

The Human Right to Development: Definitions, Research and Annotated Bibliography

JOOTAEK LEE*

Abstract

Considering a wide variety of international instruments and literature, this article will attempt to provide a comprehensive and consistent definition of the human right to development and its relationship to the human right to health and intellectual property. This article will also provide an annotated bibliography of various sources which can facilitate the research of scholars and practitioners in this field. A list of primary source instruments, including the selective laws of domestic countries, is also introduced.

CONTENTS

I. Introduction	2
II. Definitions of the Human Right to Development in the Context of Health and Intellectual Property	4
III. International Principles relating to the Human Right to Development	7
A. Traditional International and Regional Human Rights Principles that Apply to the Human Right to Development, Health and Intellectual Property	7
B. Institutions and Documents Directly Dealing with the Right to Development	8
IV. Annotated Bibliography	11
A. Treatises and Books	11
B. Articles and Reports	17
V. Conclusion	34

I. INTRODUCTION

In August, 2021, Mamta Murthi, the World Bank’s Vice President for Human Development exclaimed that COVID-19 vaccination rates in developing countries was “absolutely unacceptable.”¹ The poorest countries are left so far behind to get vaccinations.² As of August 2022, 67.7% of the world population has received at least one dose of a COVID-19 vaccine; 12.57 billion doses have been administered globally, and 4.88 million are now administered each day.³ However, still only 20.9% of people in low-income countries have received at least one dose; it was with

* © Associate Professor/Foreign, Comparative and International Law Librarian, Rutgers University Law School.

¹ ‘*Absolutely Unacceptable*’ COVID-19 Vaccination Rates in Developing Countries (Aug. 3, 2021), <https://www.worldbank.org/en/news/podcast/2021/07/30/-absolutely-unacceptable-vaccination-rates-in-developing-countries-the-development-podcast>.

² *Id.*

³ *Coronavirus (COVID-19) Vaccinations*, Our World in Data, <https://ourworldindata.org/covid-vaccinations?country=AFG>.

fewer than 3% in 2021.⁴ The situation has not improved that much within the twelve months. Why has this situation happened? Developing countries, including African countries, needed financing for both the purchase and deployment of vaccines.⁵ Furthermore, rich countries have continued to buy many more doses than they use.⁶ Countries and pharmaceutical companies have hidden their vaccine purchase contracts, providing even more vaccines to rich countries.⁷

This COVID-19 vaccine situation shows one aspect of an endemic issue that developing countries have experienced for a long time as a result of their decolonization. A reality is that developing countries are still developing, and people or persons living there are still suffering. Furthermore, these countries do not have sustainable abilities to invent and manufacture medicines to combat serious diseases including COVID-19 and HIV. Fortunately, the U.S. government announced to put licenses for 11 medical technologies invented at the National Institutes of Health (NIH) into a patent pool.⁸ However, this is an exceptional case as it removed only one hurdle to making a vaccine, which requires further agreements with different patent holders.⁹ As such, the Right to Development (“RTD”) of people living in low income countries has not been realized and improved that much since the United Nations General Assembly adopted the Declaration on the Right to Development (“DRTD”) in 1986. Sustainable development goals have not been achieved. COVID-19 pandemic actually worsened the situation.

The RTD theory provides human rights to persons or people in their efforts to promote or protect civil and political, economic, social, and cultural developments.¹⁰ While there have not been consistent definitions relating to development, the RTD provides mechanisms to increase personal developments in many aspects of life. Intellectual property is at the core of such efforts for development and makes it more efficient and easy for persons or people to develop. If new technology and scientific idea and knowledge has to be delivered to the persons or people in developing countries without copyright and patent barriers, their development could be accelerated. Particularly, their health and well-being could improve much more if their access to medicines and knowledge and technology to develop such medicines has improved.

As such, there have been conceptual issues in the intersection between intellectual property (“IP”) and the RTD. In essence, the same IP rights which protect the invention and the inventor simultaneously restrict access to resources and technology which could greatly benefit human rights.¹¹ IP rights are unequally distributed to a few developed countries, and they limit innovation in countries that do not own IP rights but could most benefit from such developments.¹²

Affected by the DRTD, the UN General Assembly focused on development and adopted the 17 sustainable development goals (SDGs) which can be achieved by 2030.¹³ The SDGs are integrated and indivisible and linked to other relevant ongoing processes in the economic, social and environmental fields.¹⁴ The first three goals are allocated to end poverty and hunger and ensure food security, healthy lives and well-being for all.¹⁵ Goal 3.8 is to achieve universal health coverage, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.¹⁶

⁴ *Id.*

⁵ ‘*Absolutely Unacceptable*’ COVID-19 Vaccination Rates in Developing Countries (Aug. 3, 2021), <https://www.worldbank.org/en/news/podcast/2021/07/30/-absolutely-unacceptable-vaccination-rates-in-developing-countries-the-development-podcast>.

⁶ Nurith Aizenman, *Why low income countries are so short on COVID vaccines. Hint: It’s not boosters* (Nov. 10, 2021), <https://www.npr.org/sections/goatsandsoda/2021/11/10/1052078529/why-low-income-countries-are-so-short-on-covid-vaccines-hint-its-not-boosters>.

⁷ *Id.*

⁸ Jon Cohen, ‘*A Pretty Big Deal*’: U.S. Makes COVID-19 Technologies Available for Use in Developing Countries, *SCIENCE* (May 13, 2022), <https://www.science.org/content/article/pretty-big-deal-u-s-makes-covid-19-technologies-available-use-developing-countries/>

⁹ *Id.*

¹⁰ *Id.* art. 1(1).

¹¹ *Ahmed, supra* note 23, at 613.

¹² *Id.* at 613.

¹³ *Id.* p.14.

¹⁴ *Id.* ¶ 55.

¹⁵ *Id.* p. 14.

¹⁶ *Id.*

Particularly, it is interesting to see that Goal 3 (Ensure healthy lives and promote well-being for all at all ages) of the Sustainable Development Goals¹⁷ includes the following paragraph:

3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

Protection of intellectual property created in the developed countries can often work as an obstacle to IP development in developing countries. The human right to development and intellectual property rights create the dynamics of conflict and coexistence between developing and developed nations.¹⁸

[I]t is misleading to inquire whether human rights and intellectual property rights coexist or conflict with each other. Because of the overlapping human rights attributes, these two sets of rights both coexist and conflict with each other. A better, and more important, question is how we can alleviate the tension and resolve the conflict between human rights and the non-human-rights aspects of intellectual property protection.¹⁹

This approach emphasizes “[t]he importance of flexibilities, limitations and exceptions enshrined in international instruments in the pursuit of a balanced IP regime that is supportive of both innovation and the dissemination of knowledge and technology to achieve public policy objectives.”²⁰ “IP for development” and “development-oriented IP” are used in the language of international IP discourse, such as in the 2007 Development Agenda recommendations; however, “both are not mutually exclusive and many countries, including developed ones, tend to combine them in their overall approach to IP protection.”²¹ However, how can an existing intellectual property regime created by the developed countries enhance the promotion and protection of the human right to development of the developing countries? This article will further analyze this question and provide resources with an annotated bibliography of the existing literature in order to answer the following questions: (1) what are the definitions of the right to development and how they have been developed; (2) what are the exceptions and flexibilities in the existing international instruments for the dissemination of knowledge to the developing countries; (3) What are the obstacles to the current iteration of the human right to development; and (4) whether the right to development gained a status of universal human rights and peremptory norms.

II. DEFINITIONS OF THE HUMAN RIGHT TO DEVELOPMENT IN THE CONTEXT OF HEALTH AND INTELLECTUAL PROPERTY

The right to development is an inalienable human right which can be enjoyed individually or collectively by persons and people. However, defining the development is a daunting task. Development itself contains many different aspects of life in terms of persons and people. International organizations, governments, and scholars do not provide a consistent definition either. Development is also politically motivated, and its definitions are especially divided between developing and developed countries.²² Thus, UN General Assembly has tried to provide a consistent definition through a resolution, called the Declaration on the Right to Development (“DRTD”) in 1986.²³

¹⁷ G.A. Res. 70/1 (Sept.25, 2015).

¹⁸ Peter Drahos, *The Universality of Intellectual Property Rights: Origins and Development*, in INTELLECTUAL PROPERTY AND HUMAN RIGHTS 13–41 (WIPO, Geneva, 1999).

¹⁹ Peter Yu, *Reconceptualizing Intellectual Property Interests in a Human Rights Framework*, 40 UC Davis Law Review 1039, 10780(2007).

²⁰ Ahmed Abdel-Latif, *The Right to Development: What Implications for the Multilateral Intellectual Property Framework?* 605, 615, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY (2015).

²¹ *Id.*

²² Surya P. Subedi, *Introductory Note: Declaration on the Right to Development*, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

²³ G.A. Res. 41/128 (Dec. 4, 1986).

Article 1 of DRTD defines the right to development as:

an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.²⁴

It reaffirms “the principles of self-determination and full sovereignty over natural wealth and resources and involves both national and international dimensions of State responsibilities including responsibilities in the creation of an enabling environment for development and favorable conditions for all human rights.”²⁵

The idea behind the right to development is the adoption of “a comprehensive and human-centered development policy, participatory development processes, social justice and equity.”²⁶ As such, the DRTD moved a conceptual development into the human rights field, emphasizing equity and justice. DRTD specified that the right to development is a collective right, inclusive of a “development with equity and justice ... has strong connections to economic, social and cultural rights.”²⁷ Notably, Article 8 calls upon States to undertake, at a national level, all necessary measures for the realization of the right to development and to ensure, inter alia, equality of opportunity for all through their access to basic resources, education, health services, food, housing, employment and the fair distribution of income.²⁸

Under the DRTD, the right to development not only focuses on the contents but also the structures, processes, and outcomes of development both at the national and international levels.²⁹ Its preamble emphasizes process, particularly recognizing that “development is a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom.”³⁰

There have been continued disagreements between nations as to how the RTD should be implemented, particularly between developing and developed countries.³¹ Developing countries want to reduce inequities that occur because of globalization and “gain greater participation of developing countries in global economic and financial decision-making.”³² On the other hand, developed countries would like to focus on contributing to achieving elements such as “good governance, democracy ... and sound economic conditions” at the domestic front of developing countries.³³ The DRTD resolved this discrepancy to some extent. Overall, the term “development,” in the context of the DRTD, has largely been understood to mean “social and economic development” of developing countries in general. In particular, the DRTD refers to the least developed countries. Therefore, the right to development mainly focuses on the economic and social development of developing countries, as stated in article 4 (2) of the DRTD.³⁴

Article 3 of DRTD declares that, “States have the primary responsibility for the creation of national and international conditions favorable to the realization of the right to development.”³⁵ According to a high-level United Nations task force on the implementation of the right to development, “the responsibility for the creation of this enabling environment encompasses three main levels: (a) States acting collectively in global and regional

²⁴ *Id.* art. 1(1).

²⁵ Surya P. Subedi, *Introductory Note: Declaration on the Right to Development*, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

²⁶ Surya P. Subedi, *Introductory Note: Declaration on the Right to Development*, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

²⁷ Ahmed Xxxx.

²⁸ Art.8.

²⁹ Surya P. Subedi, *Introductory Note: Declaration on the Right to Development*, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

³⁰ Preamble, DRTD, G.A. Res. 41/128 (Dec. 4, 1986).

³¹ Ahmed Abdel-Latif, *The right to development: What implications for the multilateral intellectual property framework?*, in *RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY* 605–626 (Christopher Geiger, ed., Edward Elgar Publishing 2015) at 610.

³² *Id.*

³³ *Id.*

³⁴ Surya P. Subedi, *Introductory Note: Declaration on the Right to Development*, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

³⁵ Art. 3.

partnerships; (b) States acting individually as they adopt and implement policies that affect persons not strictly within their jurisdiction; and (c) States acting individually as they formulate national development policies and programs.”³⁶ The concept of the RTD carries with it a moral and political force in the deliberations on economic development of developing countries and delivery of promises made through various international initiatives, ranging from financing for development and poverty reduction to projects of social engineering envisaged in the Charter of the United Nations.³⁷

In 1993, the Declaration on the Right to Development (“DRTD”) is later reaffirmed the right to development as an inalienable human right with the Vienna Declaration and Programme of Action.³⁸ The World Conference on Human Rights affirmed the right to development as “a universal and inalienable right and an integral part of fundamental human rights.”³⁹ This includes the right *not* to develop to therefore respect the existing, recognized human rights of other countries. The declaration states that “[w]hile development facilitates the enjoyment of all human rights, the lack of development may not be invoked to justify the abridgement of internationally recognized human rights.”⁴⁰

In 2000, the UN General Assembly adopted the United Nations Millennium Declaration⁴¹ and identified fundamental values essential to international relations which were later developed as the Millennium Development Goals. The eighth goal is *Global Partnership for Development*. The Millennium Development Goals were only set until 2015. In 2015, the UN General Assembly adopted a new resolution, the 2030 Agenda for Sustainable Development⁴² as a development agenda to build on the Millennium Development Goals. The Sustainable Development Goals name 17 goals and 169 targets. This new agenda is informed by the Declaration on the Right to Development.

The new Agenda recognizes the need to build peaceful, just and inclusive societies that provide equal access to justice and that are based on respect for human rights (including the right to development), on effective rule of law and good governance at all levels and on transparent, effective and accountable institutions.⁴³

The DRTD, however, was a General Assembly resolution and, as such, is not binding on member states. Thus, in January 2020, the Human Rights Council made efforts to create an enforceable written document, publishing a draft Convention on the Right to Development (“CRD”) (A/HRC/WG.2/21/2/Add.1),⁴⁴ emphasizing that the right to development is a common concern of humankind.⁴⁵ The CRD recognizes the same concept of development as the DRTD in the preamble, but did not provide a specific definition under its Article 2 definition section. But the CRD provides general principles relating to development under Article 3 which includes: human person and people-centered development, the principles of accountability, empowerment, participation, non-discrimination, equality and equity; development as a human right; self-determined development; sustainable development; state parties’ right to regulate to achieve sustainable development on their territory; international solidarity among individuals, peoples, states and international organizations; universal duty to respect human rights; and right and responsibility of individuals, groups and organs of society to promote and protect human rights.⁴⁶

Through the CRD, the RTD is gaining the universal rights status which must be respected by all humankind. The RTD after gaining more peremptory norm status may be able to preempting intellectual property rights primarily

³⁶ A/HRC/15/WG.2/TF/2/Add.2.

³⁷ Surya P. Subedi, Introductory Note: Declaration on the Right to Development, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

³⁸ World Conference on Human Rights, *Vienna Declaration and Programme of Action*, ¶10, U.N. Doc. A/CONF.157/23 (June 25, 1993).

