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MDiv

Globalization and Intellectual Property

How does the TRIPS agreement affect developing nations

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1 Introduction

“Intellectual property” (IP) is a broad term which has only the meaning it evokes. Legally, it regroups different different areas with different legislation. Copyrights concern literary and artistic work, as well as computer software and the like. Trademarks touch to names or labels denoting a quality. Patents protect any invention, product or process, inventive, and capable of industrial application.

Each of these has different legislation, different working mechanism, are used with different strategies or interest, and have different impact, notably on developing countries. In this study, I focus on patents and copyrights, leaving trademarks completely aside.

The questions I'm asking are: in our globalized world, what is the current international legislation about intellectual property rights (IPR)? Where does it come from, and how does it affect developing countries in the global market? Because of the negative impact of IPR on the ground, I then ask questions about their legitimacy. What are the current ethical, epistemological and socio-economical debates revolving around IPR? Lastly, I ask where to find viable alternatives, and of what kind they are. Since it is an exploring field, no definite answers are given, but a general flavour and direction. Lastly, I briefly look at the issue with themes relevant to an explicitly Christian perspective of for a church reflection.

2 Globalization and Intellectual Property Rights

An overview of the current situation

2.1 Key organisms and documents

Two organism, the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO) are the main actors (though the second more than the first) when it comes to global IP legislation and enforcement. Those are now briefly presented.

World Intellectual Property Organization (WIPO)

The World Intellectual Property Organization (WIPO) is one of the 16 specialized agencies of the United Nations. Its objectives are stated as follow:

It is dedicated to developing a balanced and accessible international intellectual property (IP) system, which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.¹

As matter of international intellectual property became more and more important, the end of the 19th century saw two important conventions. Nations gathered in 1883 at the *Paris Convention for the Protection of Industrial Property*, followed in 1886 by the *Berne Convention for the Protection of Literary and Artistic Works*. Both of them created bureaux that united in 1893 to form the *Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle* (United International Bureaux for the Protection of Intellectual Property). In 1960, the bureaux moved from Bern to Geneva, became the WIPO in 1970, and were internalized by the UN in 1974. In 1996, WIPO made a cooperation agreement with the World Trade Organization (WTO) concerning the implementation of the TRIPS agreement, on which we will come back.

Each Member State is given one vote, which led rise to violent criticism: during the 1960s and 1970s, developing nations were able to slow the extension of intellectual property, notably concerning pharmaceutical patents. As it happened, this did not please pharmaceutical companies. In 1982, an article entitled “Stealing From the Mind” appeared in the *New York Times*, in which Barry MacTaggart, the then chairman and president of Pfizer International, accused the UN, through the WIPO, to try “to grab high technology inventions for underdeveloped countries.” (MacTaggart, 1982) This gave the WIPO a reputation of “international socialism”, and allowed the locus of intellectual property rights discussion to be moved to an other organism, more favorable to Pfizer and other companies, which turns out to be the General Agreement on Tariffs and Trade (GATT) and its successor the WTO. (Drahos & Braithwaite, 2002:61-62)

¹From WIPO official website, http://www.wipo.int/about-wipo/en/what_is_wipo.html (23.08.2011).

The General Agreement on Tariffs and Trade (GATT) and the World Trade Organisation (WTO)

The General Agreement on Tariffs and Trade (GATT) was signed in 1947. The main text was updated in 1993 during the Uruguay Round (1986-1994), and the newly issued document, GATT 1994, stipulated the creation of a body (GATT was a set of rules), the World Trade Organisation (WTO).

The WTO is “the only global international organization dealing with the rules of trade between nations. (...) The goal is to help producers of goods and services, exporters, and importers conduct their business.”² It provides a set of trade agreements, and a dispute resolution process. It has now 153 members as well as 30 observers.

During the Uruguay Round was also decided the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). This document establish the minimum requirement that member states must provide regarding intellectual property rights (IPR). As example, copyright must extend to at least 50 years after the author's death, it must be granted automatically (not registration needed), computer programs must be regarded as literary work, and patents must be enforceable for at least 20 years. Those requirements are generally regarded as “strong” IPRs.

An important amendment was adopted in the 2001 Doha Declaration on the TRIPS Agreement and Public Health at the request of developing countries, allowing for a permissive reading of the agreement when it comes to essential medicines. The same year, Resolution 2001/33 of the 57th session of the UN Commission on Human Rights recognized access to medicines in the context of pandemics as an essential human right. (Blakeney, 2006) This compulsory licensing being of little use to country whose chemical industry is not developed enough, a waiver was issued in 2003 allowing the import of patented medicines to poor countries, until the two thirds of the WTO's members have accepted the change³. The

²From the WTO website, <http://www.wto.org/> (28.08.2011).

³This was acclaimed as a victory for many developing nations, though there are some voices who fear pharmaceutical companies won't have the incentives to research any more. In the long run, this decision might be devastative for developing nations. “When this outcome threatens, developing countries should press for alternatives to patents as a means of financing the development of pharmaceutical products that are

original deadline was set to the 1st of December 2007, extended to the 31st of December 2009, and again to the 31st of December 2011.⁴

2.2 What does it mean for a developing nation in a globalizing world?

Globalization may be understood as the “rapid integration of good and services over borders both real and virtual.”⁵ Added to the increasing speed of integration of goods, the exponential development of new digital technologies have completely change the scene of “property” and market, the balance of power, the relations between means of production, diffusion, receptions and consumptions. (Wang, 2003) In this context and under the TRIPS agreement, knowledge understood as proprietarizable becomes goods. How are stronger intellectual property rights affecting developing countries in this situation?

Number of studies show that stronger IPRs have beneficial impacts for developing countries' economy. (see f.eg. Fink & Braga, 2005) For example, they contribute to move from static competition (low wages and old technologies) to dynamic competition (innovation and application of new technologies), and especially they boost foreign direct investment (FDI) and licensing, allowing for technology transfers. (Lippoldt, 2006) Evaluating only FDI and technology transfer, results are positive. Yet, licensing comes at a cost, and a broader picture of the price of knowledge under the form of IPR—mainly patent and copyright—leaves a darker image.

