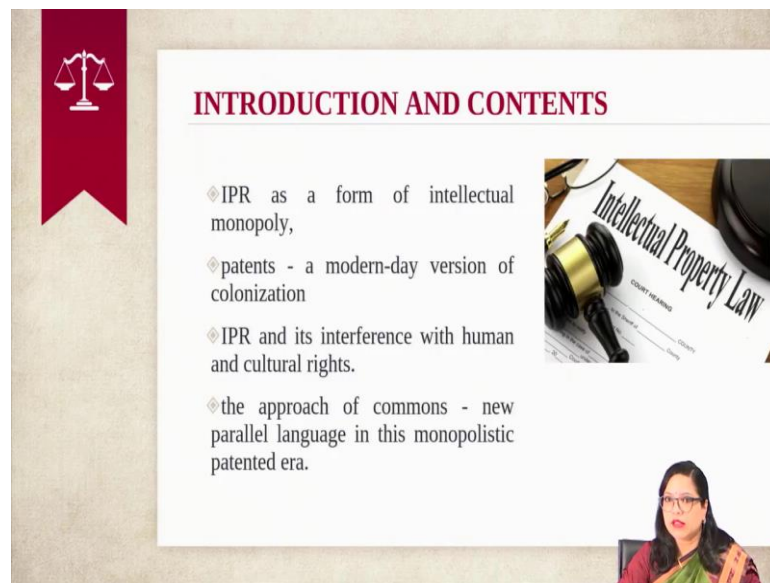


Sociology and Resource Management
Prof. Archana Patnaik
Department of Humanities and Social Sciences
Indian Institute of Technology, Kharagpur

Module - 02
Community control of natural and man-made resources
Lecture - 08
Debates on Intellectual Property Rights

A warm welcome to all. Today, we will discuss how IPRs and commons run as a parallel system to each other where IPRs act as a decisive agent of monopoly.

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The slide features a red ribbon graphic on the left with a white scales of justice icon. The main content is a white box with a red border containing the following text:

INTRODUCTION AND CONTENTS

- ◆ IPR as a form of intellectual monopoly,
- ◆ patents - a modern-day version of colonization
- ◆ IPR and its interference with human and cultural rights.
- ◆ the approach of commons - new parallel language in this monopolistic patented era.

To the right of the text is a small image of a gavel resting on a document titled 'Intellectual Property Law'. In the bottom right corner of the slide, there is a small video inset showing a woman in a green sari speaking.

We will discuss how Boldrin and Levine view the perspectives of IPR as a form of intellectual monopoly. Discussing the concept with examples, we will also understand the perspectives of how patents have become a modern-day version of colonization as explained by Vandana Shiva exemplifying the western exploitation of indigenous knowledge.

Additionally, we will touch upon Coombe's perspective on IPRs and their interference with human and cultural rights. Finally, we will end this module by understanding how the approach of commons can be considered as a new parallel language explained by David Bollier in the monopolistic patented area.

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INTELLECTUAL PROPERTY AS INTELLECTUAL MONOPOLY

◆ As per Boldrin and Levine (2002) in their article The Case against Intellectual Property-

"intellectual property refers to not only the right to own and sell ideas, but also the right to regulate their use".

◆ There are two attributes to Intellectual property-

1. The right to own and sell ideas; which is also called the right of the first sale,
1. The right to control the use of those ideas after the sale, which is referred to as downstream licensing (which is considered to be an economically dangerous attribute).

Let us begin with understanding the definition of what intellectual property means. In their article, Boldrin and Levine explain that intellectual property refers to not only the rights to own and sell ideas.

However, also the right to regulate their use. There are two attributes to intellectual property: the right to own and sell ideas, also called the right of the first sale. The right to control the use of those ideas after the sale referred to as downstream licensing is considered a dangerous attribute economically. The right to own ideas can lead to the monopoly of certain individuals or groups over the idea as a resource.

Economists, in this case, state that the practice of monopoly can give rise to a reward for an invention as, in this context, individuals or groups will be interested in inventing something new and gaining property rights overhead. Hence the cost of creation is a fixed cost. If somebody wants to create a new artifact, then the cost will remain the same, and since he or she wants to have a monopoly over the distribution cost, it will be mostly zero or marginal cost.

