January 9, 2014

“Substantial Expression” and “Formalized Expression” – A New Philosophy of the Subject
Matter of Copyright

Haijun Lu
ARTICLE: “Substantial Expression” and “Formalized Expression” – A New Philosophy of the Subject Matter of Copyright

NAME: Haijun Lu *

Ph.D. and Associate Professor of Law, University of International Business and Economics Law School (No.10, Huixindong Street, Chaoyang District, Beijing 100029, P. R.China), Mobile: +86 15011328266, Tel: +86(10) 64495038, Email: shangbaking@126.com.

SUMMARY:
It has been reached a consensus in copyright academic community that the subject matter of copyright is expression. The expression protected by the copyright is expression showed in certain symbol combinations. It is the symbolized and formalized expression. Before the appearance of the “Formalized Expressions”, the “Substantial Expressions” has been in the mind. The former is the subject matter of copyright; the latter is the essence of the subject matter of copyright. The raising of the two concepts can present a more clear idea of the subject matter of copyright. As the common elements of literary works are limited, the “Formalized Expressions” of the kind of works is same to the “Substantial Expressions” of the kind of works. The distinguishing of the “Formalized Expressions” and the “Substantial Expressions” is in favor of making the right of derivative works basing on the underlying works rational, understanding the essence of software works and architecture works clearly, and clarifying the real relationship of the works. We should distinguish the “Formalized Expressions” and the “Substantial Expressions”.
TEXT:

1. Introduction

Idea-expression Dichotomy is a basic principle of copyright law which occupies an important position and plays a key role in the legal practice. To promote the development of the dichotomy, many scholars have achieved fruitful results in its in-depth study. Existing research focuses on the interpretation of connotation and extension of Idea-expression Dichotomy, the justification of Idea-expression Dichotomy and the distinction of idea and expression. Despite of the different conclusions of the study, there is still a basic consensus that the subject matter which should be protected by copyright law is the expression of idea rather than the idea itself. However, existing research could not resolve all the difficult questions about copyright such as the justification of the right to create derivative works on the ground of the underlying works and the nature of works of software and architecture works. That is to say, why does the author of the underlying works have the right to stop others from creating derivative works on her works since the expression of the derivative works has incongruity with the expression of the underlying works? Some scholars have accordingly concluded that the phenomenon is an exception of Idea-expression Dichotomy. In this circumstance, the idea should be protected by copyright law. However, this rash conclusion may negatively impact the entire theoretical system of copyright law through ignoring idea and expression dichotomy in too many circumstances. Moreover, what is the nature of the works of software? Software is usually written in high-level language. However, to make the software really useful, it should be transferred to object codes. Source codes are written in high-level language. Object codes are composed of machine codes which are expressed in “0” and “1”. The expression of source codes and object codes are different. If Idea-expression Dichotomy is mechanically interpreted, the works of software which are expressed in object codes that are transferred from source codes will be different from the works of software which are expressed in the source codes. Such a conclusion is apparently inconsistent with the common sense and the legislation of various countries. In addition, architectural works are generally protected by copyright law in most countries. However, there are different opinions about the essence of architectural works and the correlation of the different expressions of architectural works. In light of Idea-expression Dichotomy, the subject matter of copyright is expression. However, the expressions of buildings, architectural models and architectural drawings are different. What is the relationship of buildings, architectural models and architectural drawings? What is the essence of architectural works? Is the construction of buildings in accordance with the architectural drawings

---

1 See Paul Goldstein, *Goldstein on Copyright*, Aspen Publishers (2007), § 2.0, 2.2.
4 See Edward Samuels, the Idea-Expression Dichotomy in Copyright Law, 56 *Tenn. L. Rev.* 321 (winter, 1989). Also see Arjun Gupta, "I’ll Be Your Mirror" - Contemporary Art and the Role Of Style in Copyright Infringement Analysis, 31 *Dayton L. Rev.* 45 (Fall, 2005).
7 § 3(1) of Chinese Computer Software Protection Regulations stipulates that the source codes and the object codes of one computer software are one work.
and architectural models copy in sense of copyright or implementation in sense of patent? The current copyright theory cannot tell us persuasive answer.

How to reasonably interpret above phenomenon? Can we rethink the question alternatively? On the basis of the aforementioned studies, this article will present a new theory named “Substantial Expression” & “Formalized Expression” dichotomy. The dichotomy is a discovery about the subject matter of copyright. On the new theory, the real relationship among various works will be revealed. On the clearer recognizing of the relationship among various works, the rationale of the right to create derivative works as well as the essence of the works of software and the architectural works will be more persuasively interpreted.

This article has three parts. Part I. beds for “Substantial Expression” and “Formalized Expression” dichotomy. Part II introduces Idea-expression Dichotomy. This part will discuss the connotation, history, advantages and disadvantages and existing alternative measures of Idea-expression Dichotomy. On the basis of Part II, in Part III “Substantial Expression” and “Formalized Expression” dichotomy is elaborated. This part will discuss the definition and theoretical and practical significance of “Substantial Expression” and “Formalized Expression” dichotomy. Part IV (Conclusion) concludes that we should abide by Idea-expression Dichotomy. However, Idea-expression Dichotomy must be developed. “Substantial Expression” and “Formalized Expression” dichotomy is a true dichotomy about the subject matter of copyright. Basing on the dichotomy, we can recognize the nature of the subject matter of copyright and the real relationship of works more clearly.

II. Idea-Expression Dichotomy: The Principle, Its Inability and Existing Alternative Measures

Idea-expression Dichotomy means that copyright law only protects the expression of the idea, not the idea itself. It is the most basic principle of copyright law. Being used to effectively determine the rational range of the subject matter of copyright, its basic function is to define the scope of protection of copyright law clearly, balance of inspiring creation and retention of access to works in copyright law and ensuring the realization of the function and purpose of copyright law.

Idea-expression Dichotomy is very difficult to be defined because of its abstractness. From its source to today, it has been researched and thought continuously and a series of meaningful distinction methods have been developed including form and contend test, subtractive test, abstraction test, purpose or function test and Altai’s abstraction-filtration-comparison test, etc. However, even in the 21st century, people still feel that they are speaking to the ghost when they talk about Idea-expression Dichotomy. This is also true even to copyright law experts.  

A. The history, Definition of Idea-expression Dichotomy: law and practice of U.S. and China

Idea-expression Dichotomy roots, enriches and improves in copyright judicial practice. It

---

9 Although Idea-Expression Dichotomy does not appear in Chinese Copyright Act in action, it has been used in
can be traced back to Millar v. Taylor\textsuperscript{10} and Donaldson v. Beckett\textsuperscript{11}. Finally, it is systematically elaborated in Baker v. Selden\textsuperscript{12}. As the basic principle of copyright law, Idea-expression Dichotomy develops along with the constantly enriching and developing of the subject matter of copyright. The scope of the subject matter of copyright has been constantly expanded from the literal elements\textsuperscript{13} to the non-literal elements\textsuperscript{14}, and to the principle of total concept and feel. Idea-expression Dichotomy has experienced some stages from its source to the phase of strict interpretation of the expression, from the phase of not-literal elements to the phase of High-tech works\textsuperscript{15}, and from common law to the statute law.\textsuperscript{16}

As a basic principle of copyright law, Idea-expression Dichotomy is clearly defined in some