Who actually owns knowledge? In 2000, 90% of the world's patent were held in the North. (Cosbey, 2000:11) According to a WIPO document of 1998, *GALA and GRAIN*, citizens from developed countries hold 95% of African patents, 85% of Latin American patents and 70% of Asian Patents. (cf. Barwa & Rai, 2002) Not only that, but the patent game is a twisted one. About two thirds of patents are never produced, but used only to ward off rivals. Studies establish the use of intellectual property rights to establish market powers. (Blakeney,

relevant to their special needs.” (Hindley, 2006:42)

⁴The list of member states having accepted can be found on the WTO's website (http://www.wto.org/english/tratop_e/trips_e/amendment_e.htm). Of notable importance amongst those, the USA, Switzerland, Japan, and the EU.

⁵Definition given in class, 22nd of August 2011.

2006:19-20) This use appeared clearly in the recent acquisition by Google of Motorola Mobility for approximately \$12.5 billion: in the transaction, Google acquired 17'000 granted patents and 7'000 pending patents, "which will enable us to better protect Android from anti-competitive threats from Microsoft, Apple and other companies."⁶ It is clear that in this context, any developing country's industry is largely paralysed in the global market. And patents are further threatening, for life form, if modified, can be patented. Barrientos (2002:133) gives a few examples. Neem was used as a pesticide by women in India for years. Now, it has 35 patents in the US and the EU. Brazzein is a substance found in West African berry, five hundred times sweeter than sugar. An isolated protein is patented in US and EU, and no plan are made in making West African people share in the estimated US\$100 billion a year market. An enactment of the TRIPS agreement would enable the global privatization of food resources in general. (Blakeney, 2006:27) For African communities, this is a question of life. "they depend for their lives and livelihoods on biodiversity and indigenous knowledge, vulnerable to the greed, hoarding and abuse of bio-pirates and their commercial interests." (LenkaBula, 2005:56) Financially-wise,

Given that an overwhelming proportion of patents originate in the developed world, patent protection is likely to lead to a transfer of income from the less-developed countries to the more-developed countries and thereby widen the income disparities between the two. (Barwa & Rai, 2002:49)

When it comes to copyright, the TRIPS agreement forces WTO's states members to adopt the first 19 articles of the Berne Convention⁷, "which will probably have the effect of locking students and researchers in poor countries out of the global information system." (Blakeney, 2006:30) Indeed, the market of ideas still largely used as a revenue extraction mechanism, including in developing countries. (Boldrin & Levine, 2006) As an example, the academic publishing world is dominated by three giants—Reed Elsevier, Springer and

⁶Larry Page, CEO of Google, 15th of August 2011, <http://googleblog.blogspot.com/2011/08/supercharging-android-google-to-acquire.html>. An other recent example is Apple's trial against Samsung, to prevent them to deploy their new product (Galaxy Tab 10.1) which violates one of Apple's patent over a flat rectangular design.

⁷Interestingly, the USA acceded the Bern convention only in 1989, and we will see that the story literature publishing in developed country is one based on what we would call today "piracy", the USA more than anyone else.

Wiley—who owned in 2002 around 42% of all journal articles published (among the other 2'000 publishers). Those enterprises are profit-based. As a consequence, many libraries even in developed countries cannot pay the escalating subscription prices for academic publications. (McGuigan & Russell, 2008)

So, in the end, who will benefit from the application of the TRIPS agreement in developing countries? FDI will rise, as well as licensing, since most developing countries are importers of technology from developed countries, and the strong IPRs will allow enterprises to extend their markets without fearing “piracy”. The World Bank estimates a large benefice for developed nations in this new market. For example, it estimated a \$19 billion benefit per annum for the USA. (World Bank, 2001:133) Given that a large majority of patents are held in developed countries, “patent protection is likely to lead to a transfer of income from the less-developed countries to the more-developed countries and thereby widen the income disparities between the two.” (Barwa & Rai, 2002:49) According to Hindley (2006), we cannot be sure of the global gain that will arise from IPRs enforcement, since we cannot be sure that stronger IPR will stimulate creativity and innovation. But “the belief that the TRIPS agreement creates, or will create, a transfer of substantial wealth from the residents of poor countries to the residents of rich countries has a much firmer basis.” (Hindley, 2006:33) This transfer of wealth gives the impression that “the WTO is a vehicle for the exploitation of poor countries by rich ones,” (*Ibid.*), and plays a major role in the negative view of the WTO from developing countries.

And added to the cost of patents licensing, copyright royalties, market monopolies and other IPR-related economic strategies, there are important cost to implement the TRIPS agreement. In Egypt, for example, it was estimated that a fixed cost of \$800'000 was necessary, with additional training cost of around \$1 million. (Blakeney, 2006:25) engineers and lawyers have to be trained and employed to work for the largely foreign-owned IPRs. Is it likely that there also, foreign enterprise with knowledge and technology will make profit.

The Commission on Intellectual Property Rights (CIPR) issued a report in 2002, *Integrating Intellectual Property Rights and Development Policy*, in which they stated:

although the potential benefits from the development of copyright-based industries in some developing countries may be enticing in some cases, it is hard not to conclude from look-

ing at the evidence from the developing world overall that the negative impacts of stronger copyright protection are likely to be more immediate and significant for the majority of the world's poor. (CIPR, 2002:19)

Why, then, did developing nations accept such an agreement? Why would they want to enforce it? This is the question to which we now turn.

2.3 Why would a developing nation sign the TRIPS agreement?

Signing and enforcing the TRIPS agreement means willingly entering a game where all the cards are held by opponents. How did we get to a place where IPR play such an important role, and more importantly, why did developing nations entered that game?

Drahos & Braithwaite (2002) present a short history of copyrights and patents. It all started as tools for censorship and monopoly privileges granted by the king or queen. As Gutenberg's invention spread out, the best way to prevent the diffusion of books questioning the authority of the king or of the pope was to control the press industry. But "piracy" goes well: unauthorised press diffuse books and copy others, political, religious or pornographic. To the point that in the 1750s, 40% of those imprisoned in the Bastille are there because of book trade offences. After the French revolution, the press is freed, and Europe sees a period of "unprecedented democratization of the printed world." Quickly, national copyright put things to order, but the international scene is quite different. Nations unashamedly copy books from other countries, which is seen as a honourable business, sometimes subsidized by the king, and offered as a public service: knowledge is disseminated cheaper, and everyone gains if knowledge is spread quickly and freely.

