

# HOW IS THE OWNER OF “TRADITIONAL KNOWLEDGE RIGHT”? A PERSPECTIVE OF INTERNATIONAL LAW AND THE CASE OF CHINA

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## ABSTRACT

*Traditional Knowledge (TK) used to be deemed as public domain excluded from the protection of intangible property right. Despite the fierce debate proposing a special intellectual property right (IP) to protect TK, this paper finds that TK is substantially different from latter and sui generis mechanisms to protect TK are required. Following the analysis on the recent discussions in international communities such as Convention on Biological Diversity (CBD) and World Intellectual Property Organization (WIPO), the paper addresses the most difficult question as who is the subject/owner/right holder of TK and how this could be defined. The paper proposes to protect TK as a collective right in Chinese law comparable to the diffuse interest protection in German law, adopting the mechanisms introduced by CBD and WIPO, inter alia, the prior informed consent and fair benefit sharing.*

**Keywords:** Traditional Knowledge (TK), Intellectual Property (IP), Sui Generis Right, CBD, WIPO.

## INTRODUCTION

The definition of *traditional knowledge* (TK) commonly adopted by the international community is that proposed by the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) of the World Intellectual Property Organization (WIPO) in “The Protection of Traditional Knowledge: Draft Articles (The WIPO Treaty).”<sup>1</sup> Article 1.1 of the WIPO Treaty specifies that traditional knowledge includes know-how, skills, innovations, practices, teachings and learning’s developed within an indigenous or local community and that is passed on from generation to generation. According to the “Convention on Biological Diversity” (CBD), traditional knowledge is “knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.”<sup>2</sup> Article 2 of “Intangible Cultural Heritage Law of the People’s Republic of China (Intangible Cultural Heritage Law)”<sup>3</sup> defines *intangible cultural heritage* as “various traditional cultural manifestations which are handed down by the people of all ethnicities from generation to generation and regarded as a constituent part of their cultural heritage and physical objects and premises related to the traditional cultural manifestations.” Although the definitions of intangible cultural heritage mentioned in the “Intangible Cultural Heritage Law” and the traditional knowledge (associated with biological and genetic resources) discussed in this study are closely correlated, they are two different concepts of two different areas.<sup>4</sup> Intangible cultural heritage focuses on the protection of “manifestations,” whilst traditional knowledge emphasizes the tradition-based “knowledge and information” in the fields of agriculture, medicine, environment and biodiversity.<sup>5</sup> The

intangible cultural heritage referred to in the Intangible Cultural Heritage Law is highly consistent with the “traditional culture expressions” discussed in the WIPO system at both the connotation and denotation levels.

Since decades, there is increasing awareness of TK value on the global market. The research of TK protection has been stimulated the fierce debate persists in the international community. In recent years, China’s legislation in this area has progressed rapidly<sup>6</sup>. To a certain extent, the legal vacuum in this regard<sup>7</sup> has been filled in the relevant fields in Chinese law. However, numerous questions in this field remain not answered. For example, it is a feasible approach to protect TK following the Intellectual Property system? Who is the subject (owner/holder) of TK? For whose benefit shall TK be “protected”? If TK involves rights, who should be entitled to these rights and how should these rights be enforced? More specifically, how to define the “rights” in TK that is typically bound to an ethnic group or region and thus fairly difficult to delineate?

This study proceeds in four parts. Part 2 addresses the divergence between the TK and the intellectual property right (IPR) regimes. After a brief summary of the controversies in academia regarding the proposed “property rights” of TK, Part 4 and Part 5 address the recent global developments in TK-related issues, focusing on the question as how to identify the subjects/right holders of TK. Part 6 discusses the two most controversial issues left by the WIPO Treaty regarding the subject matter of the paper and Part 7 presents a conclusion.

### **The Essential Divergence between the TK and the Intellectual Property (IP) Regimes**

In terms of the protection of the (documented) TK, the following questions are especially noteworthy: Should the protection of the TK be subject to the same mechanisms adopted for public or private knowledge rights? Should the existing systems of intellectual property (IP) rights be applied to protect TK or should a sui generis system be established to protect the “rights” of TK? If so, what would the subject, object and content of such rights?

The current system of IP rights is designed for modern scientific and technological knowledge; hence, the IP is fairly different from the TK.

Firstly, their historical roots are different: The foundation of the philosophy of IPR system is traced back to the ideological trend of respect for individuals’ intellectual labour and personal right in the Age of Enlightenment in the 17<sup>th</sup> and 18<sup>th</sup> centuries in Europe (Rene, 2012). The combination of “knowledge” and “property rights” in a system began in Europe between 1770 and 1870, when European industrial society and modern nation-states were gradually formed and individualism as a trend emerged. For example, the Paris Convention for the Protection of Intellectual Property was established in 1883, the Berne Convention for the Protection of Literary and Artistic Works was established in 1886, the "Convention to Establish the World Intellectual Property Organization" was signed in 1967. By contrast, the traditional knowledge of ancient civilizations can be traced back to thousands of years ago. For instance, the well-known documented Chinese traditional medicine *Yellow Emperor's Internal Classics* can be traced back to the pre-Qin period.