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NORTH-SOUTH CONFLICTS IN INTELLECTUAL PROPERTY RIGHTS – PATENTS AND COLONIZATION

Patents are associated with innovation and creativity which get recognized, where the creator or inventor gets the exclusive right to sell, distribute and produce the product on their own accord.

However, IPR in its current form is in nature, discriminating when it comes to the patenting within the global north and south.

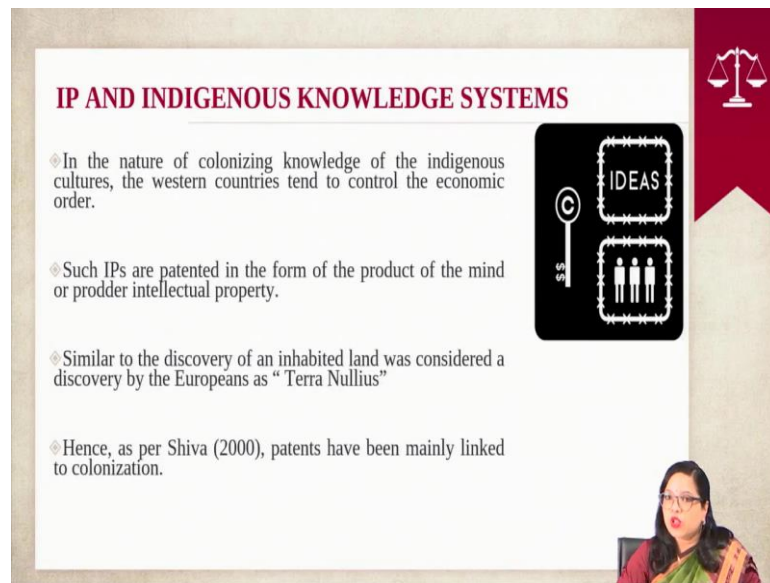
The patenting of intellectual property by the Western countries and especially the US is equivalent to colonization (Shiva, 2000).

Protect Intellectual Property
N. Stephan Kinsella

We have already touched upon the idea of intellectual property rights. Let's now understand the concept of patents are associated with innovation and creativity which gets recognized when the creator or inventor gets the exclusive rights to sell distribute and produce the product on their own accord. Now let us discuss these concepts using certain cases.



So, you will contextualize it more Vandana Shiva in her article north-south conflict in intellectual property rights discusses how patenting of intellectual property by western countries and especially the US is equivalent to colonization. Shiva states that countries in the west use their monopoly over knowledge even those that have originated in the indigenous culture and they try to patent it and sell them at a higher cost to the impoverished countries of the south.

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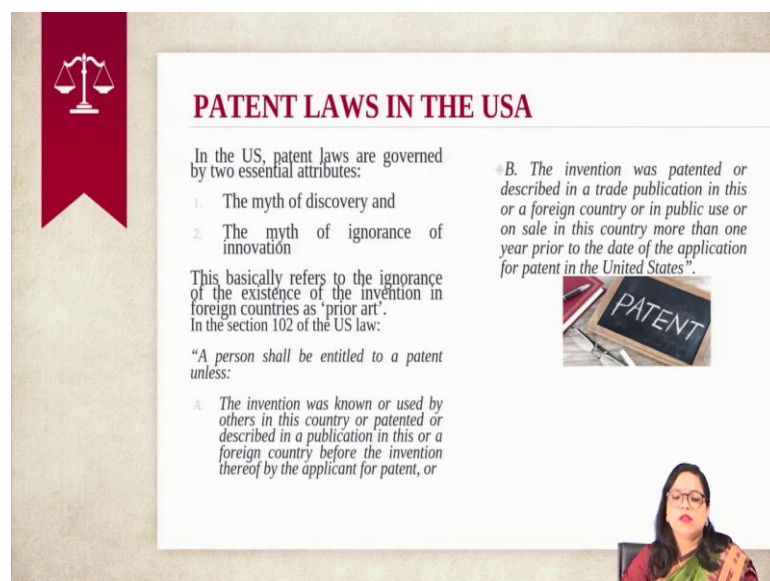
IP AND INDIGENOUS KNOWLEDGE SYSTEMS

- ◆ In the nature of colonizing knowledge of the indigenous cultures, the western countries tend to control the economic order.
- ◆ Such IPs are patented in the form of the product of the mind or prodder intellectual property.
- ◆ Similar to the discovery of an inhabited land was considered a discovery by the Europeans as “ Terra Nullius”
- ◆ Hence, as per Shiva (2000), patents have been mainly linked to colonization.