During the 19th century, multinational agreements are on the agenda. Though one could hear lots of rhetoric about the immutable rights of the author, and the need to protect their work of genius, it was really the trade agenda that drove the process. Process which culminated ultimately in the Bern convention in 1886. Interestingly, the US remained absent, offering foreign authors no protections on their territory. "American publishing was built on the piracy of European works." (*Ibid.*, p.32-33) In one incident, a book was telegraphed from London to the US the day of its publication, and was available for the new world

citizens in hard copy in less than 12 hours. An 1891 act stipulated that a foreign book could be protected, if it was simultaneously released in the US, and printed there. Ultimately, the US became serious about copyright. "It did so when it realized that its giant software industry made it the biggest exporter of copyright in the world." (*Ibid.*)

The history of patents shows also this rhetoric of author protection and the reality of trade interest. For example, patents were given for an invention of an author of another country. They were largely used for protectionism, so when the German chemical industry grew bigger, the Swiss legislation asked that patents be represented by a model, so that chemical inventions could not be patented in Switzerland. Every nation used patents to protect their industry. Germany made a trade threat, and this requirement dropped in 1907. Later, when developing countries would try to use patents to protect their industries, similar trade threat except for a bigger span would be slapped down by Western powers.

Today, patents are presented as enabling free trade (or, their rejection as impeding free trade). Interestingly, the 19th century showed the opposition of free trade to IPR used for protectionism. During the 20th century, "patent and copyright systems were colonized by big business, which routinely used these systems as the backbone of internal cartels." (*Ibid.*, 36) This is dramatically clear in the cartels of pharmaceutical companies using patents to raise the price of antibiotics (better to sell little at a high cost than a lot at low cost), and let people who could not afford them die. Today, IPR are used to segment the market: a product can be sold in one country for one price through one agent, and all importation in this country are forbidden from countries where the product is sold cheaper. It gives a lot of power over price to IPR owners. Some members of the GATT admitted to Drahoz and Braithwaite that there is something odd in placing TRIPS in an organization ostensibly dedicated to bringing down barriers to free trade.

It is indubitable that the US, the largest exporter of IPR, are advantaged by the agreement. But how were they able to persuade the world? We can see three main factors.

First, the rhetoric of the promise of economic benefit. TRIPS's part I article 7, entitled "Objectives", states:

The protection and enforcement of intellectual property rights should contribute to the pro-

motion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations. (WTO, 1994:323)

This is based on the assumption that “with the removal of impediments and abuses in the operation of intellectual property laws, the resultant flow of technology would lead inexorably to economic development.” (Blakeney, 2006:19) This assumption between strong IPRs and economic development “is generally accepted as an article of faith.” (*Ibid.*) It remains an article of faith at least for developing countries who do not possess a rich portfolio of patents and copyrights. For developed countries, the correlation between other countries strengthening their IPRs in compatible terms and wealth acquisition is more straightforward.

Secondly, the US “Special 301” legislation allows them for unilateral action against countries that offer too little protection for property rights according to their understanding of IPRs. The choice for a developing country is not TRIPS or status quo. It is s.301 US action or TRIPS and WTO protection against self-authorized US action. (Hindley, 2006)

Thirdly, the WTO after the Uruguay Round offered only a single-package of agreements, take or leave. Those who refused are left with the protection of the previous GATT 1947 document, but this one can be resigned within 6 months. And indeed, the US did resign, so GATT offered no protection. A country who refused the WTO package would be facing the US alone, without multilateral protection. (Hindley, 2006)

Altogether, the TRIPS agreement is “not laudable.” It is

nothing less than the culmination of the efforts of a group of developed countries [US, who dragged EU and Japan] to obtain advantageous intellectual property protection abroad for their domestic intellectual property industries, no matter the costs to less developed nations. (...) The U.S. coalition (whose agenda was substantially pushed for by U.S. industries dependent on intellectual property, such as drug and media companies) manipulated the treaty-building process in such a way that the final standards built into TRIPS were essentially dictated by the developed countries' needs and desires. [And] consensus-building among all countries was a myth; the reality was consensus-building among developed countries. (Har, 2008:1812)

In the view of market globalization, world standards for international standards of IPR protection, “competitive pressures leave developing countries little choice but to take action in this regard.” (Lippoldt, 2006:59)

3 The Legitimacy of Intellectual Property Rights

An increasing debate

3.1 Some notes on terminology

As in every debate, terms are loaded. It is quite clear with this “piracy” terminology, used mainly from the defenders of strong IPR, but regularly slammed back on their by their opponents. For example, (Bishop, 2004) shows that wrong figures were given by music industries about “piracy”, plus the fact that they touch some percentage of benefit on each empty media sold (CD-R, hard drive) that is never redistributed to the artist.

Therefore, it is not necessary to be an economist to see that if we abandon the mind washing we received while growing up that taught us that the normal order of society was for a small faction of the population to control the majority of resources, and for the masses to struggle to obtain them, and we apply a trickle-up rather than a trickle-down theory, it becomes quite clear who the pirates actually are. (Bishop, 2004:106)

His point is valid, yet from both sides, the terminology of “piracy” is misleading, as it implies that “unauthorized copying of files” / “sharing with your friends” (chose the one that fits your perspective) or “non-redistributing (il)legitimate taxes” (*idem*) is the equivalent of stealing chips, kidnapping and murdering people. Richard Stallman, a proponent of free software, call people to caution when it comes to terms⁸.

An other term that Stallman criticizes strongly is “intellectual property.”⁹ This is an umbrella term that regroup copyright, patent and trademark law, which all have distinctive histories and legislation. According to him, it is an intentional “seductive mirage” in that

⁸See, for example, an list of terms to avoid because of confusion: <http://www.gnu.org/philosophy/words-to-avoid.html>.

⁹Cf. <http://www.gnu.org/philosophy/not-ipr.html>.

companies gain from the confusion that arise from the idea that intellectual property is somewhat similar to physical property. This allows for propaganda such as “copying is stealing”, for example when Microsoft asks:

You wouldn't steal a Cadillac just because it's owner is rich, would you?
Software is no different.