Second, the (economic) function of the IP right system and the (economic) rationale of the proposed TK protection are fairly divergent. Professor Reto suggested that the economic concept of intellectual property in terms of private right protection lies in the government intervention and economic stimulation: In the premise of a market economy, any intellectual achievement is the result of its previous investment, condensing the efforts of its creators are all

with expectations of return on investment. If the market and disorderly competition cannot provide returns for such investment, the intellectual would be discouraged and the market will gradually sluggish. Therefore, the government (interference) should use intellectual property law to protect individual rights and interfere with the market (Reto, 2009). By contrast, traditional knowledge has not been included in the object of right protection for thousands of years. Most of the TK such as traditional Chinese medicine was generated in collective indigenous communities thousands of years ago and passed from generation to generation. The assumption that the creator of TK aims at the return on investment, as the reasoning of IP, would not match the actual situation. Because at that time, there was no “market” in the sense of modern economics. Protection of traditional knowledge was not proposed until the phenomenon of “bio-piracy” and misappropriation of foreign TK drew attention from the international community and especially, the developing countries.<sup>8</sup>

Third, some scholars discussed the different political background behind the IPR and TK protection from the perspective of political philosophy and international law. They criticize that the developed countries benefit from the international IP regime via TRIPS far exceeding the developing countries. The latter have been pushed into the global trade-related IP regime and have lost the opportunity to autonomously choose the IPR policies tailored to their own national interests. The protection of TK involves a set of paradigms established by Third World countries throughout the 20<sup>th</sup> century. Along with the wave of globalization, the “Awakening of the Third World,” sustainable development and protection of biological diversity have become significant topics of international politics. Developing countries have realized the importance to protect the natural resources and their biological diversity, which were considered “ownerless” and part of the public domain during the colonial era (Hannes, 2009). Correspondingly, the legitimacy of the IPR system itself was also reflected and criticized (Emmanuel, Ohid & Stephanie, 2010).

Last but not least, the institutional mechanisms of IP and TK are different (Ming, 2006). From an institutional point of view, there are two impassable obstacles in applying an IP system to protect TK. First, the value pursuits of the two systems are dissimilar: The IP system aims to encourage innovation, whilst the TK system targets the protection of tradition. Hence, the goals of the two systems are as differentiated as “new” and “old.” Second, many specific requirements of the IP system do not apply to TK, including the fact that protected property requires a specific date of completion, that it should be identifiable by one or more creators or authors, that it should have a novel and creative nature and that it is protected only for a certain term. These differences are even acknowledged by WIPO that by and large supports the adoption of the IPR system to regulate TK.

### **“TK Right” or Not?-Controversies and Consensus in the Academia**

At present, the academic community has divergent viewpoints on the proposal of “property rights” of TK. Some scholars believe that the existing IP rights system should be adopted to selectively protect TK (Paul, 2007). Others question the nature of TK as a “property” in the legal sense and find that TK should not be covered the scope of the property rights system; therefore, the IP system is not applicable to the protection of TK (Stephen, 2009). WIPO’s basic standpoint is to regulate TK within the framework of “broad intellectual property” (WIPO, 2001). The 1967 WIPO Convention emphasized that intellectual property is a broad concept that covers other forms of intangible property that is not currently part of the existing IP categories. However, this position has been strongly opposed by some European scholars who find that the

application of the IP system to protect TK is not only impossible but also precarious to the knowledge itself (Reto, 2009).

Regarding this question, three schools of opinions exist among the Chinese academic community. The first school supports the proposal to use the IP system as a foundation and reforming or expanding the interpretations of the current IP system so as to gradually cover regulation of TK (Guobin, 2007). The second school suggests that a *sui generis* system should be established for TK protection (Yuye, 2008; Tianbao, 2012).<sup>9</sup> The third school advocates that the protection of TK should be treated as protection of the public interest and be subject to the public law system (He, 2011).<sup>10</sup> Although the three viewpoints have their distinctive emphases, they all agree that TK has certain specificity when compared with the object of the existing IP system. Nevertheless, either the existing IPR system should be modified or a new TK right shall be constructed, a new approach is necessary in the protection of TK. For that reason, “the Intangible Cultural Heritage Law” in China was promulgated as a special law. It can be considered that the academic community has reached a consensus, to a certain extent, on the positioning and connotation of the legislative approach to protect TK.

### **How to Define the Subjects (“Right Holders”) of TK?**

To date, defining the subject/owner of TK property remains fairly difficult, in particular. This and the next section endeavour to discuss this question.