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ G.A. Res. 55/2 (Sept. 8, 2000).

⁴² G.A. Res. 70/1 (Sept. 25, 2015).

⁴³ G.A. Res. 70/1, ¶35 (Sept. 25, 2015).

⁴⁴ [https://www.ohchr.org/sites/default/files/Documents/Issues/Development/Session21/3_A_HRC_WG.2_21_2_Advance EditedVersion.pdf](https://www.ohchr.org/sites/default/files/Documents/Issues/Development/Session21/3_A_HRC_WG.2_21_2_Advance%20EditedVersion.pdf).

⁴⁵ Preamble

⁴⁶ art. 3.

asserted and protected by researchers in developed countries. Universality of the RTD inherited from Universal Declaration of Human Rights (“UDHR”)⁴⁷ was finally culminated by the CRD in 2020.

III. INTERNATIONAL PRINCIPLES RELATING TO THE HUMAN RIGHT TO DEVELOPMENT

A. Traditional International and Regional Human Rights Principles that Apply to the Human Right to Development, Health and Intellectual Property

1. The Covenant of the League of Nations (1919) & United Nations Charter (“UN Charter”) (1945)
The Covenant of the League of Nations addressed development within its mandate system in Article 22. This concept of development found its expression in Article 55 of the Charter of the United Nations in a wider context of international economic and social cooperation among States. Article 55 recognizes the importance of promoting “conditions of economic progress and development” and “solutions of international economic, social, health, and related problems” and all Members of the United Nations pledged themselves through Article 56 “to take joint and separate action” in cooperation with the United Nations “for the achievement of the purposes set forth in Article 55”. Thus, the embryonic foundations for the DRTD were laid in the Charter of the United Nations itself in 1945.
2. American Declaration of the Rights and Duties of Man (1948)
The preamble emphasizes spiritual development which is the “supreme end of human existence and the highest expression thereof” Under Chapter Two, every individual has a duty to fully form and develop his personality.
3. Universal Declaration of Human Rights (“UDHR”) (1948)⁴⁸
Under Article 22, everyone has the right to social security and is entitled to the economic, social and cultural rights for his dignity and the free development of his personality. Article 26 emphasizes the importance of education for the full development of the human personality. Article 25 provides the right to a standard of living adequate for the health and well-being of himself and of his family, including housing and medical care, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
4. Declaration of the Rights of the Child (1959)
The Rights of the Child and the Convention on the Rights of Persons with Disabilities have integrated provisions on international assistance and cooperation with a focus on the needs of developing countries. The right to development is an aspirational and enabling right. It is a right to means of achieving other human rights.
5. International Convention on the Elimination of All Forms of Racial Discrimination (“CERD”) (1966)
It reaffirms that discrimination is disturbing peace and security among peoples and the harmony of persons living side by side even within one and the same State.⁴⁹
6. International Covenant on Civil and Political Rights (“ICCPR”) (1966)⁵⁰
Article 1 provides the right of self-determination. People freely determine their political status and freely pursue their economic, social and cultural development.⁵¹ All people may freely dispose of their natural wealth and resources, and in no case, a people may be deprived of its own means of subsistence.

⁴⁷ G.A. Res. 217 (III) A, at 76, Universal Declaration of Human Rights (Dec. 10, 1948). Most provisions of the UDHR are considered to attain the status of customary international law. See HENRY J. STEINER, PHILIP ALSTON & RYAN GOODMAN, *INTERNATIONAL HUMAN RIGHTS IN CONTEXT* 161 (2008); Hurst Hannum, *The Status of the Universal Declaration of Human Rights in National and International Law*, 25 GA. J. INT’L & COMP. L. 287, 353–354 (1995/1996).

⁴⁸ G.A. Res. 217 (III) A, at 76, Universal Declaration of Human Rights (Dec. 10, 1948). Most provisions of the UDHR are considered to attain the status of customary international law. See HENRY J. STEINER, PHILIP ALSTON & RYAN GOODMAN, *INTERNATIONAL HUMAN RIGHTS IN CONTEXT* 161 (2008); Hurst Hannum, *The Status of the Universal Declaration of Human Rights in National and International Law*, 25 GA. J. INT’L & COMP. L. 287, 353–54 (1995/1996).

⁴⁹ Preamble.

⁵⁰ International Covenant on Civil and Political Rights, *opened for signature* Dec. 19, 1966, 999 U.N.T.S. 171.

⁵¹ Art. 1.

7. International Covenant on Economic, Social and Cultural Rights (“ICESCR”) (1966)⁵²

Article 2(1) of the International Covenant on Economic, Social and Cultural Rights tells each State Party to take steps, individually and through international assistance and co-operation in order to achieve progressively the full realization of the economic, social and cultural rights by all appropriate means.⁵³ Along the lines envisaged in Articles 55 and 56 of the Charter of the United Nations, the Covenant absorbed “development,” qualifying it as an important means for the achievement of human rights. It was a recognition of the idea that development measures can serve as a framework within which economic and social rights can be defined and realized. Article 6 also provides concrete steps to provide technical and vocational guidance and training programs, policies and techniques to achieve steady economic, social and cultural development and full and productive employment.⁵⁴ Article 11 tells State Parties to achieve the most efficient development and utilization of natural resources for an adequate standard of living.⁵⁵ Article 15 tells State parties to take the steps to achieve the full realization of the right to enjoy the benefits of scientific progress and its applications which includes the steps necessary for the development of science and culture.⁵⁶

8. American Convention on Human Rights (1969)⁵⁷

This regional convention sponsored by the OAS approves broader standards with respect to economic, social and educational rights into the incorporation into the Charter of the OAS of.⁵⁸ Particularly, Article 26 emphasizes the progressive development for the full realization of the rights implicit in the economic, social, educational, scientific, and cultural standards set forth in the Charter of the Organization of American States.⁵⁹

B. Institutions and Documents Directly Dealing with the Right to Development

1. UN General Assembly Resolutions 1710 and 1715 (XVI) (1962).⁶⁰

In 1962, the first United Nations Development Decade was proclaimed. The UN General Assembly recognized the need for concerted action for the advancement of the economic and social development of all people.⁶¹ Its main focus was placed not only on the less developed countries in terms of growth, but also on the people in terms of removing illiteracy, hunger and disease which seriously affect the productivity and promoting education in general and vocational and technical training.⁶²

2. UN General Assembly Resolution 1803 (XVII) (1962)⁶³

The UN General Assembly adopted a resolution titled Permanent Sovereignty over Natural Resources required sovereignty to be exercised in the interest of a State’s “national development and of the well-being of the people of the State.”⁶⁴ It focuses on the promotion and financing of economic development in under-developed countries and in connection with the right of peoples to self-determination in the draft international covenants on human rights.⁶⁵

3. UN General Assembly Resolution 2027(XX) (1965)⁶⁶

⁵² International Covenant on Economic, Social and Cultural Rights, *opened for signature* Dec. 19, 1966, 993 U.N.T.S. 3.

⁵³ Art. 2(1).

⁵⁴ Art. 6.

⁵⁵ Art. 11.

⁵⁶ Art. 15.

⁵⁷ American Convention on Human Rights, Nov. 22, 1969, 1144 U.N.T.S. 144.

⁵⁸ *Id.* preamble.

⁵⁹ *Id.* art. 26.

⁶⁰ United Nations Development Decade; A programme for international economic cooperation, A/RES/1710(XVI), 17–18.

⁶¹ *Id.*

⁶² *Id.*

⁶³ Permanent Sovereignty over Natural Resources, A/RES/1803(XVII)

⁶⁴ *Id.*

⁶⁵ Permanent Sovereignty over Natural Resources: General Assembly Resolution 1803 (XVII), https://legal.un.org/avl/ha/ga_1803/ga_1803.html.

⁶⁶ Measures to Accelerate the Promotion of Respect for Human Rights and Fundamental Freedoms, A/RES/2027(XX).

In its resolution 2027(XX), the General Assembly strengthened that link when it recognized the need for the framework of the Development Decade to “devote special attention on both the national and international levels to progress in the field of human rights, and to encourage the adoption of measures designed to accelerate the promotion of respect for and observance of human rights and fundamental freedoms.”⁶⁷ The resolution invited governments to include in their plans for economic and social development measures directed towards the achievement of further progress in the implementation of the human rights and fundamental freedoms as proclaimed in the Universal Declaration of Human Rights and subsequent international human rights instruments.⁶⁸

4. United Nations Development Program (UNDP)

Under the Charter of the United Nations, the United Nations General Assembly established the UNDP in 1966 in order to achieve international cooperation in solving economic, social, cultural, or humanitarian challenges without distinction for race, sex, language, or religion.⁶⁹ The UNDP are currently making efforts to achieve sustainable development goals, and publishes Human Development Reports.⁷⁰ The most recent report was published in 2022, emphasizing “advancing human development is the means to navigate uncertain times and effect the behavioural changes and institutional reforms ... Human development is about expanding capabilities”⁷¹

5. Final Act of the International Conference on Human Rights (1968)⁷²

The link between development and human rights was officially recognized by the Tehran Conference on Human Rights in 1968.⁷³ Resolution XI dealt with human rights and scientific and technological developments, recognizing that scientific discoveries and their technological applications accelerate economic, social and cultural progress and raise the level of living, and they are the decisive factor in the effective application of human rights.⁷⁴ The resolution also recognizes the danger of legal and ethical application in human rights.⁷⁵ Resolution XVII dealt with economic development and human rights, recognizing that “there is a profound inter-connexion between the realization of human rights and economic development.”⁷⁶

6. UN General Assembly Resolution 34/46 (1979)

The General Assembly recognized the right to development in its resolution 34/46 of 23 November 1979 under the title “Alternative approaches and ways and means within the United Nations system for improvising the effective enjoyment of human rights and fundamental freedoms.”⁷⁷ The resolution notes that the right to development is a human right and that equality of opportunity for development is as much a prerogative of nations as of individuals within nations.⁷⁸

7. 1981 African Charter on Human and Peoples’ Rights⁷⁹

While the matter concerning different dimensions of development were being debated within the United Nations, a Senegalese jurist, Keba M’baye, first proposed the idea of a right to development (“Le droit au développement comme un droit de l’homme” in *Revue des droits de l’homme*, vol. 5, 1972, p. 505), and it was first given legal recognition in the 1981 African Charter on Human and

⁶⁷ *Id.*

⁶⁸ *Id.* ¶1.

⁶⁹ UNDP, <https://www.undp.org/about-us>.

⁷⁰ <https://hdr.undp.org/>.

⁷¹ 2021/22 Human Development Report, <https://report.hdr.undp.org/>.

⁷² A/Conf.32/41, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N68/958/82/PDF/N6895882.pdf?OpenElement>.

⁷³ Surya P. Subedi, Introductory Note: Declaration on the Right to Development, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

⁷⁴ A/Conf.32/41, p.12, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N68/958/82/PDF/N6895882.pdf?OpenElement>.

⁷⁵ *Id.*

⁷⁶ *Id.* at 14.

⁷⁷ A/RES/34/46, p.170.

⁷⁸ *Id.*

⁷⁹ <https://www.achpr.org/legalinstruments/detail?id=49>.

Peoples' Rights ("Banjul Charter").⁸⁰ In its preamble, the Banjul Charter told states to pay special attention to the right to development, recognizing that civil and political rights cannot be achieved without a satisfactory realization of economic, social and cultural rights.⁸¹ Article 22 officially recognizes a legal right of people to their economic, social and cultural development, and states are obligated to ensure the exercise of the right to development.⁸²

8. Commission on Human Rights: Report on the 41st Session (1985)⁸³

The thirty-seventh session of the Commission held in 1981 established a Working Group (resolution 36 (XXXVII)) to study the scope and contents of the right to development.⁸⁴ Based on the Working Group report, the Economic and Social Council (Resolution 1985/43) approves the Commission's decision to transmit the General Assembly with relevant documents in order to enable the Assembly to adopt a declaration on the right to development,⁸⁵ paving the way for the adoption of the DRTD on the right to development.⁸⁶

9. The Rio Declaration on Environment and Development⁸⁷

The Rio Declaration linked development with environment and expanded the status of the right to development. Article 3 states that "[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations."⁸⁸ Unlike the DRTD, the Rio Declaration was adopted with the support of an overwhelming majority of States. Although the United States expressed, in a separate statement, its opposition to development as a right, the normative character of the provisions in article 3 of the Rio Declaration and the support it received has strengthened the status of the right to development.⁸⁹ The right to development was also recognized by the 1993 World Conference on Human Rights (A/CONF.157/23).

10. United Nations Millennium Declaration (2000)⁹⁰

Inspired by the DRTD, the Millennium Declaration dedicated the Whole section III for development and poverty eradication.⁹¹ Under Article 11 General Assembly committed to realize the right to development for everyone and to free the entire human race, more than a billion of them from extreme poverty.⁹² The declaration emphasized the creation of an environment conducive to development,⁹³ and good governance and transparency.⁹⁴ Particularly, Article 20 encourages the pharmaceutical industry to make essential drugs more widely available and affordably by all who need them in developing countries."⁹⁵

11. United Nations 2030 Agenda for Sustainable Development⁹⁶

Also affected by the DRTD, the UN General Assembly focused on development and adopted the 17 sustainable development goals (SDGs) which can be achieved by 2030.⁹⁷ The SDGs are

⁸⁰ Surya P. Subedi, Introductory Note: Declaration on the Right to Development , https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

⁸¹ Banjul Charter, preamble.

⁸² Banjul Charter, art. 22.

⁸³ E/CN.4/1985/66.

⁸⁴ Surya P. Subedi, Introductory Note: Declaration on the Right to Development , https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

⁸⁵ E/CN.4/1985/66.

⁸⁶ *Id.*

⁸⁷ *Rio Declaration on Environment and Development*, in Report of the United Nations Conference on Environment and Development (1992), A/CONF.151/26 (Vol.I).

⁸⁸ *Id.* Art. 3.

⁸⁹ Surya P. Subedi, Introductory Note: Declaration on the Right to Development , https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

⁹⁰ A/RES/55/2.

⁹¹ *Id.* pp. 4–5.

⁹² *Id.* art. 11.

⁹³ *Id.* art. 12.

⁹⁴ *Id.* art. 13.

⁹⁵ *Id.* art. 20.

⁹⁶ G.A. Res. 70/1 (Sept.25, 2015).

