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MA Human Rights Theory and Practice

Coursework

Challenges and possible solutions in access to educational resources in a selection of countries of the global South: a human rights perspective

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Annotation

The research exposes interrelation between the right to education and intellectual property. Among different barriers in the access to educational materials, the copyright plays a significant role. The paper reveals political and economic reasons derogating access to knowledge; in particular how the North countries using an international copyright regime hamper enjoyment the right of education in developing countries. Activists, academics try to find ways for overcoming the copyright hindrance and offer various top-down and bottom-up solutions. The latter in practice demonstrates a tremendous success in the North and South. In the last part of the work, the study provides an international human right framework which can be used by activists or decision makers for improving access to the learning materials in their countries.

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Appendix -	the Berne Appendix (1971), Special Provisions Regarding Developing Countries
CC -	Creative Commons
CG -	General Comments
CLA -	Copyright Licensing Agency
CRC -	the Convention on the Rights of Child (1989)
DRM -	Digital Rights Management
FTA -	Free Trade Agreement
HR -	Human Rights
ICESCR -	the International Covenant on Economic, Social and Cultural Rights (1966)
IP -	Intellectual Property
OA -	Open Access
OER -	Open Educational Resources
R2E -	Right to Education
RRO -	Reproduction Rights Organisation
TPM -	Technological Protection Measures
TRIPS -	Trade-Related Aspect on Intellectual Property
UDHR -	the Universal Declaration of Human Rights
US -	United States of America
WTO -	the World Trade Organization

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Introduction

In the last two decades, the intellectual property regime has become one of the most harmonised laws. This unification has been called to promote technology innovation and economic growth. However, for many developing countries, such level of intellectual property protection has created an adverse effect, impinging on development opportunities and different human rights including the right to education¹. This issue became an agenda for many international forums among governments, academics, NGOs and grassroots movements.

It is widely agreed that education plays an essential role in the development and many studies affirm² that access to learning materials is a crucial point in the full realisation of the right to education. Production and distribution (including trade) of the educational resources are strongly linked to the international copyright laws presented mostly by the Berne Convention, the TRIPS Agreement, the WIPO Internet treaties.

The aim of this study is to outline different challenges and to expose approaches initiated to promote better access to learning materials as well as to consider the most noticeable benefits and drawbacks. I believe that an approach based on wide grassroots movement and human rights is more sustainable for future human development than top-down approaches based on an interpretation of the existing copyright laws and pure economic adjustment procedures. Therefore I will argue in favour of a bottom-up way for overcoming the copyright obstacles in the access to knowledge in the global South.

In this paper the terms “educational (re)sources”, “learning materials”, “instructional materials” are interchangeable. In the broadest sense “learning materials” means all element which fosters an educational process. In the scope of this work “learning materials” are considered textbooks, course packs, scientific articles, media content and the like which can be used for educational purposes³. In this study, learning materials include textbooks, teacher instructions, course packs, presentations

1 Although the study will focus on access to educational resources in the global South because they are most vulnerable concerning sustainability of education. By UNESCO research, a lack of teaching materials takes place not only in developing countries like Uganda, Zambia, Malawi where pupils do not have any textbooks in school, but also problems with education materials noticed in the number of European countries (Helfer 2011, pp.333-334). In terms of dissemination digital technologies the barrier become more widespread (Chon 2007).

2 Chon 2007, pp.223-224; Rens 2009, p.305; Foster 2008, p.288; Helfer 2011, p.335. Mostly the researchers refer to the World Bank or UNESCO studies in the 1990's and early 2000's.

3 The page on the UNESCO website describes that learning materials are not only textbooks and instructional materials but also “boards and chalk, maps and flip charts, scissors, pencils, notebooks and writing pads, equipment and tools needed for science instruction, radio and television, computers and so on”. In other words it is everything that is important for the academic achievement of the students. http://www.unesco.org/education/blm/chap4_en.ph Date of access: 12.07.2016

UP:08/09/2016-10:55:47 WM:08/09/2016-10:55:50 M:HU981-7-FY A:15a1 R:1506341 C:E4FBD017B2D000A05BA9040F0655526F41BE0B5F

and all objects which can be utilised in the educational process and at the same time to be an object of the copyright regulation. (Helfer 2011, p.318).

In the first chapter, the research reveals the main obstacles to the right to education: legal, technical, economical and political. The second part discusses various methods (top-down and bottom-up), for overcoming hurdles created by the copyright regime. And the third part outlines the human rights framework for promoting better access to educational materials.

Chapter 1. Barriers: inside and outside of a copyright framework

Accordance Story, the central premises of copyright ideology is, firstly, the copyright considers all knowledge as goods. Secondly, that copyright is the only incentive for creativity without any alternatives. And thirdly, any fair practice and fair dealing are the in favour of right holders interest. Story emphasises that the current as well as earlier Berne convention does not care about textbooks in India or Bangladesh, blind children's ability to read and count, or what knowledge will be shared for socially-valuable goals⁴.

Research conducted in South Africa (2005) showed that a considerable number of learning centres do not know what the copyright is. Larger mass of respondents does not know anything about what exemptions available for educational purposes under Section 13 of South Africa Copyright Act (1978). The survey participants yet knew the concept of plagiarism and some recognised that authors need to get revenue from their books (Story 2006, p.108).

Though digital technologies are considered by developed countries governments as an essential component in development, they actually create regulations that restrict the potential of those technologies (Rens 2009, p.304).

Let us say several words about copyright nature. It is the holder's rights relate to the ability one's creation to exclude others from an enjoying any utilisation of the work. For example, rights to copy, modify, and distribute are exclusive rights pertained to the copyright holder. In other words, copyright is a monopoly concerning artistic and literary works of a huge duration. For instance, in many countries around the globe, the terms is a life of authors and 70 years after author's death from a year the textbook was published.

1.1. Common picture of textbooks production

Copyright is just one brick in the wall for providing sustainable access to textbooks. There are also institutional, geopolitical and commercial impediments for the efficient local publishing industry in developing countries. UNESCO conducted a study in the 1990's which investigated government liberalisation policies in many developing countries and textbook production. One issue concerns the complex structure of government and the contradictions between its constituent parts; each has a different level of knowledge regarding textbook publishing. For example, involved in the state's

4 Alan Story, <http://www.ip-watch.org/2012/02/27/%E2%80%98balanced%E2%80%99-copyright-not-a-magic-solving-word/> Date of access: 05.08.2016

order to make textbooks a private publisher can have a very short term for production teaching materials. As a result, books of poor quality were produced, or orders were failed whatever. Another issue concerned finance characterised by rapid inflation and devaluation of national currency; loan facilities were reduced, demotivating potential contractors. Other metrics such as a market size (which will be deliberated below), distribution network and human resources which have a strong influence on a final product. For example, a small market lead to lack of competition or a removal of competition (Helfer 2011, pp.349-350).

As were mentioned above, there are many aspects of providing educational materials: the cost of textbooks, distribution, adaptation on the particular language, infrastructure for publishing, and specialists who can create the textbooks. Although copyright just one of the set of factors influencing access to the learning materials, it needs detailed examination (Chon 2007, p.221). For instance, copyright can affect on the pace and cost of adaptation to Braille or sound medium, translation on local languages, making reproduction wholly or in part. What is the place of copyright in the cost of learning materials? Mostly right holders collect their fund with the licence fee. The fee is contained in a cost of each single item of copyrighted works (Story 2006). Above mentioned sites are substantial in the production and distribution, and it can shape access to learning materials significantly.

According to Story, there are two main factors impinging on access to knowledge. The first one is low income which reduces access to books, computers and the Internet for a majority of the populations or in many places is absent. The second factor is limited government funding to provide schools and libraries with instructional materials and books. These costs include fee established by copyright law. Usually the obstruction is "seldom discussed" in the academic studies and public discussion (Story 2006, p.90).

Copyright focuses on particular forms of expression; although it is possible to reproduce by changing copyrighted material, that reproduction can incur enormous resources, thereby increasing transactional costs. There is another point of view that many countries of the global South have postcolonial history and link to the education system of metropolia that makes change difficult at once. Moreover, as Rens claims, copyright reform with an aim to mitigate its provisions in the southern African region is usually occupied by WIPO and multinational corporation "technical assistance". This policy predefines agenda often ignoring development imperatives, while these reforms do not correlate with current copyright framework (Rens 2009, p.325). In the line of Rens, Story adds that the situation, where multinationals can influence the domestic IP regulatory

structure of emerging countries, is very typical (Story 2006, p.36). As a result of the practice, last years the tension increases between growth trend (established copyright offices) of the copyright enforcement and potential beneficiaries from weak copyright. Who are the beneficiaries? They are pupils of rural primary schools, students using the Internet for studies, librarians and teachers from remote islands. Moreover, weak copyright is an advantage for local commercial enterprises (Forsyth 2015, p.86).

1.2. Little market issues: translation and price

Chon emphasises that there exists asymmetrical representation of developing countries in the book markets. Emerged countries usually have roles of users rather than producers. (Chon 2007, p.232). Unsurprisingly, International Monetary Fund statistics reveal that only two countries in the world, the US and the UK, are IP exporters, every other country is a net importer of copyright material. Therefore, Chon makes a conclusion, "[p]revailing copyright practices and policies in the global book publishing industry have fostered inequality rather than addressed the glaring need to build domestic capacity in publishing or greater access to books published outside of a small national market" (Chon 2007, p.228).

According to Story, within the last decades the publishing industry become more and more monopolised by huge multinationals (printing and electronic), which reduces competition and creates a situation where a few big players impose their behaviour. All alternative voices become more and more marginalised (Story 2006, p.26). For example, Kenyan publishers revealed that European publishers usually offer very unfavourable terms in contracts for local partners and consider them mere trade agents for distributing their books rather than as producers (Story 2006, p.134).

Above mentioned trade situation makes a textbook provision overdependent from foreign vendors. Moreover, smaller markets usually attract a small number of trade books suppliers, that makes it impossible to substitute textbooks with trade books. Usually, developing countries have a huge budget scarcity for purchasing all trade books which are necessary for curriculum, because it is a more expensive way than buy textbooks (Chon 2007, p.226). Furthermore, if it takes into consideration typical structural adjustment policies which usually shrink education spending (Chon 2007, p.224), it becomes apparent that access to learning materials can remain narrow for a long time.

The study shows that the often books prices are doubled in South Africa in comparison with the USA or the UK. However, this is not the only disparity in market price, but also relative prices are in favour of developed countries. The latter mean that book prices in contrast with income in the South Africa less favourable in many times rather than for citizens in the UK or the US. Even if we take into account all taxes needed for import books from the North (where a majority of publishers located) the doubled price for South African consumers is not justifiable (Rens 2009, p.305).

Another research showed that in Fiji though a market price for a textbook (around 70 USD) is very close to the price in America⁵; however, in the South, the cost in percentage to average income is far from this proportion for counterparts in the North. Moreover, the geographical remoteness and climate demand regular renewal, in other words, photocopying. Without the latter; and taking into consideration a lack of a state budget for buying new books, a local educator can encourage affordable alternative economic answers, which the West terms as ‘piracy’ (the issue will be considered in Chapter 2, Subsection 2.3.1. Informal economy), which provides affordable prices than conventional industry (Forsyth 2015, p.89). Concerning high prices for an original textbook many students have several options to reduce their expenses: making copies “illegally” or navigate the Internet, which is costly (Story 2006, p.98) or use the potential of an alternative economy.

