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CULTURAL HERITAGE AT RISK: ADDRESSING CHALLENGES IN IPR PROTECTION FOR TRADITIONAL KNOWLEDGE

- Preeti¹

ABSTRACT

The protection of traditional knowledge (TK) through intellectual property rights (IPR) is a critical area of study that bridges cultural heritage and legal frameworks. This paper explores the intricate relationship between TK and IPR, examining the limitations of existing laws in safeguarding the intellectual and cultural assets of indigenous communities. With India being one of the world's megadiverse countries, rich in biodiversity and agricultural heritage, the need for an effective system to protect TK becomes evident. The research delves into the challenges posed by biopiracy, inadequate legal recognition, and the complexities of defining ownership within collective knowledge systems.

The paper evaluates the adequacy of current IPR mechanisms, including patents, copyrights, trade secrets, trademarks, and geographical indications, in addressing the unique characteristics of TK. Furthermore, it discusses alternative approaches such as sui generis systems and community-based intellectual property management to ensure equitable benefit-sharing and the prevention of cultural appropriation. The study also emphasizes the ethical dimensions of TK protection, advocating for respect for indigenous rights and the sustainable use of traditional knowledge.

By critically analyzing the legal frameworks and their limitations, this paper contributes to the ongoing dialogue on developing robust and culturally sensitive mechanisms to safeguard TK. It concludes with recommendations for reforming international agreements, enhancing community participation, and establishing global funds to encourage the protection and promotion of traditional knowledge systems.

¹ Preeti is an LL.M. Student at National Forensic Science University, New Delhi.

KEYWORDS - Traditional Knowledge, Intellectual Property Rights, Biopiracy, Indigenous Communities, Sui Generis Systems.

INTRODUCTION

India is one of the world's 17 Megadiverse Countries² and is a land to rich biological diversity heritage and has recorded over 1,02,718 animal species and 54000 plant species.³ Our nation has also been recognized as one of the 12 centres of crop diversity, containing many wild varieties of crops. Furthermore, India has made its space in the group of 12 main centres of plant production and needless to say is abundant in agricultural biodiversity.

Due to its great biodiversity and natural abundance, India has a wealth of traditional knowledge (hereinafter referred as TK) regarding the characteristics and applications of these biological resources. Cultural patrimony is built on traditional knowledge. Indigenous and local communities predominate in most biodiverse and bio-rich environments. For them, living in the natural world is a way of life and an integral element of their culture. Indigenous organizations provide a source of historical knowledge on environmental preservation and sustainable use. It was always a treasure that was easily accessible and open to abuse.

This paper examines the complex interplay between 'traditional knowledge' and 'intellectual property rights', analyzing the challenges and exploring potential solutions for effective protection. It delves into the limitations of existing IPR frameworks in safeguarding TK and explores alternative approaches, including sui generis systems, community-based intellectual property management, and international legal instruments. Furthermore, the paper analyzes the ethical dimensions of TK protection, emphasizing the importance of respecting indigenous rights, promoting equitable benefit-sharing, and preventing biopiracy and cultural appropriation. By exploring these multifaceted issues, this research aims to contribute to the ongoing dialogue on developing robust and culturally appropriate mechanisms for protecting traditional knowledge while fostering its sustainable use and transmission to future generations.

²WORLDATLAS, "Ecologically Megadiverse Countries of the World," available at: <https://www.worldatlas.com/articles/ecologically-megadiverse-countries-of-the-world.html> (last visited on Jul. 20, 2024).

³HT Correspondent, "India Added at Least 800 Species of Plants, Animals in 2020," Hindustan Times (Sep 21, 2021), available at: <https://www.hindustantimes.com/environment/india-added-at-least-800-species-of-plants-animals-in-2020-101632207311999.html> (last visited on Jul. 20, 2024).

TRADITIONAL KNOWLEDGE VIS-A-VIS INTELLECTUAL PROPERTY RIGHTS

The terms “traditional knowledge” and “IPR” combined, are not frequently heard together. Although the term “IPR” refers to intellectual property rights, traditional knowledge is something that has often been taken for granted without an appreciation of its importance. The delectable family recipes, for instance, grandmothers learn from their grandmother or the myths and legends about the indigenous tribes and how their way of life is quite different from others? Yes, all of these are illustrations of traditional knowledge, the kind of knowledge that is passed down orally to succeeding generations.