According a popular viewpoint of collectivism, traditional knowledge is a kind of collective rights. Its owner is considered a certain nation or collective community, but this view has been criticized (Guobin, 2005). Noteworthy is that establishing a *sui generis* system for TK through national legislation and allowing legislators to define the subject of rights is an important step in defining the methodology for TK protection. However, the construction of *sui generis* TK right could be a tricky approach. Defining the subject/right holder is fairly crucial for this proposal as it is at the core of the legitimacy, the use, as well as the enforcement of the proposed TK rights. The definition of the subject/right holder of TK presents also the greatest challenge for the legitimacy of TK property rights. This is also a long-standing obstacle in international negotiations in this respect. For Countries and ethnic groups with different levels of development in the international community and different stakeholders within a country, all have different attitudes towards defining the subject of a certain TK. Without a clear definition of the subject/right holder, the scope of TK property rights cannot be determined, making the construction of a corresponding TK right system impossible.

Improper demarcation of the subject/right holder of TK may lead to the following problems. Firstly, the function of national legislation in the protection of the TK holders may be reduced to zero. Secondly, the healthy utilization, spread and development of the cultural assets in TK may be hindered.<sup>11</sup> Thirdly, unnecessary transaction costs may be generated during the processes of exercising, enforcement and transaction of TK rights, particularly when the users (buyers) and providers (sellers) of TK are from different countries (Gerd, 2006). Fourthly, distributive justice may be undermined (Tianbao, 2012),<sup>12</sup> leading to conflicts among unspecified right holders when involving issues such as prior informed consent and benefit sharing. When the disputes involve cross-border TK, conflicts between sovereign states may occur. Since the protection offered to the subject/right holder of TK varies by country, the users of genetic resources (GRs) may choose the country with the lowest transaction costs.

## RECENT DISCUSSION ON THE SUBJECTS OF TK IN INTERNATIONAL COMMUNITY

To date, there are six most influential international treaties (including drafts) related to TK:

- The Model Provisions for National Laws on the Protection of Expressions of Folklore against Illicit Exploration and other Juridical Actions (the United Nations Educational, Scientific and Cultural Organization [UNESCO]/WIPO, 1982);
- The Convention on Biological Diversity (United Nations, 1992);
- The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) (2001);
- The Regional Framework for the Protection of Traditional Knowledge and Expressions of Culture (Secretariat of the Pacific Community, Pacific Islands Forum Secretariat and UNESCO Pacific Regional Office, 2002);
- The Convention for the Safeguarding of Intangible Cultural Heritage (UNESCO, 2003);
- The Protection of Traditional Knowledge: Draft Articles (WIPO, 2011).

Considering that continual progress has been made in the systems of the CBD and WIPO in recent years, the TK-related definitions and rules proposed by the CBD and WIPO have received greater recognition among the international community. Therefore, this study placed more focus on the introduction of the concepts proposed by the CBD and WIPO.

### The Approach of CBD

The Convention on Biological Diversity (CBD) was implemented in 1994. China became the seventh country to accede to the CBD on January 7, 1993. Over the past 20 years, China has endeavoured to fulfil its obligations as a member state of CBD.

CBD recognizes the collective rights of the indigenous and local communities over their GRs and associated TK (Christine, 2006), including prior informed consent (Tianbao, 2008),<sup>13</sup> mutually agreed terms,<sup>14</sup> and fair benefit sharing. The CBD is of an epoch-making significance as it breaks the old game rules that found TK an absolute public domain. Although the CBD does not explicitly set any property-type rights for holders of TK, the new rules to explore, use and benefit from TK established by the CBD have laid the groundwork for the establishment of sui generis TK rights. However, it is noteworthy that the CBD only states the legal status of indigenous and local communities in Article 8(j) CBD, rather than specifying the right holders of the collective rights in its provisions:

*Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices.*

The latest development regarding this article is as follows: In December 2017, Delegates to the tenth meeting of the Ad Hoc Open-ended Working Group on Article 8(j) agreed on a set of recommendations related to the contributions of indigenous peoples and local communities to the Convention on Biological Diversity, including, inter alia, (1) Guidelines for the repatriation of

traditional knowledge of indigenous and local communities held by museums, botanical gardens and others facilitates; (2) Delegates recognized the contribution of the traditional knowledge, innovations and practices of indigenous peoples and local communities to the implementation of the Convention as well as the 2030 Agenda for Sustainable Development. The recommendations from the meeting will be sent to the Conference of the Parties at the 2018 UN Biodiversity Conference being held in Egypt in 2018.<sup>15</sup>