⁹⁷ *Id.* p.14.

integrated and indivisible and linked to other relevant ongoing processes in the economic, social and environmental fields.⁹⁸ The first three goals are allocated to end poverty and hunger and ensure food security, healthy lives and well-being for all.⁹⁹ Goal 3.8 is to achieve universal health coverage, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.¹⁰⁰ Goal 3.b supports the research and development of vaccines and medicines for diseases that primarily affect developing countries, access to affordable essential medicines and vaccines, and the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.¹⁰¹ Goal 8 emphasizes the sustained, inclusive and sustainable economic growth.¹⁰²

12. Draft Convention on the Right to Development (A/HRC/WG.2/21/2/Add.1)

In January 2020, the Human Rights Council published a draft Convention on the Right to Development (A/HRC/WG.2/21/2/Add.1). This draft Convention is based on existing international legal instruments as much as possible and builds upon the Universal Declaration of Human Rights, the nine core United Nations human rights treaty, and of course on the DRTD. If this draft Convention receives the support required within the Council, and subsequently within the United Nations General Assembly, a treaty on the right to development stands to join the group of United Nations human rights treaties. Thus, there is a prospect of the DRTD becoming a catalyst that transforms the right to development from a soft-law principle into a hard-law principle, thereby becoming a historical declaration.¹⁰³

IV. ANNOTATED BIBLIOGRAPHY

A. Treatises and Books

1. TZEN WONG AND GRAHAM DUTFIELD, *INTELLECTUAL PROPERTY AND HUMAN DEVELOPMENT: CURRENT TRENDS AND FUTURE SCENARIOS* (Cambridge University Press, 2010).

This book is a collection of writings by various authors who are from different fields of expertise.¹⁰⁴ This book is made up of nine chapters. The first chapter provides a broad overview of the development of IP law and its application to human development.¹⁰⁵ This chapter ultimately frames the capability approach as one that is best suited to pair both human development and IP law.¹⁰⁶ The second chapter attempts to explain the complex overlap between IP and medicine.¹⁰⁷ It explores how the TRIPS Agreement has impacted global research, development, distribution and pricing of pharmaceutical goods. The author specifically uses the experiences of Brazil and India as generic drug producers. Chapter 3 addresses food security and IP rights, particularly as it pertains to the right to food, and biodiversity.¹⁰⁸ The chapter uses legislation in Thailand, Malaysia, and India as examples of how developing countries can use the TRIPS agreement to their advantage. Chapter 4 focuses on the legal protection of traditional knowledge and the challenges that come with attempting to provide IP protection for dynamic and intangible aspects of traditional knowledge.¹⁰⁹ Chapter 5 continues in a similar vein and

⁹⁸ *Id.* ¶ 55.

⁹⁹ *Id.* p. 14.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Surya P. Subedi, Introductory Note: Declaration on the Right to Development, https://legal.un.org/avl/pdf/ha/drd/drd_e.pdf (last visited Aug. 27, 2022).

¹⁰⁴ TZEN WONG AND GRAHAM DUTFIELD, *INTELLECTUAL PROPERTY AND HUMAN DEVELOPMENT: CURRENT TRENDS AND FUTURE SCENARIOS*, xii (Cambridge University Press, 2010).

¹⁰⁵ *Id.* at 1–59.

¹⁰⁶ *Id.* at 27–45.

¹⁰⁷ *Id.* at 60–102.

¹⁰⁸ *Id.* at 103–38.

¹⁰⁹ *Id.* at 139–74.

addresses the challenges indigenous people face in protecting their traditional cultural expressions.¹¹⁰ Chapter 6 focuses on copyright protections and educational development.¹¹¹ The author argues that copyright laws can be utilized to provide equitable educational access to developing countries. Chapter 7 expands this issue and presents a pro-access argument for access to information/communication technologies especially in our digital age.¹¹² Chapter 8 engages the issue of cultural and artistic IP protection, as well as IP laws' impact on creative innovation.¹¹³ Lastly, Chapter 9 focuses on the future of IP law and its effect on new technological innovations.¹¹⁴

2. RMI OLWAN, *INTELLECTUAL PROPERTY AND DEVELOPMENT THEORY AND PRACTICE* (Springer 2013).

This book aims to provide suggestions on how developing countries can adopt IP law to effectively promote development.¹¹⁵ This book chooses Jordan as case study because it is representative of a "middle-income developing country" and is a country which has introduced a vast amount of IP protections.¹¹⁶ It is divided into two parts and is comprised of a total of eight chapters. Part I is intended to analyze the various perspectives on IP theory, and social and economic development. The first chapter in this part, Chapter 2, is titled the "History of International Intellectual Property and Development." It examines how international IP law has developed over time, beginning in the 19th century with treaties like the Paris Convention of 1883 and the Berne Convention of 1886. The chapter then moves to the views of developed and developing countries and more recent international treaties. Chapter 3 focuses on IP and Economic Development; it includes an overview on the views of developing and developed countries and the views of prominent economists. The chapter concludes on a study of economic development in Jordan. Chapter 4 focuses on IP law and its influence on culture, particularly with an emphasis on Arab and Islamic cultures. Part II is titled, "The Practice of Intellectual Property and Social and Economic Development." As this title suggests, this part focuses on the more practical application of IP Law to development. This part begins with Chapter 5, an examination of Jordanian Copyright Law. The chapter first provides an overview of the Jordanian IP system and an in-depth analysis of the country's copyright laws. In Chapter 6, the author examines Free and Open Source Software (FOSS) and the Creative Commons (CC). The author sees the CC and FOSS as useful tools for developing countries and provides brief histories for both voluntary mechanisms. The chapter also examines the legal challenges and enforceability issues faced by countries. Chapter 7 provides a policy road map including practical implementation strategies.

3. ROBIN RAMCHARAN, *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND HUMAN SECURITY* (SPRINGER 2013).

This book is organized into three parts. Part I "IP and Human Security,"¹¹⁷ Part II "IP Development and Human Rights,"¹¹⁸ and Part III "WIPO and Human Security."¹¹⁹ This book is primarily concerned with international intellectual property law and human security. In Chapter 2, Ramcharan states that the term "security" encompasses individual, national and international levels.¹²⁰ In a globalized society where security issues are no longer limited to national borders, and include issues such as terrorism, famine, oppression and infectious diseases.¹²¹ For these reasons, IP law must be used to protect human security and "advance human welfare."¹²² Chapter 3 outlines the general characteristics of the IP regime, including the international IPR regime, copyright, related rights, patents, utility models, trade secrets, trademarks, industrial design, geographical indications, and *sui generis*

¹¹⁰ *Id.* at 175–217.

¹¹¹ *Id.* at 218–49.

¹¹² *Id.* at 250–78.

¹¹³ *Id.* at 279–328.

¹¹⁴ *Id.* at 329–66.

¹¹⁵ RMI OLWAN, *INTELLECTUAL PROPERTY AND DEVELOPMENT THEORY AND PRACTICE* 27–28 (Springer 2013).

¹¹⁶ *Id.* at 29.

¹¹⁷ ROBIN RAMCHARAN, *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND HUMAN SECURITY* 29 (SPRINGER 2013).

¹¹⁸ *Id.* at 99.

¹¹⁹ *Id.* at 217.

¹²⁰ *Id.* at 29.

¹²¹ *Id.* at 30–31.

¹²² *Id.* at 41.

systems.¹²³ Chapter 4 discusses the human security aspects of the intellectual property regime.¹²⁴ Part II explores issues related to development and human rights. Chapter 5 focuses on the imperatives of the right to development.¹²⁵ Chapters 6 and 7 start with defining human rights and exploring the linkage between human rights and IP, and then considers from a human security perspective for international business organizations.¹²⁶ Chapter 8 goes into the protection of traditional knowledge in Africa, Asia, and Latin America.¹²⁷ Part III takes a deep dive into WIPO and human security. Chapter 9 introduces the development agenda of WIPO and chapter 10 proposes for an international equity in WIPO.¹²⁸

4. Peter Drahos, *The Universality of Intellectual Property Rights: Origins and Development*, in INTELLECTUAL PROPERTY AND HUMAN RIGHTS 13-41 (WIPO, Geneva, 1999).

This first section of this paper provides definitions for several key terms in “intellectual property” and considers IP rights to be rights of exploitation in information.¹²⁹ The next section describes the evolution of IP law, from the territorial period (this period was dominated by the principle that intellectual property rights do not extend beyond the territory of the sovereign which has granted the rights in the first place), and international period (the beginning of multilateral era of international cooperation in IP), to the global period, especially after the TRIPS Agreement.¹³⁰ Section 3 of the paper discusses human rights, the right of property and IP.¹³¹ It examines to what extent IP rights have been recognized in the human right regime. The fourth section explores the relationship between IP and human rights and points out the problematic view that all IP rights are human rights by virtue of their universal recognition.¹³² Finally, the fifth section provides an instrumental view on the development of IP rights.¹³³

5. Laurence Helfer & Graeme Austin, *HUMAN RIGHTS AND INTELLECTUAL PROPERTY: MAPPING THE GLOBAL INTERFACE* (Cambridge Univ. Press 2011).

This book intends to cover the growing interactions between human development and intellectual property law. Chapter 1 begins with an overview of human rights and intellectual property, including relevant themes, history UN Treaties, Mechanisms for protection, and standards.¹³⁴ Chapter 2 focuses on the Human Right to Health, including access to patented medicine and a critical analysis of contemporary global innovation policy.¹³⁵ Chapter 3 focuses on creator’s rights and property rights.¹³⁶ Chapter 4 addresses on the right to the freedom of expression as it pertains to cultural participation and scientific progress; the chapter also provides an overview on domestic and international sources of law.¹³⁷ Chapter 5 examines the right to education and access to copyright materials.¹³⁸ Chapter 6 considers the human right to food and accessibility to agricultural technologies; this chapter also addresses specific controversies regarding plant genetic resources.¹³⁹ Chapter 7 considers the intersection between international human rights law and indigenous people’s traditional knowledge.¹⁴⁰

¹²³ *Id.* at 45–62.

¹²⁴ *Id.* at 63–95.

¹²⁵ *Id.* at 99–115.

¹²⁶ *Id.* at 117–73.

¹²⁷ *Id.* at 177–214.

¹²⁸ *Id.* at 217–57.

¹²⁹ Peter Drahos, *The Universality of Intellectual Property Rights: Origins and Development*, in INTELLECTUAL PROPERTY AND HUMAN RIGHTS 13–14 (WIPO, Geneva, 1999).

¹³⁰ *Id.* at 15–25.

¹³¹ *Id.* at 25–33.

¹³² *Id.* at 35.

¹³³ *Id.* at 35–38.

¹³⁴ Laurence Helfer & Graeme Austin, *HUMAN RIGHTS AND INTELLECTUAL PROPERTY: MAPPING THE GLOBAL INTERFACE* 1–89 (Cambridge Univ. Press 2011).

¹³⁵ *Id.* at 90–170.

¹³⁶ *Id.* at 171–220.

¹³⁷ *Id.* at 221–315.

¹³⁸ *Id.* at 316–363.

¹³⁹ *Id.* at 364–431.

¹⁴⁰ *Id.* at 432–502.

6. RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY 605-627 (Christopher Geiger, ed., Edward Elgar Publishing 2015).

Abdel-Latif begins his essay with an overview of the right to development (RTD).¹⁴¹ In the second section, the author lays out the conceptual issues in the intersection between intellectual property (IP) and RTD. In essence the author asserts that the same IP rights which protect the invention and the inventor simultaneously restrict access to resources and technology which could greatly benefit human rights.¹⁴² IPRs are unequally distributed to a few developed countries and limits innovation in countries that do not own IPRs but could most benefit from such developments.¹⁴³ The last section focuses on the contemporary issues and development within IP and the RTD.¹⁴⁴ The author focuses on the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the World Intellectual Property Agenda (WIPO) as mechanisms for developing countries to enforce their RTD and attain use of certain innovations.

Susy Frankel's essay in Chapter 33 of this volume focuses on the intellectual property rights of indigenous peoples.¹⁴⁵ The chapter is divided into five parts. First, Frankel explains the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) as the primary instrument that addresses the goal of self-determination.¹⁴⁶ Using WIPO's definition and UNDRIP, the indigenous people's intellectual property is defined as "traditional knowledge and traditional cultural expressions (TCEs)."¹⁴⁷ The challenge is fitting these complex and vast traditions within the framework of legal intellectual property rights. The third section explores the question of who gets to control how much of an indigenous group's TCEs is protected and for what purpose.¹⁴⁸ Frankel uses examples from indigenous tribes in New Zealand to illustrate how to properly define the scope of TCEs and various approaches to the solution. Section four briefly considers the challenges presented by the Convention on Biological Diversity (CBD) and the Nagoya Protocol.¹⁴⁹ These treaties recognize state control over biological and genetic resources found within the state and requires "prior and informed consent and benefit sharing" of traditional knowledge related to these resources.¹⁵⁰ Sue Farran's article in Chapter 34 is comprised of 11 sections.¹⁵¹ The author uses case-studies from Pacific Island countries (PICs) to examine how traditional international property regimes, which are shaped by Western commercial/economic values, are unfit to encompass "traditional knowledge" and TCE. This results in adverse consequences for developing pacific islands.¹⁵² Farran defines TK and TCE as a dynamic combination of both tangible and intangible forms, including temporal and spiritual aspects.¹⁵³ For this reason, human development goals often conflict with spiritual and cultural aspects of an indigenous group's TK because IP and development strategies "fail to adequately accommodate the many different cultures associated with TK."¹⁵⁴ Funding and aid for IP protection often requires the development of "cultural industries" and

¹⁴¹ Ahmed Abdel-Latif, *The right to development: What implications for the multilateral intellectual property framework?*, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY 605–626 (Christopher Geiger, ed., Edward Elgar Publishing 2015).

¹⁴² *Id.* at 613.

¹⁴³ *Id.* at 613.

¹⁴⁴ *Id.* at 616–25.

¹⁴⁵ Susy Frankel, *Using intellectual property rules to support the self-determination goals of indigenous peoples*, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY 627–640 (Christopher Geiger, ed., Edward Elgar Publishing 2015).

¹⁴⁶ *Id.* at 627.

¹⁴⁷ *Id.* at 628.

¹⁴⁸ *Id.* at 631.

¹⁴⁹ *Id.* at 638.

¹⁵⁰ *Id.*

¹⁵¹ Sue Farran, *Human rights perspective on protection of traditional knowledge and intellectual property: A view from island states in the Pacific*, in RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY 641–658 (Christopher Geiger, ed., Edward Elgar Publishing 2015).

¹⁵² *Id.* at 642–43.

¹⁵³ *Id.* at 643.

¹⁵⁴ *Id.* at 647.

marketing strategies rather than protecting cultural rights.¹⁵⁵ In the final sections, Farran describes the challenges of incorporating indigenous groups into international IP law and protecting rights while acknowledging the autonomy of small island developing states.