According to WIPO, Traditional Knowledge comprises:

*“Tradition-based literary, artistic or scientific works, performances, Inventions Scientific discoveries; designs; marks, names and symbols; undisclosed information; and, all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields”.*⁴

Presently, at the international level, there is no accepted definition of TK at the international level. Though, it can be expressed as:

- In a *broad* sense, TK includes both the knowledge itself and conventional cultural representations, such as particular signs and symbols connected to TK.
- When used in its *stricter* sense, TK refers to knowledge in general, especially knowledge that comes from intellectual work within a conventional setting. It also includes know-how, practices, skills, and innovations.

Traditional knowledge, according to *Article 8(j)* of ‘*The Convention on Biological Diversity*’, refers to the understanding, innovations, and customs of local and indigenous cultures around the world.⁵

Precisely, it is the indigenous, local, or native community's knowledge base that has been kept and passed down the generations to such an extent that it has become the community's spiritual and cultural identity.⁶ Traditional knowledge can be found in a wide range of ideas, including time

⁴ Daniel J. Gervais, “Traditional Knowledge & Intellectual Property: A TRIPS-Compatible Approach,” 137 Michigan State Law Review (2005), available at: <https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=1723&context=faculty-publications> (last visited Jul. 21, 2024).

⁵ Convention on Biological Diversity, available at: <https://www.cbd.int/traditional/> (last visited on July 21, 2024).

⁶ WORLD INTELLECTUAL PROPERTY RIGHTS (WIPO) https://www.wipo.int/pressroom/en/briefs/tk_ip.html#:~:text=When%20community%20members%20innovate%20within,by%20conventional%20intellectual%20property%20systems (last visited Jul. 21, 2024).

measurement, food items, plant qualities, spice usage, yoga techniques, etc. The fact that traditional knowledge has ancient roots and is frequently oral is its most important component. As times have changed, there is a greater need to conserve traditional knowledge, particularly to prevent its unlawful and commercial abuse. The indigenous people must be shielded from such harm and assisted in maintaining their old customs. Protection of TK must encourage its effective and widespread usage.⁷ The preservation of traditional knowledge was long neglected. Mankind is surrounded by it, and yet has devalued and degraded its importance. Traditional knowledge can now be guarded by intellectual property rights; however, it is a difficult process.

PREVAILING INTELLECTUAL PROPERTY REGIME WITH AN ASSESSMENT OF THE ADEQUACY Systems of Traditional Knowledge Protection

Particularly in developing and disadvantaged nations, traditional knowledge should be given effective security. Such protection would be in place to prevent illegal third parties from acquiring rights to traditional knowledge as well as the acknowledgement of the rights of the original traditional knowledge holders. Due to current globalization, traditional information must be efficiently protected and grown with a great deal of international collaboration and cooperation; any such protective plan must take into account the national, regional, and international components of the society. Additionally, the frameworks for traditional knowledge must take the original knowledge bearers' perspectives into account. The economic components of protection must be addressed by these systems. The most important aspect of any protection should be that it is affordable, clear, and available to those who retain traditional knowledge.

In the light of Traditional Knowledge, there are two types of intellectual property protection systems. It is recommended that these two strategies be used in conjunction with one another because it is doubtful that a comprehensive strategy for the safeguarding of traditional knowledge will completely rely on any one form. The two strategies are:

⁷Vatsala Singh, IPR Vis-à-Vis Traditional Knowledge, MONDAQ, (Oct. 8, 2018), <https://www.mondaq.com/india/patent/743482/ipr-vis--vis-traditional-knowledge> (last visited Jul. 22, 2024).

Positive protection:

The processes to maintain conventional knowledge are referred to as "sui-generis" steps. It entitles owners of traditional knowledge to legal action or other remedies in the event that their information is misused. Any system for the positive protection of traditional knowledge must include: ⁸

- Promotion of respect for traditional knowledge systems and recognition of their significance.
- A Responsive behaviour to the genuine requirements of those with conventional expertise.
- The suppression of unjust and unequal uses of traditional knowledge, as well as other forms of appropriation.
- The preservation of innovation and creativity is based on tradition.
- Support for systems of traditional knowledge and empowerment of those who hold that knowledge.
- A bottom-up approach to development is encouraged by the utilization of traditional knowledge, as well as the equitable benefit sharing from its use.