\textsuperscript{13} The early cases involving Idea-expression Dichotomy tried to “really” separate the idea and the expression. See Stowe v. Thomas.23 F. Cas. 201 (C.C.E.D. Pa. 1853) (No. 13,514).In this period, copyright only prohibited literal copying and did not prohibit a more abstract taking. Because copyright only prohibited literal copying, the copyright protection usually was limited to the physical \textit{material objects} such as manuscripts. Because of the limited copyright protection in this period, the separation of idea and expression is relatively easy. See Edward Samuels, the Idea-Expression Dichotomy in Copyright Law, 56 Tenn. L. Rev. 321,328 (winter, 1989). Also see Leslie A. Kurtz, Speaking to the Ghost: Idea and Expression in Copyright, 47 U. Miami L. Rev. 1221, 1224 (May, 1993)
\textsuperscript{14} When the non-literal elements of works comes to be protected by copyright law, Idea-expression Dichotomy has become more and more important relative to in the phase of strict interpretation of the expression because in this phase any elements may be protected by copyright and the system of limitation of copyright liability has become more important. See Leslie A. Kurtz, Speaking to the Ghost: Idea and Expression in Copyright, 47 U. Miami L. Rev. 1221, 1224 (May, 1993). In this period, the separation of idea and expression has become more difficult because of the un-limitation to the literal aspects of copyright protection. In this circumstance, the stolen of content other than form may result in copyright liability. However, there are no good functions to separate the content and the form of a work. See Leslie A. Kurtz, Speaking to the Ghost: Idea and Expression in Copyright, 47 U. Miami L. Rev. 1221,1225 (May, 1993). At the same time, Idea-expression Dichotomy has become more valuable because when the copyright protection is extended to the non-literal elements of works, the proper definition the range of copyright protection has become more difficult. Actually, only in the circumstance of non-literal copies will Idea-expression Dichotomy make sense. See Edward Samuels, the Idea-Expression Dichotomy in Copyright Law, 56 Tenn. L. Rev. 321,328 (winter, 1989). In this period, a series of tests to separate idea and expression have been developed in which “Abstraction Test” can be called the landmark which has played an important role in copyright judicial practice.
\textsuperscript{15} The computer revolution has brought about radical changes in the world. When the works of software appeared, to balance the development of the software industry and the freedom of software creation, the work of separation of idea and expression of software has become the an important issue which is difficult to be faced because of the attribute of usefulness of software. At this time, “Abstraction Test” has become the mainstream of the methods to separate idea and expression. However, someone argues that it is not suitable to for software. Since the 1990s, the Circuit Court of Appeals of the U.S. has successively slightly amended “Abstraction Test” to separate the idea and expression of software. See Mingtong Luo, \textit{Copyright Law Theory} (vol.2, edition 6), Qun Yan Tu Shu Gu Fen You Xian Gong Si (Kwan-yin Book Co., Ltd.) (2005), p.419. On the basis of “Abstraction Test”, “Altai’s Abstraction-Filtration-Comparison Test” and other tests to separate idea and expression have been proposed.
\textsuperscript{16} Along with the development of the case law of Idea-expression Dichotomy, it has been appearing on the provisions of statutory law. Before “Copyright Act of 1976”, the copyright office has promulgated the relevant rules to define the idea which should not be protected by copyright law. See Material not Subject to Copyright, 37 C.F.R. § 202.1 (1988). In “Copyright Act of 1976”of U.S., Idea-expression Dichotomy is clearly defined in Article 102(b).
Although idea and expression dichotomy is very basic in copyright law, it is too abstract to be accurately applied. So we need soundly define the dichotomy to apply it in copyright practice. Some scholars try to define the boundary of idea and expression basing on the dictionary meanings or the definitions from the aspect of philosophy. However, there are so many kinds of meanings of idea in the dictionary. Most of the meanings of idea in the dictionary are not defined from the aspect of copyright although they are useful to help to define the boundary of idea and expression because of its complicated and general nature. Similarly, the definitions of idea from the aspect of philosophy are not so useful to define the idea in the circumstance of copyright law. Therefore, we should properly define Idea-expression Dichotomy basing on its function which is separating protected elements and unprotected elements in works. Just as Professor Goldstein said that, idea and expression should not be defined in strict accordance with the literal meaning, but as an analogy to the unprotected elements and the protected elements in works.

In China, there has ever existed the academic dispute of the term of "idea / expression" and "content / form." To this problem, we can apply substantive analysis method similarly. As a matter of fact, users use the terms "idea / expression" and "content / form" to express the meaning.

---

17 § 102 (b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work. U.S. Copyright Act of 1976, 17. U.S.C. §§ 101 et seq.

18 § 6 of Chinese Computer Software Protection Regulations stipulates that in no case dose copyright protection for computer software extend to software idea, process, method of operation or mathematics concept. In the third draft amendments to the Copyright Law of China Idea-expression Dichotomy has been provided as the most basic principle.

19 § 10(1) in China Taiwan Copyright law stipulates that in no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery rather than expression of idea.

20 § 2 (8) The protection of this Convention shall not apply to news of the day or to miscellaneous facts having the character of mere items of press information. Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979).

21 § 2 Copyright protection extends to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such. WIPO Copyright Treaty (adopted in Geneva on December 20, 1996).

22 § 9(2) Copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such. Agreement on Trade-Related Aspects of Intellectual Property Rights.


25 For example, in The Compact Edition of The Oxford English Dictionary 1367 (1975), the interpretation of idea occupies one whole page which include more than 4 thousand words, 12 major significances and numerous subcategories. See Amaury Cruz, What's the Big Idea Behind the Idea-Expression Dichotomy? - Modern Ramifications of the Tree of Porphyry in Copyright Law, 18 Fla. St. U.L. Rev. 221,222 (summer, 1990).

of the unprotected elements and the protected elements in works.

The term of "content / form" is inaccurate in the context of copyright law which leads people to misunderstand the scope of protection of copyright because the content and form of the work is an organic whole which is intertwined such as the content and form in the works of music, lyric poetry and abstract plastic arts. Not only does expression include the form in a work, but also does expression include the content in a work which may express the personality of the author. It is the term of "idea / expression" rather than "content / form" that is inclined to be used.

Although it is very difficult to accurately define the scope of idea, the probable range of idea has been outlined including procedure, process, system, method of operation, concept, principle, discovery, the rules of the game and accounting methods etc. However, titles, slogans and typeface maybe either ideas or expressions relying on whether there are personal expressions.

B. The Reason to Abide by Idea-expression Dichotomy

Similar to expression, normally idea is the result of the labor of the author which is also

28 Chamberlin v. Uris Sales Corp., 150 F.2d 512 (2d Cir. 1945).
30 Title is some kinds of expression. At the same time, it is the integral part of the whole works. In the legislation of some countries such as France and Canada, when elements of copyrightability (In France, the element of copyrightability is creative. In Canada, the element of copyrightability is original and distinctive. See Haijun Lu, On Subject Matter of Copyright, Intellectual Property Publishing House (2011), p456.) are met, titles can be protected by copyright law. However, some leading copyright scholars such as Prof. Nimmer argues that not only in common law but also in statutes, titles are non-copyrightable. See Melville B. Nimmer & David Nimmer, Nimmer on Copyright, Matthew & Bender Company, Inc. (2009), § 2.16. In China, the copyrightability of titles has been discussed in some cases such as Mingren Zhang v. Qiang Chen (Copyright Infringement Dispute), (2012) Beijing Municipal Higher People's Court, Civil Division, Final Ruling, Case No. 29. In this case, the title of the work of the defendant was identical to the title of the work of the plaintiff which is "Me and You". The court argues that there is no copyright infringement of title because many works have the title "Me and You" for example in 1987 there have been works named "Me and You". However, I disagree with the court’s opinion. Title itself is a work. At the same time, it is the integral part of the whole works. A good title usually plays an important role in whole work. Thus we should judge the copyrightability of title in the context of whole work. In this case, the work involved is the theme song of the Beijing Olympic Games that named "You and Me". Although "You and Me" has appeared in other works, "You and Me" as the title of the theme song of the Beijing Olympic Games has played the most important role in the whole song. It is the key element of the work. It has enough personality to be copyrightable.
31 In 2012, two giants of China’s national drink named Guangzhou Pharmaceutical Group and JD Group dispute about the copyrightability of the advertisement of “怕上火，喝×××” (Fear of Excessive Internal Heat, Drink×××). Generally speaking, to literary works, the greater is the quantity of Expression, the greater is the likelihood of protection by copyright law. See Haijun Lu, On Subject Matter of Copyright, Intellectual Property Publishing House (2011), p455. However, this does not mean that short literary works cannot be protected by copyright law under any circumstances. If there is personality in the short literary works and it is not a traditional expression, it is copyrightable. For example, the short literary works (title:life; main body:network) is copyrightable. Therefore, slogans are personal rather than traditional expression, they may be protected by copyright law.
32 Recently, the copyright theorists in China warmly discussed the copyrightability of design of a single word basing on the leading case about the copyrightability of typeface (Beijing Founder Electronics Co., Ltd. v. Procter & Gamble (Guangzhou) Co., Ltd., Beijing Carrefour Commercial Co., Ltd. (Copyright Infringement Dispute), (2011) Beijing First Intermediate People’s Court, Civil Division, Final Ruling, Case No. 5969. In the final ruling, Judge Songyan Rui does not deeply discuss the copyrightability of design of a single word. Her ruling bases on Implied license Theory.). In my opinion, the design of a single word is creation. The creation belongs to works of art. The basic structure of Chinese characters is used to transmit information. It is practical. Different from the usefulness of Chinese characters basic structure of transmitting information, if the design of a single word made on the basis of the basic structure of the Chinese characters is personalized design and original, it is able to obtain copyright protection. The possible adverse consequences of the copyright protection of the word body design can be overcome through the improvement of the power set of copyright and copyright restriction system.
important to the development of economic and society. For example, a significant idea will facilitate major theoretical developments and bring enormous economic and social benefits. The proposition of Einstein's theory of relativity in natural sciences and Coase Theorem in social sciences are good proofs. Whether in accordance with the natural law theory, or according to Locke's Labor Theory, or in view of the great social value of idea, it seems that idea should be protected by law. However, according to Idea-expression Dichotomy, idea should not be protected by copyright law. It seems to be contrary to the social common sense and principles of justice. There are underlying causes about Idea-expression Dichotomy.

