal issues that the contracting states have as to the protection modes of "works of applied art". 12 At that time, France was the most prominent exponent of the unity of art approach, deeming that all works, whatever their merit or purpose, shall be equally protected under the copyright law, no matter they are "works of pure art" or "works of applied art". Countries, like Britain and Italy, however, hold restrictive views on works of applied art, requiring that the artistic value of works of applied art should

be distinct from the industrial character of the product with which they are associated. There are also many countries which protect works of applied art in the framework of a design patent system under the industrial property law. 13 Views are divided among countries as to whether the copyright protection and the design protection can overlap to some extent. France takes a positive attitude, whereas the U.S. and Australia are just the opposite. German thinks it is ok for some parts, but not reasonable for other parts. ¹⁴ To finalize copyright protection in various countries, the contracting states of the Convention reached a consensus through negotiation: "subject to the provisions of Article 7 (4) of this Convention, it shall be a matter for legislation in the countries of the Union to determine the extent of the application of their laws to works of applied art and industrial designs and models, as well as the conditions under which such works, designs and models shall be protected. Works protected in the country of origin solely as designs and models shall be entitled in another country of the Union only to such special protection as is granted in that country to designs and models; however, if no such special protection is granted in that country, such works shall be protected as artistic works." 15 Pursuant to this provision, the contracting states of the Convention can decide their ways to protect works of applied art and industrial product designs at their own discretion, either by way of copyright protection, or design protection. They are entitled to determine the protection conditions and the protection scopes of the two legal ways, including, among other things, whether overlapped protection is allowed and to what extent the two legal ways can overlap. Thus, the said provision fully solves the legal issues arising from divided views on international copyright protection. Consequently, the said provision adopts two concepts, "works of applied art" and "industrial design and model", to refer to different modes of intellectual property protection for the same subject, wherein the former is the mode of automatic copyright protection and the latter is the mode of industrial property right protection after registration. "Industrial design and model" in the above-mentioned provision are subject matters eligible for design patent protection with "industrial" modifying "design" and "model" concurrently. Semantically speaking, "model" is a design of an object, in addition to the sculpture thereof, 16 and "design" has the meaning of a drawing or sketch, in addition to the practice of making designs. ¹⁷ The use of "design" and "model" in combination encompasses graphic and three-dimensional industrial de-

signs. ¹⁸ The Paris Convention for the Protection of Industrial Property ("Paris Convention" for short) protects industrial designs and utility models. 19 A utility model if literally translated means a useful product design, which is a technical solution. Thus, the so-called "model" in the Berne Convention is confined to industrial designs, instead of a small object built to scale often a larger object.

Of course, it is not necessary to dig out the origin of the word "model", but directly use the expression "model works" as stipulated in Rule 4(13) of the Implementing Regulations of the Copyright Law of 2013, even if it requires a higher level of intellectual property protection in comparison with international conventions. Even if this is the case, we should not categorize scientific models into "model works". The tough issue is that the legal concept of "model works" is self-contradictory and hard to be made justifiable and consistent. If a model is "made on the basis of the shape and the structure of an object to a certain scale" and in strict proportion to the object, it is at best a reproduction thereof with no originality, and cannot be called works. If a model is not made to scale an original object, the model may not reflect the real object but with distortion and deformation, thereby failing to fulfil the purpose of "display, test or observation". Nevertheless, the expression "the purpose of display, test or observation" used in the provision regarding "model works" under Rule 4 (13) of the Implementing Regulations of the Copyright Law of 2013 actually restricts the purpose in a broader sense. Under these circumstances, only models that are made, through distortion and deformation, not in proportion to the real object can be regarded as "works" with originality and protected under the Copyright Law. However, such "models" departing from the initial forms of objects only have aesthetic value as works of plastic arts, and it is more suitable to call them "works of fine arts". It is hard to imagine what scientific values the models should have to make them deserve the title of "scientific models".