7. MONIRUL AZAM, *INTELLECTUAL PROPERTY AND PUBLIC HEALTH IN THE DEVELOPING WORLD* (OpenBook Publishers 2016).

This book focuses on how the least developed countries (LDC) like Bangladesh should improve intellectual property and health-related infrastructure to ensure healthy lives and access to medicines for their citizens. Chapter 1 introduces the current situation in LDCs and suggest that LDCs should utilize the transitional period to initiate infrastructural and institutional capacity building.¹⁵⁶ This chapter also introduces the advent of TRIPS agreement and patents for pharmaceuticals and explores the role of international and domestic patent laws in public health crisis in developing countries.¹⁵⁷ Chapter 2 is a case study on Bangladesh's pharmaceutical industry, legislative and institutional framework and pricing of pharmaceuticals.¹⁵⁸ Chapter 3 describes the experiences of TRIPS-compliant patent law reform in Brazil, China, India and South Africa and summarizes lessons for Bangladesh.¹⁵⁹ Chapter 4 discusses the globalizing standard of patent protection in WTO and some policy options for the LDCs, particularly Bangladesh.¹⁶⁰ Chapter 5 presents the question: Has the TRIPS waiver helped the LDCs progress towards innovation and compliance? and proposes that Bangladesh to adopt a national development-centered IP policy and a national health strategy integrating long-term innovation and access objectives.¹⁶¹

8. *IS INTELLECTUAL PROPERTY PLURALISM FUNCTIONAL?*, (Susy Frankel ed., Edward Elgar Publishing 2019).

This book is a collection of articles from various authors. It is divided into four parts following the introduction: I) Global Standards and Their Interaction with National Norms;¹⁶² II) Pluralism within a Framework of International Norms: Comparative Perspectives and National Policy Drivers;¹⁶³ III) The Pluralistic Functions of Copyright;¹⁶⁴ IV) Rigidity and Flexibility of Patent Law.¹⁶⁵

Part I encompasses Chapters 1–4. Chapter 1, written by Lionel and Tanya Aplin, focuses on a case study in dysfunctional pluralism and Article 10(1) of the Berne Convention, which provides for the freedom to quotation as a fair use.¹⁶⁶ Chapter 2 is written by Susan Isiko Strba and entitled Intellectual property pluralism in African development agendas: food security, plait variety protection and the role of WIPO.¹⁶⁷ Chapter 3, written by Alison Slade, discusses national courts and their role in the development of international IP law and policy and includes a reflections on India.¹⁶⁸ Chapter 4, written by Ana Nordberg, explores the legal method and interpretation in international IP law: pluralism or systemic coherence.¹⁶⁹

Part II consists of Chapters 5 to 9. Chapter 5, written by Jennifer Davis, discusses the role of confusion in unfair competition law.¹⁷⁰ Chapter 6, written by Susan Corbett, provides a re-conceptualized framework on the country code top level domain name as a sui generis IP right.¹⁷¹ Chapter 7,

¹⁵⁵ *Id.* at 649.

¹⁵⁶ MONIRUL AZAM, *INTELLECTUAL PROPERTY AND PUBLIC HEALTH IN THE DEVELOPING WORLD* 4 (OpenBook Publishers 2016).

¹⁵⁷ *Id.* at 24.

¹⁵⁸ *Id.* at 37–88.

¹⁵⁹ *Id.* at 89–148.

¹⁶⁰ *Id.* at 149–238.

¹⁶¹ *Id.* at 239–80.

¹⁶² *IS INTELLECTUAL PROPERTY PLURALISM FUNCTIONAL?* 8–128 (Susy Frankel ed., Edward Elgar Publishing 2019).

¹⁶³ *Id.* at 129–266.

¹⁶⁴ *Id.* at 267–383.

¹⁶⁵ *Id.* at 384–462.

¹⁶⁶ *Id.* at 8–36.

¹⁶⁷ *Id.* at 37–65.

¹⁶⁸ *Id.* at 66–95.

¹⁶⁹ *Id.* at 96–128.

¹⁷⁰ *Id.* at 129–52.

¹⁷¹ *Id.* at 153–77.

written by Lavinia Brancusi, proposes that alternative products as a factor in determining the functionality doctrine could be applied in EU law.¹⁷² Chapter 8, written by Evana Wright, discusses the case of protecting traditional knowledge in Australia through analyzing cases in India and Peru.¹⁷³ Chapter 9, written by Pratyush Nath Upreti, discusses the geographical indications in Nepal.¹⁷⁴

Part III starts from Chapter 10, which discusses copyright as a service from a perspective on the axiological nature of the copyright system.¹⁷⁵ Chapter 11, written by Yahong Li, discusses the copyrightability of remixes and creation of remix rights.¹⁷⁶ The next chapter was written by Lida Ayoubi and covers the copyright pluralism and human rights of visually impaired.¹⁷⁷ Chapter 13, written by Karolina Sztobryn, proposes a more pluralistic approach to copyright protection after the Marrakesh Treaty.¹⁷⁸ Chapter 14, seeks to compare and answer the question: Is copyright an engine of free expressions or free expression is an engine of copyright.¹⁷⁹

Part IV consists of Chapters 15 to 18. Chapter 15, Permanent injunction in patent law – in search of flexibility, was written by Rafal Sikorski.¹⁸⁰ Chapter 16, written by Marcin Balicki, discusses whether utility model protection in Europe is an alternative for a patent or an anachronism.¹⁸¹ Chapter 17 explores the models of institutional ownership by focusing on university inventions in Europe.¹⁸² Finally, the last chapter looks at a more recent development, 3D printing and explores the making of patent law at the digital frontier.¹⁸³

9. INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS (Paul L.C. Torremans ed., 4th ed., 2020).¹⁸⁴

This book is also a collection of articles from various authors and focuses on interpreting the most recent development in the field of IP and human rights. The book is divided into five parts: I) The Relationship Between Intellectual Property and Human Rights; II) Copyright and Human Rights; III) Trade Marks and Human Rights; IV) Rights in Information; and V) Patents and Human Rights.

Part I consists of seven articles. Chapter 1, written by Daniel Gervais, provides an updated perspective on the relations between intellectual property and human rights. Chapter 2, Laurence R. Helfer, reexamines the 2008 article “New Innovation Frontier” and mainly analyzed the European Court of Human Rights (ECHR) decisions through August 2019. It develops three distinct paradigms to identify the proper place of intellectual property in the European human rights system. It concludes that the ECHR should find a violation of the right of property in intellectual property disputes only in cases of arbitrary government conduct. Chapter 3, written by Peter K. Yu, focuses on the challenges to the development of a human rights framework for IP. In Chapter 4, Christophe Geiger provides update on reconceptualizing the constitutional dimension of IP. Chapter 5, written by Gemma Minero, evaluates IP rights and human rights, and discusses how the two rights may coincide and cooperate. Chapter 6, written by Henning Grosse Ruse-Khan, focuses on proportionality and balancing within the objectives for IP protection. Chapter 7, written by Paul L.C.Torremans, emphasized the importance of viewing copyright (and Other Intellectual Property Rights) as a human right.

Part II consists of 11 articles. Chapter 8, written by Myra J. Tawfik, discusses copyright and Freedom of Expression in Canada. In Chapter 9, Katarzyna Klafkowska-Was'niowska analyzed

¹⁷² *Id.* at 178–205.

¹⁷³ *Id.* at 206–34.

¹⁷⁴ *Id.* at 235–66.

¹⁷⁵ *Id.* at 267–87.

¹⁷⁶ *Id.* at 288–309.

¹⁷⁷ *Id.* at 310–40.

¹⁷⁸ *Id.* at 341–57.

¹⁷⁹ *Id.* at 358–83.

¹⁸⁰ *Id.* at 384–401.

¹⁸¹ *Id.* at 402–26.

¹⁸² *Id.* at 427–42.

¹⁸³ *Id.* at 443–62.

¹⁸⁴ Table of Contents can be found on <https://lrus.wolterskluwer.com/store/product/intellectual-property-law-and-human-rights-fourth-edition/>.

communication to the public of works and freedom to receive and impart information in the Charter of Fundamental Rights. Chapter 10, written by Krzysztof Garstka, seeks to answer the question about how to mitigate the risks Article 17 of Directive 2019/970 poses to the Freedom of Expression. Chapter 11, written by Sharon E. Foster, focuses on the conflict between the human right to education and copyright. Chapter 12, written by Alexander Peukert, discusses copyright and the two cultures of online communication. In Chapter 13, Marshall Leaffer focuses on fair Use, transformative use and the First Amendment. Chapter 14, written by Andrew T. Foglia, looks at the embedded content and the Digital Millennium Copyright Act. In Chapter 15, Bernd Justin Jütte focuses on finding the balance in copyright law through analyzing the internal and external control through fundamental rights. Chapter 16, written by Patrick Masiyakurima, talks about fair dealing defenses. Chapter 17, written by David Felipe Alvarez Amezcuita, takes a comparative perspective and analyzes the fundamental rights for author's and contractual relations. Chapter 18, written by Sebastian Schwemer & Jens Schovsbo, examines algorithmic copyright enforcement and free speech in the light of the Article 17 regime.

Part III consists of four articles. Chapter 19, written by Marco Ricolfi, talks about trademarks and human rights. Chapter 20, written by Andrea Radonjanin, discusses folklore, human rights and intellectual property. In Chapter 21, Nigar Kirimova explores balancing interests in brand investment with basic rights and free competition rules in the EU. Chapter 22, written by Giancarlo Frosio, focuses on algorithmic enforcement online.

Part IV consists of four articles. Chapter 23, written by Peter Jaffey, analyzes privacy, confidentiality and property. Chapter 24, written by Jacqueline N. Nwozo, discusses developing a right of privacy for corporations. Chapter 25, written by Abbe E.L. Brown, explores IP, human rights and climate change. Chapter 26, Dev Gangjee, focuses on geographical indications and human rights.

Part V consists of four articles. Chapter 27, written by Karen Walsh & Naomi Hawkins, focuses on expanding the role of morality and public policy in European patent law. In chapter 28, Sven J.R. Bostyn discusses the personalized medicine, IP rights and human rights. Chapter 29, written by Ida Madieha bt Abdul Ghani Azmi & Majdah Zawawi, analyzes the ethical and religious concerns over patenting biotechnological inventions in human DNA and stem cell research in Malaysia. Chapter 30, written by Geertrui van Overwalle, discusses gene patents and human rights.

B. Articles and Reports

1. Stephen M. McJohn & Lorie Graham, *Indigenous Peoples and Intellectual Property*, 19 WASH. UNIV. J. L. & POL'Y 313 (2006).

This article is largely an examination on Native American IP law with some comparisons to international indigenous groups. The authors use the conclusions drawn from the book *Who Owns Native Culture* by Michael F. Brown as a jumping off point for the rest of the article where the authors suggest a solutions where “intellectual property law, negotiation and human rights precepts work together to address indigenous claims to heritage protection.”¹⁸⁵ This article is organized into three sections: “Special Interests, The Public Domain, and Indigenous Peoples,” “The Role of Intellectual Property Law”, “Negotiation and Cultural Protection.” In the first section, the authors argue that indigenous property rights and interests are very different from those being sought by corporations and special interests.¹⁸⁶ The authors continue to argue against the idea that indigenous ip rights diminishes the public domain.¹⁸⁷ They argue that the public domain is actually enriched by the protection of traditional knowledge.¹⁸⁸ The author further suggests that special exclusive rights should be granted to indigenous groups for their traditional knowledge.¹⁸⁹ Section III centers on negotiation as

¹⁸⁵ Stephen M. McJohn & Lorie Graham, *Indigenous Peoples and Intellectual Property*, 19 WASH. UNIV. J. L. & POL'Y 313, 313–14 (2006).

¹⁸⁶ *Id.* at 315.

¹⁸⁷ *Id.* at 317–25.

¹⁸⁸ *Id.* at 325.

¹⁸⁹ *Id.* at 332.

a useful tool for creating policy only if indigenous peoples' concerns become a significant element (like financial interests) in international IP rights.¹⁹⁰

2. CIPR, *Integrating Intellectual Property Rights and Development Policy*, in REPORT OF THE UK COMMISSION ON INTELLECTUAL PROPERTY RIGHTS (2002).

This is a 2002 Report of the Commission on IP Rights. The commission had three tasks to consider: (1) How national IPR regimes could be designed to benefit developing countries within international agreements; (2) How the international framework might be improved. More specifically, how IPR rules covered access to genetic resources; 3) How broader policy framework needed to complement IP regimes. (i). The report is divided into eight chapters: (1) Intellectual Property and Development;¹⁹¹ (2) Health;¹⁹² (3) Agriculture and Genetic Resources;¹⁹³ (4) Traditional Knowledge and Geographical Indications;¹⁹⁴ (5) Copyright Software and the Internet;¹⁹⁵ (6) Patent Reform;¹⁹⁶ (7) Institutional Capacity;¹⁹⁷ (8) The International Architecture;¹⁹⁸ The Overview section before the first chapter explicitly declares the imbalance in power and representation of developing countries in these international policy commissions and that such imbalance needs to be rectified.¹⁹⁹

Chapter 1 discusses the rationale for IP protection, History, Evidence about IP's impact, and Technology Transfer. The Report notes that for developing countries that have acquired significant technological and innovative capabilities, weaker IP protection has led to rapid innovation.²⁰⁰ Chapter 2 discusses research and development, access to medicines for poor people, and policy implications. The report remarks that a great barrier to innovation is lack of incentive for private sector to undertake research that relates specifically to the needs of poor people in underdeveloped countries. (31) The report then further concludes that IP protection does not play a significant role in stimulating R&D in developing countries.²⁰¹ Chapter 3 considers plants and intellectual property protection, and access to plant and genetic resources and farmers' rights.²⁰² Chapter 4 focuses on issues surrounding IP protections and traditional knowledge and considers the geographical indications for protecting traditional knowledge.²⁰³ The fifth and sixth chapters are concerned with copyright and patent policy respectively.²⁰⁴ Both chapters examine whether IP protections in such areas promote or inhibit innovation. Chapter 7 discusses institutional capacity and addresses requirements for effective IP policy, best implementation practices, and "effective technical assistance" for developing countries.²⁰⁵ In regard to enforcement issues, the report suggests that developing countries could best regulate and enforce IP law through civil not criminal courts.²⁰⁶

3. UNCTAD-ICTSD, *Intellectual Property Rights: Implications for Development, Discussion Paper* (2003).

This paper contains three parts: (I) Global institutional issues, (II) cross-cutting issues: the opportunities, and (III) intellectual property and social and development issues: the challenges. Part I

¹⁹⁰ *Id.* at 337.