Rens claims that this price gap is mostly a consequence of a lack of competition in the publishing industry. He argues for using a compulsory licence for essential learning material; the licensing fee should meet consumer needs and foster their right to education (Rens 2009, p.305). However, for locally produced textbooks the cost can be also not favourable because of a set of internal impediments such as a non-efficient way for producing, a state’s monopoly, favouritism, deficiency (in terms of underdeveloped domestic publishing industry) or a monopolistic price of foreign publishers (Chon 2007, p.225).

Another significant challenge for local markets is a translation into languages of minorities which are very often in the developing countries. The translation demands extra funding (new licences with right holders) for creation a new content and it raises the cost of the learning materials (Chon 2007, p.226). Therefore, in terms of translating books into a local language local book producers in limited markets need simple and cheap regulation for access to overseas books (Story 2006, p.97).

Shaheed describes the problem of countries with minority languages; despite, copyright being neutral in relation to language, most books are provided in English, French, and Spanish, other

5 Association of American Publisher. New Data Finds College Students Spend Just \$67 per Course Material, <http://newsroom.publishers.org/new-data-finds-college-students-spend-just-67-per-course-material/> Date of access: 18.08.2016

languages are therefore marginalised due to the lack of incentives for right holders to publish in local minority language. This means all people who do not use above mentioned languages lose the opportunities for education, broader intellectual exchange, full participation in social and political life as well as the ability to earn money for a livelihood (Shaheed 2015, pp.14-15, para 68) because of copyright.

1.3. Trade-related issues: TRIPS-plus, national treatment, 301 Report, price discrimination

Forsyth notes that the origin of the problem around IP regulation is not small countries in the Pacific region, but trading companies and multinationals imposing the IP rules. (Forsyth 2015, p.113).

After developing countries trips TRIPS⁶ and signed up to the modern IP regime in the 1990s, they were required to follow the same standards as developed countries, yet did not have options to change any reservations in the Berne or TRIPS because of the ubiquitous and harmonisation of rules become mandatory for all (Story 2009, p.6).

Since Digital Millennium Copyright Act (1998) we have entered the epoch of different free trade agreement (FTA) began, where the US expanded existing level of protection and gave content providers, publisher, Internet service providers more power to control materials. In many countries, FTA extended copyright duration up to 70 years from author's death (Story 2006, pp.38-40).

The number of the TRIPS plus agreements rose significantly from 130 in 2001 to 330 in 2011. This made a tremendous impact not only on the economies of the treaties contracting parties but also for those who just recently locate in the region. Concerning the interrelations and demand directly or indirectly follow the "minimum standard" many countries fail their duty to protect, respect, and fulfil their human rights obligations⁷.

FTA does not only extend the duration of copyright and enact stricter anti-circumvention legislation, but it blocks any parallel trade (such as in the FTA between the US and Morocco where

6 The TRIPS is a mandatory agreement concerning Trade-Related Aspects on Intellectual Property for each member of the WTO.

7 This summary from my essay in International Trade, Investment and Human Rights. Page 6. See section "TRIPS, preferential trade agreements and "TRIPS Plus"
<https://github.com/rizomaa/dissertation/blob/master/Internationaltrade-M-Volchak-07.01.2016.docx.pdf> Date of access: 28.08.2016

the criminalization of fair dealing had happened) which may be suspected of 'piracy'. Furthermore, the rules created an anti-competitive environment in the developing countries (Rens 2009, pp.311-313).

Some critics can say this strict regulation is equal for every participant. Firstly, this is incorrect; consider educational provisions in Chapter 2 (see Sections 2.2.4 and 2.3.1), and compare the effects on US or the UK and the rest of the world. Secondly, Story offers to imagine that a creator from a Southern country, such as Guatemala or Gambia, will claim his/her broken copyright in the US. Most likely this author will not have enough funds and legal resources to defend his/her work in the court, and the copyright will be mostly a "hypothetical right" (Story 2009, p.21).

Even though TRIPS and the WTO in a case of breach the rule already implement dispute mechanism and trade sanction (Foster 2008, p.300) for countries-perpetrators, the United State Trade Representative Annual Report 301 is one more tool in trade for keeping the standards of IP. To begin with, the Report considers unilateral the US trade sanction bypassing WTO mechanisms. Moreover, the US actively uses the Report to intimidate countries which they suspect "breach" copyright by trade sanctions (Rens 2009, pp.311-313).

As Story stresses, the Berne Convention and the TRIPS "agreements contain what are called 'minimum standards' provisions, but include no prohibitions against enacting 'maximum standards'" (Story 2002, p.134). Thus, the TRIPS-plus regime creates an infinite process when minimum standards can be moved higher and higher, what indeed impinges dissemination of technologies and innovations (Ramcharan 2013, pp.70-71).

Moreover, the legal regime promoted by the Berne Convention and the TRIPS means that any member of these agreements has the same level of protection as a member of the particular country, so-called the national treatment regime. In other words, if owners in Mexico have copyright protection term 100 years after author's death that means a British publisher will have the same term of protection for all his books distributed in Mexico. There appeared two questions, according to Story, the first one is about protection; why do developing countries within their borders have to protect all works produced around the globe. These obligations create an unbalanced burden on the legal and enforcing system of these countries. Secondly, these obligations raise concerns about a quantity of produced works in the North in comparison with in the South. As a result, Southern countries concentrate on protection mostly production from the North countries; reinforcing the Northern states power in emerging economies (Story 2006, pp.48-50).

1.4. Copyright duration

Let us turn our attention on duration of copyright and continue the Mexican example where the copyright term is the life of authors plus 100 years after his or her death. In other words, it means that if some author were to write and publish a book this year, survive for a further 50 years after, the book will have protection up to 2166 year in Mexico. If the book is published in Belarus, the protection will be 'only' 50 years after author's demise. And it does not matter if the book or song is not available in a market and the author has no any successors. Therefore, Story argues that "[e]xtending the duration of copyright becomes simply a profit's protection plan and leads to the mortgaging of the future" because the profit will be gained from people who are not born yet (Story 2009, p.35).

The expansion of the term provides an opportunity for right holders, firstly, to collect revenue for a further 20-40 years. If it is necessary to spend a lot of investment for the first copy of the protected work; however, for further copies, the cost dramatically falls what gives right holders a possibility to collect windfall profit. Secondly, additional years of copyright generate additional financial stream for corporations and consumers from the South, it creates more debt. Story remarks, that

"[a]t a time when many countries in the South are trying to reduce their debt burdens, increasing the terms of copyright means that they are literally mortgaging their financial future; instead they should be considering how they can provide more and better materials to their citizens at cheaper price today and in coming years" (Story 2006, p.92-93).

Furthermore, copyright lobbying and policy making organisations such as the Motion Picture Association of America push for copyright terms to be "forever less one day". (Story 2006, p.95-96).

However, copyright protection is not only about the future; it is about the past as well. For instance, let us imagine a teacher of literature in Chile wanting to make copies for students following the university curriculum. In Story's example the educator intends to utilise a poem from books produced by a publisher from Spain in 1935. It is unknown whether the author (who died in 1955) of the poem transferred economic rights to this Spanish publisher or not. However, the teacher of literature can not make a copy for students without breaching copyright. It does not matter that it is copying for non-commercial - educational purposes. Story adds here, "[t]he fact remains that copyright term extension is creating an increasingly precarious situation for those who wish to use works legally protected by copyright" (Story 2006, p.91).

1.5. Universities and libraries. Copyright cops

Before discuss the impact on Universities, let us turn our attention in Zimbabwe, where the domestic Copyright and Neighbouring Rights Act does not define clearly can students demonstrate a result of their classwork for their parents if it is about dramatic or musical creations (Story 2009, p.32). Narrow provisions for education purposes are very typical for developing countries; the fault supplements the example above the Chilean literature teacher where educational exceptions do not give a clear allowance what is allowed. In other words, is it legal to make ten copies of one part book for students or only strictly personal and private use permitted? Most teachers adopt a practice of teaching their students rather than spend a time to tracking down copyright owners from abroad to obtain permission for copying (Story 2009, pp.32-34).

A significant challenge for libraries and everyone who would like to obtain legal access to teaching resources, is to trace and making contact with a right owner, because many of them are untraceable. Even if they succeed to find copyright holders, some of them can just deny permission, others can offer too expensive or harsh licence conditions in exchange for copying. Usually, a librarian budget in developing countries affords to purchase only several copies of a book for thousand students. It mean many students have to wait until the student before them has finished with the book, creating a bottleneck of access to teaching materials (Ramcharan 2013, p.70).

The librarians at the University of the South Pacific allow students to only make one copy of the article/section of each necessary books and control the process very strictly. In the Fijian branch of this University, it is possible to make only 10% percent of any copied book. By Forsyth, the role of librarians has moved away from traditional role of dissemination knowledge, to that of 'copyright cops' who check on the copying process. There is one more interesting rationale from librarians following this role. They argue that it can help the university to gain accreditation giving economic and educational benefits for the university; what is particularly important for education institution in the South wanting to compete with universities from the North (Forsyth 2015, p.97).

Rens wonders, though libraries suffer from different copyright impingement (as collective societies license policy with high licence fee), at the same time, the library administration spends own sources for promotion copyright (Rens 2009, p.311). It is probably, as a result of implementation International Federation of Library Associations strategy, which in early 2000x defined one of the role of the librarians as a keeper for 'enforcement' and 'controlling' protection of publisher interests.

Story asks: What is the first duty of librarians to protect copyrighted works or to meet the information needs of library's users? (Story 2006, p.103).

There is another restriction to access to learning materials, contained in the domestic copyright regulation. As Forsyth writes, Fijian students are in the precarious situation because there is no legislation which provides the exceptions for using more than one copy by educators and share the material for the whole class. Fijian law defines only a school as a place where can be utilised educational provisions, but not a college or a university is mentioned there. These narrow provisions also exclude, for instance, distant education and many students from the remote islands or rural area to enjoy more affordable tertiary education (Forsyth 2015, p.95).

For example, librarians at the University of Witwatersrand in Johannesburg were restricted from digitising a valuable but deteriorating collection because of copyright clearance. Educators, librarians, and students need to use the collection very intensively, and it became destroyed fast (Ramcharan 2013, p.70). That means that the material will be moved from exploitation soon, and access to education will become more narrow for the students.

Copyright regulation can result in commercialization of libraries. Some libraries in Johannesburg, South Africa, were forced to provide a membership fee for access to high cost of books. Apparently, it creates a barrier for poor people who mostly need the access to a library because of economic difficulties (Story 2006, p.102).

Another example from Kenya shows that the Copyright Act gives an opportunity to make just a copy of several short passages from an original work just for official institutions which is not enough in many cases. As a result, many rural learning centres face the requirement of paying a licence fee or use materials from public domain. For the majority of learning centres in Africa "use public domain" means to use outdated materials from the first part of the twentieth century or earlier. Another barrier is an absence in the copyright law of the ability to translate textbooks into more than 40 different Kenyan dialects (Story 2006, pp.98-100).

Some theorists offer that civil society organisations, universities, library associations, student associations teachers' unions should organise themselves on a regional basis, to provide a detailed uniform list of the exceptions and limitations appropriate to southern African conditions (Rens 2009, p.337). However, as practice shows in most cases, it is wasteful.