Well, it is. As Jefferson put it,

If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. (Jefferson, 1813)

This does not justify any unauthorized copy of any idea/book/software/mathematical demonstration/business method/medicine formulas/cooking recipe, yet it should at least forbid the amalgam of copying with stealing, which oversimplifies the debate, and therefore bias it. Moreover, intellectual property relates to information and knowledge, which is built over time by many people. It is therefore hard to know who is truly responsible for it. “All ideas have fuzzy boundaries. Working out where the fences of intellectual property ownership should go is very difficult. In the world of commerce it is legal muscle more than moral entitlement that determines the fence line.” (Drahos & Braithwaite, 2002:26)

3.2 Some of the ethical and epistemological debate

There is ethical debate raging on some specific concern, a great deal of them revolving around the patenting of life forms (cf. *supra*), and notably that of genes. (cf. Cook, 2006) When Francis S. Collins and his team started sequencing the whole genomes, in order to detect and treat genetical illness more efficiently, a private enterprise started to do it. Whereas Collins released his discoveries on the go (“We could not justify even a single day passing where researchers around the world, aiming to understand important medical problems, would not have free and open access to the data being produced.” Collins,

2007:120), Celera Corporation lead a parallel project with the aim of patenting the human genome, and fortunately failed, though after a tough competition.

Patents related to medicine are an other much debated topic. (cf. Goren, 2006; Noehrenberg, 2006) Drahos & Braithwaite (2002:5-10) gives an account of AIDS in South-Africa, in a chapter entitled “Health-Hell in Africa”. The rest of his books shows the place that pharmaceutical companies played in the drafting and application of the TRIPS agreement as part of the WTO, and most of it corroborates the line of the political analyst french singer Renaud:

La médecine est une putain,
son maquereau c'est le pharmacien.¹⁰

I won't enter those debates, their complexity goes beyond the scope of this research. Simply put, considering the massive wealth transfers from developing country to a few developed countries, as well as the non-wealth transfers of potentially-beneficial knowledge (in medicine, education, technology, and so on), it

squares with no theory of justice we know of, except the one that Trasymachus gives to Socrates in Plato's Republic: “I define justice or right as what is in the interest of the stronger party.” (Drahos & Braithwaite, 2002:16)

Moving to epistemological considerations, part of the argumentation when it comes to IPR is centred on the author's right over his work, and part over the social and economical benefit that arise from the incentive for investment in research for innovations. We'll look here at the first aspect, and later at the second.

An author, it is argued, can own his ideas. But can he really? What is the perspective on creativity and knowledge behind? It is interesting to note that the hermeneutics of the 19th century (Schleiermacher, Dilthey) was very much author-focused. The aim of reading was to feel what it is to be the author, the reader is observer, or even consumer, and the work is entirely the author's. With 20th century hermeneutics, Barthes, Foucault and Derrida signed “the death of the author,” which doesn't mean the author is irrelevant, but that he isn't the sole producer of meaning any more. Ricœur showed the autonomy the text aquired

¹⁰“Medicine is a whore, her pimp is the pharmacist.” Renaud, “Étudiant—poil aux dents”, *Le Retour de Gérard Lambert*, 1981.

from its author, its cultural situation and its original addressee, and Gadamer put one word in bold letters over 20th hermeneutics: “tradition.” All interpretation is embedded in the tradition in which we stand. On that ground, knowledge is not simply what the author produced and what the user consumes, identified as bricks building a wall, but it arises from the intersection of the author and the reader, at the confluent of two (or more) traditions, in an intricate web of sources. Is that arguably copyrightable? Can an author have the pretension to say: “this comes from me alone, this belongs to me alone?” Maybe we should try to read the spirit and not the letter of the copyright practice: protection of authors from abuses. If someone has invested times, he must be recompensed. If someone had a brilliant idea, he must be acknowledged. Yet, that doesn't imply that the best way to do so is to lock his contribution in profit-driven publishing companies and ask for astronomic sum. We'll come back to that later.

Apart from my precedent application of the hermeneutical development to the concept of authorship, a lot of deconstruction of the traditional modern Western notion of authorship has been done from different perspective.

As a matter of fact, because of the recent technological development who offer amazing possibilities when it comes to knowledge production and diffusion, and because of the post-colonial era in which we are, there is urgent need for new methodological framework, “as existing theories are insufficient in examining these issues.” (Wang, 2003:38) This is of utmost importance for the protection of knowledge itself, because “in virtually all cases, ways of knowing have correlation to the ways of protection, transmission, legitimization and evaluation of knowledge.” (Oguamanam, 2004:137) Since the western way of knowing is different of that of traditional African cultures, seeking for protection of traditional cultural knowledge within the western IP system may lead to a “forced epistemological assimilation of the former.” (*Ibid.*, p.168-169) Other have also engaged in such post-colonial deconstruction of Western IPR (Barwa & Rai, 2002; Kerr, 2006), for example Vaidhyanathan (2001):

Vaidhyanathan also believes that any sanctions brought by changes in law are culturally and ethnically biased, as they are based on an Anglo-American model. In many cultures, Vaidhyanathan points out, borrowing from and building upon earlier cultural expressions are not considered a legal trespass, but a tribute. (David & Kirkhope, 2004:447)

Barwa & Rai (2002) read the TRIPS agreement from a gender perspective, and concludes that it is built on a patriarchal view of nature, that is “worked” on, where regenerating is not seen as creating but merely as passively repeating.

The regenerating role of women and nature is then defined out of the sphere of innovation, excluding them from the regimes of patents and monopoly privileges. (...) By discounting time and the historically evolving nature of innovation, patenting institutionalizes privilege—those who are left out of the loop (very often poor women are the majority of those excluded) fall progressively behind in the race for ring-fencing products for monopoly exploitation. (*Ibid.*, p.43)

IPR affect differently men and women, from the North and from the South. Those who suffer the most are probably the poor women, she says.