Laws were improperly applied in the "foraminifera model" case. Although the present case involves models, they are scientific models, not design models of industrial products, and shall not be categorized into "model works". Foraminifera models have originality, which meets the requirements for works under Rule 2 of the Implementing Regulations of the Copyright Law, as will be discussed later. Since a matchable type of works is not set forth under Article 3 of the Copyright Law, the court may, upon the application of an embracive provision, rule that the foraminifera models

pertain to "other works as provided for in laws and administrative regulations" under Article 3(7) of the Copyright Law.

II. Scientificity and originality of scientific models

Scientific models seek to represent real objects. How can they be protected under the Copyright Law as being original and creative? Scientists usually do not believe that scientific models result from artistic abstraction and aesthetic adornment, and the making of scientific models is kind of artistic crafts. Scientists who adopt scientific attitudes insist that scientific models should be objective; whereas the courts require scientists to prove that scientific models are personalized selections and expressions before granting the benefit of copyright protection. As such, there is a barrier between science and copyright laws.

There is a way to break the barrier. Acknowledgement of scientificity and originality of scientific models is premised on solid understanding of scientific activities. Science is to study the underlying principle of nature in order to acquire knowledge, and scientific concepts serve as the bases for the formation of scientific cognition. The first character in the Chinese translation "科学" for "science" originally means a unit of biological classification, such as the lion belongs to the cat family. Scientific concepts are formed on the basis of classification of indiscriminate objects. Kant once said dogs saw no trees. "Tree" is an abstract concept, including the class of trees of different heights, sizes and appearances. A dog has no idea of trees, but only sees a paradigm individual of trees. In contrast, people see a type of plant with the help of the concept of trees.

Scientific concepts are formed through tremendous scientific works and innovative intellectual efforts. Taking the concept of foraminifera as an example, we all know that foraminifera, including 1000 genera, 34000 species, live in the ocean floor, are sized from tiny to the maximum diameter of more than 5cm, and have shells. Before scientific and systematic classification of foraminifera, we have no idea of, and thus turn a blind eye to, the concepts of foraminiferal species such as "Longiapertina varistriata Seiglie and Bermudez", "Elphidium craticulatum Fichtel and Moll", "Japanese Rotaria rotatoria", "Puteolina malayensis Hofker", but only see the morphological variability among foraminifera. Plenty of time and efforts are required to study foraminifera from scratch. The clue to foraminifera classification is likely to

be found through comprehensive analysis of year-by-year observation results of a vast variety of foraminifera on a large scale. Only by thousands of times of screening and discrimination it is possible to gradually determine the typical characteristics of a particular organism as a classification index, thereby forming a unified method for classifying foraminifera in order to help people know foraminifera in a scientific manner. Academician Zheng Shouyi studies foraminiferal classification and bionomics. It should be noted that different scientists, though following strict scientific standards, might extract diverse typical traits as the observed foraminifera are different in terms of type, shape and size, thereby resulting in varied classification systems to make completely different classification of foraminifera. Chances are that different experts will make totally dissimilar judgements on classification of the same object even if utilizing the same classification method, which is quite normal for any scientific classification system. Just like in the field of intellectual property with which we are familiar, a patent for invention can be classified into several types with respective international classification numbers according to the International Patent Classification (IPC).

We cannot say it is unscientific. All results from intrinsic limitations of our scientific cognition. 20 Various concepts of foraminifera should not be called works, so it is improper to consider the concepts of foraminifera as original and eligible for copyright protection. The underlying principle of the copyright law is that "copyright does not protect ideas". There are no expressly specified provisions in this regard in the current Copyright Law. However, Rule 5 of the Draft explicitly stipulates "works as named in this law refers to intellectual expressions in the literary, artistic and scientific spheres, having originality, which can be fixed in some forms." It is further provided for in Rule 9 that "copyright protection extends to expression, and does not extend to ideas, processes, principles, mathematical concepts, operational methods, etc.", which implies that ideas, processes, principles, mathematical concepts, etc., though being novel and original, are not copyrightable, such as the idea of "Lanzhou-Xining Economic Zone"; ²¹ or the artistic form of "text pictures". ²²