Like colonizing knowledge of the indigenous cultures, the western countries tend to control the economic order. IPs are patented in the form of the product of a mind similar to the discovery of the inhabited island or the land that was considered a discovery by the Europeans and was named terra nullius or the empty land. Knowledge also got patented as inventions that were originally indigenous in nature as Shiva states it. Hence as per Shiva similarly patents can be linked to colonization where westerners try to control the resource of the indigenous people and claim them to be theirs. She especially gives an example of the US.

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PATENT LAWS IN THE USA



In the US, patent laws are governed by two essential attributes:

1. The myth of discovery and
2. The myth of ignorance of innovation

This basically refers to the ignorance of the existence of the invention in foreign countries as ‘prior art’.
In the section 102 of the US law:

“A person shall be entitled to a patent unless:

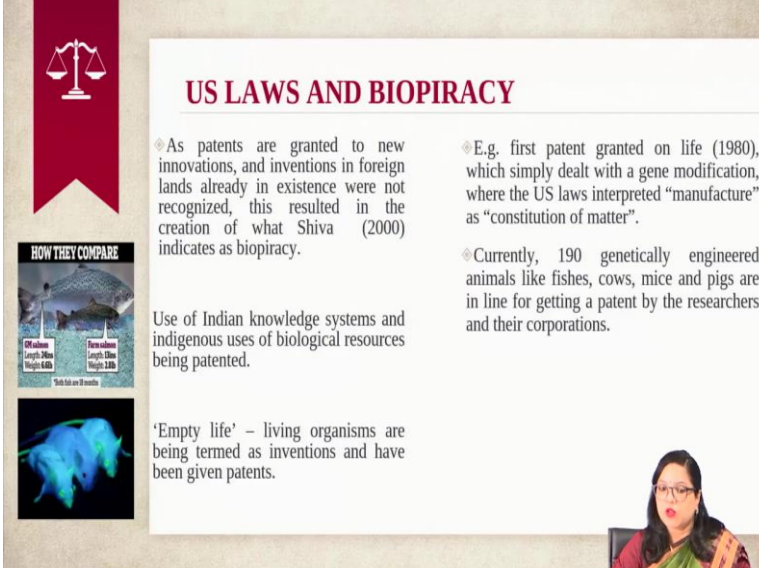
- A. The invention was known or used by others in this country or patented or described in a publication in this or a foreign country before the invention thereof by the applicant for patent, or
- B. The invention was patented or described in a trade publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States”.



In the US patent law governed is governed by two essential attributes - the myth of discovery and the myth of ignorance of innovation. These refer to the ignorance of the existence of innovation or invention in a foreign land as prior art. In section 102 of the US law, a person shall be entitled to a patent unless the invention was known or used by others in this country or patented or described in a publication in this or a foreign country before the invention.

Therefore the applicants for the patent or the invention were patented or described in a trade publication in this or a foreign country or public use or on sale in this country more than a year before the date of application for patent in the United States.

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The slide features a red ribbon graphic on the left with a white scales of justice icon. The main title is 'US LAWS AND BIOPIRACY'. The text is organized into several sections: a main paragraph on the left, a 'HOW THEY COMPARE' section with a table, a paragraph about Indian knowledge systems, a paragraph about 'Empty life', and a list of bullet points on the right. A small inset image shows a woman speaking.

US LAWS AND BIOPIRACY



◆ As patents are granted to new innovations, and inventions in foreign lands already in existence were not recognized, this resulted in the creation of what Shiva (2000) indicates as biopiracy.

◆ E.g. first patent granted on life (1980), which simply dealt with a gene modification, where the US laws interpreted “manufacture” as “constitution of matter”.

◆ Currently, 190 genetically engineered animals like fishes, cows, mice and pigs are in line for getting a patent by the researchers and their corporations.

Use of Indian knowledge systems and indigenous uses of biological resources being patented.

‘Empty life’ – living organisms are being termed as inventions and have been given patents.