Finally, a last deconstruction I went through, is that of creativity, from a postmodern and “networked” perspective. Gibson (2006) argues that traditional economy is challenged now by a “network economy,” through which the grand-narrative of IPR is progressively challenged, “leading ultimately to what is arguably the current process of the de-legitimation of the intellectual property system.” (*Ibid.*, p.33) Looking at other form of knowledge creation that the traditional enterprise or individual centred, she concludes that

strategic movements such as free software, open source, Creative Commons, and more have shown is that these are sophisticated models of knowledge development, far more complex than utopian fields of shared dreams. In this way, such strategies challenge the security of the corporatised narrative of creativity. Indeed, creativity is not contained by a brand or managed by investment; rather, creativity proliferates. (*Ibid.*,p.125)

Creation is not discrete but continuous, the user is not passive but active, creation is not author centred as in the Romantic ideal of the gifted individual, but community-based.

The rhetoric of the “poor author whose rights are baffled by selfish pirates” does not fit in the present epistemological context, where thousands of authors give their work freely on the Web, ask for contributions of the community, and benefit from the work of each other. What this and the whole history and use of IPR show, is that this rhetoric is no more than rhetoric. Pharmaceutical, software, books and music companies are not really concerned by the “immutable rights of innovation's author,” since those “rights” are sold and traded,

used as weapon against other companies or to establish one's monopoly. The lobbies for the TRIPS agreement do not arise from NGOs concerned by human rights in general¹¹. What is the logic behind the pharmaceutical company who fight “for the ethical right of the inventors” but neglect life quality, health and ultimately life of thousands of those who cannot afford their products?¹² The individual's right is but a masquerade, and the debate has to be situated on the systemic level. “The dangers of central command and loss of liberty flow from the relentless global expansion of intellectual property *systems* rather than the individual possession of an intellectual property right.” (Drahos & Braithwaite, 2002:5)

3.3 IPR debated from socio-economical perspective

I said earlier that part of the argumentation when it comes to IPR is centred on the author's right over his work, and part over the social and economical benefit that arise from the incentive for investment in research for innovations. We now look at the second part. What is the social and economical benefit.

We've seen already that the TRIPS agreement argues that strong IPR will boost the economy of the country of those who apply it. As already stated, many studies (see Fink & Maskus, 2005) confirm this (though lots of them are *a priori*, as Matharoo, 1997). We've seen that the benefit is that of the investment of foreign companies, and the uses of their technologies under the cost of licensing. That developed countries benefit is indubitable, that the economy as a whole (whatever that means) benefits is more dubious, that the developing country itself benefits is very much unclear. It doesn't show that without such IPR system the situation would be worse. Worse it would be, if IPR encourages creativity and innovation in a drastic way, and if “piracy” really impedes world trade.

Let's look at the second proposition first. It is indubitable that counterfeiting and piracy

¹¹Lobbies from NGOs, for example when the cultural heritage of a traditional tribe is used by international companies to make money without the tribe seeing any benefit from it, those lobbies are harder to defend from within the TRIPS agreement.

¹²The hypocrisy is taken to the full when one thinks that those countries now fighting this deadly threat that is piracy did not hesitate not to enforce copyright when it wasn't in their interests.

have an impact on current world trade. Does it mean it has to be prevented? If that was the case, we could apply the same reasoning to other historical situation. It is indubitable that printing machines have impact on scribing services. Does it mean it had to be abandoned? It certainly was a tough times for scribes, some of them lost their job, some of them found ways of transforming their services (offering qualities that press couldn't, for example). But the press invention offered so much opportunities that the loss of one monopoly was worth the global social and economical gain. It is indubitable that when refrigeration was brought to homes, companies of ice-merchant (which was in some cities an important markets) lost their jobs. Was the rational move to forbid fridges in order to save some companies' business model? It seems not. The easiness we have today to copy information offers opportunities that the world did not know during the Berne Convention. Some software companies, for example, decided to allow user to copy, modify and diffuse freely their software, expecting to gain on marketing, and focusing on offering better customer services. It is too early to say that "piracy" impedes the world trade. It affects economy as we know it, and present big actors, but it might offer new opportunities that we cannot think of yet. What is certain though, is that profit-driven companies who do not want to see the world change by fear of losing their privileged position are impeding humanity's progress and virtually preventing a large part of the world to enjoy what technology offers, in no less ways in developing countries.

The first proposition that would justify a strong IPR system is that it encourages innovation, which has a positive social impact. As an example, a pharmaceuticals companies would invest large amount of money if they know they can recover their investment by selling drugs. Without this guarantee, they would not invest, and we would not have medicine. Better a world with expensive medicine than one with no medicine at all. Of course, the best would be a world with cheap medicine! Is refunding the only incentive for investment? Is creativity only money-driven? As Hindley (2006:26) points out, in the absence of patent system, prizes and rewards for socially useful inventions would probably multiply. For example, and caricaturing, we could have a basket of money founded by people wanting a remedy for such illness. The more people want it, the more money is there. Once a discovery is made, the company gets the money as well as the social prestige, and the remedy would fall on the public domain (or under a patent with a much shorter time-span).

Similar kind of initiatives (known as crowd-founding¹³) are developing rapidly in our days, since networks allow for quicker diffusion of propositions and connections of people with similar interest. Plus, “whatever the motivation of inventors, there is no question that inventions appear even where there is no patent system.” (*Ibid.*) In sciences, the prestige is as much if not more a drive than finances¹⁴. We have seen that culture was moving to a networked community creativity. One of the advocates of this community-based creative culture is Lawrence Lessig, creator of the Creative Commons (we’ll come back to that as well), whose book title speak for itself: *Free Culture—How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity* (Lessig, 2004) His observations are shared by many. “Copying and imitation are central to our process of learning and the acquisition of skills.” (Drahos & Braithwaite, 2002:2) IPR put price on information, which raises the cost of borrowing, and as a result chokes innovation, not raises it. To tightened an IPR hinders cultural production. (Vaidhyathan, 2001) And thus, we are taking IPR too far:

Neither Macaulay and Jefferson, nor Le Chapelier and Rousseau would recognize their ideas in the edifice we have erected today. In the name of authorial and inventive genius, we are creating a bureaucratic system that only a tax-collector or a monopolist could love. (Boyle, 2004:11)

All of this does not create a climate appropriate to creativity and innovation, especially now that technology allows for a much faster and easier diffusion of informations and resources, re-sampling, communautary reviewing and improving.