1.6. Adaptation for impaired people

In 2006 the World Blind Union reported that there was no country from the developing world which adopted any points regarding blind people in domestic copyright law (Story 2006, p.12). The situation formally changed. Although the Marrakesh Treaty (2013) called to solve copyright barriers for visually impaired people was signed more than three years ago, however, the enactment process proceeds very reluctantly. As of August 2016 only 20 countries ratified the agreement on the domestic level, and the treaty will enter into force from September but mostly for Latin American countries, Canada, India plus several scattered around the globe and only one African country (Mali)⁸. Kouletakis regrettably notes, that unwillingness of many countries means loss of opportunities for visually impaired people, and it is necessary civil compulsion on states with a demand to accelerate the ratification of the Marrakesh Treaty (Kouletakis 2014, p.63). We can suggest it is unlikely that the majority of developing countries will sign and ratify the agreement for many years.

There is one more serious drawback in the Treaty. On the one hand, Shaheed positively notes that in the Marrakesh Treaty “[s]tates commit to enacting exceptions and limitations to facilitate access to published works by persons with disabilities and to allow cross-border transfers of those works” (Shaheed 2015, p.14). However, on the other hand, this agreement has a provision that only an authorised by state entity can operate with the materials for adoption it in the precise format as well as make any cross-border exchange (import, export) of the works on a non-profit basis. In other words, by Kouletakis, it means “man in the middle” can hamper the exchange. Firstly because in developing countries, there is a usual communication gap between central government (which has to create or define the entity) and local communities (for example, from remote areas). It means that not all needs can be addressed in time. Moreover, the “authorised entity” operates just non-commerce; it implies the necessity to provide sources for its operation. And the second issue is that the Marrakesh Treaty has no provision for commercial exploitation materials (Kouletakis 2014, pp.59-60) blocking the development of a local publishers industry and creation sustainable distribution network.

The discussion about current challenges will not lose its significance for a long time. Moreover, the history of copyright treaties shows that provisions that favour users rights neglected or enjoyed with a distinct lack of enthusiasm if not neglected.

8 WIPO-Administered Treaties, Contracting Parties of the Marrakesh VIP Treaty
http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=843. Date of access: 28.08.2016

Many copyright laws in the global South have no "fair dealing" provisions for impaired people. For example, blind citizens in South Africa libraries have to pay a fee after each photocopy activities regarding of blanket licences. Photocopy in the case means further an opportunity to convert the Braille or sound format. What is more, it is mandatory for blind people to go through two complex steps: (1) get permission from right owners to transcribe the book and (2) make payment for covering license fee (Story 2006, pp.105-106).

The same situation is in the Pacific Regions where there are no provisions for people with disabilities and this is particularly important due to the nature of the scattered islands in the Pacific Ocean (Forsyth 2015, p.95) particularly there is not an efficient distribution network. In addition, in many cases physically challenged people use minority languages, that exacerbates the situation by a shortage of incentive for international publishers to deliver adopted (for instance on Braille) books on a little part of small market (Rens 2009, p.328). Theoretically, it is possible by using the Berne Appendix but not in practice (see section 2.2.4).

The current situation, is that many accessible works in the Northern countries are not exported due to copyright restrictions. The example from Ghana shows a typical case when students hire a person for reading learning materials, which makes it more expensive to educate blind Ghanaian students. Story emphasises the absurdity: blind societies in the North/UK acquire a licence to adopt copyrighted material for their needs, but the licence forbids to share the works outside the UK. There appears another issue, even if the impaired students have enough resources for adoption the material, they still need to do doubled task for converting the books in Braille again (Story 2006, pp.129-130).

Story generalises issues around blind people and the copyright; the right holders obtain their exclusive right automatically around the globe (see above national treatment). However, at the same time, sharing knowledge is restricted by each particular jurisdiction. As a result, the rights of the visually impaired are discriminated against (Story 2006, p.133).

1.7. DRM: access to content and software issues

The WIPO Internet treaties which came into force in the 1990s, several years after TRIPS, established new challenges for access to educational materials. The first challenge concerns technological protection measures (TPM's), in law also known as digital right management (DRM)

called to protect IP-objects from unauthorised digital copying, modification and distribution using technical solutions such as cryptography, particularly with the assistance of software or hardware. The second tackle relates to anti-circumvention laws which on a legal level forbid any interference and attempts to pass around DRM. A combination of these two technical and legal tools gives extra power for right holders to enforce copyright. At the same time, new provisions impede advantages which were provided by digital technologies. The first benefit is almost zero transaction cost of each copy. And that second benefit is broader access for each user of the Internet. Theorists argue that these Treaties mostly focus on the promotion of technological means from developed countries, in the telecommunication infrastructure of developing countries, for controlling digital environment on two levels: technical and legal (Chon 2007, p.241; Story 2006, p.117; Forsyth 2015, pp.104-105). Story supposes that in developing countries (where is a scarcity of telecommunication technologies) it is nonsense to protect foreign products by the use of DRM thereby spend limited resources in maintaining interests of international vendors (Story 2009, p.64).

The WIPO Internet treaties hamper many developing countries need to expand limitations of the copyright in a digital environment such as the Internet. The main problem is that technical protection measures expand upon legal regime which in many cases not only prevent unauthorised (commercial gain or commercial scale) use but also prevent personal use even though such use is covered by exception of making personal copy for reserving or personal needs (Ramcharan 2013, p.69). Sganga emphasises that the TMP's and sanction against circumvention are enacted; however, nobody paid enough attention to investigating what human rights were violated (Sganga 2015, p.567). Furthermore, Chon continues the discourse, if a current distribution system of printing materials affects mostly small markets, in the digital networked technologies environment, it concerns users rights within all countries (Chon 2007).

One more example, from Kenya where there was an initiative to make affordable education for a huge number of student in countries with a lack of capacity to provide facilities for conventional secondary and tertiary education using distance educational approach. Surprisingly, the distance course was more expensive in terms of cost for textbooks which exceed average income in Kenya. The case showed that digitisation of learning materials, as a rule, does not reduce costs, because mostly learning resources are locked by subscription-based databases making access difficult because of digital rights systems (Story 2006, pp.95-96).

Recent observations show that e-book bought in the Northern country does not mean that it will work in some country from both the South or the North. Amazon uses the centralised blanket lock-

down approach that prevents the legitimate rights of users, for example, to make a reserve copy or read books outside of the country where this book was bought from (Story 2009, p.64).

As were mentioned above, librarians more often behave like copyright police in controlling file distribution. Now, partly, the function is carried out by TPMs and anti-circumvention law adds transition cost for the librarians. To begin with, many technologies of databases provided by different publishers are different; and they create additional expenditure for developing interoperable interfaces and search in them. Next, all materials inside the databases are blocked for extraction and further copying technically and by contract with publishers (Story 2002, p.104). Library databases, scientific journals, and educational materials can be password protected. Knowledge remains centralised in the programme, and at any moment access to the software can be terminated if fees will not be paid or renewed. The combination of password lock and built-in DRM restrict access to learning materials radically (Story 2006, p.118) from different perspectives: economic, human rights, and governance.

The proprietary software uses similar techniques to those contained within DRM. In the first place, it is closed source code, which blocks any attempt to adopt the software for local needs, for example, translation or extension of functionality (Story 2006, p.164). In the second place, proprietary software protected by complex, different IP regimes such as patents, copyright, trademarks, know-how, industrial model and the like. It hampers any free use of the computer programs. The third issue is a mandatory update hardware for installing a new version of the software, which imposes an additional cost burden in its maintenance (Story 2006, p.123). Next, it takes a regular licence fee which leads to immense expenditure and over dependency on one vendor. To sum up, on Story's point of view, proprietary software does not provide technological transfer or independence which are both essential for education, it mostly significantly increases costs, reinforces technological 'lock-in', and fosters consumer dependency in one closed technology (Story 2006, pp.125-127; Story 2002, p.135).

Chapter 2. Solutions to the copyright issues: top-down and bottom-up approaches

2.1. Introduction into the method “from below”

In the chapter, different existing solutions will be elaborated and generalised in two groups. The first one considers the top-down way and the second one is an approach “from below” (Chon 2007). On different examples and justifications here will be demonstrated fault of existing legal provisions and benefits of social practices which defeat current copyright hindrances.

By Ramcharan, there is no one size fitting all countries in their law-making policy; that means that states do not approve all laws for every possible case but their specific needs. He writes, “[h]istorically, each country adopted its legislation to suit their vital concerns and levels of development” (Ramcharan 2013, p.65). And he continues that in the case of “access to information that is essential to education, such as textbooks crucial for the academic achievement of nation's schoolchildren has become more difficult as a result of heightened copyright protection”. As we considered in the previous parts, copyright tends to create harmonised legislation which is the same for all, especially in part establishing minimum standards for protection copyrighted works.

Forsyth reveals bottom-up and top-down approaches through their principal focus. If in the bottom-up approach such as the user's needs become in the centre of some solution, for example, affordability of the human development, in contrast, the top-down way concentrates attention on the compliance any capacity building initiatives with existing intellectual property regime (Forsyth 2015, p.96).

Chon argues that the top-down approach takes as a ground the current IP regulation which mostly reflects the needs of IP-rich countries (as we discussed these are the US and the UK) and keeps “radical inequality in a globalised trade system”. For, example, a typical top-down approaches are foreign direct investment, licensing, and “technology transfer” (Chon 2007, pp.210-213). This perspective significantly reduce possible strategies relating to “human development needs such as education” for both countries from the South and the North. Therefore, to develop IP policy “from below” which will be linked to “distributive justice” and cover broader interests for policymaking for developing as well as for developed countries means a more sustainable way of changing current imbalance in knowledge and money flows (Chon 2007, p.205).

Chon believes that the way "from below ... can extend an original linkage between the trade and intellectual property even further to human development" as distributive justice helps to balance IP and development needs. Thus, this interconnection can spread "access to educational materials for development needs." (Chon 2007, p.206).

Chon points out that the global IP regime creating regulation for technology transfer is not in favour of the South countries needs. She writes, the "[f]ragmented regulatory system leads to glaring omissions in the production and distribution of public goods"; therefore, many of education related goods issues are neglected because they are mostly concentrated in the "poor or non-markets" (Chon 2007, p.210).

In contrast, IP from below highlights the attention on: firstly, "groups and individuals with relatively less voice and representation in formal legal structures", secondly, gender, race, class, and nationality issues including oppression, and, thirdly, "non-elite users and consumers of knowledge goods within both developed and developing countries" (Chon 2007, p.214).

Let us begin with detailed consideration the top-down approach.

2.2. Top-down method: an illusion or a probable solution?

2.2.1. Blanket licence

The blanket licence is a type of a licence provided by collecting societies for broad access to a set of different content. How does it work? For example, such collecting society as a reproduction rights organisation (RRO) makes contracts with many right holders and authors of learning materials (books, textbooks, media content). Thus, the organisation has right to collect a fee from a use of any work on which this organisation has a contract; and after it passes the charge to owners of copyright. It gives an opportunity for different clients just purchase one licence and use it for all works which the licence covers, on the one hand. Right holders and individual authors do not need to make negotiation with all interested users of their content, on the other (Story 2006). At first glance, the process should accelerate the exchange of knowledge and help in such cases as producing course packs for students. But not all glitter is gold.