¹⁹¹ CIPR, *Integrating Intellectual Property Rights and Development Policy*, in REPORT OF THE UK COMMISSION ON INTELLECTUAL PROPERTY RIGHTS 11–28 (2002).

¹⁹² *Id.* at 29–56.

¹⁹³ *Id.* at 57–72.

¹⁹⁴ *Id.* at 73–94.

¹⁹⁵ *Id.* at 95–110.

¹⁹⁶ *Id.* at 111–36.

¹⁹⁷ *Id.* at 137–54.

¹⁹⁸ *Id.* at 155–70.

¹⁹⁹ *Id.* at 7–8.

²⁰⁰ *Id.* at 22.

²⁰¹ *Id.* at 32.

²⁰² *Id.* at 57.

²⁰³ *Id.* at 73–74.

²⁰⁴ *Id.* at 95–96, 111–12.

²⁰⁵ *Id.* at 138.

²⁰⁶ *Id.* at 147.

introduces the concept of intellectual property rights and provides an overview of the increasingly complicated global intellectual property rights system.²⁰⁷ The author notes that “patents and other IPRs are intended to balance different aims and interest in order to most effectively achieve certain public policy goals” and “it is important to understand that balancing the interests of present and future creators, users of intellectual property and the public is not just a matter of economic calculation...[but] an inherently political exercise.”²⁰⁸ Part II focuses some potential opportunities from the perspective of developing countries and discusses issues such how to foster invention and innovation and creativity in developing countries, access to new technology, and transfer of technology.²⁰⁹ “The effects of strengthened IP protection are often dependent on its interrelationship with the effects of other factors, such as the size of the domestic market, the structure of factor supply, productive infrastructure and the degree of stability of the macroeconomic environment.”²¹⁰ Part III discusses the challenges in different areas: health, food, agriculture and biodiversity, traditional knowledge and folklore, as well as access to knowledge, educational, technical and scientific information.²¹¹ It focuses on how these areas of concern for developing countries when implement new IPR standards.²¹²

4. Margaret Chon, *Intellectual Property and the Development Divide*, 27 *CARDOZO L. REV.* 2821 (2006).

The author decidedly argues that the phenomenon known as “intellectual property globalization” brought on by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) demands a fundamental recalibration of current and future IP policies. Chon introduces the concept of a “substantive equality norm.”²¹³ which must be included in all forthcoming IP developments in order to maximize social welfare and close the development gap.²¹⁴ This article is organized into four sections: I. Intellectual Property Encounters;²¹⁵ II. Concepts of Development;²¹⁶ III. Exploring Development Economics;²¹⁷ IV. A Proposed Substantive Equality Norm.²¹⁸ Section I provides a brief overview of how TRIPS accelerated the globalization of intellectual property.²¹⁹ It also explains the various struggles WIPO encountered in implementing new IP policy that would satisfy the demands and needs of all nations.²²⁰ In the final subsection of this chapter, Chon discusses three general perspectives on intellectual property law: Classical, Pluralist, and Skeptical.²²¹ Section II argues that current IP law fits wells into the “(neo)liberal” school of thought which views economic growth as a primary source of development. In Section III, Chon explores two different approaches to development: 1) human capabilities approach and 2) the global public goods approach.²²² The author argues that both of these approaches are “grounded in (neo)liberal development economics and share the idea that IP globalization must focus on meeting basic needs and question methods of access and distribution thereby create a “substantive equality principle.”²²³ Chon explains that Amartya Sen formed the human capabilities approach because gross domestic product (GDP) calculations were insufficient to measure for economic development.²²⁴ The author then further argues that IP

²⁰⁷ UNCTAD-ICTSD, *Intellectual Property Rights: Implications for Development, Discussion Paper 25–62* (2003).

²⁰⁸ *Id.* at 32.

²⁰⁹ *Id.* at 63–92.

²¹⁰ *Id.* at 89.

²¹¹ *Id.* at 93–138.

²¹² *Id.*

²¹³ Margaret Chon, *Intellectual Property and the Development Divide*, 27 *CARDOZO L. REV.* 2821, 2823 (2006).

²¹⁴ *Id.* at 2831.

²¹⁵ *Id.* at 2839–58.

²¹⁶ *Id.* at 2859–73.

²¹⁷ *Id.* at 2874–83.

²¹⁸ *Id.* at 2884–2910.

²¹⁹ *Id.* at 2839.

²²⁰ *Id.* at 2844–49.

²²¹ *Id.* at 2849–58.

²²² *Id.* at 2874.

²²³ *Id.*

²²⁴ *Id.* at 2876.

globalization should heed human development measurements which include criteria like life expectancy, literacy, and income.²²⁵ Chon proceeds to assert that the global public goods approach addresses goods which have “the qualities of being both non-rivalrous and non-exclusive.”²²⁶ Moreover, global public theory provides that most public goods and knowledge goods are a mix of public and private aka “impure public goods”²²⁷ Chon argues that these qualities are actually malleable variables which are largely social constructs and not always a tidy result of pure market forces, therefore it is important to ask whether the public has a say in whether these knowledge goods are public or private.²²⁸ In the final and fourth section, Chon proposes that a new substantive equality principle be introduced into international IP law. It functions similarly to strict-scrutiny review in constitutional law, where strict scrutiny review will be triggered “when an exclusive right over intellectual property...conflicts with a basic need.”²²⁹ Chon argues that applying such a principle would provide “a minimum threshold of access in the context of basic needs.”²³⁰ Finally, Chon details the practical application of this principle to basic education.²³¹

5. Peter Yu, *Ten Common Questions about Intellectual Property and Human Rights*, 23 GEORGIA STATE UNIV. L. REV. 709 (2007)

This article by Peter Yu addresses the ten most common questions the author has come across while discussing the development of the human rights framework for IP Rights.²³² With a lengthy discussion and answer to each question, this article is organized as follows: Question 1: Are Intellectual Property Rights Human Rights?²³³ Question 2: Besides Access to Medicines, are there Other Intellectual Property issues that implicate the protection of human rights?²³⁴ Question 3: Should Patents be separated from copyrights in the human rights debate?²³⁵ Question 4: Are all forms of intellectual property rights human rights?²³⁶ Question 5: Can corporations bring claims of violation of their right to the protection of interests in intellectual creations?²³⁷ Question 6: Does the right to private property already provide adequate protection to interests in intellectual creations?²³⁸ Question 7: Can the protection of human rights interests be built into the intellectual property system?²³⁹ Question 8: Will the human rights framework ratchet up existing intellectual property protection?²⁴⁰ Question 9: Will the Human Rights Framework promote the interests of indigenous peoples and traditional communities?²⁴¹ Question 10: Will the human rights framework promote the interests of less developed countries?²⁴²

6. Peter Yu, *Reconceptualizing Intellectual Property Interests in a Human Rights Framework*, 40 U.C. DAVIS L. REV. 1039 (2007).

This lengthy article focuses on distinguishing the aspects of international intellectual property rights which are protected by international human rights interests and those aspects of IP law which have

²²⁵ *Id.* at 2877.

²²⁶ *Id.* at 2879.

²²⁷ *Id.* at 2881.

²²⁸ *Id.* at 2878–84.

²²⁹ *Id.* at 2885.

²³⁰ *Id.* at 2888.

²³¹ *Id.* at 2900–11.

²³² Peter Yu, *Ten Common Questions about Intellectual Property and Human Rights*, 23 GEORGIA STATE UNIV. L. REV. 709 (2007).

²³³ *Id.*

²³⁴ *Id.* at 718.

²³⁵ *Id.* at 721.

²³⁶ *Id.* at 726.

²³⁷ *Id.* at 728.

²³⁸ *Id.* at 731.

²³⁹ *Id.* at 736.

²⁴⁰ *Id.* at 738.

²⁴¹ *Id.* at 740.

²⁴² *Id.* at 745.

no foundation in human rights whatsoever.²⁴³ The article is divided into three parts: (1) Drafting History; (2) The Rights to the Protection of Interests in Intellectual Creations; and (3) Challenges. The first part provides the historical context for the drafting of article 27(2) of the UDHR and article 15(1)(c) of the ICESCR, in order to provide insight into the intentions of drafting these instruments.²⁴⁴ Yu draws six conclusions from examining the drafting history of these two international human rights instruments: (1) the right to protect IP interests is not self-evident. Some nation found IP was “unworthy of protection as a basic human right” while others “questioned its overlap with protection already covered under the right to own property.”²⁴⁵ (2) Although human rights are considered fundamental, they were and are still subject to politics. (3) there is a significant interdependent relationship between articles in the UDHR and articles in the ICESCR.²⁴⁶ (4) these same international instruments do not “delineate the scope of the right to the protection of interests in intellectual creations.”²⁴⁷ (5) In addition, these instruments were not drafted with providing an interpretation of what IP protections are.²⁴⁸ (6) However, the drafters of these instruments did discuss some intersection between human rights and IP law.²⁴⁹

In Part II, the author aims to answer the question “how [can we] alleviate the tension and resolve the conflict between human rights and the non-human rights aspects of IP protection.”²⁵⁰ The author separates the conflicts into two separate categories: external conflicts and internal conflicts.²⁵¹ The former can be solved with human rights primacy while the latter consists of conflicts which all have basis in human rights.²⁵² The author then identifies three methods used to resolve internal conflicts: (1) the just remuneration approach,²⁵³ (2) the core minimum approach,²⁵⁴ (3) the progressive realization approach.²⁵⁵

In Part III, the author addresses three new challenges against the human rights framework for IP. The first challenge asserts that increased IP protection and elevation of said rights to the same level of human rights could jeopardize access to information...and essential medicines [as well as heighten] the economic plights and cultural deterioration of less developed countries/indigenous communities.”²⁵⁶ The author argues that, as argued above, existing international instruments recognize only certain IP rights as human rights.²⁵⁷ IP rights are also “heavily circumscribed” by other human rights.²⁵⁸

The second challenge argues that rights holders and their countries are more likely to be resource-rich and fully developed nations; a human rights framework for IP is likely to result in institutional capture of the human rights forum where developing-countries would have to give up participation and control.²⁵⁹ Here, the author argues that the human rights forum is quite robust and difficult to capture, moreover nations are now held accountable for international compliance.²⁶⁰ The author also

²⁴³ Peter Yu, *Reconceptualizing Intellectual Property Interests in a Human Rights Framework*, 40 U.C. DAVIS L. REV. 1039, 1043 (2007).

²⁴⁴ *Id.* at 1048.

²⁴⁵ *Id.* at 1070.

²⁴⁶ *Id.* at 1071.

²⁴⁷ *Id.* at 1072.

²⁴⁸ *Id.* at 1073.

²⁴⁹ *Id.* at 1074–75.

²⁵⁰ *Id.* at 1078.

²⁵¹ *Id.*

²⁵² *Id.*

²⁵³ *Id.* at 1095.

²⁵⁴ *Id.* at 1105.

²⁵⁵ *Id.* at 1113.

²⁵⁶ *Id.* at 1124.

²⁵⁷ *Id.* at 1125.

²⁵⁸ *Id.*

²⁵⁹ *Id.* at 1133.

²⁶⁰ *Id.* at 1136.

notes that private actors, not just governmental actors, are now an important part of global economy and may yield efficient, collaborative results.²⁶¹

The third and final challenge is the cultural relativism debate—that recent human rights policy has failed and become inapplicable in non-western countries.²⁶² The author concedes that while this is a problem, international committees have demonstrated their ability to work through differences and find common ground.²⁶³

7. Miranda Forsyth, *Lifting the Lid on “The Community”: Who Has the Right to Control Access to Traditional Knowledge and Expressions of Culture?*, 19 IJCP 1 (2012).

This article focuses on the right to control access to traditional knowledge and expressions of culture and explores some important considerations. The author uses two case studies, Samoan tattooing and the Vanuatu land dive, to demonstrate the potential tensions between the interests of the nation and local groups that closely identified with the particular manifestations of traditional knowledge, as well as the tensions between those who want to commercialize traditional knowledge and those who want to preserve it.²⁶⁴ The author further examines the problems with implementing *sui generis* legislation.²⁶⁵ She also explains why it would be difficult to provide for communal rights over traditional knowledge in practice. At the end, she suggests the complexities of local politics must be taken into account in all regulatory and developmental programs concerning traditional knowledge.²⁶⁶

8. Samson Vermont, *Independent Invention as Defense to Patent Infringement*, 105 MICH. L REV. 475 (2006).

The main point of this article urges that independent invention should be recognized as a defense, on condition that an independent inventor creates the invention before receiving actual or constructive notice that someone else already created it.²⁶⁷ The author argues that this defense would still motivate innovation while reducing wasteful duplication of effort.²⁶⁸ The defense would also improve dissemination of inventions without lowering the incentive to invent below the necessary minimum.²⁶⁹ Finally, the author uses Bayes’ theorem to illustrate that “an invention could be invented by more than one inventor is itself evidence that a moderately reduced expected profit will still motivate at least one inventor to create the invention without inefficient delay.”²⁷⁰

9. Ruth Okediji, *Does Intellectual Property Need Human Rights*, 51 NYU J. INT’L L. & POL. 1 (2018).

Okediji argues three central points in this article. First, utilizing a HR framework for IP does not always create positive outcomes for all countries but can actually strengthen IP laws to the detriment of society.²⁷¹ Secondly, the author argues that human rights driven responses are built to satisfy western agendas. Thirdly, the human rights framework has a “narrow vision” which “excludes economic, social, and cultural rights.”²⁷²

This article is organized into five parts. Following the Introduction, the Part II discusses the “incomplete Evolution of the IP and Human Rights Interface.”²⁷³ Okediji begins this Part by pointing out that while TRIPS provided hardline standards for IP protection with real legal strength, however TRIPS continues to fail at providing policy which assists least-developed countries.²⁷⁴ This part also

²⁶¹ *Id.* at 1137.

²⁶² *Id.* at 1141.

²⁶³ *Id.* at 1146–48.

²⁶⁴ Miranda Forsyth, *Lifting the Lid on “The Community”: Who Has the Right to Control Access to Traditional Knowledge and Expressions of Culture?*, 19 IJCP 1, 8–13 (2012).

²⁶⁵ *Id.* at 13–20.

²⁶⁶ *Id.* at 23.

²⁶⁷ Samson Vermont, *Independent Invention as Defense to Patent Infringement*, 105 MICH. L REV. 475, 484–87 (2006).

²⁶⁸ *Id.* at 475.

²⁶⁹ *Id.*

²⁷⁰ *Id.*

²⁷¹ Ruth Okediji, *Does Intellectual Property Need Human Rights*, 51 NYU J. INT’L L. & POL. 1, 4 (2018).

²⁷² *Id.* at 5.