Earlier significant developments regarding Article 8 (j) CBD include the following: Decision V/16 was reached at the Fifth Meeting of the Conference of the Parties to the CBD held in May 2000, which clearly stated for the first time that “prior informed consent or prior informed approval” is applicable to TK and “access to traditional knowledge, innovations and practices of indigenous and local communities should be subject to prior informed consent or prior informed approval from the holders of such knowledge, innovations and practices.” Decision VI/24 of the Sixth Meeting of the Conference of CBD held in April 2002, adopted the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefit Arising out of their Utilization (hereinafter the Bonn Guidelines). Article I.C.9 of the Bonn Guidelines specifies that “all genetic resources and associated traditional knowledge, innovations and practices covered by the Convention on Biological Diversity and benefits arising from the commercial and other utilization of such resources should be covered by the guidelines.” The Tenth Meeting of the Conference of the Parties to the CBD held in October 2010 passed the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (hereinafter the Nagoya Protocol). The Nagoya Protocol reaffirms the Bonn Guidelines by further recognizing “the unique circumstances where traditional knowledge associated with genetic resources is held in countries, which may be oral, documented or in other forms, reflecting a rich cultural heritage relevant for conservation and sustainable use of biological diversity<sup>16</sup> and that each member state shall take legislative, administrative or policy measures as appropriate, in order that the benefits arising from the utilization of traditional knowledge associated with genetic resources are shared in a fair and equitable way with indigenous and local communities holding such knowledge. Such sharing shall be upon mutually agreed terms.<sup>17</sup>

In addition, Article 6.2 of the Nagoya Protocol states that, in accordance with domestic law, each party shall take measures, as appropriate, with the aim of ensuring that the prior informed consent or approval and involvement of indigenous and local communities is obtained for access to genetic resources where they have the established right to grant access to such resources.

On that basis, the CBD first proposed the mechanisms such as “prior informed consent” and “benefit sharing”. However, the determination of the ownership and disposal rights of TK lies rather in the sovereign state. This being so, sovereign states can stipulate whether a given piece of TK belongs to individual/individuals, a group or the state according to the types, distribution and current possession of the TK, through domestic legislation. Nevertheless, state legislation to regulate TK shall not affect the mandatory provisions such as “prior informed consent” articulated in the CBD (Tianbao, 2008).<sup>18</sup>

The CBD was initially adopted in the 1990s. Its fundamental philosophy is to use benefit-related incentives to curb abuses and unrestrained development of biodiversity resources. CBD combines the “accessibility” and “benefit sharing” of GRs and related TK, so as to achieve the dual purpose of protecting biological resources and encouraging fair trade.<sup>19</sup> This fundamental philosophy is deeply influenced by the concepts of sustainable development, risk society (Ulrich,

1986) and environmental economics promoted by the international community in the 1990s. The CBD attempts to establish a model that internalizes the destruction and misuse of environmental resources into the control system in the form of environmental costs. The rationale of such a social ideological trend can be summarized as follows: Efforts that enhance the protection of the environment and biological diversity should generate earnings, whilst actions that consume and harm the environment and biological diversity should cause expenses. Earnings and expenses coexist in the same economic control system. Since the theory of risk society states that controlling the risks of modern society is beyond the ability of a single state, it proposes that the control model should be achieved based on the production and trade chain among the international community. The CBD system is the result of the above-mentioned ideological trend in the 1990s. This historical background helps understanding the development of the relatively independent concept of TK derived from CBD. CBD's rationale regarding the protection of the possible "TK rights" is that biological diversity and associated TK belong to indigenous peoples and local communities. The protection of biological diversity is interdependent with and inseparable from TK. To exercise this philosophy, the CBD adopts an approach within the economic and traditional framework of private law. Specifically, it creates a quasi-right by endowing the holders of GRs and associated TK with a range of jurisdiction, so that they have the power to control their own resources, as well as the right to use the resources of other holders based on the principles of "prior informed consent" and "benefits sharing". However, the premise and foundation of the jurisdiction centered on "prior informed consent" appears to be similar yet not entirely the same as the right of property in terms of law. The right of disposal proposed by the CBD emphasizes the need to reach an agreement with the resource holder prior to obtaining and using the resources. Concepts such as "approval" and "consent" appear to be encouraging certain contractual arrangements, which could be understood as denying the right of ownership of the holders of GRs and associated TK. For that reason, the academic community has separate viewpoints toward this issue. German academia finds that the possibility of a system of ownership rights cannot be excluded. Firstly, the contractual mechanism is time-consuming and laborious and will result in high transaction costs for the acquisition and use of resources, thereby hindering the dissemination and utilization of GRs and TK. Secondly, if the relationship between the holders and users of the GRs and TK is regulated by the contract, the holder can only hold the user responsible for breach of contract rather than tort liability if the users refuse to share the benefit with the holders of TK after acquiring, developing and using the resources or transferring the GRs and TK to a third party thereafter (Anna, 2000).