As Story's research shows, there are disadvantages in such licences. To begin with, in developed country to make a printed copy of an article legally using the blanket licence costs around 8-10 USD that is unaffordable for libraries in underdeveloped countries (Story 2006). The second

drawback of the licences is that they are more focused on tertiary institutions and do not refer to secondary and primary education in the South. Another obstacle for developing countries the blanket licence has a tight coverage of different content types, which are essential for creating course packs (Story 2006, pp.43-44). For example, it can be photocopied materials and transient electronic copies; furthermore, the licence can have special conditions in what extent the resources can be used. For instance, it can be copied only 10% or one article from a journal or one case study from a book. And finally, the usage is considered as commercial activity and in South Africa includes 14 percent of Value-Added Tax (VAT) (Story 2006). Along with lines of Story, Forsyth adds that above mentioned obstacles increase a transaction cost because of such schemes administration, especially, for many universities and libraries which have weak capacities for keeping the 'police' functions. In other words, to support enormous infrastructure as the Copyright Licensing Agency (CLA) or the like in the UK is too expensive for universities in the Pacific. She concludes that the blanket licence in one university can exclude other universities in the region which are not in the net from enjoyment such licence policy that creates disparity again (Forsyth 2015, p.99-100).

Story develops critiques that the RRO system in South Africa mostly collects money for foreign owners, that means that capital flees from the South towards the North continue and support the inferiority of the global South (Story 2006, p.42). Furthermore, Story points out the RROs focus more on "government-subsidized tertiary institutions and does not make much more effort in getting the private universities or corporate organisations on board as far as copyright clearance are concerned" (Story 2006, p.114).

To sum up, all above mentioned about blanket licence does not mean that the tool as an idea is entirely futile, but the main issue for developing countries are an economic situation and a lack of capacities. At the same time, a blanket licence is a top-down approach taking into consideration only compliance with a practice of developed countries and a high level of the intellectual property protection.

2.2.2. Fair use/dealing/practice

The idea of "fair" came from provisions in domestic copyright acts which based on international IP legislation relating to education and non-commercial use. Just several countries (the UK, US) have enough substantial provision of fair use or fair dealing. For example, the US use the rationale that teaching and scholarship have a significant influence on society providing direct and indirect

benefits through educated citizenry and dissemination knowledge; that is not a place where a market will stimulate "socially desirable transactions" (Chon 2007, p.237).

There is one more example from the South; the 2013 Copyright Act in the Cook Islands has several user-friendly provisions for educational purposes, such as students or educators can make a copy of books which are absent on the local market or have unaffordable prices. Another exception gives teachers rights to use any electronic means in terms of education purposes (Forsyth 2015, p.95); however, the broad exceptions is not typical for most developing countries (Forsyth 2015, Chon 2007, Rens 2009, Story 2006).

Moreover, Shaheed notes inequality that some affluent countries, for example, the US have well-developed "fair use" provisions for unlicensed free utilisation in the education sphere. At the same time, most countries have very limited and restrictive rules which are very often uncertain and outdated for modern technologies (Shaheed 2015, p.16). Chon points out, discrimination in distribution more thoroughly showing the "fair use" doctrine in the US means that users do not need to pay for educational use, but for users from the South, they need to pay compensation to content owners even within "fair use" purposes. So, Chon following distributive justice claims that it needs to reshape existing bilateral and regional treaties and propose to expand the exceptions and limitations in respect of the cultural, historical and political context of a particular country (Chon 2007, p.235).

According to Forsyth's observations shows although the Cook Islands, Fiji, Samoa, the Solomon Islands copyright laws have some exceptions relating to education, they provide many vague concepts such as "fair dealing", "fair use", "short part", "short excerpt", "reasonable proportion". In the laws, the concepts usually have no explanations and definitions. And, secondly, they are often interpreted in a restrictive manner because of fear of possible copyright infringements. Moreover, creating any "fair" provision expanding exceptions and limitations in favour of development these countries take the risk of enormous pressure from the international trade organisations because of "might be accused of being protectionist" (Forsyth 2015, p.94).

Story sceptically notes, although fair dealing is called to take into account the public interest, there are no fair dealing provisions in some developing countries. Besides, the situation reflects a general spirit of contemporary copyright, where owners' rights are harmonised and consistently become "strengthened, protected and enforced", but users' rights are the voluntary exception. By Story, all

countries but especially developing need some treaty which will standardise users' rights (Story 2006, p.137).

The Berne Convention Article 10(2) provides utilisation for teaching which compatible with “fair practice”, however, there is not any definition what the "fair practice" really means (Chon 2007, pp.237-238).

According to Rens, although publishers from the North insist that "fair practice" is a universal category, the special conditions (a relative price, a lack of resources, an absence of learning materials) in developing countries should be taken into consideration (Rens 2009, p.328). In fact, many countries from the South have no domestic institutional capacity to enact the “fair use” policy in the local copyright acts as well as implement this policy (Chon 2007, pp.237-238). Forsyth continues that existing exceptions in the Berne Convention (Article 9, 10) and TRIPS (Article 9, 13) integrated into some “fair dealing” provision of domestic copyright acts are already outdated for current needs and technologies. Moreover, future examining of international copyright laws should turn attention that teaching and learning which play the crucial role in development can take place scarcity of resources (Forsyth 2015, p.92). In this line Rens thinks and claims that "[d]eveloping countries contexts and challenges require innovative exceptions and limitations" (Rens 2009, p.325).

From the human rights perspective, it is important to note that “fair dealing” is not a right, Ramcharan emphasises that they do not grant a right to work being used, “rather they simply state that infringement does not occur while availing of the limited exceptions provided” (Ramcharan 2013, p.66).

By Story, firstly, regarding a lack of learning materials which can be used legally and freely the South countries should expand current “fair use”. In other words, “individual study” and “individual research” provisions do not make legal creating course packs (module reader). Secondly, the language describing the "fair dealing" is very complicated for non-lawyers, for example, teachers in primary or secondary school; it should be simplified (Story 2006, p.139).

Rens believes that "[a] comprehensive review of copyright law and regulation within SACU [(Southern African Customs Union)] suggests that, in the interest of access to learning materials, it is necessary to develop guidelines for fair practice which take into account the specific circumstances prevailing in developing countries and which acknowledge disparities among

countries in the region". His survey findings suggest that fair dealing as a means of access to knowledge could be considerably enhanced by the introduction of clear, detailed, progressive provisions (Rens 2009, p.337).

2.2.3. Three-step test

There is one provision which called to extend exceptions and limitations on economic right of the owners. These provisions are contained in the Berne Treaty (Article 9(2)) and the TRIPS (Articles 13) Agreement. Article 13 of the TRIPS states,

"Members shall confine limitations and exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the interests of the rights holder".

Ideally, this three steps ("certain special cases", "do not conflict with normal exploitation", "do not unreasonably prejudice the interests of the right holder") somehow have to help in promotion access to learning materials.

Foster making the legal analysis on the test defines that positive solution means, firstly, an importance of interest or values which will be protected ("certain special case"). Undoubtedly, accordingly Foster, that education has higher priority for society than material interests of right holder. Furthermore, copyright has a strong implication to encourage creativity for the teaching purpose. Also, TRIPS recognises necessity transfer of information that is a function of education. Secondly, access to the educational materials significantly contributes to education: "... making those materials available at a reduced cost or for free to realise the goal of education in a state with depressed economy may be 'necessary'" ("do not conflict with normal exploitation"). And, thirdly, a trade impact of the measures "would be negligible in the situation of a depressed economy where the population does not have the ability to pay for educational materials" ("do not unreasonably prejudice the interests of the right holder") (Foster 2008, pp.304-305).

Sganga claims, it is necessary to rethink too much the "trade-oriented" three-step test in compliance with human rights based on the General Comments no.17 interpretation of full realisation for the right to cultural participation (Article 15(1)). Sganga argues that "normal exploitation" and "legitimate interest" "should be limited to the human rights core of author's rights". That means that human rights approach defines scope where author's rights can be affected. For example, any "States parties' obligations concerning the rights to food, health and education, as well as the right to take part in cultural life and to enjoy the benefits of scientific progress and its applications" will

comply with the Article 13 of the TRIPS Agreement. The principal balancing need should be done in the first step "certain special cases" (Sganga 2015, p.572-573).

Chon promotes development ground for a three-step test interpretation. She believes the Article 13 of the TRIPS and Article 9(2) of the Berne Treaty provides for any possible the WTO dispute panels related to access to learning materials enough premises for implementation of the exceptions and limitations. Besides, these exceptions implemented in the domestic law will comply with the three-step test provisions in a spirit of TRIPS Articles 7 and 8 (development goals) (Chon 2007, p.243).

Further, Chon insists that in a situation of conflict between a "clearly defined" educational exceptions and the TRIPS Article 13, the educational exceptions will correspond with the first step ("certain special cases") in the WTO dispute panel. If an educational exception is not "clearly defined" WTO panel should ask what is "the public policy purpose of the exception" and consideration of the educational exception should go broader than investigation "whether the exception is clearly defined". She concludes that "[u]nder a substantive equality principle, a decision maker should explicitly consider and defer to a developing country's stated policy of promoting education for development. This interpretive approach would contrast, again, with a differently weighted application of the three-step test toward exceptions of developed countries and disputes between them over the scope of such exceptions" (Chon 2007, p.244). Continuing all these points of view Rens notes that southern African countries do not use in their domestic legislation "full advantage of the flexibilities provided by TRIPS" (Rens 2009, p.337).

Ramcharan argues that a lack of certainty and omission of any "substantive guide as to which exceptions may qualify to meet the conditions set out in the various versions of the test". He continues that "[a]mbiguities and restrictiveness of the approach to exceptions under TRIPS have had the deterring effect on those developing countries aiming to devise new exceptions corresponding their individual socio-economic, cultural and technological level of development" (Ramcharan 2013, p.67). However, Foster shares a positive view on a lack of certainty in the Article 13 of TRIPS because it can advance flexibility for adjustment the test for different requirements in various countries. (Foster 2008, pp.301-302).

Story sceptically assesses the potential of the WTO dispute settlement panel as a place for promoting interests of the South countries. He highlights the only three disputes related to copyright took place up to 2008, and there were no countries from the South. Why did it happen? First of all,

only government can initiate the dispute; that shrinks actors who can expose emergencies in education. Secondly, this is a very expensive procedure with hiring experts in international and copyright laws. And thirdly, for librarians or academic it will be very complicated to "convince their governments to make a complaint to the WTO over particular restrictive foreign copyright law". Moreover, sometimes government do not represent citizens needs, it is a frequent situation for developing countries. Fourthly, a country can provoke activity against an applicant of the dispute (there were examples where the US use the coercive custom against other states). And fifth, there is a little space for lawyers within the Berne Convention scope to provide rationale in favour of "access rights" (Story 2009, p.59). Looking at the picture Story asks a question: can blind people use the three step for their needs?

2.2.4. The Berne Appendix, compulsory licence and education

By Rens, there are at least four grounds for restriction of copyright in the TRIPS Agreement which can mitigate mandatory copyright demands. To begin with, Article 8(2) stops all effects which "unreasonably restrain trade or adversely affect the international transfer of technology". Next, Article 9 of the Berne Treaty provides translation opportunity. Thirdly, the Berne Articles 10(1) and 10(2) are devoted quotation and teaching exceptions respectively. And, finally, every the WTO Member state can adopt "appropriate measures to prevent or control" abusive "licensing practices and conditions" making harm on competition (Rens 2009, p.321).

Let us turn our attention to Article 10(2) as known as the Berne Appendix (the Appendix) concerning the study topic about educational provisions for developing countries. There are several questions: What is the scope of the Appendix? Who can enjoy its provision? And how does it work?