²⁷³ *Id.* at 10–36.

²⁷⁴ *Id.* at 16.

lays out the progression of international IP and human rights law, while incorporating the different theories (i.e. economic incentive, freedom and justice) which promoted the development of such law.²⁷⁵ In Section B of this part, Okediji cites to the Special Rapporteur's Report which states that "the protection of moral and material interests arising from authorship or inventorship" cannot be used to protect patent rights which "interfere with individuals' dignity and well-being."²⁷⁶ Okediji proceeds to conclude that there must be reconciliation between competing interests.²⁷⁷

Part II Section C focuses on two problems of the current human rights framework: (1) "The importance of the collective for the realization of rights enshrined in the ICESCR" and (2) "the unsuitability of IP limitations and exceptions designed for individuals to satisfy the obligations required of states under the ICESCR."²⁷⁸ The author relies on General Comment No. 21 and articles of the UDHR and ICESCR to promote a human rights regime that exceeds the current limitations of IP law alone.²⁷⁹

Part III considers the ways that a "properly constructed human rights framework" can do to reform IP law.²⁸⁰ Okediji suggests at least three improvements that could result from "expanded economic, social, and cultural rights": (1) knowledge goods can be used at a larger scale than currently possible. (2) new rules that "ensure justiciability" of user rights in domestic law; (3) more accountability for state's implementation of international IP obligations.²⁸¹ Okediji notably states that "IP laws cannot—regardless of how carefully they are designed—effectively meet the most critical needs of human development."²⁸² Therefore, a developed human rights framework must exist to account for economic, social and cultural rights. The author proceeds to provide two examples of how IP policies alone are unable to overcome structural rules. The first example is access to Medicine and other Pharmaceutical innovations.²⁸³ The next two sections compare civil and political rights case to "IP/Human Rights Interface" and then examines the economic, social, and cultural rights at the IP/human rights interface.

The fourth and final Part of this article proposes solutions for the current IP/Human Rights Framework. Okediji first suggests "mandatory obligations for developing and least-developed nations to employ copyright [and patent] limitations and exceptions."²⁸⁴ Secondly, Okediji calls for a temporary moratorium of IP harmonization efforts so that governments can have time to "better align policy initiatives with the complex dynamics of innovation efforts in a global knowledge economy."²⁸⁵ The author also suggests that there be a "built-in compliance and reporting infrastructure for TRIPS flexibilities" and finally, "development-oriented limitations and exceptions for global copyright regimes."²⁸⁶

10. Peter K. Yu, *Intellectual Property and Human Rights 2.0*, 53 U. RICH. L REV. 1375 (2019).

This article is organized into four main sections: I. Intellectual Property and Human Rights Scholarship;²⁸⁷ II. Human Rights Methods and Methodology;²⁸⁸ III. Why Study Intellectual Property and Human Rights?;²⁸⁹ and IV. Responses to Skeptics and Critics.²⁹⁰

²⁷⁵ *Id.* at 17–21.

²⁷⁶ *Id.* at 21.

²⁷⁷ *Id.* at 24–25.

²⁷⁸ *Id.* at 27.

²⁷⁹ *Id.* at 36–37.

²⁸⁰ *Id.* at 37.

²⁸¹ *Id.*

²⁸² *Id.* at 38.

²⁸³ *Id.* at 39.

²⁸⁴ *Id.* at 62.

²⁸⁵ *Id.* at 63–64.

²⁸⁶ *Id.* at 64–65.

²⁸⁷ Peter K. Yu, *Intellectual Property and Human Rights 2.0*, 53 U. RICH. L REV. 1375, 1383 (2019).

²⁸⁸ *Id.* at 1399.

²⁸⁹ *Id.* at 1424.

²⁹⁰ *Id.* at 1440.

The first section, Intellectual Property and Human Rights Scholarship, lays out in detail, the history and evolution of IP and Human Rights scholarship within the past two decades.²⁹¹ The second section, Human Rights Methods and Methodology, presents the new research on human rights approaches; Three specific methods are selected: (1) comparative methods; (2) quantitative assessments; and (3) contextual analyses.²⁹² Under comparative methods, the author discusses the relative problems and benefits of using broad-scale global comparisons and single-case analysis as different kinds of comparative methods.²⁹³ Under quantitative assessments, Yu notes that human rights scholarship has concentrated on empirical analysis.²⁹⁴ The third method, contextual analyses, is significant because examining human rights within a cultural, geographic, and/or historical context provides great insight into the development of the law as well as the best ways to implement new laws.²⁹⁵

Part III explains new contributions to the discourse between human rights and IP law and how they may contribute to future development.²⁹⁶ In subsection B “Human Rights,” Yu presents five contributions human rights law has made to IP. First, Yu argues that many aspects of IP law overlap with human rights law.²⁹⁷ It is thus important to separate human rights aspects from non-human rights aspects within IP law in order to better address “internal tensions and conflicts within the human rights system.”²⁹⁸ The author discusses additional contributions to the discourse between human rights and IP law: (2) cause researchers to carefully consider third-generation of human rights;²⁹⁹ (3) require researchers to decide whether they will use a philosophical or positive conception of human rights;³⁰⁰ and (4) explore what updates must take place to accommodate new technologies.³⁰¹

Part IV, as the title suggests, rebuts various criticisms against human rights in intellectual property.³⁰² The author concludes that it is important to pay attention to the distinction, which was pointed out by Professor Okediji, between the existing human rights system privileges interests among developed countries and within the Western liberal tradition, and those in the developing world.

11. Andrew Muma, *Intellectual Property and Innovation Law in Kenya and Africa*, 2018 E. AFR. L.J. 165 (2018).³⁰³

This paper is a book review of the book, “Intellectual Property and Innovation Law in Kenya and Africa; Transferring Technology for Sustainable Development” written by Ben Sihanya. This book brings a unique perspective on the development of technology and innovation in Kenya and identifies some emerging keys and grey IP areas in Kenya. The book specifically discussed the following issues that have generated debate: Folklore, Digital Copyright, Character Merchandising and Domain Names. Furthermore, the book covers Transfer of Technology for Sustainable Development and the terrain of International IP Law with a focus on Parallel Importation, Trade in Counterfeits, Transfer of Technology (TOT) -Forms and Administration, TOT Health and Security and Concludes the book by looking at Innovation, Innovative Lawyering and Enforcement and finally a call for IP reforms. Muma then briefly discusses what each chapter covers. Chapter 2 lays a foundation for the framework of IP concepts and theories. Chapters 3, 4, and 5 focus on patents, patentability, registration procedures, ownership, infringement defenses and remedies. Muma points out the challenges faced in Kenya and Africa when determining patentability. Chapter 6 explores the sui generis registration of Plant and Animal Breeders Rights. Chapters 8 and 9 focus on copyright and in Chapters 12 and 13 the book

²⁹¹ *Id.* at 1382.

²⁹² *Id.*

²⁹³ *Id.* at 1402–03.

²⁹⁴ *Id.* at 1406.

²⁹⁵ *Id.* at 1416.

²⁹⁶ *Id.* at 1383.

²⁹⁷ *Id.* at 1433.

²⁹⁸ *Id.*

²⁹⁹ *Id.* at 1434–35.

³⁰⁰ *Id.* at 1435.

³⁰¹ *Id.* at 1436.

³⁰² *Id.* at 1383.

³⁰³ Andrew Muma, *Intellectual Property and Innovation Law in Kenya and Africa*, 2018 E. AFR. L.J. 165 (2018).

identifies two problematic areas: Kenyans Digital Copyright and Folklore. Chapters 13 and 14 also covers trademarks law and registration, infringement and defenses. Chapter 15 in the style of Character Merchandising, Endorsement and Sponsorship. The next chapter covers domain names. Chapter 18 deals with Geographical Indications (GI), trade secrets and industrial designs. Finally, Chapter 20 to 24 discuss International Intellectual Property Law.

12. Dotan Oliar & James Y. Stern, *Right on Time: First Possession in Property and Intellectual Property*, 99 B.U. L. REV. 395 (2019).

This article first explores the relative advantages and disadvantages of different approaches concerning first possession, which is the foundation of ownership.³⁰⁴ It then identifies the tradeoffs associated with early and late rewards.³⁰⁵ Part II then examines patent,³⁰⁶ trademark,³⁰⁷ and copyright law³⁰⁸ to show how different doctrines from various fields of law work together to establish essentially a system of original acquisition. Where the essence of adopting first possession rules in the realm of tangible property lies shows the applicability in the approach of the award of IP rights. In Part III the authors develop a model of IP with a possessory framework that adopts common law doctrines of first possession and original acquisition doctrines in patent, copyright, and trademark law.³⁰⁹ Finally, the authors conclude that the development of IP's possessory doctrines requires close attention to detail and a systematic understanding of the relevant considerations.³¹⁰ The article provides an overview of the major themes that emerge from considering the original acquisition concept as it plays out in the domain of intellectual property, identifying lessons for both property and IP law.

13. Michele Boldrin & David Levine, *The Case Against Intellectual Property*, AEA PAPERS AND PROCEEDINGS, May 2002, at 1.

This article approaches intellectual property through the restricted lens of economic theory. It is divided into five parts and ultimately argues against IP as an “intellectual monopoly” and the economic problems that come with regulating use.³¹¹ After the introduction, the article addresses what the authors coin as “Downstream Licensing.”³¹² This term refers to the right to control use of ideas after the sale.³¹³ Specifically, the authors argue that creation of new ideas is a sunk cost and that downstream licensing hurts innovation.³¹⁴ In section 3, “Collateral Costs” the authors examine possible collateral damages to enforcing intellectual property rights for digital ideas such as copyright protection.³¹⁵ This section also notes that particularly for patent owners, more money and time is spent on “nuisance and defensive patenting” than actual innovation of new ideas; this problem is enhanced when government enforces IP rights.³¹⁶ In Section 4, “Competition without downstream licensing” and Section 5, “The Hidden Costs of Imperfect Monopoly” the authors use formulas to demonstrate that the “rent-seeking behavior of monopolies dissipates the social surplus.”³¹⁷

14. Laurence R. Helfer, *The New Innovation Frontier Revisited: Intellectual Property and the European Court of Human Rights*, INTELLECTUAL PROPERTY AND HUMAN RIGHTS (Paul L.C. Torremans, ed., Forthcoming 2020) (2019).

³⁰⁴ Dotan Oliar & James Y. Stern, *Right on Time: First Possession in Property and Intellectual Property*, 99 B.U. L. REV. 395, 397 (2019).

³⁰⁵ *Id.* at 406–15.

³⁰⁶ *Id.* at 420–27.

³⁰⁷ *Id.* at 428–34.

³⁰⁸ *Id.* at 435–39.

³⁰⁹ *Id.* at 457.

³¹⁰ *Id.*

³¹¹ Michele Boldrin & David Levine, *The Case Against Intellectual Property*, AEA PAPERS AND PROCEEDINGS, May 2002, at 1.

³¹² *Id.* at 2–3.

³¹³ *Id.* at 2.

³¹⁴ *Id.* at 3.

³¹⁵ *Id.* at 3–4.

³¹⁶ *Id.* at 5.

³¹⁷ *Id.* at 10.

This article addresses the increased role of the European Court of Human Rights (ECHR) in international intellectual property cases.³¹⁸ The surge in IP cases is in large part due to the ECHR's decisions that held that IP interests and other "intangible knowledge goods" are protected under the European Convention's right of property.³¹⁹ Specifically, this chapter analyzes a variety of decisions made by the ECHR under Article 1 and how these decisions have changed international IP policy. The chapter is organized into five parts. After the introduction, Part II is titled "European Convention on Human Rights and the Right of Property;"³²⁰ Part III: "Intellectual Property and the European Convention's Right of Property: A Tripartite Framework for Analysis;"³²¹ Part IV: "Forecasting the Future: Three Paradigms for ECHR Adjudication of Intellectual Property Disputes;"³²² Part V: Conclusion.

In Part II, the author begins by explaining that the scope and meaning of Article 1 of Protocol 1 has caused controversy in the European Human Rights System, largely in part because Article 1 provides for "the peaceful enjoyment of possessions" without use of the actual word "rights."³²³ In the second subsection, the author addresses "The Subject Matter and Temporal Scope of the Right of Property" and various definitions of the word "possessions" are discussed.³²⁴ In these property cases, the ECHR must determine whether a government interfered with a person's property.³²⁵ While the ECHR gives deference to governments, the state must show that this interference was made on reasonable grounds for public interest.³²⁶

In Part III, Helfer asks three essential questions to investigate the scope of IP rights under Article 1: (A) Is Intellectual Property Protected by Article?, (B) Has the State Interfered with a Possession?, and (C) Has the State Adequately Justified its Interference with a Possession? Helfer begins with references to three decisions by the ECHR which held that patents and copyrights were subject to the scope of Article 1.³²⁷ These cases focused heavily on protection of the financial interests and made comparisons of the exclusivity and transferability of patent rights to property rights.³²⁸ After an overview of the *Dima v. Romania* case and the court's ultimate decision that literary and artistic works were protected under Article 1, Helfer discusses how the ECHR's decision may illuminate future decision-making processes for future cases.³²⁹ In the next subsection, the author analyzed the seminal case, *Anheuser-Busch, Inc. v. Portugal*, and explains the analytical framework the ECHR provided in its decision.³³⁰ This case extended Article 1 protections to trademarks and other industrial property.³³¹ The author ultimately asserts that this case "expanded the ECHR's jurisdiction to review the denial of registrations on any ground recognized in national and regional intellectual property laws."³³²

In section B, the author explains that tribunals have identified two different types of interferences: (1) government restrictions on the exercise of IP rights and 2) interferences from domestic IP disputes.³³³ In section C, the author examines how the ECHR decides whether a government has

³¹⁸ Laurence R. Helfer, *The New Innovation Frontier Revisited: Intellectual Property and the European Court of Human Rights*, INTELLECTUAL PROPERTY AND HUMAN RIGHTS, 3 (Paul L.C. Torremans, ed., Forthcoming 2020) (2019).

³¹⁹ *Id.* at 4.

³²⁰ *Id.* at 8–12.

³²¹ *Id.* at 12–35.

³²² *Id.* at 35–51.

³²³ *Id.* at 8–9.

³²⁴ *Id.* at 9.

³²⁵ *Id.* at 10–11.

³²⁶ *Id.*

³²⁷ *Id.* at 12.

³²⁸ *Id.* at 13.

³²⁹ *Id.* at 17–19.

³³⁰ *Id.* at 19–26.

³³¹ *Id.* at 19.

³³² *Id.* at 26.