HOW THEY COMPARE	
 Wild fish Length: 10cm Weight: 50g	 Genetically modified fish Length: 15cm Weight: 100g

Such aspects of ignoring prior innovation as invention according to Shiva became a trend in western countries. As a result, it promoted patent laws and patent laws indirectly promoted piracy law and patent laws promote piracy. Here let us now discuss the case of biopiracy which was given by Vandana Shiva to claim her point as patents are granted to innovations and inventions that existed in foreign lands were not recognized this resulted in the creation of what Shiva indicated as biopiracy.

Such use of the Indian knowledge system and indigenous use of biological resources being patented in a foreign land was considered biopiracy by Shiva. According to Shiva this empty earth concept of terra nullius has been converted to empty life where living organisms are being termed as inventions and are being patented. All of this according to

Shiva started with the first patent that was granted on life in 1980 which simply dealt with a gene modification, where the US law interpreted it as manufactured as a constituent of matter. It was Anand Mohan Chakrabarty a distinguished Indian-born American microbiologist and scientist who applied for a patent on a living organism and oil-eating bacteria. It was initially denied and was then challenged in the court of customs and patent of appeal office and Professor Chakrabarty claimed that the bacteria pseudomonas was genetically engineered and hence can be claimed for filing a patent.

After 9 years of struggle in 1980, he received the patent on the life form, and this started patenting on life forms. Currently, 190 genetically engineered animals like fish cows, mice, and pigs are in line for getting a patent from researchers and their corporations.

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US LAWS PROMOTING BIOPIRACY.

- Review of TRIPs - began in 1999.
- US kept its commitment on patents on life to save its biotechnology industry, pushing ahead the creation and patenting of Genetically Modified organisms (GMOs).
- These also included biological resources that were already in practice in indigenous cultures, such as Neem, karela, and basmati, which also got patented in the US.
- US patent laws rejected all the repealing proposals from the third world countries,
- TRIPs is favouring the rich western countries' interests over the developing countries.

The slide features a red banner with a white scales of justice icon on the right side. Three images are included: a green neem leaf, a pile of white basmati rice, and a woman in a red and green sari in the bottom right corner.

In 1999 a large number of third-world countries revolted to repeal the trade related to intellectual property rights to stop the patents on life and biopiracy this led to the review of TRIPS. The US kept its commitment to patenting on life to save the biotechnology industry pushing ahead the creation and patenting of genetically modified organisms. These also included biological resources that were already in practice in indigenous cultures such as neem, karela, and basmati which also got patented in the US.

US patent laws rejected all the repealing proposals from the third world countries and did not prevent its biopiracy and simply changed one clause within TRIPS that could do very

little to prevent this biopiracy. According to Shiva, this highlights how the TRIPS are favouring the rich western countries' interests over the developing nations.

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THIRD WORLD COUNTRIES PURSUING TO MODIFY TRIPS

- The African Group and India pushed for the exclusion of life forms in the process of granting patents;
- To include the intervention of the WTO to be subordinate to the Convention on Biological Diversity (CBD).
- African group, central and Latin American countries pushed for changes in the Article 278.3(b), which was opposed by the US and Europe
- Western countries are protecting their corporate rights on this form of a monopoly

CBD

The African group and India pushed for the exclusion of life forms in the process of granting patents and to include the intervention of the world trade organization to be subordinate to the convention on biological diversity or CBD. African group central and Latin American countries pushed for the changes in article 278.3 b based on their right to review as built into the agreement which was proposed by the US and Europe.

According to Shiva, this shows how through different rules and mechanisms the western countries are protecting their corporate rights on this form of monopoly and undermining the rights of developing countries of the south.

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NEEM PATENT CASE AS BIOPIRACY

Not allow the patenting of neem extracts to be used as fungicide and pesticide – as it is a historical practice in India.

◆ This “Neem Challenge” began in 1994, and the fungicide patent by the U.S. Government and a big multinational corporation (MNC).

A symbol of defending the product that has been in use in large scale in India for centuries.

◆ This depicted a strong stance against the US biocolonialism.