Genius is actually less likely to flower in this world, with its regulations, its pervasive surveillance, its privatized public domain and its taxes on knowledge. (Boyle, 2004:11)

It is therefore difficult to say with certainty that a country without a patent system would have a worse social welfare, and we can even make a good case that given *this* IPR system we have, social welfare would be best without.¹⁵

¹³One of the most famous being www.kickstart.com.

¹⁴Ask Andrew Wiles, during the year where he wasn't sure his proof of the world's most famous mathematical theorem (Fermat's conjecture) was valid.

¹⁵Some of the issues created by IPR as we know them: the patent system is very complex and obscure. The averagely-constituted individual cannot hope by itself to know if his “invention” is already patented or

Our IPR system does not encourage creativity and innovation that much, but arguably present important threats. (The two next-mentioned come from Drahos & Braithwaite, 2002:3-4) They put the rights holder in a position of central command in the market; competition suffer for example when a selling technique is patented. “Essentially the patent functions as a barrier to entry to the market, the height of the barrier varying according to the nature of the patent and market structure.” (*Ibid.*, p.3) They pose a threat to liberty, when scientist stop researching some molecules because too many patents are connected to. The basic freedom of research is interfered. Drahos & Braithwaite call the actual system “information feudalism,” in that just as in Medieval feudalism this system is characterized by relationships of great inequality. The humble folks were subject to the private power that lord exercised over them by virtue of their ownership of the land. Today transfer of knowledge to private hands give them under the TRIPS agreement such power over others, which leave them with an impression of total helplessness.

The conclusion is not that strong IPR always lead to excessive levels of private powers, amassing huge amounts of intellectual property portfolios. “It is just that in our world they have.” (*Ibid.*, p.5.) Given the present situation, what are the alternatives for a developing country?

not. This implies hiring expensive services for search and interpretation of the results. Pursuit for patent-infringement are common ground, sometimes for thing we as non-lawyer would consider intuitive. But given the high cost of penal pursuit, most small parties have no choices but pay licenses. Some entities playing this game of patent-attacks might be business-companies, or can be “patent-trolls”, people owning patent without ever applying them and making money by suing other. For example, many little programmers have been sued by some patent-trolls companies, asking royalties on their revenues, which might be a few dozens dollars out of the \$70 they were making by their software supposedly infringing an obscure patent. Cf. <http://www.bbc.co.uk/news/technology-14682700> for such a story. Small companies cannot pay the necessary lawyers big companies have, and cannot compete at this game. Many potential genius are rebutted from the start. An other issue is that the system cannot recognize simultaneous discoveries. Only the first one (to be filed or to be discovered, depending on the country's legislation) gets the patent. But when one studies the history of sciences, the almost-simultaneous identical discoveries at two different places without connections that appear from time to time is mind-boggling and questions this artificial limit in the patent system.

4 Are There Some Alternatives?

4.1 Where are the alternatives to be found?

In the present situation, are alternatives to be sought within or without the present system?

For some authors, “it would be best to eliminate patents and copyrights altogether.” (Boldrin & Levine, 2006:33) For other, the conclusion is less certain: it would be difficult to make a conclusive case for the IPR system we know if we had too, but it is equally difficult to make a really conclusive case for abolishing it. Since radical alternatives are “sharing utopia”, they prefer the path of “critical theory of plausible reforms to the current global intellectual property settlement.” (May, 2000:181) In any case, given the inertia of the current situation, many authors critical of the present strong IPR system (like Vaidhyathan, 2001; Boyle, 2004; Lessig, 2004) argue for an internal reform allowing more balance between creators' rights and consumers' rights.

Haupt (2008) gives another reason why the change must come from within. He uses—and this is quite interesting for us theologians in the line of Accra—Michael Hardt and Antonio Negri's concept of “Empire”. According to him, profit-driven corporate monopolists try to maximise revenue by co-opting subcultures.

In short, these diverse agents are engaged in communicative exchanges with Empire, which—via multilateral trade agreements; strict licensing conditions for music, films and software; restrictive copyright legislation, such as extended terms of protection; and court action like the successful legal challenge to the first version of Napster—“steals” or appropriates the cultural expressions or practices that belong in the public domain. (*Ibid.*, p.xxiii)

Empire is a *decentralised* and *deterritorialized* apparatus of rule that progressively incorporates the entire global realm. Any revolutionary possibilities can only emerge from within Empire. As example, Free Software use the very legislation of Empire, copyright with a specific license, in order to assure that the code remains free, that no corporation may privatise it. Interestingly, the Internet is an alternative place decentralized and deterritorialized, but the “corporate monopolist” try now to make it centralized in order to control its revolutionary power. Emblematic of this is the fight against P2P networks who, *par*

excellence, are uncontrollable.¹⁶

I can see two strategies when it comes to IPR. One tries to change the legislation, the other tries to transform the whole system by a new practice. It's more the intention or the perspective than the rules that are changed, in order to allow new possibilities. I call the first strategy "transformative", and the alternatives issuing from the second "subversives."

4.2 The transformative strategy

The transformative strategy tries to change the legislation of the current system in order to restore some equity in the system. Balance has to be found, and as quick as possible. "The more the copyright regime is imbalanced to favour copyright holder, and therefore developed world, interests over user, or developing world interests, the greater the likelihood of a legal backlash against copyright holder prerogatives." (Peltz, 2009:271) Out of balance, the system would chill creativity entirely, which is in the interest of no one.