Defensive protection:

It is the defence of traditional knowledge against unauthorized intellectual property rights obtained by third parties. Any strategy for the defence of conventional knowledge must include: ⁹

- The customary knowledge meets the standards for prior work that qualifies as relevant.
- A system to make sure search authorities have access to and are aware of the conventional knowledge that makes up prior art.

Patents

According to Section 3(p) of the 'Indian Patent Act', 1970, traditional knowledge cannot be protected.¹⁰ An innovation that effectively duplicates or aggregates previously known qualities of conventionally recognised constituents is not an invention and cannot be patentable. However, IP safeguards can be sought if there is a sufficient modification to the present TK that enables the innovation to meet the requirements of Indian IP legislation.

⁸ Supra note. 5.

⁹ Ibid.

¹⁰ Indian Patent Act, 1970, (Act 39 of 2000), s. 3(p).

The law provides for appropriate provisions to protect TK. Conventional knowledge is public knowledge by definition, thus any claim for a patent pertaining to TK cannot really come under an invention under Section 2(1)(j) of the Patents Act, 1970,¹¹ which specifies that ‘invention means a new product or method requiring an innovative phase and capable of industrial use.’ Furthermore, “a substance obtained through a mere admixture which results only in the aggregation of the properties of the components thereof or process for producing such substances” is not an invention and hence, not patentable.¹²

The patent system may provide protection for a number of aspects of TK. A patent application can be used to protect novel and inventive techniques that address technical problems in the prior art globally. For instance, patents may be applicable to the trademark, which comprises modern subject matter. Processes used to prepare items that have been extracted from biological resources including microorganisms, plants, and animals can be covered by patents. The codified TM is not patentable since it fails to satisfy the conditions for innovation.

Copyrights

Copyright may be used for the protection of TK holders’ artistic manifestations, in specific artists belonging to the indigenous and migrant peoples, against illegal development and abuse. This can include written works like novels, legends, and poems; theoretical works; visual works; textile works like garments, tapestries, and carpets; musical works; and three-dimensional works like pottery and ceramics, paintings, carvings in wood and stone, and various things. The involvement of singers, dancers, and performers in theatre productions, puppet shows, and other related activities may be guaranteed by the use of public rights. The WIPO also acknowledges the performances by the local communities and indigenous peoples as common knowledge. The performance is protected by copyright law by ancillary rights or privileges of the artist.¹³ As a result, traditional, indigenous, and local performances can generally be protected under the purview of copyright and, more particularly, under the category of performer rights.

The expression form is protected by copyright, not the ideas themselves. Any of the acts listed in Section 14 of the 1957 Copyright Act are permissible for copyright holders. Copyright can be used to protect the artistic expressions of TK holders, especially those created by artists from indigenous and immigrant cultures, from unlawful duplication and misuse. Moral rights concern

¹¹Id. s. 2(1)(j)

¹²Id. S. 3(e).

¹³ Srividhya Ragavan, *Protection of Traditional Knowledge*, 2 MINN. INTELL. PROP. REV. 1 (2001).

how authors, artists, and other creators relate to their works. These rights may offer a crucial means of protecting the interests of indigenous peoples in works produced from their knowledge.

Trade Secrets

According to Srividhya Ragavan, the most effective intellectual property system for protecting traditional knowledge is the trade secret law.¹⁴ For instance, trade secrets may imply that a photographer has a duty to withhold copies of their work from the sale or public display without their consent. The best intellectual property to protect any kind of secret knowledge is this one. The first step in protecting indigenous knowledge through trade secrets is for its owners to recognise its value. They must be aware of their rights and the long-term gains that will result from such protection. It is necessary to make the incentives offered by the secrecy regime known among the relevant sectors and communities for policing the use and distribution of TK. Holders of TK can also choose whether or not to disclose the information. TK has several advantages over other types of IPRs thanks to its security and diverse trade secret representations. Delivery is easier, faster, and less expensive. The legal requirements to establish a trade secret are varied. Information that cannot be protected by a patent or copyright may be under trade secret law. By suing for misappropriation of trade secrets, incidents of unlawful use of the information without the consent of the community can be effectively avoided.