The Appendix can use just developing countries "only for the purpose of teaching, scholarship or research". The provision gives an opportunity to use compulsory licence by the government authorised entity for translation and reproduction of learning materials. However, the Appendix provide a three-year waiting period from the date of the first publication of the work before the translation licence may be issued. Moreover, if the translation has been done during the waiting period somewhere in the world, the translation permission will not be provided. For the reproduction licence, the waiting period is five years after a particular edition of the work. This duration is shorter for scientific work (three years) but longer for poetry, fiction, music or drama (seven years) (Helfer 2011, p.338-339).

In Helfer's opinion, although the Appendix called to facilitate educational initiatives, it is "quite confined and highly complex" because of long "waiting time" (three, five, seven years) and a "grace period" which can prevent any activities for implementation compulsory licence. (Helfer 2011, p.338-339) Also, commentators emphasise on useless the Appendix for developing countries (Story, 2006,2009; Chon 2007; Rens 2009). Why? The Berne Appendix does not overlay broadcasting and communication rights which are now profoundly important in education (Helfer 2011, p.338), for example, distant online education. Moreover, these steps can be terminated by owners rights, conventional money-making method or interest of collecting societies. As a result, this test is futile from the understanding how to use it, what the practice shows decades (Story 2006, p.141).

Rens stresses that his team doing the research in the Southern African Customs Union have not found any state's attempts to utilise the Appendix. And he concludes that a complex and precarious procedure failed because it does not help countries from the South to speed up and broad access to education (Rens 2009, p.323). It is still very often that textbooks are not available and suitable for such countries as Zambia in terms of transaction cost for education in the country. Primary and secondary schools in a rural area are usually in the local languages, which are different from dominant. Students with disabilities have a similar issue for adopting the work on Braille. At the same time, Rens believes that compulsory licence could be in these cases an efficient solution (Rens 2009, p.308).

Other critique concentrates on a limited number of actors how can use the compulsory licence. For example, it does not give an opportunity for teachers wanting to spread material among student without of compulsory licence using a photocopier or the Internet do so. These very approaches would be very useful especially for distant education, libraries and research (Story 2006, p.140).

Story asks who can enjoy this Appendix. By Story, the compulsory licence for translation book on local languages using Berne Appendix is problematic for many countries which is not fit to "developing" size. Moreover, he emphasises that present "definition of what is 'developing country' is far too restrictive. For example, South Africa was excluded from the provision of the Appendix (Story 2002, p.137; Story 2006, p.134)

Even though, theoretically, under the Appendix developing state which does not have the capacity to produce materials can organise parallel import. However, narrow provisions of Berne can easily cut it off. Chon writes that parallel import can be prevented by domestic law, blocked by TRIPS-

plus agreements what makes the Berne Appendix useless for providing cheap books on a local market (Chon 2007, p.231).

For a little country, sometimes the usage of rhetoric regarding a compulsory license can be risky. In later 1990s parliament opposition in Lebanon in response to a government establishment of a proprietary strategy for software acquisition in a public sector offered to the compulsory licence for proprietary software (as Microsoft Windows) for public interest such as for poor students.

Afterwards, the US put the country on the priority watch list of the US Trade Representative Annual Report 301. The list can shape US unilateral trade policy and establish sanctions against countries who potentially damage the interest of American companies (Story 2006, p.125).

Ramcharan analysing development potential of the Appendix notes that provisions provided for developing countries by Appendix 1971 are very complex for implementation and developing own publishing industries in the Southern countries. Therefore, money flow continues to move toward affluent countries where the textbook publishing industry usually located, thereby rises disparity. Thus, the Appendix is not agreeable for the global South (Ramcharan 2013, p.66). In terms of the Appendix rigidity, Chon adds it creates structural barriers educational purposes and undermines local publishing industries and to the textbooks translation from the world's dominant languages into minority languages (Chon 2007, p.229). Story asks a rhetorical question: Is it possible to use educational provisions for the public interest, or the Appendix remains a "technological anachronism" which reinforces the privileged position of publishers from the South (Story 2006, p.140)?

Let us consider several examples from provision right to health. Though these cases are not directly linked to the right to education, however, they brightly demonstrate how compulsory licence could affect access to learning materials.

The first example shows how Indian Generic Industry overcame a cost barrier and made the drug against HIV/AIDS more affordable. In 2000 the annual price of the drug was 10,000 USD and after implementation of the compulsory licence its cost fell dramatically more than 80-90 times and achieved around 140 USD. This price is expensive for many developed countries by result stresses possible potential. It is important to note that the result became possible because the new "national legal regime" relating to Indian generic pharmaceutical industry allowed reverse-engineering strategy on patented drug. Furthermore, the industry was protected "from foreign competition by

regulatory controls, high tariffs, foreign equity restrictions, and price controls” (Hestermeyer 2008, p.10).

Another example is from Brazil where TRIPS provisions were used for compulsory licensing to improve access to health, in other words, to protect the public interest. Before implementation of the strategy, the cost of patented non-generic AIDS drugs dropped only a 9 percent between 1996 and 2000. After Brazil enacted Industrial Property Law (1997) which make possible to utilise compulsory licences for goods which are not manufactured in Brazil and “if they are sufficiently important”. Eventually, during the 2000 expenditure for non-patented AIDS medicines fell by around 80 percent (Collins-Chase 2007, p.775). This case demonstrates how “provisions of the TRIPS Agreement can be implemented in ways that respect, protect and fulfil the right to health”⁹. Furthermore, the Brazilian government has productively united implementation of TRIPS with its obligations under human rights law - in particular its duty to provide affordable essential drugs¹⁰.

2.3. Bottom-up method: real solutions

2.3.1. Informal economy

In this subsection, the bottom-up approach will be analysed. As Chon recognises, the approach from below pays more attention to “substantive reforms” of IP rather than on procedures. For example, in the case of AIDS disease, there exist a scarcity of drugs, and it is perhaps danger for society. IP from below focuses on involving in the issue grassroots social movements and NGOs and stresses on unequal access to patented medicine for minorities, children and women rather than fit the problem to existing legal framework. So, the bottom-up way relating to alternative economic practices in Africa will discover 'piracy' as a tool for fostering access to knowledge rather than demonise them (Chon 2007, p.215).

Usually ‘piracy’ is considered as a business producing and selling an unauthorised copyright content like software, books, or media. As it was mentioned above, the International Intellectual Property Alliance or the United State Trade Representatives 301 Report call too much attention for loss of copyright holders usually marked level of 'piracy', but they do not implement any research about deprivation in an education sphere or a level of access to knowledge. It is important to note

9 Report of the High Commissioner, 2001. The impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on human rights (No. E/CN.4/Sub.2/2001/13), para.58

10 Ibid., para. 58

that in 19th and 20th centuries many developed country used 'piracy' as a tool for developing their industries (Story 2006, p.34).

Chow points out that 'piracy' is underestimated from a positive side and should be contemplated broader as a spillover with many positive consequences for societies such as knowledge production, dissemination and widening access to innovation for users in the South countries (Chon 2007, p.217).

Rens' study shows that the small photocopying businesses suffice people needs. For instance, in Makerere University (Uganda), copy shop cover students' demand in current course packs by supplying text for students as well as educators and solve cost and distribution issues in the conventional publishing sector (Rens 2009, p.303).

2.3.2. Open access movement

Forsyth very precisely reflects the ideology of Open Access:

"... free of charge to users, access is unlimited or largely unlimited by copyright restrictions (including licen[s]ing), the material is available in a variety of forms, including via internet, the full text is available and can be accessed by anyone with access to the internet, and can be used for any purpose by the person accessing it" (Forsyth 2015, p.102).

According to Story, Open Access (OA) movement promote "openness" as "the value that "should be endorsed consistently across all form of knowledge" (Story 2006, p.70). For instance, corporate-owned scientific journals required authors to transfer all rights without any payments for an article even before it can be published. In many value-based aspects, it was a reason among scientists who want share knowledge, to bear new policy based on open access (Story 2009, p.20). By conventional publishers, there exists "drawback" in the open access; they insist that uncontrollable dissemination of scientific can destroy "peer reviewed" concept of private journals and thereby hampers scientific innovations (Story 2006, p.171).

There is also a challenge for the alternative content-making approach. For instance, University of Uganda (African Virtual University) terminated to buy materials for distance courses outside and focus on creation own. There appears the question: who will be an owner of a new content? (Story 2006, pp.99-100).

One of the important steps in the OA history is access to knowledge movement was born from WIPO development Agenda consist of groups of academics and activists mostly based on developed country and focuses on the IP issues in the global South remarkably on improving access to knowledge. The Declaration on Open Access includes the point that "open access enables education and use of scientific information by the public", and it is worthy to consider this access as "a universal right" in the whole globe (Story 2006, p.171).

Story finds weak sides in the access to knowledge movement. The main critique that IP issues are inside the movement considered in "a traditional copyright lens, albeit a slightly more liberal and user-friendly version". In other words, many discussions appear around "fair use", "compulsory licence", "three steps test" regimes and use "traditional copyright legal narratives" and nothing about barrier for blind people, collecting societies administrative burden, distance learning (Story 2006, pp.162-163).

Forsyth research shows that there is readiness among local publishers (for example, in universities) who want to use an open-licensed content and create textbooks based on this in the Pacific region. She confidently says that domestic based printing industry can help to overcome a price barrier and increase the relevance of content in the textbooks (Forsyth 2015, pp.106-108) what was proven in the informal economy part (see Section 2.3.1), however now it is supported by a "copyright clearance" of content under an open licence.

Forsyth points out, although open access prevents knowledge commodification through principles of sharing and gives the Pacific countries necessary advances; however, there is a challenge within developing countries. Firstly, regional legislation is different; secondly, there are doubts that local writers will follow open access principles to share "own creative outputs" as well as government concerns about economic return from such activities (Forsyth 2015, p.108).

2.3.3. Creative Commons: strong and weak sites

The study shows that students of a college in Johannesburg had just two textbooks in the administration but no one more in the class. In the case, open access licensed content could be implemented as a solution. According to Rens, the strategy can significantly reduce the burden on education budgets in the South Africa; the same way can be carried out for providing free software, surely after the technical provision will be solved (Rens 2009, p.310).

Let us concentrate, firstly, on content-focused Creative Commons (CC) licence. Factually, this is a family from six licences which in different scope in author's choice can bestow some rights, but some of them keep for authors. For instance, all licences have an attribution requirement; that means users of the works should mark an original author. One type can permit all means of usage, other only non-commercial utilisation or use without changes.

Last years open licence Creative Commons attained immense popularity especially for the work published on the internet. Now more than 1 billion creations (textbooks, scientific articles, pictures, websites, government databases) use Creative Commons¹¹. Moreover, this licence actively develops compatibility with other open licences, such as GNU General Public Licence for software. The main idea of the grassroots movement to foster "cultural commons" where everyone can access, share, edit knowledge products (Shaheed 2015, p.17).

Besides, CC has strong aspects are not only opportunity to use, change, reproduce and distribute free content, but also a legal instrument to defend these freedoms inside existing copyright laws. This moment has a drawback, for example, it promotes a copyright approach as the only way for incentive and distribution of creativity.

Creative Commons has disadvantages. Initially, in terms of their implementation in the individualistic copyright paradigm (Story 2006), they define authorship for separate persons who makes a decision what CC licence choose with the message that "some rights reserved" not all. Even though in the legal text of the licence a licensor is defined "the individual(s) or entity(ies) granting rights under this Public License"¹², this scope shrinks the bottom-up way and an opportunity for alternative forms of authorship which is not individual or pertains to legal personality (for example, local communities or indigenous people).