1. Creative Practice Calls for Idea-expression Dichotomy

The purpose of copyright law is promoting the development of social culture and art which is guaranteed by endowing the exclusive rights to author in a limited period. However, the exclusive rights are the obstacle of creation. 33 Figuratively speaking, “the more extensive copyright protection is, the more inhibited is the literary imagination.” 34 As a result, in order to ensure the smoothness of cultural creation, copyright protection must be limited within a reasonable range.

(1) The creation of human being is a course of cumulative growth. The copyright system should follow this law. All of the creation bases on existing materials. 35 In the process of literary creation, authors are inevitably enlightened and guided by others.

(2) There are limited ideas which should be the common materials of the public. For example, actually there only exist 36 kinds of tragic situations and the corresponding 36 emotion. The same kind of thought, research and theme often repeatedly exist in works. 36

If an author may take the idea from the raw materials through the behavior to create new expression of an idea, every copyright will shrink the range of idea. Science, poetry, drama and other literature will be hindered. 37

If ideas are endowed an exclusive right, the free communication of the ideas and the creation of works will be chained. Not only may we freely take the ideas of other works, but also can we separately take the components of them such as facts, concepts, themes, structure, methods, literary style, literary form, artistic techniques and vocabulary etc. 38

In short, idea, procedure, process, system, method of operation, concept, principle, and discovery are the basic building blocks of copyrightable expressions. If these ideas are endowed copyright, the purpose of copyright law will not be revealed. 39

35 Emerson v. Davies, 8 F. Cas. 615, 619 (C.C. D. Mass. 1845) (No. 4,436).
39 See Julie E. Cohen, Lydia Pallas Loren, Ruth Gana Okediji, Maureen a. O’ rourke, Copyright In Global
2. Idea-expression Dichotomy: the Reflection of the Economic Basis

Idea-Expression Dichotomy not only fits for the practice of creation, but also reflects of the economic base.

(1). The monopoly of idea will increase the cost of the works of creation which will decrease the quantity of works. All of the creations base on preexisting works and inevitably use the materials of preexisting works. However, if the first person who expresses an idea has gained the monopoly of the idea, any later creator will have to obtain the permission of the first author to use the idea.

In other hand, it is impossible that a work includes only one idea in sense of copyright. For this reason, the author who does not want to incur litigation will have to find the sources of the ideas which may appear in his works one by one. Although it is possible in practice, it is not feasible.

The creation of the work will be greatly hampered and the aim to promote the progress of science and useful art will not be able to be successfully achieved if the idea is protected by copyright law.

(2). The copyright protection of idea will encourage rent-seeking behavior. The developing cost of a new idea may be lower than the potential revenue of licensing of the idea. Frenzy of claiming rights of the ideas will appear. Ideas with minimal expression will absorb many resources which should be used to create the most abundant expression. The ideas will be hoarded by the “creators” to get license fee.

(3). It is not feasible to protect ideas by copyright law because of the inflated governing costs of the rights on the ideas. In the creations of the author, there are so many sporadic ideas that the courts have to define the range of the idea and the overlapping of different ideas. In all of the embarrassing actions of the courts, the confirmation of the plaintiff’s original ideas is most difficult.

In all, there is no benefit to protect ideas by copyright law. Only does the copyright protection of ideas will enhance the cost of creation and will decrease the quantity of works. Copyright is a double-edged sword which will destroy competition while inspiring creation. From the perspective of the protection of the creators of new ideas especially the considerable ideas, it is equitable to protect ideas by copyright law. However, from the perspective of the whole society, the copyright protection of ideas does not meet the social and public interests.


Freedom of expression is guaranteed by the Constitution which is an important human right which means that everyone has the freedom to express personal thoughts and views.

41 Nash v. CBS, Inc., 899 F.2d 1537, 1540 (7th Cir. 1990).
Copyright owners have the right to control the replication and dissemination of copyright works to obtain economic benefits. However, freedom of expression encourages free communication and dissemination of speeches. Therefore, it seems that the system of copyright is conflict with the spirit of freedom to express. However, they have effect in common.

(1). Incentives of copyright law encourages the freedom of expression through the richness of expression.

(2). As Justice Brandeis said, "The noblest of human productions - knowledge, truths, conceptions, and ideas - become, after voluntary communication to others, free as the air to common use." 43 Idea-expression Dichotomy enriches the market of ideas through excluding ideas from the subject matters of copyright.

(3). It is not the case that the market of ideas is restrained by copyright law because it is the expression of idea that is protected by copyright. On the safeguard of Idea-expression Dichotomy, it is the speech which only repeats things that have been expressed by others that be restricted by copyright and it is the expression which adds on new things to the market of idea that be hampered by copyright. 44

In all, the copyright system should be fit to the spirit of freedom of speech. Idea-expression Dichotomy must be abided by. Otherwise, the freedom of speech will be destroyed.

C. How to Separate Idea and Expression

As a basic principle of copyright, Idea-expression Dichotomy assumes considerable historical missions. To carry through the missions, we need to find some methods to separate idea and expression. However, it is not an easy task.

A leading scholar on Idea-expression Dichotomy vividly says that “Copyright can be thought of as something in the nature of a Swiss cheese - full of holes. The unprotected elements within a work, however, cannot be simply snipped out as with a scissors. Rather, they must be conceptualized out by the perceiver, who will need to make judgments and evaluations.” “The words idea and expression remain strangely undefined, terms without content, bottles without wine.” 45 “No principle can be stated as to when an imitator has gone beyond copying the ‘idea’ and has borrowed its ‘expression’. Decisions must therefore inevitably be ad hoc.” 46

As an abstract legal principle, Idea-expression Dichotomy should be implemented through applying specific tests. A series of tests to separate idea and expression have appeared in copyright legal practice such as “Test on Content and Form”, “Subtractive Test”, “Abstraction Test”, “Pattern Test”, “Test on Purpose or Function”, “Abstraction-Filtration-Comparison Test”, and so

46 Peter Pan Fabrics, Inc. v. Martin Weiner Corp., 274 F.2d 487, 489 (2d Cir. 1960).
D. Does Idea/Expression Dichotomy Really Do Its Work

Idea/Expression Dichotomy means that copyright law protects expression rather than idea which has played an important role in copyright legal practice to separate copyrightable elements and non-copyrightable elements and in the engineer of balance the incentive to the creation and the access to the information. However, just from the birth of Idea/Expression Dichotomy, it has been questioned frequently.

1. Idea/Expression Dichotomy Has Not Reached Its Attempt

The function of Idea/Expression Dichotomy generally is defined as rationally restrict the copyright protection. However, from the history of Idea/Expression Dichotomy, it has played a role of expansion of subject matters of copyright rather than restriction of them. 47 Idea/Expression Dichotomy has developed along with the expansion of subject matters of copyright from the literary copyright protection to the non-literary copyright protection, and to “the total concept and feel principle”. Sometimes, Idea/Expression Dichotomy has been used as a tool to expand the subject matters of copyright such as “Pattern Test” which argues that the sequence and the interplay of characters of the works should be protected by copyright law and which expands the range of copyright protection significantly.