NEEM PLANT

- Flower: Anticancer, antifertility
- Leaf: Fertilizer, Pesticide
- Seed: Insecticidal, Antifeedant, larvicidal
- Oil: Antimicrobial, Anti-inflammatory, Antiarthritic, Anticancer
- Bark: Anticancer, Hepatoprotective, Antimicrobial, Anticancer

Inset: Antimicrobial, Anti-inflammatory, Antifertility, Immunomodulatory, Anticancer

One example of India’s struggle to oppose a patent on biological resources was that of the neem patent case; the opposition was to allow the patenting of neem extracts to be used as fungicides and pesticides. And as you all must be knowing it is a historical practice in India to use these neem extracts in such a way the the USDA grace patent claim as it as it was their idea and invention.

The neem challenge began in 1994 and the fungicide patent was chosen to be worked against as it was owned by the US government and a big multinational corporation. This defense was a symbol of defending the product that has been used on large scale in India for centuries. This depicted a strong stance against US bio colonialism.

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COLLATERAL COSTS

- ◆ Other forms of production of intellectual properties and ideas, which are in forms like the digital – including computer software, programs, books, music, and movies.
- ◆ The use and their supervision require copyright protection, to save them from collateral damage.
- ◆ For example- case of music piracy.

Music

MIX TAPE

HIGH QUALITY AUDIO

As we can see the nature of US law is mostly inclined towards economic welfare. However, there are other forms of production of intellectual properties and ideas like the digital including computer software programs E-books music, and movies, and the use and their supervision require copyright protection to save them from collateral damage.

For example, if music is created by a musician and is pirated by someone else then the musician will not be able to gain any kind of benefit from his or her creation at the same time someone else might be reaping the benefits of the musician's creation. Similarly, you must have seen the disclaimer while watching a movie in a theatre which always states that circulating the movie in any form is an offense, and not to do so.

Thus, now protecting inventions can lead to their misuse in these cases, but at the same time protecting them through patents can also lead to monopoly as we were discussing earlier.

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**COMPETITION WITHOUT DOWNSTREAM LICENSING
(RIGHT TO CONTROL THE USE OF THE IDEA AFTER
SALE)**

In a competitive economy, such innovations tend to remain through either consumption or reproduction.

E.g. New music piece that is produced in MP3 format.

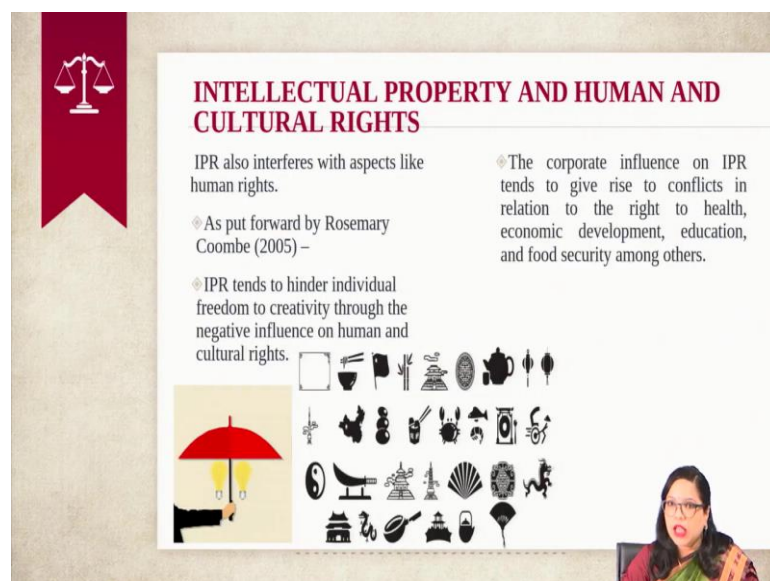
The improved technology helps the producer to recover the sunk costs in a competitive market.

The benefits of the monopoly get reduced by the improved technology.

The slide features a scale of justice icon in the top right corner, a green box with a keyboard icon, and a smartphone with headphones icon.

In a competitive economy, such innovations tend to remain in production through either consumption or reproduction. Let's take an example of a music piece that is produced in MP3 format. Improved technology for reproduction causes more copies to be produced and hence leads to an increase in the first sale price without any bound. In this process, the improved technology helps the producer to recover the sunk cost in a competitive market. Here, the benefits of the monopoly get reduced by the improved technology. Hence, this makes a competitive environment more feasible and not economically dangerous.