Another weakness is that a CC tool gives only six choices what is very narrow grounds for using open access provisions broader. On the other hand, there is concerns about too complex structure in the vast set of tools. Thirdly, CC licence does not provide access to "already published works", in other words, for most works created by an employee ("work for hire") but not self-employed individuals. Next, that CC licence excludes creators who produce new work not motivated by copyright (for example, academics, in many communities in Asia or Africa, indigenous people

11 State of the Commons 2015. Annual Report of the Creative Commons Foundation.
<https://stateof.creativecommons.org/2015/> Date of access: 02.06.2016

12 Legal text of the Creative Commons Attribution Share-Alike 4.0 International
<https://creativecommons.org/licenses/by-sa/4.0/legalcode> Date of access: 04.05.2016

around the globe). And the last drawback, CC approach can exacerbate copyright problems in the countries where the informal economy ('piracy') play a considerable role in the providing access to knowledge (for instance, India) by revitalisation the copyright ground for its existence (Story 2006, pp.168-170).

Besides, critics above, recent years some developing countries attain success in the growth of open access in the education system. For instance, Mexico could improve access to scientific journals. The Universidad Autonoma del Estado de Mexico not only publish dissertations, presentations in the open repository but also provides 640 journals including 169 from Mexico on opens access ground. Another example from South Africa shows how a local social publisher prints textbooks licensed by Creative Commons for secondary schools and disseminated millions of copies. And the third example from India is about children books (under Creative Commons) on eleven local languages and how a multi-stakeholder publisher (convergence of non-profit, government, corporate sponsors) distributes millions of copies a year (Shaheed 2015, p.19). What is more, a grassroots initiative at the University of Cape Town has organised a hub and develop learning materials like physics, chemistry, mathematics under open access premises (Rens 2009, p.311).

2.3.4. Free software and a technological transfer

Free software is another example of hacking copyright "within the paradigm of copyright" (Story 2006, p.147) and promotion of a real technological transfer.

Significant tensions for access to knowledge is proprietary software which in many emerged markets unaffordable and unable to customise it. Some countries like Uganda moves its choice in favour of free open source software for public needs. The software allows for licence holders to access, study, modify and redistribute the software without limitations. These broad rights give opportunity not only reduce cost and customise the solution for local needs what stimulates domestic innovations but also encourage interaction between government departments and agencies as well as "private/public cooperation" (Forsyth 2015, p.106), in other words, carry out the real technological transfer.

Why in the case cannot proprietary software performs "technological transfer"? Such software blocks any adaptation this technology for local needs and user can utilise "as is". This principle "as is" creates dependency on import technology and excludes the right to change this technology for translation, customisation interface for specific tasks without owner's permission (Story 2006, pp.213-214). Along the line of Story, Ramcharan argues that access to information (scientific

knowledge and knowledge of technological advances) vital to the transfer of technology as well as for economic growth and poverty reduction (Ramcharan 2013, p.67-68).

And other important function of the free software that the resistance goes beyond of the copyright paradigm (Story 2006, p.147) Story claims, that "free software is about more than cost. It's a matter of freedom, independence and local capacity"; and he underlines, just broad understanding through political economy lens opens the full potential of free software and open source "as a tool for economic liberation" (Story 2006, p.166).

2.3.5. Even more possible strategies

There are many different bottom-up and mixed strategies which reflect countries needs for learning materials. One of them is a "public domain". The public domain is a concept in current copyright defining all creations for which the protection has already expired. In a broader sense, the public domain means all works which can be used, changed, copied and redistributed freely, without one's permission. Helfer recommends that developing countries can use a "public domain" way for bypassing the copyright hurdles. Initially, a state can seek or create analogues of learning materials which describe the same methods, formulas, ideas in the public domain because copyright does not protect it. Next, the country can use an approach "work for hair" with a single fee for a creator and place the product in the public domain, that give chances for other publishers to reproduce this creation without licence fee and enormous transaction cost (Helfer 2011, p.359). However, Story does not agree that this way will be so simple. He sceptically notes that public domain within a copyright law is not a useful tool for promoting access to teaching materials. Firstly, there are number ways to hook free content to the "distribution network", for example, making a film based on the public domain materials and any further use of the material protected by copyright. Moreover, the public domain for the global South is tremendously thinner than for scientists from the affluent countries (Story 2009, p.37).

In many countries, a copyright law uses in its title the "author's rights" construction that misleads non-lawyers (Ramcharan 2013, p.65). It is important to note that in many cases the owner of the protected content cannot be an author, but legal entity including corporations, companies and other non-individuals. There is one more misleading provided by Foster, "TRIPS incorporates Berne, except for moral rights, so it protects what amounts to means of achieving the material interest of authors" (Foster 2008, p.301). All these points creates an impression that the copyright law defends authors. There is a movements which highlight the difference. For example, the separation of authors and rights holders provoked an initiative in Venezuela which focused on authors' rights

which belong to "natural persons, the composers, the writers, the interpreters, the artists, and performers". Where the companies will be expelled from an enjoyment of "any human right like authorship." (Story 2006, p.155). Sganga offers that is necessary to include three categories in the further "copyright reform in order to restore a proper balance between authors' private interest, individual human rights and public needs, and proposed different solutions to tackle their often problematic interplay". Authors here means individuals who create new content (Sganga 2015, p.575). The question will be considered in more detail in section 3.

Some theorists and activist argue that the main aim to change this situation is to change intellectual property international and regional agreements like TRIPS-plus. Regarding a lack of adaptability, history of a copyright regulation demonstrated that the consensus is very improbable and "[t]he more realistic solution is political pressure through the international community directed toward those suggested that attempt to gain TRIPS-plus protection in the developing states" (Foster 2008, p.304). Political pressure can be both from civil society or state if it relevantly considers the existing needs of the citizens. However, in many countries, as Chon emphasises, domestic governments cannot reflect the public interest, so, the approach from below posits social movements and non-governmental organisations as relevant legal actors who can play a significant role in the changing of copyright (Chon 2007, p.215). Story develops the civic way, there can be applicable public protests, marches, street theatres, all types of civil disobedience direct actions for such aim. Furthermore, civil society can shape the discussion and use human rights approaches beyond of "piracy of intellectual property rights". And the last, all strategy should base on activists integration "the south with the north, local with global, and developed with developing" for further mobilisation and resisting copyright (Story 2006, p.174).

To sum up, using a combination of strategies it is possible to reshape copyright more fitted to the "from below" approach. Firstly, a government in the developing countries can mitigate¹³ the harshest consequence of current IP agreements¹⁴. Next, a social movement can inform the public how the neoliberal harmonisation including IP can damage creation and indigenous culture. Further, scholars can develop alternative views and theory to intellectual property, for example, through collective authorship or rethink the nature of creation. Fourthly, to stimulate sharing culture as a regular practice for a majority of people is vital. Finally, the use different from intellectual property

13 The visible example is The Commonwealth of Learning initiative. The intergovernmental organisation fosters any open access initiatives for open learning, distance education knowledge, resource and technologies. The movement includes mostly little Island countries and countries from the South (exceptions, Canada and the UK) (Forsyth 2015, p.102,104).

14 The African Group of WIPO in 2014 prepared limitations and exceptions to libraries, archives, educational, teaching and research institutions in the spirit of Marrakesh Treaty (2013) while developed countries are against this. (Forsyth 2015, p.101).

language and approach based on user's rights and rethink the concept of 'piracy', place of traditional knowledge¹⁵ there can develop a new understanding of humankind heritage and original authorships (Story 2006, pp.147-148).

15 The Declaration of Shamans on Intellectual Property states that it is necessary "[r]esisting commodification and attempting to retain access to knowledge as a human right and not a commercial right." (Story 2006, p.160).

Chapter 3. Shape the access to learning materials using a human rights law

3.1. Importance access to learning materials on the right to education

Different studies show that in comparison with other factors such as teacher's salary and equipment that providing access to "instructional materials" increases the pupils' academic output significantly (Foster 2008, p.288; Helfer 2011, p.335). So in the chapter considering the right to education, we mean access to learning and teaching materials.

By Foster, any restriction on learning material has a vast impact on the enjoyment of the right to education. Therefore, there is a conflict concerning the educational resources where an economic interest of authors or rights holders clash with full realization of the right to education (Foster 2008, p.288).

According to Forsyth, in current international IP regulation, there is little mention of how copyright influences development as well education. Because education is the main precondition for development, a lack of learning materials and poor access to textbooks and online materials can impinge an education potential and a student's progress. It concerns both formal education and traditional knowledge (Forsyth 2015, pp.87-88).

Historically, there is a difference in the human rights (HR) and intellectual property (IP) approaches when promoting access to education. Although early copyright and IP law declare developing creativity and promote the learning in the 18-19th centuries they mostly focus on a private site. At the same time, the HR way declares that the state is the primary actor who has a duty in respecting, protecting and fulfilling the right to education (Helfer 2011). According to Helfer, even though from the intellectual property perspective a developed market of copyrighted works is the precondition for promoting learning. He continues, "human right of access to education materials cannot be determined solely by the ability to participate as a consumer in the markets that copyright law creates and sustains" (Helfer 2011, p.316).

Helfer makes a statement, on the one hand, that copyright gives the considerable right for owners and creates obligations for users regarding reproducing, distributing and translation. On the contrary, the human right to education give users' rights to avoid all action which will increase "social cost" of accessing to textbooks or course packs. The transaction cost to access can impinge upon the enjoyment of human rights (Helfer 2011, p.358).

According to Helfer, copyright has a direct relation to learning and teaching materials. From HR perspective "the provision of learning materials is also a human right to education", therefore, free access to education does not have to be prevented by the cost of those materials and it should be affordable. As we proved before, copyright has a significant influence on the price of textbooks and other learning materials. Therefore, any impact on the price of schoolbooks can apply pressure on full realisation on the human right to education (Helfer 2011, p.318).

3.2. Protection HR to education. Soft laws: UDHR and Declarations

By Rens, access to learning materials is just a part of access to knowledge and full enjoyment of the right to education. The access means not only opportunity and affordability to buy textbooks but also to copy them, for example, in a library. Therefore, access to knowledge should be considered from different aspects (Rens 2009, p.303). Forsyth claims, there are many metrics provided which focus on primary and secondary school, but it is important to consider another form of education as well (Forsyth 2015, p.90), such as traditional. How does international human rights (HR) law assess this access?

International HR laws promoting the right to education give us assessment criteria as well. The first one is the Universal Declaration of Human Rights (UDHR) in the Article 26. The article shapes "free" and compulsory elementary education. Other forms of education can be "free" but at least technical and professional education should be "generally available", and higher education "shall be equally accessible to all". In the second part of the article, it established the importance of education for the development of the individuals. Education should be in line with respect for human rights and fundamental freedoms. The article, firstly, makes interconnection between the right to education with other rights and freedoms. Further, it defines minimal measures of state obligations concerning the rights. By Foster, although the UDHR is a soft law as many declarations, and it does not bind parties by any obligations, "but some core provision of the UDHR may be considered customary and, thus, potentially binding" (Foster 2008, p.290).

Another document "The United Nation Declaration on the Rights of Indigenous Peoples (DRIP, 2007) recognizes the right, inter alia, indigenous peoples' to conduct their cultural heritage as well as to develop educational system, institutions providing education in the local language in a traditional manner without any discrimination (Helfer 2011, p.331; DRIP, Article 14).