2. Idea/Expression Dichotomy Is Not Useful to the Sound Definition of the Range of Copyright Protection

Idea/Expression Dichotomy is not a useful tool to predict the range of copyright protection of specific works rather than the ex post facto description of whether the copyright infringement exists. That is to say, if the works is judged to be copyright infringed, it is regarded as the copyrightable expressions; however, if the works is not judged to be copyright infringed, it is be regarded as non-copyrightable ideas. 48 So Idea/Expression Dichotomy is impressionistically used to justify the judgment rather than present the grounds of the judgment. 49

E. The Alternatives of Idea/Expression Dichotomy

As the cornerstone of copyright law, Idea/Expression Dichotomy has an important impact on copyright legal practice. Some scholars have made some useful explorations about the dichotomy:

1. A Market-Based Analysis

Some scholar has presented a market-based analysis as an alternative of Idea/Expression Dichotomy who argues that the term of Idea/Expression Dichotomy does not touch upon the basic purpose of copyright law rather than the alternative or metaphor of market affect analysis. 50

47 See Edward Samuels, the Idea-Expression Dichotomy in Copyright Law, 56 Tenn. L. Rev. 321, 368 (winter, 1989).
48 Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738, 742 (9th Cir. 1971).
49 See Edward Samuels, the Idea-Expression Dichotomy in Copyright Law, 56 Tenn. L. Rev. 321, 324 (winter, 1989).
50 See Edward C. Wilde, Replacing the Idea/Expression Metaphor with a Market-Based Analysis in Copyright
Market-Based Analysis is a judgment on the market affection of one work on another works. Courts have usually judged the copyright cases on the market interplay of the works of the plaintiff and the works of the defendant. A Market-Based Analysis rather than the term of Idea/Expression Dichotomy should be used by courts to judge whether the works of defendant have infringed the copyright of the works of plaintiff. In Market-Based Analysis, the market of the works should be considered. If the similarities of the works of the defendant and the plaintiff copied from the works of the plaintiff replaces or seizes the appropriate market position, the defendants constitutes copyright infringement. On the contrary, if the two works can compete as separate products, there is no copyright infringement. 51

2. Ideas Are Protected by Copyright Law

Some scholar argues that ideas should be protected by copyright law to a certain extent because ideas are so difficult to be defined that they should be ignored. 52 Moreover, in the legal practice, ideas are really protected by copyright. For example, the substantial similarity is actually the similarity of ideas. The process of “Abstraction Test” and the protection of the right of the creation of derivative works demonstrate that ideas are protected by copyright law. 53 However, copyright law just protects ideas as incidental effects rather than the basic principles. The arguments of copyright protection of ideas are just discovery of another side of the basic principle of copyright law.

3. The Legal Interest Protection of Ideas- a New Perspective about the Subject Matter of Copyright54

The living resources under civil law express as rights, legal interests and free resources. Rights mean the legal power protecting the interest. Legal interests mean the specific living resources which are passively acknowledged by the law. Free resources mean the non-legally-binding resources. With the development of economic and society, the traditional Idea/Expression Dichotomy cannot meet the new demand of copyright practice development. It calls for a new theory.

Basing on the classification of living resources in civil law, we can construct the subject matter from the following perspective. It is not the case that ideas are not completely protected by copyright law. From the perspective of resources-oriented standard, the subject matter of copyright can be classified as rights, legal interests and free resources. Expressions are directly protected by copyright law as the rights owned by copyright owner. Ideas are protected as incidental effects by

---

copyright law as the legal interests. The expressions and the ideas in public domain are regarded as free resources which are not under the control of copyright law. However, the use of the free resources cannot violate the principle of good faith and the principle of public order and good morals. The explanation of the subject matter may make some sense.

In a nutshell, there are actually some theoretical flaws and drawbacks about Idea/Expression Dichotomy. However, it still is one of the most basic principles of copyright law and the most important directions of copyright legal practices which should be abided by. When Idea/Expression Dichotomy is applied with the separating methods of idea and expression, the theoretical flaws and drawbacks about Idea/Expression Dichotomy, the purpose of copyright law and the other principles of copyright law must be seriously considered to justify the judgments of the specific copyright case.

Prof. Edward Samuels proposed some instructive suggestions about the application of Idea/Expression Dichotomy. 55

(1). Idea/Expression Dichotomy should be used as the straw.

The substantial similarity test, the originality principle, the specific copyright principle of useful article, factual works and characters should be applied as priority relative to Idea/Expression Dichotomy because they base on the stronger policy considerations and they have the agility not owned by Idea/Expression Dichotomy.

(2). Idea/Expression Dichotomy should be applied in the phase of judging of copyright infringement rather than the threshold stage.

(3). The copyright-required expressions should be a minimal amount. A works just needs to include only a modest expressive content to be copyrightable.

(4). The merger doctrine should be seriously considered in applying Idea/Expression Dichotomy.

In all, Idea/Expression Dichotomy is a basic principle of copyright law, the cornerstone of achievement of the purpose of copyright law and the direction of copyright legislations and jurisdictions. Although in some kinds of works Idea/Expression Dichotomy cannot justifiably define the range of copyright protection, the role of it as the cornerstone of copyright law should not be shaken. The feasible path is that we should rethink the subject matter of copyright and endow the new meaning to the subject matter of copyright fit to the copyright practice. On the base of the new interpretation, the copyright systems should be innovated to fit the need of the society.

III. The New Theory: "Substantial Expression" and "Formalized Expressions" Dichotomy

As a most basic principle, Idea/Expression Dichotomy means that copyright law protects expression of idea, not the idea itself. Although there are different opinions about the meanings of idea and expression, the scholars have common points in the recognition of the basic status of Idea/Expression Dichotomy in copyright law. That is to say, all the scholars argue that the subject matter of copyright is expression rather than idea. The copyrightable expressions express as the combinations of the ideograms in some forms comprised of signals. Actually before the shaping of the Formalized and ideogramized expressions, the expressions have already existed which are the essence of the subject matter of copyright.

A. the proposition and definition of “Substantial Expression” and “Formalized Expression”

The expression of idea can be classified to two levels: the first one is “Substantial Expression” which is the essence of the subject matter of copyright, the second one is “Formalized Expression” (expression in tangible form of combination of ideograms) which is the object of the subject matter of copyright.

1. The Distinction of “Substantial Expression” and “Formalized Expression” Is Confirmed in the Creation of Works

The creation of the author actually is a process of the transformation from idea to expression. In the process of creation, the first thing appearing in the mind is idea. Generally speaking, we express our views basing on our feelings which are the ideas. The ideas in the mind of the author can be isolated to hierarchy of levels. The first forms of ideas are most general ideas. Through the thinking and brewing, the most general ideas become more and more concrete. When the ideas are developed to a certain degree of specific, enough personal trade-offs and judgments are added in the most general ideas. The most general ideas evolve into concrete ideas. Once the concrete ideas in the mind of the author have been expressed appreciable with given certain forms regardless of the kinds of the forms, the copyrightable expressions which have been given certain forms appear. It is the expressions which have been given certain forms that are protected by modern copyright law. The process from idea to expression can be articulated through analyzing the process from non-copyrightable information to the copyrightable works. Information is non-copyrightable which is objective such as the information of rainfall. Information is conveyed to human beings through signals such as “a lot of clouds”. Neither information nor signals are subject to copyright

56 “Formalized” in this paper is different from “formalized” in the context of law literature.

57 “Substantial Expressions” vs. “Formalized Expressions” Dichotomy is different from fixed work v. unfixed work. “Fixed” means that a work is fixed on a tangible medium of expressions. “Formalized expressions” may be fixed or unfixed. “Formalized expressions” mean that the expressions have been expressed as form of combination of ideograms such as Chinese characters.
laws. The copyrightable matters are the combinations of symbols expressing the information and the signals. The combinations of symbols are the permutations and combinations of ideographic symbols such as text, lines, colors, melodies which are non-copyrightable because they are common heritages of human beings. If the combinations of symbols have been distinctive through the creation of the author, the distinctive combinations of symbols can be protected by copyright law. The combinations such as “It is about to rain” and “there are a lot of clouds” are copyrightable although “it”, “rain” and “clouds” are non-copyrightable symbols.

The subject matter protected by copyright law is the expression in tangible form of combinations of ideograms. In the previous stage of the creation of works, the most abstract idea firstly appears in the mind of the author which is not protected by copyright law. With the advance of creative process, the author increasingly integrates his personal ideas into the abstract idea and finally the expression in tangible form of combinations of ideograms appears. Actually, before the expression gets perspective through the form of combinations of ideograms, the essence of the subject matter of copyright which should be protected by copyright law has actually existed in the author’s mind. The expression in this stage has not got perspective in form of combinations of ideograms. It may not be the subject matter of the property and protected by copyright law. However, the expression in this stage is the essence of the subject matter of copyright.