We are now discussing scientific models, i.e., a typical representation of scientific concepts, which is no longer concepts, but expressions. As for concepts, they are surely abstract and have no counterparts in an objective world. Concepts are akin to "statutes" in The Republic written by Plato, whilst we are prisoners squatting in the cave who have

been bound hand and foot to look at the shadows cast by statutes on the wall and do not see statutes themselves. 23 When walking on the street, we see specific persons looking differently, rather than an abstract and representative person. The abstract and representative "person" exists as a concept in human brains. Due to empirical differences, empirical phenomenon corresponding to a representative "person" in each brain will vary vastly. Portraits of "a representative person" are of great variety, possessing originality. Similarly, even for typical features of foraminifera of a particular kind, the scientists may have quite different opinions. Longterm observations enable them to be highly sensitive to the diversity of foraminifera, which is the same for us to human faces. Moreover, scientific standards, just like laws, are of uncertainty. Frank, a U.S. jurist, once said: "to a great extent, law was, is and will always be uncertain and ever-changing". ²⁴ There is a great deal of uncertainty about the scientific standards followed by scientists, which is similar to the laws applied by judges. It is easy to image that scientific models made by scientists following strict scientific standards and based on their own knowledge of typical traits of particular foraminifera are definitely kind of personalized expression.

Some scholars may argue that foraminifera have calcareous shells and fixed forms, and foraminifera models can be directly made by means of reproduction of foraminifera specimens. In the "foraminifera model case", the Shandong Higher People's Court once stated: "enlarged foraminifera models sought for protection by Zheng Shouyi in the present case are made in proportion to the real objects". Even though Academician Zheng Shouyi made the foraminifera models by taking foraminifera specimens as "models", it is not the reason to deny the scientificity and originality thereof. In order to determine a foraminifera specimen of a particular type, scientific classification is the first thing to do, and then determine a representative among the various foraminifera of that kind in a scientific manner. Different people view differently even if scientific standards are followed strictly. Academician Zheng Shouyi has a rich experience in foraminifera research and is capable of discriminating tiny differentiations between foraminifera. Her choice would be relatively more scientific. However, it is not contradictory with the fact that the choice she made is a personalized selection. Similar to finding "a typical Chinese", each individual would have his or its own personalized choice as a result of empirical discrepancy. Model makers will intentionally or unintentionally accentuate some features and neglect others for the purpose of highlighting the typical characters of certain species of foraminifera when making scientific models according to the foraminifera specimens selected thereby. If the defendants in this case assert that the foraminifera models in dispute have no special characteristics, they are encouraged to seek, in the wild nature, typical foraminifera that are totally or substantively identical to the foraminifera models made by Academician Zheng Shouyi to convince the judges that the foraminifera models in dispute lack originality. That is an impossible job just like finding "a typical Chinese" on the street. Undeniably, the foraminifera models made by Academician Zheng Shouyi are scientific and meanwhile original and should be protected under the Copyright Law.

In summary, there are intrinsic uncertainties in our scientific cognition, and the representation of scientific cognition is usually original. Different from literary expressions, scientific representation is required to be in line with scientific standards. The intrinsic uncertainties in scientific standards do not necessarily set limitations on scientific representation. A typical example is that scientific models used for expressing scientific concepts have both scientificity and originality due to creative expansion.

III. Scientific models and "threedimensional works"

If the Draft is passed to become the new Copyright Law, scientific models can be classified into "three-dimensional works" under the new law. Scientific models accord with the definition of "three-dimensional works" that is "created for the purpose of geographical terrain demonstration, as well as object theory or structure illustration". The issue, however, has not been solved satisfactorily. "Object" in the definition of three-dimensional works refers to "all things and phenomenon that exist objectively" according to Modern Chinese Dictionary (5th edition). 25 If "object" is limited to "article", then "living creatures" should not be incorporated therein; and even if possible, "humans" are not meant to be included. When the subjects of scientific models cannot be categorized into "object", scientific models should only be considered as "other literary, artistic and scientific works" under Article 5(16) of the Draft.