There are documents focusing on open education and open educational resources (OER) documents, such as the Paris OER Declaration (2012) promoted by UNESCO, which proposes States parties using the possible resources to “support capacity building for the sustainable development of quality learning materials”¹⁶. The Cape Town Open Education Declaration (2007)¹⁷ fosters “openly licensed course materials, lesson plans, textbooks, games, software and other materials that support teaching and learning”, the latter mostly was signed by individuals and several hundred NGOs. There is a more focused document issued by a mostly European academic community. This paper is the Declaration a balanced interpretation of the "Three-step test" in Copyright Law (2008) called to heal “restrictive approach” of the Berne three-step test in compliance with human rights and fundamental freedoms, competition on the market, and public interest, such as “cultural, social, or economic development”¹⁸.

3.3. Content of R2E concerning access to learning materials

As we showed above, there are many international documents with good wishes but what about legally binding documents and how do they define the right to education in general and access to educational resources in particular? What is the minimum standard that should be accepted as a realisation of the right? How can we consider access to education and what are its substantial characteristics?

Chon points out that right to education promoted by different human rights documents form a global legal base for "a human capability approach to the question of copyright on educational materials" (Chon 2007, p.218-219). Let's outline global, regional, and domestic levels.

On the global level, the International Covenant on Economic, Social and Cultural Rights (ICESCR) is the most recognised document which in comparison with UDHR and above mentioned Declarations bind all states participants who have ratified this Covenant.

Article 13 of the ICESCR recognises the right to education to all which should develop of human personality, its dignity, respect to human rights and freedoms, tolerance, friendship as well as help

16 The text of The 2012 PARIS OER DECLARATION.

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20OER%20Declaration_01.pdf Date of access: 14.07.2016

17 List of signatures: http://www.capetowndeclaration.org/list_signatures and text of the Cape Town Open Education Declaration <http://www.capetowndeclaration.org/read-the-declaration> Date of access: 14.07.2016

18 The text of the Declaration a balanced interpretation of the "Three-step test" in Copyright Law [http://www.law.qmul.ac.uk/events/archive/declaration_three_steps\[1\].pdf](http://www.law.qmul.ac.uk/events/archive/declaration_three_steps[1].pdf) Date of access: 01.07.2016

individuals capably to participate in free society. This article defines the scope of state obligation to primary, secondary and higher education. Helfer makes brief analysis of articles 13 and 14 in ICESCR, for example, primary education should be free and compulsory, or secondary education "generally available and accessible to all" and higher education should be "equally accessible to all" and as free as possible taking into account the state's resources (Helfer 2011, p.328). Foster notes, distinctions between fundamental education and elementary education are not defined (Foster 2008, p.289).

There are other legally binding documents such as the Convention on the Elimination All Form of Discrimination against Women (1979), the Convention on the Rights of Child (1989, further - CRC), the Declaration against discrimination in education (1960, further - DADE). The first one mostly concentrates on non-discrimination access to education and without a stereotypical approach to the composition of textbooks. The CRC in Article 28 and 29 repeats most provisions of the ICESCR in the Article 13 implies their progressive realisation. This Convention expands state obligation in secondary, vocational, and general education, in supporting needy children, enhancing international cooperation as well as "facilitating access to scientific and technical knowledge" (Helfer 2011, p.330). General Comment №1 for the CRC Article 29(1) stipulates that efficient promotion of education includes constant update essentials, such as textbooks, teaching materials, and equipment¹⁹; the cost of the schoolbooks should correlate with state obligation provide free primary education (Helfer 2011, p.332-333).

On a regional level the African Convention Human and Peoples Rights and the Inter-American Commission on Human Rights are useful organisations. These bodies produce regular reports and examine complaints from individual and comment treaties²⁰.

The United Nations Educational, Scientific and Cultural Organization plays a significant role in promoting the right to education on nondiscrimination premises (Helfer 2011, p.326).

General comments №13 contains the most comprehensive consideration of the ICESCR Article. They include a general explanation of the essential characteristics: availability, accessibility, acceptability, adaptability. For example features availability means that, among other factors, a requirement to provide teaching materials, computers facilities and information technologies. Next, accessibility includes non-discrimination (access to all, involving vulnerable groups), physical

19 Para 18, of the GENERAL COMMENT NO. 1 (2001) ARTICLE 29 (1): THE AIMS OF EDUCATION
 20 Right to Education Project. <http://www.right-to-education.org/page/report> Date of access: 20.08.2016

accessibility that means a geographical location or opportunity to use distant educational methods. The characteristic includes affordability for all levels of education taking into consideration elementary education should be free to everyone. Acceptability means that there are appropriate teaching methods for keeping minimum educational standards.

Today in the world more than 140 Constitutions protect the right to educations (Helfer 2011, p.327). Some large developing countries as India (Article 21a)²¹, Brazil (Chapter 3, Section 1)²², South Africa (Article 28)²³ have provisions which concern education; they guarantee at least free compulsory elementary education. In the constitution of South Africa social and economic right are justified fully, and it creates state obligation in limits of available resources towards the progressive realisation of the rights to education (Rens 2009, p.322). Commitments relating to the human right to education, "particularly obligation to make education up to certain levels "free", directly implicate member states' decisions as to how to allocate resources" (Helfer 2011, p.326). However, the Constitutions of Botswana, Lesotho, Namibia protect first-generation rights and have just several references to a right to education (Rens 2009, p.322).

3.4. Right to education and development

Even though the US Constitution have no educational provision in the case San Antonio Independent School District v. Rodriguez (1973) the court stated interconnection between the right to education, freedom of expression, and political participation (Helfer 2011, pp.324-325). Chon adds that "[a] well informed, educated and skilled citizenry is indispensable to the development process" (Chon 2007, p.219). On the one hand, the TRIPS (Article 7,8), the WIPO Treaties (preamble) and the Berne Convention have references to educational needs in the context of development perspective (Chon 2007, p.220). Inline with Chon's view, Sganga argues that these agreements have enough points reflecting the needs of least-developed countries, transfer and dissemination technology, an importance of socio-economic development, compulsory licence, non-patentability (Article 27), serving public domain (Article 70) (Sganga 2015, p.563).

In the Millennium Development Goals education was the Goal 4 to achieve universal primary education, and the United Nation attached to this Goal different human rights instruments and mechanisms: UDHR (Article 25(1) they may be meant Article 26), ICESCR (Article 13, 14) and

21 The Constitution of India. <http://lawmin.nic.in/coi/coiason29july08.pdf> Date of access: 10.07.2016

22 The Constitution of Brazil https://www.constituteproject.org/constitution/Brazil_2014?lang=en#55 Date of access: 20.08.2016

23 The Constitution of South Africa <http://www.gov.za/sites/www.gov.za/files/images/a108-96.pdf> Date of access: 20.08.2016

CESCR General Comments №11, №13, CEDAW (Article, 10), CERD (Article 5(e)(v)), CRC and CRC General Comment №1²⁴.

The Sustainable Development Agenda Education (also Goal 4) states that “[e]nsure inclusive and equitable quality education and promote lifelong learning opportunities for all”. The Goal has very similar instruments as for MDG agenda supplemented by the Convention on the Rights of Persons with Disabilities (art.32), DRIP (art.39), more attention is paid for international cooperation, right to work including technical and vocational training (ICESCR, art.6).

Rens believes that the importance of access to learning material bears fruitful environment for creativity, social and economic growth. And he adds that this access has an efficient metrics of the education development goal for assessing state policy addressing the challenges of the promotion knowledge in the developing countries (Rens 2009, p.304). At the same time, educational potential in development can not be implemented in countries with limited financial and other resources as well as with strong copyright laws; therefore it is necessary to expand exceptions and limitations for least developed countries (Forsyth 2015, p.90).

3.5. Scope of author’s rights

As we mentioned before, the right to education (access to knowledge) can intersect with mostly material interest to authors which is another cultural right. What is the scope of the right to “benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic” (ICESCR, Article 15(c)) work? How can this right be balanced with state obligation in education? Who is this author?

Interconnection of the right to education and the right to get a profit from the protection of the moral and material author’s interests can create possible competition among these rights. General Comments №17 (2005) define when a state should not hamper and comply their obligation with respect to safeguarding the moral and material author’s rights with the state's “core obligations in relation to the rights to food, health and education, as well as to take part in cultural life and to enjoy the benefits of scientific progress and its applications” (Sganga 2015, p.569). Although these comments recognise a social value of intellectual property; they emphasise that a state has to preclude “unreasonably high costs for access to essential medicines, plant seeds or other means of food production, or for schoolbooks and learning materials, from undermining the rights of large

24 Mainstreaming Human Rights in Development Policies and Programming: UNDP Experiences. 2012, United Nations Development Programme

segments of the population to health, food and education” (Foster 2008, p.303; Shaheed 2015). By Rens, the state’s human rights obligations "enhancing access to educational materials is frequently misread in some quarters as an infringement of creators' rights." (Rens 2009, p.314). On the one hand, human rights approach concentrates on essential material needs where authors can enjoy an acceptable standard of living; on the other hand, intellectual property laws mostly guard business and corporate interests and investments. Shaheed also reports that authorship safeguards in copyright and ICESCR mean not the same concept and authorship right is not so harmonised in current copyright laws in many countries (Shaheed 2015, p.8, para 29).

Let us sort out whose rights are protected by ICESCR Article 15(c). General Comments №17 clarify that human rights are inalienable, and they pertain only natural person in case of promoting moral and material interest but not corporations and legal entities²⁵. It means that any claims on the copyright of a publisher or another legal entity are outside of the safeguard of Article 15(1)(c) of ICESCR and UDHR (Foster 2008, p.299). Moreover, the GC №17 underscore that “material interest” and “property rights” are different, especially if it concerns corporate ownership²⁶. Also, by Shaheed’s report, “material interest” is not necessarily to expand to the author’s whole lifetime. It could be implemented, for example through one-time rewards. However, the protection of authors’ under ICESCR and UDHR is linked to the right to own property and with the right to remuneration of employees (Shaheed 2015, p.12).

GC 17 define the scope of an author’s right to “benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic” work. Firstly, this right should be balanced with other rights in the ICESCR, and any case of a limitation of this right, according to the ICESCR Article 4, should follow “a legitimate aim, and must be necessary for the promotion of the welfare in a democratic society”. Next, the limitation should be minimal and comply with an adequate standard of authors’ living. And the last, the limitation in favour of public interest should be provided with compensation for a creator²⁷.

3.6. User’s minimum standard

By Helfer, "human right of access to education materials cannot be determined solely by the ability to participate as a consumer in the markets that copyright laws create and sustain" (Helfer 2011, p.317).

25 Supra, Para 7

26 Supra, Para 17

27 Supra, paras. 22-24

According to Berne Convention, a minimum level of users' rights is "a matter for the legislation in the countries of the Union to determine" (art.10, 10bis). Therefore, in Story's opinion, there are no obligations to develop users' rights in the international IP regulation; it is voluntary for each participator of the Union (Story 2009, p.53).

How should a definition "users' rights" be shaped? Story believes that "words carry messages" and firstly, it needs to change copyright language instead exceptions and limitation in promoting reforms it is necessary to use users' rights. Secondly, the demanding of the access to education should be based on the rights but not "fair use". Otherwise, any good wishes, for instance, of an organisation of blind people to have affordable and accessible learning materials will be faced with the owner's superior position to forbid²⁸.