2. The Being of “Substantial Expressions” Independent of “Formalized Expressions” Is Confirmed through the Fixation Requirement of Works in some legislations

The fixation requirement should be met if the works want to be protected by copyright law in some legislation such as the copyright act of U.S. The fixation requirements means that works should exist on the tangible material objects to be protected by copyright law. Although the fixation requirement is not a universal requirement of copyrightability, it can be inferred that practically the expressions before they are expressed in the tangible material objects do exist in the mind of the author rather than only on the tangible material objects. The expressions in the mind of the author are “expressions in mind” which are “Substantial Expressions”. The expressions expressed as tangible form of combination of ideograms are “ideogramized expressions” which

58 Some scholars such as Chen Li define subject matter of IP as the combinations of ideograms. See Chen Li, the systemization of IP law, Peking University Press(2005), p123. We can say that the subject matter of copyright and trademark are combinations of ideograms. However, it is not the case in patent. The proposition that technical solutions(subject matter of patent) are expressions of idea seems to be unconvincing. The basic idea can be protected not only in copyright law but also in patent law. The above fact cannot be based to say that the subject matter of patent is expression of idea. Just like Idea/Expression Dichotomy in copyright law, Idea vs. Application Dichotomy is the basic principle in patent law which means that the subject matter of patent is the application of idea rather than the abstract idea itself. The application of idea itself is not like the expression of idea protected by copyright law which is the concrete idea embodied in technical solutions which are expressed through combinations of ideograms. The judgment can be discerned from the different contents of patent and copyright. The basic content of copyright is right to copy. However, the basic content of patent is right to implement which means that relying on technical solutions making identical products or using identical methods which are the application of concrete ideas.

59 Prof. Peter K. Yu argues that there may be abstract artists who start with expressions and work backwards. Even in this circumstance, actually the abstract artists start with abstract ideas rather than Formalized expressions.
are “Formalized Expressions”. 60

The relations between the “expressions in mind” and the “ideogramized expressions” present a variety of kinds of state because diverse ideogramized modes of different works. The limitation of the elements of common literary works results in the identity of “Substantial Expressions” and “Formalized Expressions” of the kind of works. The expressions of common literary works are comprised of ideograms which are the result of the development of the long-term practice of mankind such as the texts and numbers whose significance is conventional. According to statistics, there are more than 5000 kinds of languages in the world. However, there are few languages that have been widely used. There is usually one generic language in one nation or one region which generally is the habit and paradigms of thinking of the people in the nation or region. That is to say, people think about one question in the bind of the generic language. 61 The limitation and conventionality of the generic languages results in the identity of “Substantial Expressions” and “Formalized Expressions” of common literary works. However, the limitation of elements (ideograms) of common literary works does not exist in all kinds of works. The diversity of elements of some works results in diversity of states of “Formalized Expressions”. The neglect of “Substantial Expressions” in the existing copyright theory results in the misconceptions of the diversity of the states of the “Formalized Expressions”. For example, it is incorrectly argued that the “Formalized Expressions” are different works. As a matter of fact, the diverse “Formalized Expressions” have identical “Substantial Expressions” and they are one works. The arguments result in the chaos of copyright legal practices.

**B. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and the Idea vs. Expression Dichotomy**

In the phase of come-into-being, “Substantial Expressions” is the objective expression not

---

60 In the theoretical circles of IP in China, there are two schools about the nature of copyright in which one school argues that copyright is intangible property and another school proposes that copyright is tangible property. From the perspective of the process of creation of works and relying on “Substantial Expression” and “Formalized Expression” Dichotomy, both these views do not conflict. Only these views have different starting points. Although “Substantial Expression” is the prophase and base of “Formalized Expression”, if “Essence of Expression” has not been ideogramized and embodied, it is non-copyrightable because it is non-perspective and not eligible subject matter of property. In the sense of the non-copyrightable status of non-ideogramized intangible “Substantial Expression”, we can propose that copyright is some kind of tangible property. However, the embodied formalized -ideogramized -“Substantial Expression” is still different to common tangible property such as chattel and real estate although it meets the basic requirements of property such as perspective and demarcated. Because we cannot touch it through our sense but can only recognize it by mind, from this perspective, we can define copyright as intangible property.

61 In this context, someone may confuse “Substantial Expressions” vs. “Formalized Expressions” Dichotomy with merger doctrine. The later means that when there are only one means or limited means to express the specific idea, the expressions cannot be protected by copyright law or the idea behind the expressions will be protected because in the context the expressions are merged with the ideas which are un-copyrightable. As described in the following, Substantial Expressions are expressions rather than ideas. So the relations of “Substantial Expressions” and “Formalized Expressions” are not equivalent to idea and expression. Then the merger doctrine is impossible be implied in the context of “Substantial Expressions” and “Formalized Expressions”. Although all the expressions of ideas and the “Formalized Expressions” of “Substantial Expressions” may be limited by some elements, the elements are different. The former are limited by the combinations of ideograms and the later are limited by the ideograms themselves.
expressed as tangible form of combination of ideograms unlike the objective non-copyrightable ideas prior to the “Formalized Expressions”. From the perspective of the existing state, “Substantial Expressions” is the product of creations of the human being which are not expressed externally in some form. “Substantial Expressions” in above state cannot be eligible subject matter of property because they are not perspective which cannot be demarcated. The above conclusion can be confirmed by the phenomenon that almost all of the copyright laws stipulate that the “works” which are not expressed externally by some ideograms cannot be protected by copyright law. In essence, “Substantial Expressions” are the essence of “ideogramized expressions” sourced from the personal creations of human beings. To clarify the nature of copyrightable works will help us to realize the truth of the subject matter of copyright and the constuction of works. Then the difficult questions in copyright law will be solved.

“Substantial Expressions” vs. “Formalized Expressions” dichotomy is different from the Idea vs. Expression Dichotomy. Firstly, “Substantial Expressions” is one objective existing form of “expressions” rather than “idea”. Secondly, it is not the case that to differentiate “the copyrightable subject matter” and “the non-copyrightable subject matter” we differentiate “Substantial Expressions” and “Formalized Expressions”. The fact is that to further clarify the copyrightable “expressions” we indicate the existence of “Substantial Expressions” underlying the “ideogramized expressions”. Therefore, we need not worry that the proposition of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy will alter the copyright balance at present.

C. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and the Works vs. Medium of Expression Dichotomy

Normally the copyrightable “works” means the “Formalized Expressions”. However, the carrier of works means the mediums carrying the “Formalized Expressions”. “Works” is the subject matter of copyright. “Carrier” is the subject matter of property right. “Substantial Expressions” is evolved into “Formalized Expressions” by way of “being ideogramized”. Then “Substantial Expressions” is evolved into perspective expressions by means of carrier. “Formalized Expressions” which is perspective no matter by means of listening or watching can be protected by copyright law because it has been one eligible subject matter of copyright. For example, common literary works become perspective with the carrier of papers. In this perspective state, people can read and enjoy works by sight. Oral works become perspective with the carrier of air. In this perspective state, people can read and enjoy works by listening. Only the perspective “Formalized Expressions” with some carrier can become some eligible subject matter of property which can be protected by copyright. It meets the objective laws that copyright law stipulates that oral works are copyrightable.
D. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and Test on Content and Form

In the early history of copyright law, the subject matter of copyright was limited to *literal* words. In this period, it was relatively easy to separate idea and expression. “If copyright protected only against literal copying, the distinction between protected expression and unprotected ideas would present few problems. The line could be drawn between the form in which the author expressed her ideas and the content of those ideas.”

In this stage, the form of works is the form in the strict sense which has usually been limited to the language and manuscripts of the author and has been defined expression protected by copyright law. The things other than the form are the content of the works which are ideas of the works not protected by copyright law. In other words, all the takings and use of the works other than literal copying are lawful according to the copyright law in that stage.

Test on content and form is just the test relying on the specific historic conditions and it only makes sense at the time. When the range of the subject matter of copyright is not limited to the literal words of works, it becomes difficult to separate the form and the content of the works.

In addition, the meaning of the “content” and “form” in that period is different from their common meaning. Generally speaking, the content and the form of works are usually intertwined. Not only do the original elements exist in the form, but also they exist in the content. The subject matter of modern copyright law has not been limited to the form in common sense. Hence, the boundary of idea and expression cannot be defined on the separation of the form and the content of the works.

In summary, in the context of modern copyright law, content and form are not strict copyright law terminology. In fact, content and form are inextricably intertwined in a works. Content and form dichotomy is not equivalent to idea and expression dichotomy. In other words, content is not equivalent to idea and form is not equivalent to expression. Also, “Substantial Expressions” vs. “Formalized Expressions” Dichotomy is not equivalent to content and form dichotomy. All of content and form may be either ideas or expressions. However, all of “Substantial Expressions” and “Formalized Expressions” are expressions.

E. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and Abstractions Test

Marked by Abstractions Test, the tests of separating idea and expression become relatively mature. Abstractions Test is traced back to Nichols v. Universal Pictures Corp. In Nichols, Judge Hand argued classically that:

---

63 Nichols v. Universal Pictures Corp. 45 F.2d 119, 121 (2d Cir. 1930).
“... Upon any work, and especially upon a play, a great number of patterns of increasing
generality will fit equally well, as more and more of the incident is left out. The last may perhaps
be no more than the most general statement of what the play is about, and at times might consist
only of its title; but there is a point in this series of abstractions where they are no longer
protected, since otherwise the playwright could prevent the use of his ‘ideas,’ to which, apart
from their expression, his property is never extended. ... Nobody has ever been able to fix that
boundary, and nobody ever can...”