The above-mentioned right of disposal proposed by the CBD is a collective right of disposal, rather than a property right. In terms of collective ownership, scholars who studied the local groups in the Brazilian Amazonia region proposed an ideal model from the perspective of legal anthropology and suggested that the ownership be possessed by a definable indigenous group, given that it has clear boundaries with the outside world, is culturally closed and has a limited number of group members (Florence, 2001). However, such an ideal model is rarely found in reality. As the holders of the GRs and TK, the indigenous and local communities usually have unclear boundaries and an unidentified number of members. A further proposal in the definition of the boundaries of collective ownership of TK is to take the family as a unit and define the ownership based on the immediate kinship and master-apprentice relationship (Janewa, 2011). Although this approach has offered a more realistic method to define the owners of TK collectively held, some scholars argue that the implementation of this regulation tends to

involve huge investment of resources and time. This would namely also not be a feasible approach.

In general, the discussion on subject/right holders of TK by the CBD remains at a preliminary stage.<sup>20</sup> Through the interpretation of the CBD from a textual, historical and institutional perspective, the analysis above finds that establishing a *sui generis* system through domestic legislation to protect TK and defining the collective ownership of TK from a private rights perspective, are in line with the fundamental spirit of the CBD. In other words, the determination of the ownership of TK is subject to domestic legislation, given the prerequisites set by CBD.

### **The Approach of WIPO**

From February 21 to February 25, 2011, WIPO drafted an international treaty on the protection of TK at a working group meeting.<sup>21</sup> In April 2013; the WIPO-IGC revisited the draft of the WIPO Treaty at a meeting in Geneva (Hereinafter the WIPO Treaty),<sup>22</sup> during this period, the Chinese representatives actively participated in the discussions.

The policy objectives and general guiding principles<sup>23</sup> of the WIPO Treaty are essentially consistent with those of the CBD, which can be summarized into four parts: (1) Respect, protect and promote the rights of holders/owners of TK; (2) encourage the dissemination and exchange of TK and innovations and creations based on TK; (3) facilitate trust and communication among holders/owners of TK, enhance transparency and promote interaction, mutual confidence and benefit sharing between holders/owners and users of TK; (4) oppose the indefinite monopoly of TK and encourage fair and equitable sharing of useful human knowledge and information.

Unlike the CBD, the PTK directly used “traditional knowledge” rather than “genetic resources and associated traditional knowledge” as the subject. Articles 1.1 and 1.2 of the WIPO Treaty<sup>24</sup> provide definitions of “traditional knowledge” and “traditional knowledge associated with genetic resources”. It can be concluded based on the wording that “traditional knowledge associated with genetic resources” is one type of “traditional knowledge.” In addition, the overall institutional arrangements of the WIPO Treaty uphold the framework of the CBD, which includes the provisions of prior informed consent, mutually agreed terms, equitable benefit sharing, establishment of a TK database, disclosure of origin of TK in patent application and the preclusion to grant patents to unauthorized parties. The substantive progress of the WIPO Treaty lies in the fact that it extends the right of disposal of TK proposed by the CBD by removing the constraints of “genetic resources associated,” which greatly expands the scope of TK protection.<sup>25</sup> Thus, the position of TK as an independent object of international treaties is emerging, which further lays the foundation for the construction of a *sui generis* right system of TK.

### **CONTROVERSIES REGARDING THE TK SUBJECTS LEFT BY THE WIPO TREATY**

Regardless of the progress as such, the WIPO treaty contains many unresolved issues, particularly in terms of the subjects of TK. Its definitions of TK and beneficiaries of TK in Article 2 have been challenged the most. According to the definition of TK in Article 1.1, the TK to be protected is “associated/linked with the cultural and social identity that is generated, maintained, shared/transmitted in collective context, that is intergenerational/that is passed on



from generation to generation.” Collective ownership is a major feature of traditional knowledge.<sup>26</sup> Traditional and indigenous communities are the custodians of TK. Furthermore, the expressions of TK can be in various forms, such as written and oral. To date, WIPO has not provided a clear definition of “indigenous people and local communities”, as the owner/holder of TK as well as the exerciser of the right to dispose of TK. The United Nations Declaration on the Rights of Indigenous Peoples (the UNDRIP)<sup>27</sup> issued by the UN General Assembly in 2007 also uses the term “indigenous people”; however, the UNDRIP did not provide a legal definition of the term.<sup>28</sup>

An earlier WIPO document has provided a description of the term:

*Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system.*

On the basis of this description, the early documents of the WIPO appear to take a European-centric perspective, in that TK belongs to the culture(s) outside the centre of Europe. However, the WIPO’s official documents did not provide answers in terms of the coverage of the term “indigenous people and local communities” and the identification of the boundaries between an indigenous community and the outside world. Given that the international community is likely to continue future negotiations and establish specific systems based on this concept, the majority of the WIPO member states believe that providing a basic definition of potential subject matter of TK is necessary.