Sganga specifies three groups of rights: author's interest, individual human rights, and public interest which should be defined in the future copyright reform. She notes that user's human rights are not mandatory with the exceptions of the copyright; Southern countries, where copyright becomes more and more restrictive, lose many opportunities to the development and meet their cultural needs without comprehensible instruction how to enjoy these exceptions (Sganga 2015, p.566). In terms of the global trend to promote harsh copyright law, she continues, there appears "chilling effect" blocking access to participation in cultural and scientific life in the Global South. Therefore, it is substantial to develop minimum users standard for access to cultural goods for education and growth (Sganga 2015, p.562). Forsyth agrees with this stance to establish minimum core rights, which can not be by international trade or other agreements, for full enjoyment to the right to participates in cultural life, more provision for non-commercial initiatives, and extended access to works for people with disabilities and speaker of minorities languages (Forsyth 2015, p.109).

Helfer notes, that, on the one hand, copyright gives the considerable right for owners and create obligations for users to cease activity regarding reproducing, distributing and translation with copyrighted content. On the other hand, the human right to education gives users right to avoid all action which will increase "social cost" of accessing to textbooks or course packs; else the transaction cost to access can impinge enjoyment of human rights (Helfer 2011, p.358).

28 Alan Story, Inside views: 'Balanced' Copyright: Not A Magic Solving Word, Intellectual Property Watch. <http://www.ip-watch.org/2012/02/27/%E2%80%98balanced%E2%80%99-copyright-not-a-magic-solving-word/>

3.7. Ideal copyright and last attempt to balance the three-step test

In section 2 we considered three-step test which is a provision of using copyrighted material without owners permission and any sanctions in the WTO body. In brief, to repeat the central idea, the test prescribed by the TRIPS Article 13 gives conditions such as “special case”, “not conflict with normal exploitation” and not undermine right holder’s interests.

What is provided by human rights convention? GC no.13 point out that full realization of human right to education demands state obligation to respect, protect, and fulfil (facilitate and provide) the right²⁹. General obligations imply progressive realisation within the scope of a state’s available resources, which means continuing obligation of the state toward to full implementation on the right. The right to education, like all human rights, imposes three types or levels of obligations on States parties: the obligations to respect, protect and fulfil. In turn, the obligation to fulfil incorporates both an obligation to facilitate and an obligation to Provide. Respect means to avoid any activities which can hamper enjoyment of the right to education. Protect requires the state to “prevent third parties from interfering with the exercise of the right to education”. The last, “to fulfil” requires States to implement activities that facilitate and provide enjoyment of the right to education for individuals as well as to encourage the implementation of the right to education for vulnerable groups³⁰.

For example, Sganga demonstrates how it can work in the sphere of cultural rights. She points out that multi-level approach to state obligations to ensure the realisation of the rights under Article 15(1)(a) covers tripartite state obligation: to respect, to protect and to fulfil the right to. “To respect” means any enforcement of IP should not derogate access, participation and endowment in culture and should be balanced in compliance with GC no.17 and set up in all leading international treaties and conventions which harmonise IPRs. It is especially important for exceptions and the three-step test. And the court should not narrow any interpretation of the three-step test. With reference to the obligation to protect, states should prevent all third parties breaking an enjoyment of the right in the ICESCR Article 15(1)(a). For instance, Sanga offers to protect consumers rights in the private use of IP. And the obligation to fulfil refers to the enactment of measures (not only provide financial support) which will facilitate and promote the access to cultural life. In Europe, the Europeana is a

29 In accordance with GC 13 paragraph 46, 47, “The obligation to respect requires States parties to avoid measures that hinder or prevent the enjoyment of the right to education. The obligation to protect requires States parties to take measures that prevent third parties from interfering with the enjoyment of the right to education.” “The obligation to fulfil (facilitate) requires States to take positive measures that enable and assist individuals and communities to enjoy the right to education. ... States parties are obliged to fulfil (provide) a specific right in the [ICESCR] when an individual or group is unable, for reasons beyond their control, to realize the right themselves by the means at their disposal.”

30 CESCR General Comment No. 13: The Right to Education (Art. 13), para. 35

noticeable project funded by the European Union and called to make cultural heritage opened (Sganga 2015, pp.572-575). At the same time, she reveals that legislators and courts having a substantial impact on the exercise of cultural rights have never utilised a human right approach in the balancing of a cultural right with others (Sganga 2015, p.566).

By Chon, copyright has a close link to education and public health measures such as fertility, mortality and morbidity (Chon 2007, p.218-219). Let's consider an example, how the right to health can be deployed and balances with TRIPs based on human rights. A similar frame can be used with a proven access to educational materials.

The General Comment No 14 for ICESCR defines the right to health as a right to benefit from the facilities, goods, services and conditions which are necessary for the implementation "the highest attainable standard of health" (General Comment No.14). Moreover, the ICESCR Article 5 prevents any derogation and limitations of this right. The UN Report highlights that this right demands responsibility of all members of society including business³¹. At the same time, the TRIPS Agreement Article 7 (Objectives) states that the intellectual property protection and enforcement contribute to the technological development and the proliferation of knowledge. This article emphasises that this safeguard aim is to encourage technological and knowledge advantage for both groups producers in favour of social and economic prosperity as well as a balance related to rights and obligations.

On the one hand, the UDHR Article 27 and the ICESCR Article 15 define right for everyone to takes part "in the cultural life of the community, ... and to share in scientific advancement and its benefits" as well as to encourage "right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author". Two sites of these articles say for members that current IPRs construction should be "balance[d] between promoting general public interests in accessing new knowledge as easily as possible and in protecting the interests of authors and inventors in such knowledge"³². Can we consider the two "balances" in the TRIPS and the ICESCR as equal? The UN Report (2001) points out that these balances may not mean the same. The rapporteur adds that the balance between private and public interests in the intellectual property should not derogate of any the other rights"³³.

31 Report of the High Commissioner, 2001. The impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on human rights (No. E/CN.4/Sub.2/2001/13)., Para 35.

32 Ibid., Para 10.

33 Ibid., Para.13, p.6

Shaheed offers ground for reforming copyrights. Firstly, exception and limitation should promote cultural freedoms and participation. Secondly, authorship does not imply control over the work. Unpaid use should be extended to the non-profit initiatives, unprofitable creators, financially vulnerable groups. Above mentioned exceptions cannot be changed by contract or any technical protection measures. All copyright limitations should be flexible and put in the constitutions and based on human rights approach. For example, libraries and education need to have own "international fair use provision" which will reflect minimum standards recognised by most countries. Least developed countries should save exemptions until they achieve a stage of development greater the "least developed" (Shaheed 2015, p.20). At the end of the report, Shaheed recommends to implement the compatible copyright to freedom of expression, right to science and other human rights. Also, It is necessary to make a permanent analysis of the domestic copyright influence of human rights. Any interpretation of copyright by a court should be in the compliance with rights to science and culture. Any changes are possible only in favour of a necessity of the promotion "of general welfare in a democratic society" (ICESCR, art.4) upon less restrictive approach (Shaheed 2015, p.20).

3.8. Soft strategy and direct action

At the end of this section, several examples are provided which show how civil initiatives could prove and promote free access to educational resources using a human rights approach.

The first example shows how the NGO located in the Philippines interacted with the state to improve access to education; how the organisation linked government's human rights obligation to the CRC Article 28(1). Further, the NGO's report exposed that it is possible to use the flexibility of the Berne Convention and the TRIPS using compulsory licence mechanism making educational materials with affordable prices. This report emphasises the primary character of human right obligation in the bilateral, multilateral trades agreements. Moreover, an assessment of these impact to child access to educational materials should be implemented before signing such treaties. The text includes recommendations to follow the human rights obligation under Article 28(3) CRC in implementation new regulation regarding WIPO copyright treaty (Helfer 2011, p.361) for fostering access to modern knowledge. Here is some extraction from the report of the 3D NGO to the Philippines authorities:

"In line with its obligation under Article 28(1) of the [CRC], we encourage the Filipino government to use available flexibilities under the Berne Convention and the TRIPS Agreement to ensure copyright legislation supports access to textbooks and other teaching materials... To achieve this goal, we recommend that the government extends the list of

exceptions and limitations within the Intellectual Property Code... the Filipino government has the obligation to take the right to education into account when negotiating and implementing multilateral, bilateral and regional trade agreements. It should therefore conduct impact assessments before negotiating such agreements to ensure that the copyright ... [does] not impede children's access to educational materials... and future legislation related to ... the internet fully takes into account the right to education. If the government asks for international technical assistance to implement the WIPO Copyright Treaty, this should be done in accordance with Article 28(3) of the [CRC] and facilitate "access to scientific and technical knowledge and modern teaching methods" (Helfer 2011, p.361).

Another example of direct action from Kazakhstan where a former student created a hub of copyrighted articles without asking any permission. Now, the website collects around 50 million different scientific articles. The site helps researchers, students from both developing and developed countries: India, Latin America, the US, the EU, China. In 2015 the Elsevier, one of the biggest academic publisher, launched a suit against the founder, Alexandra Elbakyan. What are the main incentives to create the hub? Firstly, the creator of this website claim that access to knowledge should be possible regardless any affiliation (for example, to Western universities) and income (average an article cost on Elsevier is around 30 USD)³⁴, which are considered by Sci-hub founder as barriers to access to knowledge. Secondly, Elbakyan argues, the activity is lawful, because the Sci-hub is more than a place for supporting online sharing culture, it is "also about the right to education and learning, which is denied to people by copyright law"³⁵. Moreover, Elbakyan grounds her activity on legal basis namely the UDHR Article 27 provisions promoting participation in the cultural life and enjoy scientific benefits³⁶. The case also demonstrates that a discussion about copyright moves toward global level on the ground of UDHR and cannot be considered just in the context of the domestic copyright exceptions and limitations.

34 Sci-Hub Tears Down Academia's "Illegal" Copyright Paywalls, <https://torrentfreak.com/sci-hub-tears-down-academias-illegal-copyright-paywalls-150627/> Date of Access: 30.04.2016

35 Sci-Hub vs. the Scarcity-Mongers <http://thebaffler.com/blog/scarcity-mongers-silverman> Date of Access: 30.04.2016

36 Torrentfreak.com Supra Note 15.

Conclusion

This study considered the interconnection between copyright and access to educational materials. Firstly, current copyright creates various issues (price barriers, transaction cost, “chilling effect”) for governments, local publishers and the academic community in different developing countries. Secondly, there are two central groups amongst all the approaches for overcoming the current copyright obstacles: top-down and bottom-up. The way from below demonstrates in practice better social effect rather than the top-down approach, which mostly concentrates on the interpretation of current norms in copyright and protection of the existing business models of the North. Lastly, international HR laws give considerable weight to overcoming the clash between a user’s right to education and the owner’s economic interest as well as providing the framework for a future minimum standard in favour of the user’s human rights.

Whilst research shows that there is not one opinion among theorists about existing provision, such as three-step test (Kouletakis 2014, Foster 2008, Sganga 2015) and compulsory licence (Story, 2006,2009; Chon 2007; Hestermeyer 2008; Rens 2009, Ramcharan 2013), practice demonstrates that approaches based on the needs of people both in the Northern and Southern countries is efficient in overcoming barriers to access to learning materials. Moreover, the “from below” way creates new social movements (such as Open Access, Free Open Software, Creative Commons) with tangible outcomes for the enjoyment of the human right to education.

This study concentrated on a solution which can be useful as a theoretical kit for HR activists, policy or decision makers wishing to improve access to learning materials in the Southern countries. Further researchers can continue to study the question analysing non-state actor’s responsibility in providing access to learning materials or developing ideas on how TPM’s derogate access to education materials and breach state’s human rights obligations. Both suggestions for further research become especially important due to globalisation and digitalisation increasing their influence on the production and distribution of knowledge among different means and countries.

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