Judge Hand argued that the copyrightable elements of the works should be compared to judge
whether there are substantial similarities between them. The first thing which should be done is
that the works should be divided into different levels of idea and expression applying the
abstracting method. If the similarities between the works lie in the ideas on the higher levels, the
similarities are not substantial. However, if the similarities between the works lie in the
expressions on the lower levels, the similarities are substantial. 64 For example, when comparing
the plot and storyline of the works, the tests should lie in the similarities at the lowest level of
abstraction. If the similarities between the works lie in the ideas on the higher levels, these
similarities are less likely to constitute infringement. 65

Abstractions Test is similar with Subtractive Test on the comparison of works limited to the
copyrightable elements. To some extent representing the direction of copyright judicial trial,
Abstractions Test has inevitably the same defects like Subtractive Test. However, the progress of
Abstractions Test relative to Subtractive Test lies in it being the real method to separate idea and
expression especially only making sense to specific works. Basing on the abstraction of the works,
Abstractions Test helps us to separate the copyrightable expressions at the lower level of
abstraction and the non-copyrightable ideas at the higher level of abstraction. Abstractions Test
has become the most important method to separate idea and expression of works which has an
important impact to copyright judicial practice. 66

However, there are many critical comments on Abstractions Test. For example, Abstractions
Test is on instinct not the principled separation of idea and expression. It is clear that there is no
principle to judge the boundary of the imitating of ideas and the taking of expression. 67 Even
Justice Hand confessed that “Nobody has ever been able to fix that boundary, and nobody ever
can.” However, we still should not ignore the significance of Abstractions Test which is
meaningful to the copyright legal practice.

64 See Xiang Li, American Copyright Law: Principles, Cases and Materials, China University of Political Science
65 Nichols v. Universal Pictures Corp. 45 F.2d 119, 121 (2d Cir. 1930).
66 See Mingtong Luo, Copyright Law Theory (vol.2, edition 6), Qun Yan Tu Shu Gu Fen You Xian Gong Si
(Kwan-yin Book Co., Ltd.) (2005), p405. In China, Abstraction Test has been used to separate the copyrightable
expressions and non-copyrightable ideas. For example, Zhuangyu v. Guo Jingming, Chunfeng Literature and Art
Publishing House, Beijing Book Building Co., Ltd. (Copyright Infringement Dispute), (2005) Beijing Municipal
Higher People's Court, Civil Division, Final Ruling, Case No. 539.
67 Peter Pan Fabrics, Inc. v. Martin Weiner Corp.274 F.2d 4879 (2d Cir. 1960).
Abstractions Test is a means to separate ideas and expressions in a work. Through abstractions of the works, the different levels of abstractions will be showed. In these abstractions, some are uncopyrightable ideas and some are copyrightable expressions. “Substantial Expressions” vs. “Formalized Expressions” Dichotomy will highlight the different levels of expressions rather than the different levels of the works. In the different levels of works, there may be ideas and expressions. However, in the different levels of expressions, there always are expressions. The Substantial Expressions is the essence and the core of the Formalized Expressions. One Substantial Expressions may be showed in two or more Formalized Expressions. If we realize the real existing of Substantial Expressions, we will deeply understand the essence of works and correctly recognize the real relationship of works showed in different Formalized Expressions.

F. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and Pattern Test

Pattern Test is proposed by Prof. Chafee who argues that although the general theme is not protected by copyright law, the pattern, sequence and the interplay of characters are protected by copyright law. For example, the idea of marriage of Irish and Jews in a play can be freely taken. About the theme, there must be some similarities about some characters and scenes. However, these similarities are inevitable which do not lead to the establishment of copyright infringement. But the pattern of play including the sequence and the interplay of characters cannot be copied one by one. 68

When applying Pattern Test, the trier of fact extracts the significant characters and incidents which constitute the pattern of the works and then judges whether there are the same patterns between the works of the plaintiff and the works of the defendant through comparing the pattern of the works of the plaintiff and the works of the defendant. Abstractions Test and Pattern Test provide a useful analysis path about whether the works of defendant infringe the works of the plaintiff. 69 Pattern Test is more accurate than Abstractions Test because the former clearly indicates the copyrightable elements in the literary works. 70

However, there are also some debatable points as the following. Firstly, it is still not clear that what level of similarity is substantial similarity. 71 Like Abstractions Test, Pattern Test does not clearly define the branches of the tree of abstractions. 72 Pattern Test does not clearly define the

69 See Arjun Gupta, “I'll Be Your Mirror” - Contemporary Art and the Role Of Style in Copyright Infringement Analysis, 31 Dayton L. Rev. 45,52 (Fall, 2005).
70 See Aaron M. Broaddus, Eliminating the Confusion: A Restatement of the Test for Copyright Infringement, 5 DePaul-LCA J. Art & Ent. L. 43, 58(winter, 1994 / spring, 1995).
71 See Arjun Gupta, “I’ll Be Your Mirror” - Contemporary Art and the Role of Style in Copyright Infringement Analysis, 31 Dayton L. Rev. 45, 52(Fall, 2005).
accurate line of the non-copyrightable ideas and the copyrightable expressions. Someone argues that Pattern Test is just another expression of “Comprehensive Non-literal Similarity test” of Prof. Nimmer. Secondly, although Pattern Test is feasible, its scope is extremely limited. It is obvious that Pattern Test is not useful where the works do not include patterns. Pattern Test is useful to literary works not to other kinds of works such as modern art sculpture, the characters of the comic, professional baseball game broadcast and visual art works. It is relatively easy to analyze the levels of abstractions. However, it is usually not the case to other kinds of works.

Similar to Abstractions Test, Pattern Test correctly points out that some patterns of the works such as the sequence and the interplay of characters should be protected by copyright law. “Substantial Expressions” vs. “Formalized Expressions” Dichotomy argues that the copyrightable expressions can be classified into Substantial Expressions” and “Formalized Expressions” and the Substantial Expressions are the real subject matter of copyright which we have not realized before. “Substantial Expressions” vs. “Formalized Expressions” Dichotomy does not ignore the copyrightable patterns of works. In the dichotomy, Substantial Expressions are not equivalent to the copyrightable patterns. The copyrightable patterns are expressions rather than non-copyrightable ideas. So the copyrightable patterns can also be classified to “Substantial Expressions” and “Formalized Expressions”.

G. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and Complex Idea, Specific Ideas and Non-Standard Quality of Prof. Kurtz

A leading scholar, Prof. Kurtz, has tried to screen the non-copyrightable ideas from the copyright protected elements on the merits of ideas typing as simple idea and complex idea, general idea and specific idea and etc. According to Prof. Kurtz, Simple ideas tend to be derived from experience and impressions - from the direct impact of that which exists in the world surrounding the author. More complex ideas are more the creation of the author, who can take simple ideas and “repeat, compare, and unite them, even to an almost infinite variety, and so can make at pleasure new complex ideas.” Complex ideas rather than simple ideas should be granted exclusive rights. General ideas tend to be indiscriminate and incomplete, rather than entire and delineated. General ideas are abstract and partial ideas of more complex ones. It is the more specific ideas, which may be termed expression, that tend to embody an author's individual

73 See Aaron M. Broaddus, Eliminating the Confusion: A Restatement of the Test for Copyright Infringement, 5 DePaul-LCA J. Art & Ent. L. 43, 58 (Winter, 1994 / Spring, 1995).
74 Comprehensive Nonliteral Similarity Test of Nimmer means the re-creation of fundamental essence or structure of one work. The test fits to the comprehensive similarity rather than literal similarity. See Melville B. Nimmer & David Nimmer, Nimmer on Copyright, Matthew & Bender Company, Inc. (2009), 13.03[A][1].
76 See Aaron M. Broaddus, Eliminating the Confusion: A Restatement of the Test for Copyright Infringement, 5 DePaul-LCA J. Art & Ent. L. 43, 58 (winter, 1994 / Spring, 1995).
departure and most genuine creation. General ideas should be free to be used as the building blocks unlike the copyrightable status of specific ideas. The standard way of doing things is the usual, obvious, normal, ordinary, “natural” way. Standard conventional perspectives are more likely to be considered ideas than those that depart from convention. They are not owned and no good reason exists to protect them except against a nearly literal form of copying. If an author's way of looking at things deviates from the standard, if she chooses an unusual, non-obvious, abnormal, extraordinary, unnatural way to express her ideas, she can expect to be protected against a wider array of imitators and more abstract forms of copying.