India, however, lacks specific legislation to protect sensitive information and trade secrets. Either contract law or the equal confidentiality infringement doctrine protects trade secrets in India.

Trademarks

Even agricultural and biological products can be shielded against locally produced goods under the Trademark Act of 1999. By using trademarks and service marks, native and indigenous producers, practitioners, craftspeople, and dealers as well as the organizations (cooperatives, guilds, etc.) that represent them can distinguish their goods and services from those provided by others that offer similar products and services.

Authenticating artisanal and cultural goods can be done via collective markings. From traditional art and artwork to food, clothing, and tourism services, certification marks can be used to distinguish a wide range of goods and services. Indigenous organizations may register their trademarks and use this sign to advertise their products, differentiating their brand and assuring

¹⁴ Ragavan, *ibid.*

their distinctive quality. Therefore, the trademark scheme can protect the reputation of conventional knowledge to some extent, but it cannot protect the contents of such knowledge. It will guarantee defensive protection against practices that pass off imposter goods or services.

If a patent prevents the indigenous community from selling the goods, they could register the trademark and then license the use of the trademark to ensure authenticity for the businesses. A community could carry out and accept already-existing procedures on products as a way to improve a product that has the potential to earn royalties from sales.

Geographical Indications

The most effective method of TK conservation is GI, which is held collectively by the indigenous populations. A group in a particular region is rewarded under the Geographic Indications of Goods Act (Regulations and Protection). Although GI protection is only effective for ten years, it can be renewed numerous times to provide protection for all time. Products become higher quality as production techniques advance throughout time. The reputation and goodwill of the items are earned over many years or decades. GIs recognise the prestige of a given product, are not constrained by a specific manufacturing process, and also permit evolution. The indigenous civilizations have maintained and improved their ancient techniques for giving objects special characteristics over time. The GIs respect their sacrifices and ban anyone from abusing their prestige. As long as the natural and cultural qualities of the provided item are preserved at the proper place of cultivation, the GI is conserved. As collective rights, GI rights cannot be freely transferred from one person to another. Furthermore, GIs may be used to protect conventional medicinal products.

Industrial designs

An example of intellectual property that focuses on the aesthetic function of a product that is deduced from its visual appeal is an industrial design. Industrial designs can be used to describe the form and shape of historically made items like clothing, furniture, receptacles, wooden objects, leather goods, pottery, etc. that are created by indigenous people or associations on their behalf. Traditional handicrafts like carpets and cotton bedclothes that are woven by hand may also be categorized as industrial designs for safety. The vast cultural legacy of India is profoundly ingrained in countless varieties of traditional patterns.

CHALLENGES INVOLVED IN PROTECTING THE TRADITIONAL KNOWLEDGE UNDER THE PURVIEW OF INTELLECTUAL PROPERTY RIGHTS

The conflict between the developed and developing countries regarding the protection of traditional knowledge has a long history. It has always been argued by the Developed countries that, traditional knowledge is in the public domain and thereby there are no such things as “biopiracy”, and in the light of the same it can be patented.¹⁵ While the developing nation has always argued that the intellectual property right system creates an unfair situation. For instance, unauthorised use of biodiversity and traditional knowledge, as well as biopiracy. The developing country asserts that they are the specifications for origin disclosure, and they can’t be patented. It is evident from history that India on several occasions has witnessed many cases of bio-piracy of traditional knowledge. If we trace the first instance of such a case, we will find the case of ‘*Haldi*’. It was the first patent on wound healing properties, and now patents have been obtained in other countries on *hypoglycemic* Properties of Karela, brinjal, etc.¹⁶

It is an irony that the law which was made for the protection of Intellectual Property Rights ultimately ends with securing failure because of its Rules and Regulations.¹⁷ There have been many cases where the indigenous people tried to protect their knowledge within the preview of Intellectual Property Laws but have failed to fulfil the requirements of intellectual protection laws.¹⁸ We are aware of the fact that the *Patent* provides a legal monopoly for a period of 20 years¹⁹ in which the patent holder is entitled to the use, production, and sale of an invention.²⁰ The criteria which have been laid down by the legislature in which the inventions can be patented are – (a.) Novelty (b.) non-obviousness, and (c.) Industrial Application.²¹ It is also notable that all these three criteria must have to be fulfilled in order to get the patent otherwise the patent can’t be granted.²²

¹⁵ Jay Erstling, *Using patent to protect traditional knowledge*, 15 TEXAS WESLEYAN LAW REV., 295, 296 (2009).