³³³ *Id.*

appropriately justified their interference.³³⁴ Here, the court try to strike a fair balance between public interest and the rights of the applicant.³³⁵

In Part IV, Helfer explains and analyzes three paradigms of the ECHR: (1) The rule of law paradigm, (2) The enforcement paradigm, and 3. the intellectual property balancing paradigm.³³⁶ In the end the author argues that the rule of law paradigm provides the best framework for the ECHR to interfere in IP cases and defer to the rights of IP owners.³³⁷

15. Christopher Geiger & Elena Izyumenko, *Blocking Orders: Assessing Tensions with Human Rights*, CTR FOR INT'L INTELLECTUAL PROPERTY STUD. RES. PAPER NO. 2019-03 (2019).

This chapter addresses website blocking practices increasingly used in Europe against sites that infringe on copyrights. The authors provide an overview of the legal framework to justify injunctions against internet access providers in Europe.³³⁸ The chapter then discusses the tensions between certain fundamental rights like freedom of expression, access to information, and right to conduct business.³³⁹ It includes a discussion on the limits of intermediaries' involvement in digital enforcement and examines the required efficacy of the blocking resulting from the human right to property framework for IP. The authors focus on the holdings of two cases, *UPC Telekabel* and *Akdeniz v. Turkey*.³⁴⁰

The article is organized into four parts: (1) "A Freedom of Expression Perspective on Website Blocking: The Emergence of Use Rights; (2) "A Freedom to Conduct a Business Perspective on Website Blocking: The (Rising) Role of the ISPs in Digital Copyright Enforcement; (3) A Right to Property Perspective on Website Blocking: Effectiveness of the Blocking; (4) The Recent EU Copyright Reform and its Effects on Website Blocking and Fundamental Rights. Part 1 asserts that the Court of Justice of the European Union (CJEU) in their *UPC Telekabel* holding that the freedom of expression could be used as a fundamental right and not a mere defense.³⁴¹ In *Telekabel*, the court stated that procedure must allow the possibility for "internet users to assert their rights before the court once the implementing measures taken by the internet service provider are known."³⁴² The author next addresses the risk of overblocking. In *Telekabel*, the court stated that blocking should be "strictly targeted" in order to end the infringement but not affect lawful users of internet service.³⁴³

16. Graham Dutfield & Uma Suthersanen, *Traditional Knowledge and Genetic Resources: Observing Legal Protection through the Lens of Historical Geography and Human Rights*, 58 WASHBURN L.J. 399 (2019).

This article focuses on traditional knowledge associated with genetic resources ("TKGR") and argues that the phrase "traditional knowledge" is problematic.³⁴⁴ Part II of the article defines and analyzes the relevance of historical geography. This part also points out the importance of further investigation on the linkages between communities and their rights.³⁴⁵ The authors state they aim to "establish a more robust, comprehensive, and culturally sensitive rights structure to addresses the legitimate concerns of indigenous peoples and other communities applied both within and outside of conventional ABS frameworks and IP-related norms."³⁴⁶ Part III incorporates the relevant international instruments, like the CBD, with provisions concerning TK and benefit sharing.³⁴⁷ Other instruments include: Nagoya

³³⁴ *Id.* at 32.

³³⁵ *Id.* at 34–35.

³³⁶ *Id.* at 35–36.

³³⁷ *Id.* at 53.

³³⁸ Christopher Geiger & Elena Izyumenko, *Blocking Orders: Assessing Tensions with Human Rights*, CTR FOR INT'L INTELLECTUAL PROPERTY STUD. RES. PAPER NO. 2019–03, 3 (2019).

³³⁹ *Id.* at 4.

³⁴⁰ *Id.* at 4.

³⁴¹ *Id.* at 7.

³⁴² *Id.* at 7.

³⁴³ *Id.* at 9.

³⁴⁴ Graham Dutfield & Uma Suthersanen, *Traditional Knowledge and Genetic Resources: Observing Legal Protection through the Lens of Historical Geography and Human Rights*, 58 WASHBURN L.J. 399, 403 (2019).

³⁴⁵ *Id.* at 406–13.

³⁴⁶ *Id.* at 413.

³⁴⁷ *Id.* at 405.

Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization (“Nagoya Protocol”), and the United Nations Declaration on the Rights of Indigenous Peoples (“UNDRIP”).³⁴⁸ Part IV provides a new perspective on the two instruments, CBD and Nagoya Protocol by employing the historical geographical perspective on TK and associated genetic resources.³⁴⁹ This article emphasizes on the human-rights approach cautions against treating TK protection as something susceptible to IP law solutions, as well as the adoption of convention normative frameworks in TK protection.³⁵⁰ The authors conclude that because holders of TKGR tend to suffer from poverty, property-related norm settings can offer very little to TKGR holders and their communal groups. They further express their attitudes of doubt towards the view that benefit-sharing schemes can correct wider social justice issues.³⁵¹

17. Heesob Nam, *Human Rights Approach in Global Intellectual Property Regime: With Case Studies on The US-Korea FTA And The EU-Korea FTA* (Aug. 3, 2018) (Ph.D. dissertation, Queen Mary University of London).

This study consists of six chapters. The study aims to: (a) critically examine this predominance of trade in contemporary IP norms; and (b) provide a counter framework for IP policy reform. The author states his main approach was juxtaposing the theoretical and empirical aspects of IP norms against human rights.³⁵² Chapter 1 introduces the research questions and defines several key concepts and scope of research.³⁵³ Chapter 2 identifies the several layers of trade dimensions of IP, including the historical layer, the diversity layer, the international political economy layer, the substance layer, and the outcome layer.³⁵⁴ Chapter 3 discusses the human rights dimension of IP, by laying out the historical landscape of intersection between human rights and IP, exploring the protection side and dissemination side of the right to science and culture.³⁵⁵ In particular, the author proposes a human rights model of IP by first delineate two opposing poles to be balanced and second taking a larger perspective, as well as understanding the nature of trade-centric IP norm.³⁵⁶ This approach supports a liability rule and suggests reconstructing the IP rights by restricting the level of protection to the material interests of creators.³⁵⁷ The author conducts case studies of two Free Trade Agreement (FTA) to prove his hypothesis. Chapter 4 is a case study of the Korea-US FTA,³⁵⁸ and Chapter 5 is a case study of the EU-Korea FTA.³⁵⁹ Chapter 6 concludes that, on the whole, the context of human rights provides a just counter framework that can unify the diverse range of issues. The author also acknowledges that he based the model on the premise that a personal link exists between creators and their scientific, literary or artistic productions.³⁶⁰

18. Margaret Chon, *Recasting Intellectual Property in Light of the U.N. Sustainable Development Goals: Toward Knowledge Governance*, 34 AM. U. INT’L L. REV. 763 (2019).

This article by Margaret Chon examines how intellectual property examines international development. This article is divided into five sections: I. Introduction: Reconceptualizing Intellectual Property, II. IP and Development: Boundaries and Collaboration, III. IP and Development: Innovation and Open-ness, IV. IP and Development: Human Well-Being and Environmental Justice, and V. Conclusion. She focuses specifically on the UN’s Sustainable Development Goals (SDG)

³⁴⁸ *Id.*

³⁴⁹ *Id.*

³⁵⁰ *Id.* at 444.

³⁵¹ *Id.* at 445.

³⁵² Heesob Nam, *Human Rights Approach in Global Intellectual Property Regime: With Case Studies on The US-Korea FTA And The EU-Korea FTA* 4 (Aug. 3, 2018) (Ph.D. dissertation, Queen Mary University of London).

³⁵³ *Id.* at 13–28.

³⁵⁴ *Id.* at 29–68.

³⁵⁵ *Id.* at 69–112.

³⁵⁶ *Id.* at 123–29.

³⁵⁷ *Id.* at 129.

³⁵⁸ *Id.* at 139–213.

³⁵⁹ *Id.* at 218–280.

³⁶⁰ *Id.* at 288.

which was adopted in 2015 and argues that “IP could be...viewed as an essential and pervasive element throughout all of the SDGs.”³⁶¹ Chon further notes that the SDGs are promising because they were developed over a long period of time with extensive, open participation worldwide with consultations and various initiatives.³⁶² Furthermore, these new SDGs apply to all countries regardless of their level of development, while development is equally important for both developed and developing countries.³⁶³ Part III uses the Innovative Medicines Initiative and Open AIR to illustrate the importance of adopting an open collaboration model for knowledge sharing, in a cross-sector or cross-regional manner.³⁶⁴ Part IV explores the incorporation of human rights and environmental justice into the SDGs.³⁶⁵ Finally, Chon concluded that collaborative partnerships involved in IP and development activities may address and may simultaneously contribute to issues in the production and distribution of global public goods.³⁶⁶

19. Sanjaya Lall, *Indicators of the Relative Importance of IPRs in Developing Countries*, 32 RES. POL’Y 1657-80 (2003).

This paper examines the economic benefits and cost for implementing uniform and strong intellectual property rights (IPRs) in developing countries and discusses the potential impact of strengthening IPRs and applying them uniformly to all countries. This paper also makes an important observation that countries with different levels of technological and industrial development may face different outcomes from strengthening IPRs. Part 1 introduces the controversy surrounding the impact on developing countries of tightening

intellectual property rights (IPRs).³⁶⁷ Lall points out that countries have varying levels of industrial, technological and economic development and therefore the need for and the benefits of stronger IPRs rise with incomes and technological sophistication.³⁶⁸ The main debate focuses on the economic benefits for the developing countries. Part 2 explores the impacts of stronger IPRs on developing countries. Lall argues that private agents may find a lack of incentive to invest in the creation of new productive knowledge under perfectly competitive conditions.³⁶⁹ A temporary monopoly on the use of knowledge has four societal benefits: (1) The primary social benefit of IPRs is stimulating innovation by private agents,³⁷⁰ (2) IPRs are intended to stimulate the creation of technology and society benefits from the use of new knowledge in productive activity,³⁷¹ (3) IPRs encourages greater dissemination of new knowledge to other agents,³⁷² (4) It stimulates innovation by other enterprises, but is of little value to poor countries that lack a local innovative base.³⁷³ Lall continues to discuss two variables, nature of the activity and nature of the economy, which also determine the benefits and importance of IPRs.³⁷⁴ Part 3 categorizes countries mainly based on technological activity, industrial performance and technology imports.³⁷⁵ Finally, Lall proposes two main policy directions for developing countries: (1) to exploit more fully and strategically the flexibility inherent in current TRIPS rules, and (2) to analyze the TRIPS rules at a more fundamental level, with a view to negotiating for a non-level playing field according to development needs.³⁷⁶

³⁶¹ Margaret Chon, *Recasting Intellectual Property in Light of the U.N. Sustainable Development Goals: Toward Knowledge Governance*, 34 AM. U. INT’L L. REV. 763, 764 (2019).

³⁶² *Id.* at 766–67.

³⁶³ *Id.* at 767, 775.

³⁶⁴ *Id.* at 776–79.

³⁶⁵ *Id.* at 779–784.

³⁶⁶ *Id.* at 784–85.

³⁶⁷ Sanjaya Lall, *Indicators of the Relative Importance of IPRs in Developing Countries*, 32 RES. POL’Y 1657 (2003).

³⁶⁸ *Id.* at 1658.

³⁶⁹ *Id.* at 1659.

³⁷⁰ *Id.*

³⁷¹ *Id.* at 1660.

³⁷² *Id.*

³⁷³ *Id.*

³⁷⁴ *Id.*

³⁷⁵ *Id.* at 1664–79.

³⁷⁶ *Id.* at 1680.

20. M.Z.M. Nomani, Alaa K.K. Alhalboosi & Mohammad Rauf, *Legal & Intellectual Property Dimension of Health & Access to Medicines in India*, 14 *INDIAN J. FORENSIC MED. & TOXICOLOGY* 118, 118–122 (2020).

This article mainly analyzes several health and intellectual property laws at international and national levels and examines the construction of health and intellectual property legal framework in India.³⁷⁷ The authors use comparative law methods to interpret statutes, including the Universal Declaration on Human Rights (1948), the International Covenant on Economic, Social and Cultural Rights (1966), WTO & the TRIPS Agreement (1995), the Doha Declaration on Public Health (2001), United Nations Panel On Access To Medicines and Access To Health Technologies Report (2016), and Health & Sustainable Development (SDG) Goal 2015–2030.³⁷⁸ They point out that one-third of the world's population does not have access to basic drugs and pharmaceutical patents affect disadvantaged people.³⁷⁹ They conclude that a cohesive legislative and policy framework for access to medicine and health care system is necessary and suggest all countries shall have freedom and flexibilities under TRIPS agreement.³⁸⁰

21. Peter K. Yu, *From Struggle to Surge: China's TRIPS Experience and Its Lessons for Access to Medicines*, in *MAPPING THE THREE GENERATIONS OF STRUGGLE TO ACCESS TO MEDICINES UNDER THE TRIPS AGREEMENT* (Amaka Vanni & Srividhya Ragavan eds., Routledge, forthcoming 2021).

This article presents China's legislative development in the pharmaceutical field and experiences with the TRIPS agreement.³⁸¹ It first discusses China's reluctance in introducing high and external IP standards, including the TRIPS standards.³⁸² In January 1992, China signed the Memorandum of Understanding on the Protection of Intellectual Property with the United States, in order to prevent an impending trade war.³⁸³ Following the entry of memorandum, China amended its patent law in 1992, expanding the scope of protection in to cover foods, beverages, condiments, pharmaceutical products, and "substances obtained by means of a chemical process."³⁸⁴ The amended law also added the right to import, extended patent protection to both products and processes, and extended the duration of protection from fifteen to twenty years.³⁸⁵ It then talks about how China's leaders started to make a major policy push in mid-2000s to encourage independent innovation.³⁸⁶ The third amendment to the Patent Law in 2008 demonstrates how China had the growing capabilities to make major adjustments to the patent system, which as the author emphasized "[was] based on its own needs, interests, conditions, and priorities."³⁸⁷ Biotechnology was listed as one of the right frontier technologies in the *National Medium- and Long-Term Plan for Science and Technology Development* (2006–2020) and the *Made in China 2025* strategic plan also identified biomedicine and high-performance medical devices as one of the ten priority sectors.³⁸⁸ The author observes that China has played important roles in pushing for wider adoption of artificial intelligence and machine learning in the health area.³⁸⁹ The more recent fourth amendment grants a limited extension of the patent term for up to five years to compensate for the time lost when a pharmaceutical product is undergoing regulatory

³⁷⁷ M.Z.M. Nomani, Alaa K.K. Alhalboosi & Mohammad Rauf, *Legal & Intellectual Property Dimension of Health & Access to Medicines in India*, 14 *INDIAN J. FORENSIC MED. & TOXICOLOGY* 118, 119 (2020).