From the perspective of the sociology of law and anthropology of law, assuming that the differences between TK and other knowledge are mainly cultural, then the following questions need addressing. Who are the “indigenous people and local communities” that require protection of their GRs and TK? Who owns the rights to share the benefits generated from the development and utilization of TK? Who should be compensated? Furthermore, are the individuals who have migrated to other regions and the offspring of marriage between a member of the indigenous group and an “outsider” considered an owner of TK? These questions are closely associated with the definition of nation and ethnic identity. The method of defining the subjects/owners/right holders of TK based on the determination of the cultural and genetic boundaries of the indigenous people and local communities remains an (important) question in the academia globally. Regardless of the likelihood of determining the national and genetic boundaries by means of natural science, some scholars have pointed out that the idea of such an approach may be fundamentally wrong.<sup>29</sup> They claim that it is a fundamental mistake to define nations and ethnic groups by means of natural science, such as molecular anthropology and comparative linguistics. They point out that a nation or ethnic group is a “community of mentality” and should be determined from the individuals’ perceived identity. There is no objective authenticity, but rather social authenticity. Each country’s local community has its own TK that has been passed from generation to generation. Each of us may be a holder and user of TK. In addition, with the frequent population migration in modern society, the holders/owners of TK are rather indefinite. Furthermore, TK itself is not static, but rather evolving, renewing and flowing during the intergenerational transmission.<sup>30</sup> Therefore, it could be a non-feasible approach to define the subject of TK based on a grouping.

This paper assumes that, in accordance with the positive right approach, one feasible approach to investigate, determine and define the subjects of TK could be policy making with sufficient respect for corresponding customary law. The appropriate delineation of the subjects of TK as *sui generis* right can only be possible following further interdisciplinary research of Sociology, Anthropology and Linguistics as well as through summary of large number of the case law. Although it is noteworthy that the characteristics of decentralized, unspecified “collective ownership” should not be an obstacle to prevent the protection of the legal interest of TK. For example, “collectively owned” rights or interests in various legal fields are protected in German law, such as consumer rights, natural resources protection, protection against unfair competition (Klaus & Dietmar, 1999). Another example is the Act on Standard Terms of Business (Chenguo, 2010); although the law has undergone long theoretical exploration regarding their institutional designs, German policy makers have eventually adopted a feasible approach to protect collective rights and interests as such.<sup>31</sup>

The second controversial issue regarding the WIPO Treaty is the definition of the beneficiaries of TK in Article 2. The controversy exists as how to regulate the prior informed consent and benefit-sharing of TK when there are no such indigenous people and local community or it is impossible to determine which specific indigenous people or local community are the holders and beneficiaries. Article 2.2 of the WIPO Treaty states that

*Where the [subject matter]/[traditional knowledge] [is not claimed by specific indigenous [peoples] or local communities despite reasonable efforts to identify them,] [Member States]/[Contracting Parties] may designate a national authority as custodian of the [benefits]/[beneficiaries] [of protection under this instrument] where the [subject matter]/[traditional knowledge] [traditional knowledge meeting the eligibility criteria in Article 1] as defined in Article 1...*

According to the existing system for intellectual property rights, when the rights of intellectual property fall into the public domain, they are no longer subject to the protection of the law. The European Union (EU) finds that the use of the word “or” in Article 2.2 of the WIPO Treaty may cause misunderstanding, as this wording gives the member states the right to assign any national entity through domestic legislation to be the beneficiary of a given TK, even though it has already fallen into the public domain due to the original indigenous people or local community being undefined. The EU considers this provision unreasonable and requests that it be revised (Catherine, 2018).

In addition, Article 2 of the WIPO Treaty uses the term “beneficiaries” rather than “subjects/holder” of TK rights, indicating that WIPO’s attitude toward the question whether TK is considered a property and whether it has a determinable subject remains unclear. The objection toward the use of “or” reflects the EU’s consistent attitude toward TK: The EU has always supported the basic concept of “private law autonomy” and “state coordination” as principles for the access to GRs and associated TK. The EU also adheres to its attitude of supporting voluntary bilateral trade and opposing natural nationalization of TK in the discussions of WIPO-IGC meetings (Tianbao, 2017).

It is the finding of this study that WIPO’s wording of “beneficiaries” instead of “owners” or “subject/holder of right”, which reflects its basic attitude regarding the research question of the paper, is rooted in the CBD. Firstly, since the WIPO Treaty adopts the benefit-sharing principle of the CBD, it is necessary to determine the attribution and direction of the benefits. This makes the determination of the “beneficiaries” necessary. Secondly, although the CBD

proposed the principle of state sovereignty over the GRs, it did not extend the sovereignty to the GR-associated TK. In other words, the CBD does not specify that the “state” is the owner of the TK in its territory, but rather grants the “indigenous people and local communities” the right to dispose of the TK. However, the subjects of such a right of disposal remain absent; therefore, the CBD did not adopt the wording of “owner” or “subject of right.” Thirdly, it is now clear that Contracting Parties may designate a national authority as custodian of the beneficiaries where the subject matter of traditional knowledge is not definable despite of reasonable efforts to define them. This being so, domestic legislation of contracting party can assign a state entity to receive the shared benefits of the TK.