¹⁶ Tabrez Ahmad & Jaya Godhwani, *Traditional Knowledge: A New Challenge in Patents* 5 (2012) SSRN: <https://ssrn.com/abstract=1981642> or <http://dx.doi.org/10.2139/ssrn.1981642>. (last visited Jul. 23, 2024).

¹⁷ WORLD INTELLECTUAL PROPERTY RIGHTS (WIPO), *Traditional Knowledge and Intellectual Property – Background Brief*, (last visited Jul. 19, 2024).

¹⁸ Dr. John Mugabe, *Intellectual Property and Traditional Knowledge: An Exploration in International Policy Discourse*, WORLD INTELLECTUAL PROPERTY RIGHTS, available at https://www.wipo.int/edocs/mdocs/tk/en/wipo_unhchr_ip_pnl_98/wipo_unhchr_ip_pnl_98_4.pdf. (last visited Jul. 19, 2024).

¹⁹ WORLD INTELLECTUAL PROPERTY RIGHTS, *Frequently Asked Questions: Patents*, https://www.wipo.int/patents/en/faq_patents.html#:~:text=Patent%20protection%20is%20granted%20for,filing%20date%20of%20the%20application (last visited Jul 19, 2024)

²⁰ Id.

²¹ International Bureau, *enlarged concept of Novelty: Initial Study concerning Novelty and the prior art effect of certain applications under the Draft Article 8(2) of the SPLT*, WORLD INTELLECTUAL PROPERTY RIGHTS 1, 5 (2004), <https://www.wipo.int/export/sites/www/scp/en/novelty/documents/5prov.pdf>. (last visited Jul. 19, 2024).

²² AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, *Traditional knowledge and intellectual property Handbook*, shr.aas.org/tek/handbook/handbook.pdf (last visited Jul. 20, 2024).

Now the problem which arises with traditional knowledge is that most of such traditional knowledge is ancient and is in practice for a long period of time. In our discussion, we have seen earlier that one of the ingredients to get the patent is Novelty. Thereby, the criteria get unfulfilled and create hurdles in order to get the Protection.²³

Further, the challenge involved with traditional Knowledge is that it is prior art, and it is in the knowledge of many practitioners. Before we go into further discussions let us first understand what does actually 'Prior art' stands for? The term 'prior art' refers to scientific and technical information that exists before the effective date of a patent application.²⁴ notably, the date varies from country to country.²⁵ Further, if we refer to the US patent Act, Section 102(a) of the said act defines the term as "*A person shall be entitled to a patent unless (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.*" In the context of India, the Patent Act of 1970²⁶ deals with Patent law. By virtue of Section 29 of the said Act²⁷, it rejects the patent application on the ground of anticipation of previous publication, or by public display²⁸, or communication to the government.²⁹ If we once again refer to the ingredients of the Patent holder, there is a requirement called "Inventions' novelty" or 'non- obviousness'. Thereby it again creates a hurdle in securing patent protection.

At this Juncture, another relevant point to note down here is that possession plays a vital role in determining the basis for patent protection. The problem faced in protecting the traditional knowledge is that the traditional knowledge is common knowledge. Further, it is collectively experienced. In the light of the same, it gets precluded from getting the protection.

Another problem related to this topic is that Traditional knowledge either originates within a community or enters from outside of the community. In the second case i.e., 'outside the community, it may not be subject to any Intellectual Property Protection and it may be already in the public domain. However, in the first case i.e., in the case of 'within a community, it creates a complication in itself. For instance, it's really difficult to find the owner or inventor of that

²³Intellectual property and traditional knowledge, genetic resources and folklore, available at www.mpil.de/shared/data/pdf/pdfmpunyb/14_thesis_rosa_12.pdf (last visited Jul. 20, 2024).

²⁴ Erstling, *supra* note 14.