Some countries made requirements to amend the TRIPS agreements. This must be continued and sustained. For example, in 1999, Venezuela asked, among other things: that no patent be accorded on invention made with foreign genetic material; that a system of protection of intellectual property applicable to traditional knowledge of local indigenous communities be established, with recognition of the need to define the rights of collective holders; or that be established mechanisms of supports for developing and least-developed countries through electronic commerce, which involve strengthening developing strategies, and facilitate open technology transfer on a reasonable commercial basis. (Blakeney, 2006)

Such a successful proposal, on the side of the WIPO, is the 2004 "Geneva Declaration on the Future of the World Intellectual Property Organization", as a result of Argentina's and Brazil's "Proposal for the Establishment of a Development Agenda for WIPO". The

¹⁶Hardt and Negri's concept of Empire, and the way it is used here by Haupt, belong to "the most classical of the dialectics of 'progressism': Empire and the destruction of the old world announcing the rise of the multitude." (Labelle, 2010) This terminology, as reproached to the Accra declaration, can be criticised in that it doesn't give a very balanced and nuanced view of the situation's complexity. Yet, it also has the merit of enlightening some of the issues, and deserves none-the-less to be carefully listened to.

reasoning is straightforward: UN have the Millennium Development Goals, WIPO is part of the UN, therefore WIPO should be clearly Development oriented. A team is now working on a draft Access to Knowledge (A2K) in which they would like the WIPO to work in order to help knowledge diffusion by fixing maximum IP requirement (whereas TRIPS fixes minimum IP requirement, and states can decide to be more zealous).

My economical skills are somewhat limited (as an euphemism for “almost non-existent”), yet I don't understand why the limitation of patent and copyright is always set in time-span. If it is really in order to compensate the risk of the investment, then it should better be set in proportion to the investment. For example, we could have a patent system that stipulate that after the patent-holder has refunded n times her investment, the invention falls back in the public domain. This would allow for invention to be quickly usable for others, without having the investor disadvantaged or not recompensed for the risk undertaker. An alternative to that could be that a patented invention is usable by other, but a limit of their benefice is fixed in proportion to the benefice of the patent holder, say one tenth, one hundredth or one thousandth for that matter. Both of these systems have limit (and potential defeater), but they seem to me more just. Anyway, the time limit are getting longer and longer, whereas the innovation is getting faster and faster. To be coherent, limits in time should be smaller: in the exponential growth of technology, 40 years is way to much. If the investment for a technology is not returned within a few years (even less), it probably never will, and only will be used as patent troll (to fight other companies or individuals). Releasing in the public domain every patent after a few years would make things more equal, law suits less confused, and would not be a deficit for enterprises—only for patent-wars, but well...

Moreover, since the putting into place and maintenance cost of the agreement is significant, poor countries have a strong ethical case for asking assistance (technical and financial) in that area. They can be bold in requiring that their interest be considered, since US, EU and other developed nation played a rough game without much concerns. (Hindley, 2006)

Finally, this should be on the forefront agenda of the struggle against poverty. Without technological redistribution on reasonable terms, knowledge diffusion especially in the educative and scientific area, there is little hope for developing country to attain self-

sustenance. “Minimizing or eliminating unjust innovation diffusion ought to be an essential part of any pro-poor political strategy.” (Papaioannou, 2011:335)

4.3 Some subversive alternatives

Subversive alternatives use the technological and legal apparatus to deploy a qualitatively different way of producing, diffusing and interacting with knowledge.

One of the most developed approach in that matter is that of *Free, Libre and Open Source Software* (FLOSS). At the beginning of the history of informatics, Software were exchanged freely, source code was accessible and modifiable. When Empire realised money could be made, it was argued that software was copyrightable like any literary work, sources were hidden, and proprietary software was born. A growing number of individual, though, decided to keep on with the old way, finding it either more efficient (Open Source movement) or more ethical (Free Software movement). The result, though we don't know it, is everywhere. The GNU/Linux operating system (alternative to Microsoft Windows or Mac OS) runs in a large number of server (computers as node of the Internet), individuals computer, or embedded hardware. OpenOffice (now LibreOffice) or Firefox are maybe the two most well known software. What we don't realise using the World Wide Web (WWW) everyday, is that without the competition of Netscape (predecessor of Firefox), Internet Explorer (Microsoft's Web Navigator) would have had the monopoly of the Web, and therefore the ability to fix (and hide) protocol. FLOSS movement always valued and argued open protocols which allow for competition, that almost every other corporation try to close and hide in order to alone have control.

How is that useful for a developing country? FLOSS, instead of selling software, sells services. Software is considered free knowledge. Any can download his version of any FLOSS software, try it, modify it (or pay someone to modify it), use it the way he wants, and rediffuse it. One of the direct advantage is the social embeddedness.

At the very least, the FLOSS strategy encourages an explicit social embeddedness in local communities, rather than an importation from societies where technologies have been developed with different problems in mind. (May, 2006:159)

This allows for more adapted solutions, as well as reduced amount of money transfer to the US or EU. The small amount won't change it all, but any reduction is welcome. A local software market can easily develop, with a regional dimension. Anyone who wants to be trained in FLOSS programming can, and a very large helpful world-wide communities helps in many ways. Most importantly, FLOSS uses a set of licenses (the most famous being the GPL) which are compatible with the TRIPS agreement. The trick is that in the license, the copyright holder asserts both her rights over the software and the authorization to use, modify and diffuse it to anyone. Respecting copyright legislation means respecting the license, which in that case allows explicitly what copyright legislation forbids by default.

Governments have significant role to play, to encourage the use and adoption of FLOSS. Not only cost are reduced, local engineers can be employed, but also a far larger control is allowed over one's data, since we know exactly where the data are, and what the software does, whereas with proprietary alternative we can never know the program does only what it says it does. Moreover, corporations like Microsoft or Apple are trying their best to keep their grab on their users, by using proprietary closed format that reduce interoperability (once you have your data in one of their software, you cannot easily change software because data won't be compatible, the firm intentionally does not give specification). Not only that, but they are doing pressing lobbies, often giving their software freely (but updates or maintenances are not, and you cannot change), just like others give the first drug dose free.

FLOSS is not *the* answer, but is a definitively good starting point for a developing country who wants to keep its money on the territory, as well as control over its data. It is important here to understand that the issue is not economic versus non-economic strategy, since FLOSS is also an economic strategy (IBM is one of the important producer of FLOSS, Google is an other). And FLOSS is not against IPR, since it uses it, and goes to court when necessary. This is a typical example of subversive strategy, used widely across the world. For a general use of FLOSS in developing country, see May (2006), and for a specific case in Ethiopia, see Gjerull (2006).