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**INTELLECTUAL PROPERTY AND HUMAN AND
CULTURAL RIGHTS**

IPR also interferes with aspects like human rights.

- ◆ As put forward by Rosemary Coombe (2005) –
- ◆ IPR tends to hinder individual freedom to creativity through the negative influence on human and cultural rights.
- ◆ The corporate influence on IPR tends to give rise to conflicts in relation to the right to health, economic development, education, and food security among others.

The slide features a scale of justice icon in the top left corner, a grid of various cultural and intellectual property icons, and a red umbrella icon.

Additionally, IPRs not only create issues of patenting problems and biopiracy in the global south as we were discussing but in the process also give rise to intellectual monopoly and interfere with aspects like human rights.

As put forward by Rosemary Coombe in her article cultural rights and intellectual debates human rights dialogue the IPR tends to hinder individual freedom to creativity through the negative influence on human and cultural rights. The corporate influence on IPRS tends to give rise to conflict about the right to health economic development education and food security among others.

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INTELLECTUAL PROPERTY AND HUMAN AND CULTURAL RIGHTS

- ◆ Coombe (2005)- movements to “free culture” from the clutches of IPR controls hindering individual liberties.
- ◆ Protecting the public domain from Inhuman IPR enforcements that are driven by market interests.
- ◆ Coombe (2005) - there is very little respect paid to the cultures of cultural heritage.

According to Coombe, there have been movements that have taken place to free culture from the clutches of the economically driven IPR controls hindering individual liberties. This also includes a stance of protecting the public domain from inhuman IPR enforcement, that is driven by the market interest. As per the idea of public domain all forms of cultural protection are considered as Nefaria citizenship as termed by Coombe where there is very little respect paid to the cultures of indigenous people and their cultural heritage.

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INTELLECTUAL PROPERTY AND INDIVIDUAL FREEDOMS OF CREATIVITY

- Interferences in maintaining individual cultural and human rights and freedoms of creativity when it comes to the implementation of IPR.
- Need for an international human rights system that would focus on the violation of cultural rights of minorities when it comes to imposing IPRs.
- The draft declaration on the rights of indigenous people comprises a Convention on Biological Diversity and respect for international principles.
- The World Intellectual Property Organization (WIPO) has recognized the necessity to reach out to "new beneficiaries"

WIPO

Coombe states that there are interferences when it comes to maintaining individual culture and human rights as well as freedom of creativity when it comes to implementation of the intellectual property rights.

There is hence a need for the creation of an international human right system that would focus on the violation of the cultural rights of the minority. When it comes to imposing intellectual property rights there is also a need for the protection of the traditional knowledge of the indigenous people as claimed by Coombe.

The draft declaration on the rights of indigenous people comprises a convention on biological diversity and respect for international principles different states are trying to abide by same. Additionally, the World Trade Intellectual Property Organization has recognized the necessity to reach out to new beneficiaries.

If the intellectual property system is to achieve global legitimacy it has the mention of cultural rights; however, these are rarely framed in a way that elaborates on cultural rights.

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INTERNATIONAL COVENANT ON SOCIAL, ECONOMIC, AND CULTURAL RIGHTS-

IPR is also cultural rights within international law.

- The International Covenant on Social, Economic, and Cultural Rights

• the UNESCO also looks into preparing and interpreting normative principles and instruments regarding cultural rights.

• The US has not ratified the International Covenant on Social, Economic, and Cultural Rights, as well as remained distant from UNESCO.

The International Covenant on Social Economic and Cultural Rights is an international framework in which intellectual property is both limited and specified and is governed by the obligation to identify and look after the majors to improve the situation of the vulnerable within society.

UNESCO also looks into preparing and interpreting normative principles and instruments regarding cultural rights. Given the nature of the monopolistic intellectual property rights implementation of us, they have not ratified the international covenant on social economic, and cultural rights as well as remain distant from UNESCO. Such poor commitment according to Coombe is not given much importance in the debates that state intellectual property rights to also be cultural rights within the international law.

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NEED TO PRESERVE CULTURAL DIVERSITY AS A PUBLIC GOOD

⊗ The recognition of the minority rights determines the cultural diversities to be recognized as a cultural resource and hence needs to be developed and protected sustainably.