Complex Ideas, Specific Ideas and Non-Standard Quality of Prof. Kurtz are very instructive. However, the suggestions of Prof. Kurtz may be lead to confusion. Neither simple idea, general ideas and standard quality nor complex ideas, specific ideas and non-standard quality can be protected by copyright law relying on Idea and Expression Dichotomy because complex ideas, specific ideas and non-standard quality are also non-copyrightable ideas. Copyright law should protect expressions rather than ideas. In fact, the suggestions of Prof. Kurtz maybe mean that the expressions of complex ideas, specific ideas and non-standard quality are more likely to be protected by copyright law comparable to the expressions of simple idea, general ideas and standard quality because the former are more likely showing the personality of the author which is the cornerstone of originality. However, all of Substantial Expressions” and “Formalized Expressions” are expressions rather than ideas. So Substantial Expressions” and “Formalized Expressions” are not equivalent to Complex Ideas, Specific Ideas and Non-Standard Quality of Prof. Kurtz.

H. The Relations of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy and the Intrinsic / Extrinsic Test

The intrinsic/extrinsic test originated in Krofft 78 and modified in Shaw79 which is a two-part substantial similarity test. The first part of the substantial similarity test is called the extrinsic test depending not on the responses of the trier of fact, but on specific criteria which can be listed and analyzed. The second part of the substantial similarity test is called the intrinsic test involving a purely subjective evaluation of whether the total concept and feel of the two works are substantially similar—depending on the response of the ordinary reasonable person. In Krofft, the court is prone to compare the ideas of the works of the plaintiff and the defendant in the phase of the extrinsic test. However, in Shaw the courts do not strive to compare the ideas of the two works. They list the elements of the works and determine whether there are similarities in the expressions of the elements. Shaw clarified that the intrinsic test is subjective analysis of expression comparable to the objective analysis of expression of the extrinsic test.

78 Sid & Marty Krofft Television Prods., Inc. v. McDonald’s Corp., 562F.2d 1157 (9th Cir. 1977).
79 Shaw v. Lindheim, 919 F.2d 1353 (9th Cir. 1990).
As can be seen from the above description, the Intrinsic / Extrinsic Test is only a means to determine whether there is substantial similarities between two works. The extrinsic test is prone to judge from the perspective of objective dissection of the works. In the extrinsic test, all of the ideas and the expressions may be compared. However, the intrinsic test is prone to judge from the perspective of subjective total concept and feel of the works. Unlike the Intrinsic / Extrinsic Test, “Substantial Expressions” vs. “Formalized Expressions” Dichotomy is not a means to determine whether there are substantial similarities between two works. The dichotomy deeply clarifies that expressions of works can be abstracted into two levels: substantial expressions and formalized expressions. In the general opinions of people, the expressions in the context of idea and expression dichotomy mean the formalized expressions. However, they do not realize the existing of substantial expressions underlying the formalized expressions. Through clarifying the real existing of the substantial expressions underlying the formalized expressions, we can more deeply understand the essence of works.

In all, we can show the relations among idea, expression, “Substantial Expressions”, “Formalized Expressions” and carrier through the following diagram.

A brief description of the above diagram is as following:
1. Idea exists prior to “Substantial Expressions”. In the process of the creation of works, the first thing appearing in the mind of the author is abstract idea. Basing on Idea vs. Expression Dichotomy, the abstract idea is non-copyrightable.

2. Through the personal creations of the author, the abstract idea constantly becomes specific with the personal selection, judgment, arrangement and combination of the author. The specific personal selection, judgment, arrangement and combination of the author eventually evolve into
the product of creation which is the “Substantial Expressions”\(^{80}\) that should be protected by copyright law.

3. From the perspective of the process of forming of the works, when the “Substantial Expressions” has appeared in the mind of the author, only when it is ideogramized by text, numbers, lines, color, melody and rhythm, etc. can it be perspective and demarcated subject matter of property. When the “Substantial Expressions” is ideogramized, it evolves into “Formalized Expressions” which is the subject matter of copyright that is practically protected by copyright law.

4. “Substantial Expressions” (ideogramized expressions) must rely on some Medium of Expression which is the means of the “Formalized Expressions” to be perspective in sense of the subject matter of copyright. The Medium of Expression is the subject matter of property rather than copyright.

5. From the perspective of the process of forming of the works, “Substantial Expressions” which are the expressions in the mind of the author is prior to “Formalized Expressions”. From the perspective of the essence of the works, “Substantial Expressions” is the foundation of “Formalized Expressions”. When there is no “Substantial Expressions”, there is no “Formalized Expressions”.

6. Theoretical classification of “Substantial Expressions” and “Formalized Expressions” makes great sense in copyright law. From the perspective of the process of forming of the works, there is a transformation from “Substantial Expressions” to “Formalized Expressions” in all works. From the perspective of the essence of the works, there is “Substantial Expressions” underlying “Formalized Expressions”.

I. Theoretical and Practical Significance of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy

There is not only theoretical significance but also practical significance in the proposition of “Substantial Expressions” vs. “Formalized Expressions” Dichotomy. From the theoretical perspective, we can clearly and profoundly understand the subject matter of copyright relying on “Substantial Expressions”. From the practical perspective, we can conquer many difficult questions in the copyright judicial practices.

1. The Justification of Right to Create Derivative Works Can Be Better Explained on “Substantial Expressions” vs. “Formalized Expressions” Dichotomy

The justification of right to create derivative works can be clearly explained on the basis of the process of creation of the author, i.e. the process of the transformation from idea to expression. Although the derivative works are different with the underlying works in “Formalized

\(^{80}\) In fact, in this period, the works has been constructed.
Expressions”, they are same in “Substantial Expressions”. The author of the underlying works has the right to control the behavior of creating derivative works on his works because of above relationship between the derivative works and the underlying works. This is the rational justification of right to create derivative works.

For example, in the process of the creation of works, the author wants to express a “love” theme which is the most abstract non-copyrightable idea. When the author constantly embeds his personal idea and concept in the theme, the expression of “你是风儿，我是沙，缠缠绵绵到天涯” emerged. In this moment, “Substantial Expressions” has existed. However, restricted by language the author often arranges his expression with the language that he has learned. 81For example, if the author is literate in Chinese and English, before the “Formalized Expressions” appears, “Substantial Expressions” in the mind of the author may be “你是风儿，我是沙，缠缠绵绵到天涯” or “You are the wind, I am the sand to the End of the World intimately”. It can be seen that whatever the “Formalized Expressions” are, “Substantial Expressions” prior to “Formalized Expressions” has the characteristics of identity. Thus, when the author of derivative works creates derivative works basing on the underlying works, the “Substantial Expressions” of the underlying works which are the copyrightable elements are used. Although the derivative works are different from the underlying works in “Formalized Expressions”, the derivative works are the same to the underlying works in “Substantial Expressions”. Just as the identity of the “Substantial Expressions”, the author of the underlying works has the right to control the behavior of creation of the derivative works on the underlying works.82

2. We Can Correctly and Clearly Recognize the Real Nature of Software Works on “Substantial Expressions” vs. “Formalized Expressions” Dichotomy

Article 3 of Chinese Computer Software Protection Regulations stipulates that the source codes and the object codes of a same computer program are the same works. However, according

---

81 My expressions may make somebody confuse the Substantial Expressions/Formalized Expressions Dichotomy with merger doctrine. Merger doctrine means that when there is only one way or a few ways to express an idea, the expressions is deemed to merge with the idea. It should not be protected by copyright law, or the idea may be protected by copyright. Substantial Expressions is expressions rather than idea. Constrained by the ways of expression such as languages, Substantial Expressions may be expressed in only one means such as Chinese literary works. However, it is not the case that there are only one way or a few ways to express an idea. Although Substantial Expressions can be expressed only in Chinese literary works, there may be different ways to express the idea in Chinese literary works.

82 Prof. Peter K. Yu argues that from the perspective of positive explanation, copyright law has been expanded to cover the right to create derivative works, or the so-called adaptation right. Then we probably don't need a new theory such as Substantial Expressions/Formalized Expressions Dichotomy. The more philosophical explanation is that (1) some part of the protectable expression has been carried to the new derivative work and (2) without the protectable expression, there won't be new derivative works (or, at least, there will only be independently created derivative works, which are unprotectable because of independent creation). It is true that copyright law has been expanded to cover the right to create derivative works. However, the positive explanation does not tell us the rationale of adaptation right. Prof. Peter K. Yu thinks that some part of the protectable expression has been carried to the new derivative work. However, what are the parts? It is also true that without the underlying works there is no derivative works. But, why? Although on the more philosophical explanations of Prof. Peter. K. Yu, we cannot clearly recognize the rationale of adaptation right. The sound explanation may be the underlying works and the derivative works have identical Substantial Expressions.
to the basic principle of copyright law, the subject matter of copyright is expression. The expressions of source codes and object codes are different because of their different ideograms. Then the source codes and the object codes are not one works. However, why does Chinese Computer Software Protection Regulations stipulate that the source codes and the object codes of a same computer program are the same works?