An other alternative, in the same line, is that of Creative Commons (CC). CC is a set of licenses for easier diffusion of all kinds of digital resources (text, images, musics, videos,

and so on) under the IPR system. Authors can easily choose between a set of licenses which one correspond to their intentions (authorization of derivative works or not, authorization of commercial use or not, necessity of sharing under the same license or not), and which allows for easier indexation by search engines. Here are a few examples of their use, from the Creative Commons Corporation (2011). The TED Talks, arguably the world's most famous think tank on innovation today, uses a CC license for their diffusion. Cohen, the executive producer of TED media states: "A Creative Commons license clearly communicates that you are really serious about the spread of ideas." In developing countries, CC are put to good use as well. An example is Pratham Books in India¹⁷, whose aim is to give educational books to children. CC licenses allow them to easily find authorized illustrations on the Web, use them, and diffuse their work without losing time and money in legal works. Cory Doctorow, a famous science-fiction writer who uses CC for his work diffusion states:

As a writer, my problem is not piracy, it's obscurity, and Creative Commons licenses turn my books into dandelion seeds, able to blow in the wind and find every crack in every sidewalk, sprouting up in unexpected places.

A last alternative I want to present here is called crowd funding or crowd financing. It has a long history in the sphere of charity organisms, but is recently being more used because of the new networking possibilities. The general idea is to pay for the work done in the production, and not in the diffusion of knowledge, since this is virtually free. Instead of investing one's own money and getting a product on which he expects to make as much money as possible (using IPR to protect your interest), the idea is to gather through networking people who commit themselves to buy the product when achieved. Since all the cost of investment are covered, plus a benefit, the knowledge produced can fall back on the public domain. I think that selling knowledge will become more and more difficult (why paying through taxes the professor's post at the university, and again paying for the book he wrote during that time?), so we'll have to find methods to pay the actual work (research, writing, customer service, concerts and so on) or the actual product (printed book instead of electronic version) while keeping the knowledge itself as free as possible.

¹⁷<http://prathambooks.org>

A few other open and collaborative projects to create public goods, more than FLOSS and CC, are the Internet and the World Wide Web themselves (based on protocol in public domains), Open Access academic journals (whose growth is remarkable now, and pose a lots of questions) or the Global Positioning System (GPS). All those are successful subversive strategies and alternatives that use the actual system while creating a new mentality, from within, for the benefit of all.

4.4 From and for a Christian perspective

Before conclusion, a few thought on a more explicit Christian perspective.

On a theological level, I've read (though can't find where) that helping to think of physical property as belonging to God helped in some land redistribution debate in South-Africa. The earth does not belong to the African who was there first, or to the Afrikaners who cultivated it then, but to God, and our duty is to use it wisely and justly for the benefit of all. A similar argument could be made (and has been made, cf. Frame, Undated; Poythress, 2005) for intellectual property. According to some theological schools, knowing is "thinking God's thoughts after him." Knowledge, then, has to be used in a "godly" way, in a righteous and loving manner, for the benefit of all. In that line, for a Church to copyright anything, from a sermon to a church accounting software, would be trying to privatize God's thoughts. "Freely you receive, freely you must give." But then, of course, the idea of a software or a picture as "God's thought" might be disturbing, and would require some refinement.

On a more individual and spiritual level, capitalism can be seen as playing with human's greed. In the same way, IPR and the TRIPS agreement are a tool playing on our desire for security and autonomy. How much we want to rely on our ideas as cash cows, securing as much revenue as possible, and not having to think how we are going to manage the next step. But if this leads to such injustices as we see in the actual IPR system, basic confidence must be regained. "Do not worry about tomorrow..."

Lastly, we are always talking about rights: human rights, rights to have our ideas not stolen (whatever that means), rights to this and rights to that. As long as we claim other's rights,

I can simply nod and ask governments and NGOs to work for them to be respected. But it seems that Jesus ethical interpellation goes farther, not simply “do not do to others what you don't want them do to you,” (which allow to pinpoint the other and telling him: you did to me what you would not me having done to you, and then suing him) but on the contrary “do to others what you want them do to you.” (Mt 7,12) This is much more demanding, for it does not leave room for indifference. In the case of IPR, it would mean something as “if your knowledge may be of any benefits to others human beings, and if you have the means to communicate it to them, then you are partly responsible for the consequences of your neighbour's lack of knowledge—be it painful labour, miseducation, or sicknesses and death.”

5 Conclusion

We have seen that strong intellectual property rights, embodied today through the WTO's TRIPS agreement, have negative impacts for developing nations. They contribute massively to the wealth transfer from South to North, without importantly allowing the country to fight poverty, develop properly and reach self-sustainability.

We have seen that though the discourse takes sometimes the tone of a “just war” against “piracy” in the aim of protecting the intellectual property rights of authors, artists and researchers, they are really profit driven by a small number of influential nations and corporations, to which they really benefit.

We have seen that they are in no ways easily justifiable, nor globally representative of all nation's episteme, but much more Western grounded, and even in a modern 19th century romantic perspective. They are not adapted neither to the digital world, nor to the “network revolution.”

Yet, in the actual world, the TRIPS agreement as part of the WTO package are inevitable. Some initiatives work at reforming them, though the process is slow and in now way assured. Hopefully, they are alternatives that bring new paradigms compatible with the actual legal system, and allow for knowledge production and transfer in novel ways. It is our duty to stop contributing to this violent “information feudalism”, and explore new

alternatives. This requires experimentation, since the technology and the possibilities are new and create unprecedented sociological reactions. Developing countries may need to take the lead in novel IP legislation or innovation within the current IPR system. This asks for flexibility and creativity, but we need to take a stance. In our everyday use and production of information, as well as our engagement, we contribute either to working for Empire or to subvert it in a free culture for the common good.¹⁸

We will have an information society. That much is certain. Our only choice now is whether that information society will be free or feudal. The trend is toward the feudal.

(Lessig, 2004:para.1135)



¹⁸I must maybe specified that this whole study was made using only FLOSS, from operating system to text-processing through note-taking and bibliography managing. It involved a community of thousands of people over probably more than an hundred nations, motivated by self-interest—as better software quality or salary—and by passion. Everything was done with respect of the TRIPS agreement, using copyright law to protect those tools from being captured by profit-driven industries who set the war-machine that the TRIPS agreement is in motion. I wish I could say the same of the literature I used, but unfortunately most of the good quality material is still under information feudalism.

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