### CONCLUDING REMARKS

The traditional knowledge protection as a regime is substantially different from intellectual property rights or intangible property rights. Thus, mechanisms of the latter cannot be simply imposed on traditional knowledge and a separate TK (right) system is required. The protection of TK is still a fiercely debated topic around the world. It has been over 30 years since the United Nations Educational, Scientific and Cultural Organization (UNESCO) issued the *Model Provisions for National Laws on the Protection of Expressions of Folklore against Illicit Exploitation and Other Prejudicial Actions* in 1982. This international debate involving political, ethical, economic, technological, cultural and legal aspects is still on-going. Although there is still no final consensus on the fundamental connotation and legal definition of TK right, the “collectivist subjectivism” of TK has been accepted by various global communities as a common notion. Thus, rather than simply denying and abandoning the “collectivist subjectivism” of TK, it is better to make more efforts in the “interpretation” of the concept and to look forward to its further development via global discussion, negotiations and via further empirical research in this respect. On this basis, TK should be protected in China as a collective right in national legislation, adopting the mechanisms by CBD and WIPO such as former informed consent and fair benefit sharing introduced.

### ENDNOTE

1. Hereinafter the WIPO Treaty. WIPO, the protection of Traditional Knowledge: Draft Articles Review 2 dated June 2. [http://www.wipo.int/meetings/en/doc\\_details.jsp?doc\\_id=276361](http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=276361)
2. See Article 8(j) of Convention on Biological Diversity (CBD).
3. The "Intangible Heritage of the People's Republic of China Law" was passed at the 19<sup>th</sup> meeting of the Standing Committee of the 11<sup>th</sup> National People's Congress on February 25, 2011. It came into force on June 1, hereinafter referred to as "Intangible Cultural Heritage Law".
4. WIPO differentiates between Traditional Knowledge (TK) and Traditional Culture Expression (TCE), but points out that there is a great deal of similarity in the legal theory and the institutional design regarding these two regimes. The "intangible cultural heritage" referred to in our country's legislation is, by definition, the same as what WIPO calls a "traditional cultural expression."
5. Professor Josef Drexel of the MPI Munich Institute of Intellectual Property and Competition Law (MPI Munich) finds that the legal protection of traditional knowledge in the WIPO system has a great degree of similarity with the copyright law.
6. In November 2007, the State Environmental Protection Administration published the National Biological Species Resources Protection and Utilization Plan, establishing the legal protection of the conservation and usage of biological resource-related traditional knowledge as the medium-term target (years 2011-2015); in 2005, the State Intellectual Property Office established a special division responsible for the protection of traditional knowledge, traditional cultural expressions and heritage; the State Administration of Traditional

Chinese Medicine is also actively promoting the protection and establishment of the relevant legal framework; and the Intangible Cultural Heritage Law of the People's Republic of China has been implemented since June 30, 2011, with various provinces and autonomous regions gradually beginning to issue legal protection for their intangible provincial cultural heritage.

7. Taking the field of traditional Chinese medicine as an example, China currently has approximately over 10 regulations directly related to this subject, including the Regulations on Protection of Traditional Chinese Medicines issued in 1993, Management of the Protection of Traditional Chinese Medicines (1995) and Chinese Medicine Ordinance (2005). However, the provisions of these regulations are dispersed and partly not enforceable, leading to the phenomenon such as protection of traditional Chinese medicine via encryption, which is not consistent with the requirement of international conventions such as the Convention on Biological Diversity, which encourage trade, prior informed consent and benefit-sharing.
8. For example, in 1993, two Indian-American researchers applied for and successfully obtained a US patent on the healing property of the famous Indian spice turmeric. However, because domestic publications in India had clearly recorded the relevant TK about turmeric, the country requested that the US remove said patent and eventually won the case.
9. This proposes that any TK that meets the protection criteria of the existing intellectual property system should be protected by the IPR. For those TK that does not meet such standards, they should be regulated adopting mechanisms such as "Informed Consent System", "information disclosure system" and "benefit-sharing system" proposed in the Convention on Biological Diversity; Also Dong Zhang, "On the Orientation of Traditional Knowledge Protection Legislation-Taking the Internationalization of Traditional Chinese Medicine as an Example", in *Journal of Intellectual Property Rights*. The author finds that traditional knowledge is a kind of special private right and that a comprehensive protection path should be adopted and the existing intellectual property law should be reformed; Ming Yang, "Legal Protection of Traditional Knowledge: Mode Selection and System Design", in *Journal of Law and Business Studies*. The author finds that diversified protection ideas should be followed and that the intellectual property system should be applied to protect traditional knowledge;
10. The article pointed out that "a protecting intellectual property right through private rights, especially intellectual property rights, is a short-sighted proposal."
11. One of the main arguments of developing countries criticizing the excessive monopoly of the intellectual property system that hinders economic and cultural exchange is that "the price of intellectual property products must be affordable", WIPO, African Group Submission on Document WIPO/GRTKF/IC/13/9, WIPO Doc WIPO/GRTKF/14/9 (2009). However, if a right is established for TK and it follows the path of the intellectual property system that might give the right holders an inappropriate monopoly status, then the legitimacy of the "TK right" would also be questioned.
12. Iustitia commutative (distributional justice) is an important principle that the Convention on Biological Diversity stipulates, which the lawmakers of contracting countries should abide by in the process of the acquisition, utilization and commercialization of genetic resources and related traditional knowledge. It is also an important principle of benefit-sharing.
13. Regarding Former Informed Consent-FIC, Article 15(5) of the Convention stipulates that this system was also reaffirmed in later Section IV.C. Of the Bonn Protocol.
14. Regarding Mutually Agreed Terms-MAT, Article 15, paragraph 4, of the 1992 CBD stipulates that access to genetic resources and benefit-sharing should be carried out in accordance with the terms of "consensual negotiation". Section IV D of the Bonn Guidelines of 2002 reaffirms this. A mechanism, in accordance with Article IC9 of the standard, "Conditions for mutual agreement" also applies to traditional knowledge and related genetic resources
15. United Nation Press Release, <https://www.cbd.int/doc/press/2017/pr-2017-12-16-8j-en.pdf>, accessed March 12, 2018.
16. Paragraph 24 Preamble of the Nagoya Protocol.
17. Article 4.4 of the Nagoya Protocol.
18. Different views of developed and developing countries on this issue
19. This means that users who want to acquire and use traditional knowledge for commercial development purposes must share benefits with their holders and respect their right to informed consent; holders who want to benefit from the profits derived from their own traditional knowledge (It must be noted, however, that some indigenous communities do not have such a vision), must allow their traditional knowledge to be acquired and used by others.