⊗ E.g. In 1978, some Taiwanese researchers recording a folk musical oral performance of the ethnic minority group Ami- part of a Chinese folk music record albums that got released in France.

⊗ 20 years later an European band-, "return to innocence:" that got wide acclaim.

Anthem in the 1996 Atlanta Olympic Games.

A case of revitalization of endangered traditions.

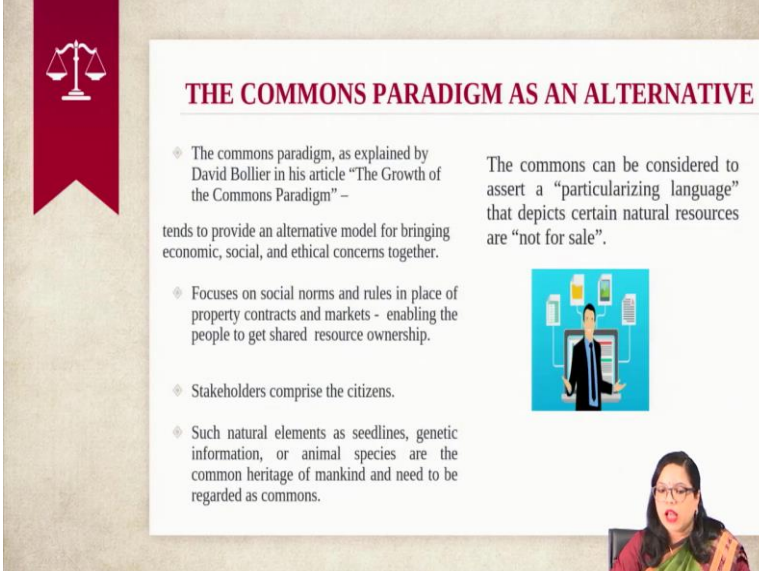
The element needs further investigation. According to Coombe the recognition of minority rights determines cultural diversity as a cultural resource and hence needs to be developed and protected sustainably. This understanding can be applied to the current discussion about intellectual property. Let us take an example to understand this concept. In 1978 some Taiwanese researchers recorded a folk musical performance of an ethnic community group named Ami, but it became available within the compilation of a Chinese folk music record album that got released in France.

Further after 20 years, a European band made use of the sample of this music to create a musical composition *Returned to Innocence* that got wide acclaim. It was chosen by the Olympic committee as an anthem for the 1996 Atlanta Olympic games. Over time the news of this use went to the original composer and certain lawyers and a local record company utilized a less-known international legend providing international legal provision that tends to prohibit unauthorized appropriation in the material form of performances. This latter gave recognition to the contribution of the talented vocalists. In short, the case highlights how cultural resources can be mis-utilized and intellectual property rights then can serve as a means of the endangered traditions.

So far we have discussed how the nature of western-centric intellectual property rights and patents leads to the stifling of cultural and human rights while also paving way for the corporatization of intellectual properties. However, there is also an alternative that

could recognize the inventive effort along with accommodating the public domain and its need.

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The slide features a red ribbon icon with a scale of justice on the left. The title is in red. The text is in black. There is a small illustration of a person in a suit holding a tablet with various icons around it.

THE COMMONS PARADIGM AS AN ALTERNATIVE

- ◆ The commons paradigm, as explained by David Bollier in his article “The Growth of the Commons Paradigm” – tends to provide an alternative model for bringing economic, social, and ethical concerns together.
- ◆ Focuses on social norms and rules in place of property contracts and markets - enabling the people to get shared resource ownership.
- ◆ Stakeholders comprise the citizens.
- ◆ Such natural elements as seedlines, genetic information, or animal species are the common heritage of mankind and need to be regarded as commons.

The commons can be considered to assert a “particularizing language” that depicts certain natural resources are “not for sale”.

The commons paradigm as explained by David Bollier in his article the growth of commons paradigm tends to provide an alternative model for bringing economic social and ethical concerns together. When the market-oriented discourse is concerned it traces the aspect of granting private property rights to generate wealth and in the process also includes granting rights on living matters such as natural elements such as seed line genetic information or animal species that are the common heritage of mankind and need to be regarded as commons. The commons can be considered to assert a particularizing language that depicts certain natural resources as not for sale. The commons paradigm, hence focuses on social norms and rules in place of property contracts and markets and hence works towards enabling the people to get their shared ownership of the resources. Here the main stakeholders comprise the citizens who are awoken by those investing in the resources and whose interests are not focused on being sold.