One reasonable explanation is that we need not to do creative works to transform source codes to object codes. Generally speaking, the source codes of software are transformed into object codes through a compile program. There is no non-copied labor 83 rather than mechanical labor in the transformation.

The more convincing explanation should base on “Substantial Expressions” vs. “Formalized Expressions” Dichotomy. As mentioned above, the “Substantial Expressions” and the “Formalized Expressions” of common literary works are identical because of the limitation of human languages. However, the languages of software works are rich rather than limited. Though the minimum constituent elements of software languages are texts and numbers, software languages are not identical to the common ideograms of texts and numbers. The meaningful ideograms of software languages are the new combinations of the common texts and numbers which express the specific meanings. The software languages can be classified into machine languages, assembly languages and high-level languages. Machine languages are the codes constituted of 0 and 1 which are the only languages that can be recognized by computer. Assembly language instructions use the abbreviation identifier direct to the hardware. High-level languages includes BASIC, FORTRAN, LOGO, COBOL, PASCAL, C, and PROLOG, etc. whose syntax and command formats are different. One computer program can be expressed through multiple software languages because of the diversity of software languages. However, the “Substantial Expressions” of the works of software are identical no matter the software languages, so Chinese Computer Software Protection Regulations stipulate that the source codes and the object codes of a same computer program are the same works. Furthermore, the works of software are identical when the “Substantial Expressions” are identical no matter the software languages.

3. We Can Correctly and Clearly Recognize the Real Nature of Architecture Works on “Substantial Expressions” vs. “Formalized Expressions” Dichotomy.

Architecture works are generally protected by copyright law of various countries including Chinese Copyright Law. However, what is architecture works? Architecture plans? Architecture drawings? Architecture models? Building? There are two typical views on the above controversial issues. One school argues that architecture works means the expressions such as buildings or structures typically in Chinese Copyright Law. For example, article 4(1[9]) of

---

83 Whether the labor is replicable is the touchstone of the judgment about whether the labor is some kinds of creation. If the labor is replicable, it is not creation. If the labor is non-replicable, it is creation.
Chinese Copyright Law Implementation Regulations stipulate that architecture works mean aesthetic works in the form of buildings or structures. One school argues that architecture works mean the designs of architecture and architecture plans, architecture drawings, architecture models and building are the material objects of architecture works typically in U.S. Copyright Law. According to the U.S. Copyright Law, an “architectural work” is the design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features. 84 It can be clearly seen that an “architectural work” is the design of a building rather than architecture plans, architecture drawings, architecture models and building themselves which are the material objects of architecture. Architectural work can also be expressed in other material objects such as blueprint or computer disc. 85

The views of the nature of architectural works have their pros and cons. The argument regarding the buildings and structures themselves as architecture works at least on the surface is more in line with Idea vs. Expression Dichotomy, but this understanding has the following drawbacks. If we define architecture works as architecture plans, architecture drawings, architecture models and building themselves, the expressions of the works are not identical according to Idea vs. Expression Dichotomy. Therefore, construction of buildings in the light of architecture plans, architecture drawings and architecture models is not copy of architecture plans, architecture drawings and architecture models. The construction of buildings does not constitute a copyright infringement. This practice is not only contrary to the common practice of most countries, but also is not conforming to the true value of the architectural works. However, the argument regarding architecture plans, architecture drawings, architecture models and building as the material objects of architecture works rather than the architecture works itself and defining architecture works as the designs embodied in architecture plans, architecture drawings, architecture models and building is not only in accordance with the common practice of most countries, but also is conforming to the true value of the architectural works because we can easily conclude that construction of buildings in the light of architecture plans, architecture drawings, architecture models is copy of architecture plans, architecture drawings, architecture models and the construction of buildings constitutes copyright infringement basing on the argument, but the above argument seemingly is not in accordance with Idea vs. Expression Dichotomy.

Superficial interpretation of architecture works odds to objective practice relative to “Substantial Expressions” vs. “Formalized Expressions” Dichotomy. In the field of traditional

copyright works such as literary works, “Substantial Expressions” is identical to “Formalized Expressions” Dichotomy because of the limitation of ideograms. However, in the field of architecture works, “Substantial Expressions” has the characteristics of diversity because of the diversity of the elements of expression relying on the diversity of ideograms which express the architecture designs. Therefore, the “Substantial Expressions” of architecture works does not have a one-to-one correspondence to the “Formalized Expressions” of architecture works. As mentioned above, there often is only one language in one country or region. To express something with the language is the habits of mind of the people in the country or region. The expression of literary works inevitably intertwines with the specific language. For example, the construction of plot is naturally on the specific language.

However, it is not the case in the circumstance of architecture works. We need not to use languages in the process of the construction of architecture design just like literary works. The construction of architecture design in mind is image-based rather than language-based. The architecture design in mind is one kind of expression of idea (“Substantial Expressions”) which can be expressed in divers forms such as architecture plans, architecture drawings, architecture models and buildings (“Substantial Expressions”) just like the combinations of texts. The different combinations of texts which are identical in “Substantial Expressions” are one works. Similarly, the identical design expressed as architecture plans, architecture drawings, architecture models and buildings are one works. So the construction of buildings relying on architecture plans, architecture drawings and architecture models is copy in the sense of copyright.  

In all, relying on “Substantial Expressions” vs. “Formalized Expressions” Dichotomy, if the design in mind has not be expressed as architecture plans, architecture drawings, architecture models and buildings, the design is not copyrightable. However, the identical design in mind expressed no matter architecture plans, architecture drawings, architecture models or buildings, the design is identical. Architecture plans, architecture drawings, architecture models and buildings are united in the design expressed in the forms. The essence of architecture works is architecture design. If the design expressed in the forms of architecture plans, architecture

---

86 There are also some questions about the understanding of the nature of architecture works. If we define the essence of architecture works as design and propose that the design realistically has existed in mind before it is expressed on the tangible material objects, the design embodied in architecture plans, architecture drawings, architecture models and buildings is identical. So what is the case about sculpture which is like architecture works? The essence of sculpture is design. In accordance with the logic of the above analysis of the nature of architecture works, the sculpture drawings and the sculpture itself are one identical works. However, there are amazing differences between the creation of sculpture drawings and the creation of sculpture relying on sculpture drawings. It is not necessary the case that the author of sculpture drawings has the ability to create the sculpture relying on sculpture drawings. We need many creative arts to create sculpture relying on sculpture drawings. However, we need replicable labors rather than creative arts to construct buildings relying on architecture plans, architecture drawings and architecture models. So the sculpture relying on sculpture drawings and the sculpture itself seem not to be identical works. However, in the circumstance of judgment of copyright infringement, there seems to be no questions about above conclusions. Not only copy of sculpture but also copy of sculpture drawings will constitute copyright infringement.
drawings, architecture models and buildings is identical, the “Substantial Expressions” of the “Formalized Expressions” is identical and they are one works. So the construction of building relying on the architecture plans, architecture drawings and architecture models is the copy of works. The unlawful copy will constitute copyright infringement of architecture works.

IV. Conclusion

Idea/Expression Dichotomy is a most basic principle of copyright law and has played an important role which should not be shaken in copyright legal practice. However, we should develop the dichotomy to adapt to more complex situations. From the perspective of the process of creation of works and the nature of works, although only the expressions fixed in the tangible material objects are protected by copyright law, the realistic expressions has existed in mind before the appearance of the fixed expressions. Merely taking into account the balance of various kinds of legal interests and the limitation of legal technology, the copyright law stipulates that the expressions in mind is not copyrightable. We can more clearly recognize the subject matter of copyright basing on the “Substantial Expressions” vs. “Formalized Expressions” Dichotomy. It is not the case that the “Substantial Expressions” vs. “Formalized Expressions” Dichotomy will overturn the copyright system in effective arguing that the expressions in mind (“Substantial Expressions”) should be protected by copyright law. The most important significance of the “Substantial Expressions” vs. “Formalized Expressions” Dichotomy is the more clear recognition of works and the definition of identity of works. Basing on the judgment, we can accurately define the scope of protection of copyright and the real relationship of works.