Furthermore, it is improper to categorize scientific models into works of fine arts or works of applied arts, both of which pertain to "two- or three-dimensional works of plastic art that have an aesthetic significance" in light of Article 5(8)

and (9) of the Draft, with the only difference lying in that works of applied arts have practical functions and are usually presented in the form of toys, furniture, accessories and the like. However, scientific models are made pursuant to scientific standards, not at an artist's own will with no restraints. In this sense, scientific models are definitely not three-dimensional works for aesthetic purposes.

There may be a dispute over whether the derivative works obtained through deformation of scientific models belong to works of fine arts or three-dimensional works? It is the purpose of the derivative works that counts, to be specific, if the derivative works are for aesthetic purposes, they are regarded as works of fine arts, and if the derivative works are for the purpose of scientific demonstration, they are regarded as three-dimensional works. In the foraminifera model case, the defendant, Liu Jungian, carved a huge stone into a foraminiferal sculpture, having a reasonable spatial layout and proration, as well as strong perspective, that is partially deformed or stretched and with the cross-section thereof rotated three-dimensionally. However, Liu Jungian engraved the names of the foraminifera on the so-called sculptures, with a few mistakes due to lack of specialized knowledge. The Shandong Higher People's Court ruled that on the one hand, Liu Jungian's recreation of the model works for the sake of art "transforms" the models in dispute; and on the other hand, the incorrect names of the accused sculptures given by Liu Jungian destroyed the corresponding relationship between the foraminifera models and names thereof, which impaired the integrity of the works. The two opinions in the same holding were found in severe conflict with each other, i.e., sculptural works for aesthetic purposes should not be required to reflect objective reality and be named in a scientific manner; nevertheless a requirement on scientific naming of Liu Jungian's sculptures implied the court admitted that the derived works were scientific models that reflected the objective reality of foraminifera. In the present case, since Liu Jungian indicated that the stone sculptures were related to a particular kind of foraminifera, they were to reveal the structural features of them. Thus, the recreated works should be determined as "scientific models" despite lack of fidelity. As stated above, the foraminifera models pertain to "other works as provided for in laws and administrative regulations" under Article 3 (7) of the Copyright Law, but to "three-dimensional works" under the Draft.

At last, it is noteworthy that disorder caused by "model works" in law will, in no way, be eliminated due to the addition of "three-dimensional works" to the Draft. "Three-dimensional works" include perspective works created for "product manufacturing", which are in substance industrial product design models or product prototypes. 26 However, as we have discussed in the first section of this article, "industrial product design models" is a legal concept in the sense of the industrial property law, and shall be a counterpart to "works of applied arts" under the Copyright Law. To put it more accurately, industrial product design models that are fixed on particular three-dimensional carriers are to present works of applied arts and would not otherwise constitute a type of works alone, just like construction models versus construction works. 27 Article 5(10) of the Draft expressly stipulates that "architectural works" include "the blueprints, design drawings, sketches and models that are the basis for construction" of buildings or constructions. But in Article 5(9) regarding "works of applied arts", no provisions are set forth to say that the industrial product design model is also such a type of works. Under these circumstances, an industrial product design model might be categorized into "three-dimensional works" or "works of applied arts", thereby leading to conflict of laws. In addition, the protection terms for those two copyrights are quite different, i.e., the protection term for the property right in relation to the former copyrighted works lasts until 50 years after the death of the creator, whereas that in relation to the latter copyrighted works is 25 years after the first publication. ²⁸ To avoid the disorder in the application of law, it is suggested to delete industrial product design models from the items under the title of three-dimensional works, that is, to delete the expression of "for product manufacturing" as stipulated in Article 5 (14) of the Draft. In such a way can industrial product design models with originality be categorized into "works of applied arts". Concurrently, scientific models in a broader sense are equal to "three-dimensional works". The copyright law system in China will be more scientific in doing so.

The author: He Huaiwen, associate professor and Ph.D supervisor with Guanghua Law School of Zhejiang University

¹ The Shandong Higher People's Court's Civil Judgment No. Luminsanzhongzi 33/2012.

² Wang Qian (2011). Reconstruction of definition of model works. Journal of East China University of Politics & Law, 3, 24.

³ Ibid.