20. On the contrary, some developing countries with rich biodiversity resources and traditional knowledge have made attempts through domestic legislation in this regard. For example, Brazil believes that TK is a “diffuse interests”. It stipulates that the state has the right to protect the dominance of rights holders’ claims through legislation and other package measures while supporting and coordinating the interests of collective holders. A system of dual ownership of traditional knowledge countries and collectives was created.
21. WIPO, the protection of Traditional Knowledge: Draft Articles Rev. 2 [http://www.wipo.int/edocs/mdocs/tk/en/wipo\\_grtkf\\_ic\\_24/wipo\\_grtkf\\_ic\\_24\\_facilitators\\_document\\_rev\\_2.pdf](http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_24/wipo_grtkf_ic_24_facilitators_document_rev_2.pdf)
22. The most recent draft of this treaty is dated June 2, 2014, available under [http://www.wipo.int/meetings/en/doc\\_details.jsp?doc\\_id=276361](http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=276361), accessed March 23, 2018 (hereinafter the “WIPO Treaty”)
23. The preface of the PTK is divided into two parts: "policy objective" (including 19 articles) and "guiding principles" (including 15 articles). Many of the clauses list several versions of the wording.
24. Article 1.1 and Article 1.2 of PTK.
25. This is related to the background of the CBD and the WIPO/IGC. The CBD was born in the 1990s and its adjustments have gone from an intangible to a tangible, from the material to the spiritual expansion process, Gudrun Henne, *Genetische Vielfalt als Resource*, Nomos 1999 edition, its starting point is still the concern for the natural environment, genetic resources and biodiversity; and WIPO's IGC was born in 2000, from the very beginning committed to international public discussion of traditional knowledge and intangible property rights.
26. WIPO recognizes that the holder of traditional knowledge may be one or several (identifiable) collectives, but it does not exclude entities of a public affairs function from acting as rights holders/owners.
27. United Nations Declaration on the Rights of Indigenous People (UNDRIP), [http://www.un.org/esa/socdev/unpfii/documents/DRIPS\\_en.pdf](http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf), accessed March 21, 2018.
28. This definition was given by the UN at the “Workshop on Data Collection and Disaggregation for Indigenous People” (United Nations, New York, 19-21 January 2004).
29. Some scholars have summed up the two phases through which a nation forms, namely: From (A) common language, geographical and economic life, religious etiquette, social customs, collective experience and historical memory, that (B) produce a broad sense of common collective identity, that (C) breeds the idea of the group from a common lineage. The collective identity of the nation or ethnic group is found the core of ethnic or ethnic identity. Among them, A to B is completely spontaneous processes and the process from B to C is rather contributions of the elite members of the group.
30. WIPO ICG, Review of Existing Intellectual Property Protection of Traditional Knowledge. 11, WIPO Doc. WIPO/GRTKF/IC/13/9.
31. Group litigation (Verbandsklage) as the procedural protection model of collective rights and interests has also been questioned by German scholars for many years, especially its base of litigation rights, which has become a conundrum in civil law and civil procedure law.

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