²⁵WORLD INTELLECTUAL PROPERTY RIGHTS
https://www.wipo.int/edocs/mdocs/aspac/en/wipo_ip_cm_09/wipo_ip_cm_09_topic7_01.pdf (last visited Jul. 20, 2024).

²⁶ Indian Patent Act, 1970, (Act 39 of 2000).

²⁷ *Id.*

²⁸ *Id.* S. 31

²⁹ *Id.* S. 32

Particular Knowledge.³⁰ In the light of the same discussion, we can conclude that traditional knowledge is facing challenges as the locus of ownership couldn't be identified easily.

Traditional Knowledge ownership structures preclude legal claims to it under any system of personalized rights, such as the TRIPS. Political philosophers Anthony Stenson and Tim Gray contend in a recent study that because traditional knowledge is primarily common knowledge and a result of collective experience rather than an individual act of creation, it cannot be viewed as intellectual property from the perspective of entitlements theory. The lexicon of intellectual property protection law and the complete idiom of western legal procedures grant an individual the sole right to make use of specific works of human brilliance. For a limited time, a patent, for instance, gives an inventor the sole authority to create, regulate the use of, and market a novel industrial method or product. Generally speaking, these types of intellectual property protection do not offer the required protection for indigenous peoples' and locals' rights, innovations, and traditional knowledge. One of the main reasons is that knowledge systems that are essentially intergenerational and the results of collective effort cannot be clearly defined as to who owns what.³¹

Another challenge involved in protecting Intellectual Property rights is non-obvious or novel, which is one of the ingredients as we have also seen earlier in our previous discussion. One of the main concerns with indigenous knowledge is that it is often orally transmitted, and evolves gradually. Thereby it is never considered a 'novel'.³²

The traditional cultures have been prevented by these obstacles from benefiting from the patent protection that exists today. Under specific social, economic, and culturally predetermined conditions, intellectual property law permits control over information. If there is no external manifestation or precise delineation, no identified creator or inventor, and no novelty or originality, a claim to legal sovereignty over the information will typically fail. Native knowledge frequently falls short of these standards.³³

The different case studies (*like* Tumeric case, Neem case, Ayahuasca case) highlight the issues that arise when traditional knowledge property rights are granted patents, how challenging it is to

³⁰ Manisha Singh, Traditional Knowledge and Intellectual Property, MONDAQ (Nov. 15, 2006), <http://www.mondaq.com/article.asp?articleid=44198&login=true&nogo=1>. (last visited on 22 Jul. 2024).

³¹ Rajshree Chandra, Knowledge as Property, Issues in The Moral Grounding of Intellectual Property Rights (Delhi, 2010; online edn, Oxford Academic, Oct. 18, 2012), <https://doi.org/10.1093/acprof:oso/9780198065579.001.0001>. (last visited on 23 Jul. 2024).

³² Id.

³³ Id.

challenge the grant of these rights, and how inadequate the current methods are as a remedy for the original holders of traditional knowledge.³⁴

CONCLUSION AND RECOMMENDATIONS

Protection of Traditional Knowledge, really needs a better system. Traditional knowledge constitutes a backbone of a large section of the world's population. The law which was made for the protection of intellectual rights would become more progressive, if it would get the capacity to protect the traditional knowledge, which is currently lacking. In the light of the same, these are some of the suggestions by the authors which can be a solution.

Firstly, the trips agreement has to be changed because taking national action alone is insufficient because it simply generates rights that cannot be used and enforced in other nations. *Secondly*, Exploitation is likely to increase the prominence of traditional knowledge and local innovation within communities and hence inspire greater involvement by the younger members of the community by bringing together the local inventors and entrepreneurs and whatever told are employed. *Thirdly*, to encourage local inventors and owners of traditional knowledge to file patents globally, a fund needs to be established. *Fourthly*, we have to look at the current sui generis system, procedures & schemes. Last but not least the TK holders must come forward and have to take an active role in protecting the same.

³⁴ Vincent M. Smolczynski, Willful Patent Filing: A Criminal Procedure Protecting Traditional Knowledge, 85 CHI.-KENT L. REV. 1171 (2010), <https://scholarship.kentlaw.iit.edu/cklawreview/vol85/iss3/10>. (last visited on 30 Jul. 2024)