- ⁵ The Beijing No.1 Intermediate People's Court's Civil Judgment No. Yizhongminchuzi 7573/2003.
- ⁶ The Xi'an Intermediate People's Court's Civil Judgment No. Ximinsichuzi 208/2008.
- ⁷ Yinchuan Rongsen Construction Materials Co., Ltd. v. Yinchuan Huangshan Enterprise Image Design Co., Ltd., the Higher People's Court's Civil Judgment No. Ningminzhizhongzi 8/2005 of Ningxia Hui Nationality Autonomous Region.
- ⁸ Shanghai Jiujia Architectural Ornamental Engineering Co., Ltd. v. Guangzhou Shitai Clothes Co., Ltd., the Shanghai Pudong New Area People's Court's Civil Judgment No. Puminsan(zhi)chuzi 553/2013.
- ⁹ Guidelines for Patent Examination (2010), Chapter 5 of Part IV, p. 406.
- ¹⁰ Typically, "broadcasting right" under Article 10(11) of the Copyright Law corresponds to Article 11.2(1) of the Berne Convention; Article 12 of the Copyright Law to Article 2.3 of the Berne Convention; and Article 2 of the Copyright Law to Article 3 of the Berne Convention.
- ¹¹ Hu Kangsheng (editor-in-chief) (2002). Interpretations of the Copyright Law of the PRC (p.20). The Law Press.
- Yao Hong (editor-in-chief) (2001). Interpretations of the Copyright Law of the PRC (p.60-61). The Qunzhong Press.
- ¹² Sam Ricketson & Jane Ginsburg (2006). International copyright and neighboring rights: The Berne Convention and beyond (2nd Edition). Oxford; New York: Oxford University Press, p462-464.
- 13 Ibid.
- 14 Ibid, p. 468.
- ¹⁵ See Art.2 (7) of the Berne Convention: "Subject to the provisions of Article 7 (4) of this Convention, it shall be a matter for legislation in the countries of the Union to determine the extent of the application of their laws to works of applied art and industrial designs and models, as well as the conditions under which such works, designs and models shall be protected. Works protected in the country of origin solely as designs and models shall be entitled in another country of the Union only to such special protection as is granted in that country to designs and models; however, if no such special protection is granted in that country, such works shall be protected as artistic works."
- ¹⁶ Oxford Advanced Learner's English-Chinese Dictionary (7th edition) (p.1292). The Commercial Press & Oxford University Press.
- ¹⁷ Ibid, p.540.
- ¹⁸ Professor Zheng Chengsi once said "'model' is one of the copyrightable subjects under Article 2(7) of the Berne Convention. However, it is a matter of translation skills, or even an error in translation In fact, that provision intends to protect 'three-dimensional designs', in contrast to 'planar designs'." Zheng Chengsi (2003). The Intellectual Property Law (p.302, Note 1). The Law Press. However, Professor

- Zheng Chengsi confines "model" to that of construction works.
- ¹⁹ Articles 4, 5 and 11 of the Paris Convention.
- ²⁰ Li Qiuling (editor-in-chief) (2004). Collection of Kant's Works---Critique of Pure Reason Volume III (2nd edition) (pp.532-533). The China Renmin University Press.
- ²¹ He Youli v. Qinghai Daily. The Qinghai Higher People's Court's Civil Judgment No. Qingminsanzhongzi 2/2013.
- ²² Zheng Weijiang v. Wu Guanzhong. The Beijing Fengtai District People's Court's Civil Adjudication No. Fengminchuzi 14041/2007.
- ²³ The Republic (p.272) written by Plato and translated by Guo Binhe and Zhang Zhuming (2002). The Commercial Press.
- ²⁴ Frank (U.S.). Law and the Modern Mind (p.6). Quoted from Shen Zongling (1992). Modern Western Jurisprudence (p.330). The Beijing University Press.
- ²⁵ Modern Chinese Dictionary (5th edition) (p.1246). The Commercial Press.
- ²⁶ See supra note 2, p.21.
- ²⁷ Wang Qian (2014). On forms of construction works. Studies in Law and Business, 6, 126.
- ²⁸ Article 29 of the Draft.