³⁷⁸ *Id.* at 119–21.

³⁷⁹ *Id.* at 121.

³⁸⁰ *Id.*

³⁸¹ Peter K. Yu, *From Struggle to Surge: China's TRIPS Experience and Its Lessons for Access to Medicines*, in *MAPPING THE THREE GENERATIONS OF STRUGGLE TO ACCESS TO MEDICINES UNDER THE TRIPS AGREEMENT* (Amaka Vanni & Srividhya Ragavan eds., Routledge, forthcoming 2021).

³⁸² *Id.* at 2.

³⁸³ *Id.* at 3.

³⁸⁴ *Id.*

³⁸⁵ *Id.*

³⁸⁶ *Id.* at 4.

³⁸⁷ *Id.*

³⁸⁸ *Id.* at 6.

³⁸⁹ *Id.* at 7.

review.³⁹⁰ The author added that the proposed twelve years of protection for undisclosed test or other data for biological products in China, which would be the highest standard in the world, shows China's eagerness to create national champions in the pharmaceutical sector and be more assertive in the global pharmaceutical arena.³⁹¹ Next, the author identifies five distinct lessons that the developments in China's patent laws and pharmaceutical regulations have provided in considering the TRIPS Agreement and on access to medicines.³⁹² First, China's struggle-to-surge experience will change our perception of the strengths and weaknesses of the TRIPS Agreement and its international harmonization efforts.³⁹³ Second, the ongoing developments in the Chinese pharmaceutical landscape will undoubtedly widen the domestic gap between those with access to medicines and those without.³⁹⁴ Third, the policy position China now takes in the pharmaceutical arena will likely differ significantly from those taken by other developing countries, including those large or populous emerging economies discussed in this chapter.³⁹⁵ Fourth, as China grows to become more assertive in the pharmaceutical arena, its poorer or smaller neighbors and trading partners may begin with its posture moving from struggle to surge and finally to strike.³⁹⁶ Fifth, although the closer alignment of China's policy position in the pharmaceutical arena with those of the European Union, Japan, Switzerland, the United States, and other developed countries could help consolidate international and regional normsetting efforts, such alignment could also lead to greater rivalries between China and these countries.³⁹⁷ The author finally concludes that although China's experience with the TRIPS agreement are unlikely to be replicated, a more cautious analysis of the struggles and successes that China has experienced in the pharmaceutical arena is needed.³⁹⁸ He also finds that China's continuous improvement in the pharmaceutical sector and the legislative and regulatory changes suggest an increasingly complex access to medicines debate at both the domestic and international levels.³⁹⁹

22. Peter K. Yu, *Challenges to the Development of a Human Rights Framework for Intellectual Property*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* 89 (Paul Torremans ed., 4th ed., Kluwer Law International 2020) (abridged and adapted from 40 U.C. Davis L. Rev. 1039).

This article focuses on the obstacles to developing a human rights framework for intellectual property law and policy. The author first quotes the authoritative interpretation of intellectual property rights from the Committee on Economic, Social and Cultural Rights (CESCR), "Human rights are fundamental as they are inherent to the human person as such, whereas intellectual property rights are first and foremost means by which States seek to provide incentives for inventiveness and creativity, encourage the dissemination of creative and innovative productions, as well as the development of cultural identities, and preserve the integrity of scientific, literary and artistic productions for the benefit of society as a whole."⁴⁰⁰ He then defined intellectual property rights as "the right to the protection of moral and material interests resulting from intellectual productions," or to put it succinctly "the right to the protection of interests resulting from intellectual productions."⁴⁰¹ Next, the author examines three challenges that may face the development of the framework, especially from a pro-development perspective: (1) the 'human rights ratchet' of intellectual property protection; (2) the undesirable capture of the human rights forum by intellectual property rights holders; and (3) the framework's

³⁹⁰ *Id.* at 8.

³⁹¹ *Id.* at 9–10.

³⁹² *Id.* at 10.

³⁹³ *Id.*

³⁹⁴ *Id.*

³⁹⁵ *Id.* at 11.

³⁹⁶ *Id.* at 12.

³⁹⁷ *Id.* at 13.

³⁹⁸ *Id.*

³⁹⁹ *Id.*

⁴⁰⁰ Peter K. Yu, *Challenges to the Development of a Human Rights Framework for Intellectual Property*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* 1 (Paul Torremans ed., 4th ed., Kluwer Law International 2020) (abridged and adapted from 40 U.C. Davis L. Rev. 1039).

⁴⁰¹ *Id.* at 2.

potential bias against non-Western cultures and traditional communities. The first challenge refers to a growing concern about the “one-way ratchet” of intellectual property protection and as a result it will further worsen the imbalance in the existing intellectual property system.⁴⁰² The author argues that the best response is to clearly delineate which attributes of intellectual property rights would qualify as human rights and which attributes or forms of those rights should be subordinated to human rights obligations due to their lack of any human right basis.⁴⁰³ The second challenge refers to the undesirable capture of the human rights forum by intellectual property rights holders.⁴⁰⁴ IP rights holders and their supportive developed countries are more powerful and organized, and have access to greater resources, tighter organization, and stronger negotiation skills, that may enable them to capture the human rights forum and put developing countries, traditional communities, and other disadvantaged groups at a disadvantage.⁴⁰⁵ Intellectual property rights holders can generally capture the human rights forum through lobbying their governments and influencing developments in the human rights forum.⁴⁰⁶ Finally, the third challenge to the development of a human rights framework for intellectual property refers to the framework’s potential bias against non-Western cultures and traditional communities.⁴⁰⁷

In general, it acknowledges the significance of national and regional particularities and various historical, cultural and religious backgrounds and suggests that context of a dynamic and evolving process of international norm-setting and interests of those performing intellectual labour outside the Western model should be taken into consideration.⁴⁰⁸ The author states that the human rights regime is not as biased against non-Western countries and traditional communities as the critics have claimed, but challenges facing developing countries and traditional communities do exist.⁴⁰⁹ It is critical to consider divergent local needs, national interests, technological capabilities, institutional capacities, and public health conditions in developing a balanced intellectual property system.⁴¹⁰ The author concludes that there is a growing need to develop a human rights framework for intellectual property and policymakers need to anticipate the challenges while advancing a constructive dialogue at the intersection of intellectual property and human rights.⁴¹¹

23. Alexander Peukert, *Copyright and the Two Cultures of Online Communication*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

This article starts with a brief introduction of the relationship between copyright and the internet which, as the author characterizes, is often a conflict between exclusivity and access.⁴¹² Digital copyright is used to balance the conflicting interests.⁴¹³ The author of this piece offers an alternative interpretation and argues that that two cultures of communication coexist on the internet, each of which has a different relationship to copyright.⁴¹⁴ He finds the distinction between exclusivity culture and access culture is based on the technology used.⁴¹⁵ Next, the author talks about the role of current copyright law and states that the purpose of copyright is to commodify the input and output of the literary, scientific and artistic domain, and further branches of the digital economy.⁴¹⁶ Indeed, according to the “celestial jukebox” theory, copyright has evolved into a right that covers every potential asset and thus in the

⁴⁰² *Id.* at 3–4.

⁴⁰³ *Id.* at 5.

⁴⁰⁴ *Id.* at 10.

⁴⁰⁵ *Id.*

⁴⁰⁶ *Id.* at 10–11.

⁴⁰⁷ *Id.* at 15.

⁴⁰⁸ *Id.* at 16–17.

⁴⁰⁹ *Id.* at 20.

⁴¹⁰ *Id.* at 21.

⁴¹¹ *Id.*

⁴¹² Alexander Peukert, *Copyright and the Two Cultures of Online Communication*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS 1* (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

⁴¹³ *Id.*

⁴¹⁴ *Id.*

⁴¹⁵ *Id.* at 6.

⁴¹⁶ *Id.* at 8.

end every element of communication.⁴¹⁷ The author examines both the exclusivity and access cultures in order to realize the “celestial jukebox.” In the third part, the author discusses the perspectives, including further promotion of the exclusivity culture and further reinforcement of the access culture.⁴¹⁸ Finally, he concludes that rather than attempting to balance the conflicting interests, we should recognize the co-existence of two paradigmatic communication cultures along with hybrids between the two cultures.⁴¹⁹ Such approach will allow the analysis of copyright (and other) regulatory proposals according to their effects on one or the other culture of communication, release from the ultimately fruitless quest for a harmonious solution on a higher level that will only trigger new conflicts in the future, and relax the normative assessment of digital copyright.⁴²⁰ The author also states that digital copyright mostly supports a secure, exclusively controlled communication medium while realizing a “celestial jukebox.”⁴²¹

24. Krzysztof Garstka, *Guiding the Blind Bloodhounds: How to Mitigate the Risks art. 17 of Directive 2019/970 Poses to the Freedom of Expression*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

This article uses the human rights perspective to analyze art. 17 of the Directive 2019/970 (DSMCD), providing that the foundation for content filtering to be regulated and endorsed by EU copyright law.⁴²² The author focuses on analyzing the risks that the enforcement schemes warranted by art. 17 of the DSMCD Directive poses to freedom of expression.⁴²³ Section 2 of the paper outlines the concept of content filtering, explaining how it functions on a technical level, and what prevailing form it currently embraces in the world of online copyright enforcement.⁴²⁴ Section 3 moves onto the core tenets of art. 17, laying out the key elements of art. 17 and the regime it sets out.⁴²⁵ Under art. 17(1), the Online Content Sharing Service Providers (OCSSPs) are liable for the copyright-infringing user uploads made public via the platform. However, the Directive sets out its own “safe harbour” procedure, including 1) OCSSP should undertake “best efforts” to obtain the authorisation from the rightholder. 2) in observance of “high industry standards of professional diligence” and using “relevant and necessary information” provided by the rightholders, the OCSSP should undertake “best efforts” to prevent the infringement of the works in question. 3) the discussed provision obliges the OCSSPs to follow what could be categorized as a “notice and stay-down” approach.⁴²⁶ Section 4 looks at the nature of the risks posed by the discussed provision to the freedom of expression, arguably the key interest vulnerable to interference by art. 17.⁴²⁷ Section 5 critically analyses the steps taken by the drafters of the Directive to mitigate the risks outlined in section 4 and proposes further solutions with this goal in mind.⁴²⁸ Section 6 looks at two broader aspects of art. 17 implementation, transparency and introducing dedicated administrative bodies, which could have a positive effect on the overall balancing of human rights involved.⁴²⁹ In section 7, the author concludes that there is an opportunity to find the best possible place and shape for content filtering in the EU copyright regime and the normative goal should focus on long-term positive effect, even though trade-offs between human rights involved will be necessary.⁴³⁰

⁴¹⁷ *Id.* at 11.

⁴¹⁸ *Id.* at 21–31.

⁴¹⁹ *Id.* at 32.

⁴²⁰ *Id.*

⁴²¹ *Id.* at 33.

⁴²² Krzysztof Garstka, *Guiding the Blind Bloodhounds: How to Mitigate the Risks art. 17 of Directive 2019/970 Poses to the Freedom of Expression*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* 1 (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

⁴²³ *Id.* at 2.

⁴²⁴ *Id.* at 2–3.

⁴²⁵ *Id.* at 3–4.

⁴²⁶ *Id.*

⁴²⁷ *Id.* at 4–7.

⁴²⁸ *Id.* at 7–16.

⁴²⁹ *Id.* at 16–20.

⁴³⁰ *Id.* at 20.

25. Christophe Geiger, *Reconceptualizing the Constitutional Dimension of Intellectual Property—An Update*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

This article discusses the most recent judicial development in EU regarding the use of human rights to interpret and adapt IP laws.⁴³¹ It attempts to show that a constitutionalization of IP law can offer a remedy for the overprotective tendencies of IP and can help this field of law recover its legitimacy.⁴³² The author makes the following proposals to construct a satisfying and balanced clause for IP at constitutional level: 1) He proposes to link IP with the universally recognized right to culture and science, thereby mirroring a solution adopted at international and national levels in several countries.⁴³³ 2) He explores the protection that could be offered by the constitutional right to freedom of expression and information.⁴³⁴ 3) He analyzes the inclusion of IP within the protection of property at the constitutional level.⁴³⁵ He then discusses the consequences of constitutionalizing IP law.⁴³⁶ Finally, he demonstrates that fundamental rights can offer a suitable basis for a fair and equitable IP system and concludes that it is urgently necessary to humanize the subject by binding it to the basic values of our juridical system: fundamental rights and human rights.⁴³⁷

26. Peter K. Yu, *TRIPS Wars: Developing Countries Strike Back*, in *FLASHPOINTS: CHANGING PARADIGMS IN INTELLECTUAL PROPERTY AND TECHNOLOGY L.* (Alexandra George ed., Quid Pro Press, forthcoming 2021).

This article mainly discusses the emerging “TRIPS Wars.”⁴³⁸ The author first talks about the impact of the TRIPS Agreement and TRIPS-plus trade and intellectual property agreements on developing countries.⁴³⁹ He then examines the developing countries’ counter-strikes at the WTO – including those at the Doha Round negotiations, the Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS Council) and the WTO Dispute Settlement Body (DSB).⁴⁴⁰ The chapter concludes by highlighting the developing countries’ efforts to establish pro-development initiatives at WIPO and other international regimes.⁴⁴¹

V. CONCLUSION

This paper has attempted to provide a clear definition and an analysis of the purported human right to development. Researching the human right to development in the context of the existing intellectual property regime is a daunting challenge. Successful research is only possible with a clear definition of the human right to development. My initial research provides relevant legal documents with an annotated bibliography of the existing literature. Thus, this could help prospective researchers to consider the larger landscape of the right to health and intellectual property development and therefore, provide a footstep to further in-depth research.

⁴³¹ Christophe Geiger, *Reconceptualizing the Constitutional Dimension of Intellectual Property—An Update*, in *INTELLECTUAL PROPERTY LAW AND HUMAN RIGHTS* (Paul Torremans ed., 4th ed., Kluwer Law International 2020).

⁴³² *Id.* at 7–10.

⁴³³ *Id.* at 18–21.

⁴³⁴ *Id.* at 21–24.

⁴³⁵ *Id.* at 24.

⁴³⁶ *Id.* at 30–55.

⁴³⁷ *Id.* at 56.

⁴³⁸ Peter K. Yu, *TRIPS Wars: Developing Countries Strike Back*, in *FLASHPOINTS: CHANGING PARADIGMS IN INTELLECTUAL PROPERTY AND TECHNOLOGY L.* (Alexandra George ed., Quid Pro Press, forthcoming 2021).

⁴³⁹ *Id.* at 2–7.

⁴⁴⁰ *Id.* at 7–18.

⁴⁴¹ *Id.* at 18–19.