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A SYNERGISTIC OPTION AND A NEW LANGUAGE.

- ◆ When it comes to bringing in the aspect of balance, David Bollier states that markets and commons are synergistic and complementary in nature.
- ◆ For example, any business could flourish when there exist certain commons like the roadways, sidewalks, etc. which helps the balancing of the private properties with relation to their public needs.
- ◆ Information commons; which may include the commons of sciences, scholarly communications, and academic content.

When it comes to bringing in the aspect of balance David Bollier states that markets and commons are synergistic and complementary in nature. For example, any business could flourish when there exist certain commons like roadways sidewalks etcetera which help the balancing of the private properties with relation to their public needs. Additionally, drive away from the high degree of inequality that private property-oriented practices of patents and intellectual property rights.

The common paradigm can be an alternative approach that can be considered in practice other than the natural resources commons can also be considered to be in form of information commons which may include the commons of science scholarly communications.

And the academic content these are also non-rivalrous and are shared without any depletion more value gets added or created on the contrary when more people enter and make use of these resources. In this context, open-source commons can be introduced which tends to introduce more contributors to the commons through the networks such as the multimedia network where the decentralized ways of production and many to many distributions takes place.

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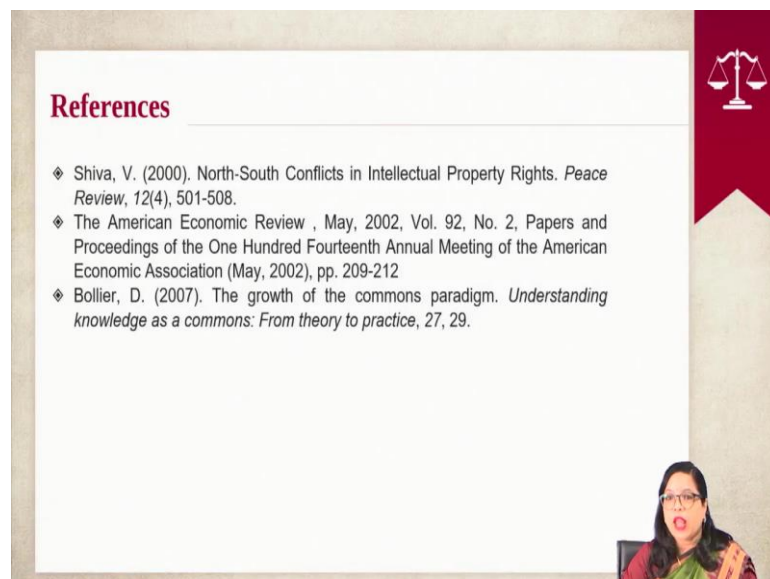
A SYNERGISTIC OPTION AND A NEW LANGUAGE.

- ◆ For example, we can consider open-source software such as Linux, a computer operating system, which became a rival of other proprietary software.
- ◆ But how does open source commons function in the broader context being parallel to the IPRs?
- ◆ We will discuss this context in more detail in the next module.

The slide features a tree diagram where the trunk is a black silhouette, and the branches are composed of various open-source software logos including SUSE, git, MongoDB, WordPress, and MySQL. A scale of justice icon is visible in the top right corner of the slide frame.

For example, we can consider open-source software such as Linux a computer operating system that became a rival of other proprietary software, but how do open-source commons function in a broader context being parallel to the IPRs? We will discuss this in more detail in the next module, till then.

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References

- ◆ Shiva, V. (2000). North-South Conflicts in Intellectual Property Rights. *Peace Review*, 12(4), 501-508.
- ◆ The American Economic Review, May, 2002, Vol. 92, No. 2, Papers and Proceedings of the One Hundred Fourteenth Annual Meeting of the American Economic Association (May, 2002), pp. 209-212
- ◆ Bollier, D. (2007). The growth of the commons paradigm. *Understanding knowledge as a commons: From theory to practice*, 27, 29.

The slide features a scale of justice icon in the top right corner of the slide frame.

Thank you and have a good day ahead.