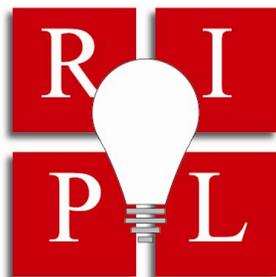


# THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



## A SCIENTIFIC APPROACH TO INTELLECTUAL PROPERTY AND HEALTH: INNOVATION, ACCESS, AND A FORGOTTEN CORNER OF THE UNIVERSAL DECLARATION OF HUMAN RIGHTS

ADAM HOUSTON

### ABSTRACT

For years, there has been vigorous debate over the relationship between intellectual property and health, especially in the context of pharmaceutical patents. Despite numerous attempts to strike a balance between innovation and access, however, few have looked to Article 27 of the Universal Declaration of Human Rights for guidance. Article 27, and its further elaboration and codification under Article 15 of the International Covenant on Economic, Social, and Cultural Rights, explicitly address this balance by pairing the right of everyone “to share in scientific advancement and its benefits” with a similarly universal right of authors to “material interests resulting” from their innovations. This article explores weaknesses of current approaches to the debate over “patients versus patents.” It then attempts to reframe the debate through the lens of Article 27 and its integral balance of rights, and illustrate the utility of adopting this approach.

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ADAM HOUSTON\*

I. INTRODUCTION

The debate over the relationship between intellectual property and health is sufficiently heated that it is difficult to take a step back and assess whether the manner in which the issue is being debated is itself part of the problem. The most public face of the debate sees pharmaceutical companies seeking to protect their patents squaring off against patients in the developing world seeking access to life-saving medications. Companies highlight the costs of testing, developing, and bringing a drug to market, emphasizing that innovation would not be possible without corresponding compensation; patients and their advocates claim financial interests should not take precedence over lives that could be saved if drugs were made accessible to all who need them. The result has been an inherently antagonistic debate, its essence reflected in its distillation down to the t-shirt-friendly slogan “Patients versus Patents.”

The resulting debate unduly restricts the scope of both the problem and its solutions. Furthermore, it sets up a match between two opponents not even engaged in the same sport, let alone following the same rules. On the patients’ side are proponents of the right to health, a right with widespread support, but one that remains largely unrealized and unenforceable in practice, particularly at the international level. On the other side are supporters of stringent international intellectual property standards, which ostensibly rank below human rights in the international law pantheon, but are established in treaties that include enforcement measures backed by effective sanctions. The result is a frequently hostile confrontation between parties speaking incompatible languages, inhibiting the parties’ ability to frame the debate in a way that addresses the underlying issue that concerns both sides: balancing innovation and access.

These are ideas familiar to both health and intellectual property. Indeed, for the latter, the balance between measures to encourage innovation and public access is already central to the bargain underlying the concept of the patent, by which inventors receive the incentive of a limited term monopoly on the exploitation of their discoveries in exchange for making the details of those discoveries public. The realization of the right to health similarly requires both innovating new solutions, and expanding access to existing ones.

At the same time, the implications of innovation and access extend well beyond both intellectual property and health to affect almost all aspects of economic and

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\* © Adam Houston 2014. Adam Houston (JD, MA – Global Development Studies, LL.M – Health Law) works in law and policy at the intersection of health, human rights and international development. He is currently based in British Columbia, Canada. Contact him: ahouston.esq@gmail.com.

social development. Consequently, it is worth re-framing the debate in a way that captures innovation and access in all fields of human endeavor. A more productive framework would not only reconfigure the intellectual property and health debate to address innovation and access, but do so in a way that could integrate parallel discussions around the same issue occurring in contexts ranging from telecommunications<sup>1</sup> to climate change.<sup>2</sup> Such a framework would provide a way to address innovation and access across the full spectrum of human rights, not merely the right to health. The potential scope of such a framework is highlighted by the U.N. Millennium Project Task Force on Science, Technology and Innovation, which concluded that “Science, technology, and innovation underpin every one of the [Millennium Development] Goals.”<sup>3</sup> Fortunately, a framework that meets these criteria already exists, tucked away in a largely forgotten corner of the Universal Declaration of Human Rights.

## II. ARTICLE 27 RIGHTS

Given its utility for both sides of the health/intellectual property debate, it may seem strange that the debaters have almost entirely overlooked the set of rights that balances the protection of the material and moral interests of innovators with a broader right of access to the benefits of such innovations. At the same time, being overlooked is nothing new; as one commentator phrases it, “this right is so obscure and its interpretation so neglected that the overwhelming majority of human rights advocates, governments, and international human rights bodies appear to be oblivious to its existence.”<sup>4</sup>

The set of rights in question exists under Article 27 of the Universal Declaration of Human Rights (“UDHR”), which reads as follows:

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

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<sup>1</sup> See Scott Kennedy, *The Political Economy of Standards Coalitions: Explaining China’s Involvement in High-Tech Standards Wars*, 2 ASIA POL’Y 41, 42 (2006) (discussing the lack of international standards in telecommunications that result from weak non-uniform policies set by individual nations such as China).

<sup>2</sup> Frederick M. Abbott, *Innovation and Technology Transfer to Address Climate Change: Lessons from the Global Debate on Intellectual Property and Public Health*, ICTSD’s Programme on IPRs and Sustainable Development, Issue Paper No. 24, INT’L CTR. FOR TRADE AND SUSTAINABLE DEV. vi, 2 (June 2009).

<sup>3</sup> Calestous Juma & Lee Yee-Cheong, *Development as Learning*, in INNOVATION: APPLYING KNOWLEDGE IN DEVELOPMENT 16 (2005).

<sup>4</sup> Audrey R. Chapman, *Towards an Understanding of the Right to Enjoy the Benefits of Scientific Progress and Its Applications*, 8 J. HUM. RTS. 1, 1 (2009).

2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.<sup>5</sup>

On the surface, Article 27 seems to encompass the entire debate with room to spare, pairing the right of everyone “to share in scientific advancement and its benefits” with a similarly universal right of authors to “material interests resulting” from their innovations.<sup>6</sup> Given not only the existence but also the proximity of the other, it is clear that neither of these rights can be absolute, and as such, they must exist in some sort of equilibrium. What remains unclear, as Donders highlights, are the boundaries of these two obligations, particularly relative to each other.<sup>7</sup> By framing them as interrelated rights, however, the two rights are at least being compared using the same measure. While the UDHR itself has only moral rather than legal standing, the rights articulated under Article 27 are in turn given legal force through its codification, and further elaboration, under Article 15 of the International Covenant on Economic, Social and Cultural Rights (“ICESCR”):

1. The States Parties to the present Covenant recognize the right of everyone:

- (a) To take part in cultural life;
- (b) To enjoy the benefits of scientific progress and its applications;
- (c) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

2. The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for the conservation, the development and the diffusion of science and culture.

3. The States Parties to the present Covenant undertake to respect the freedom indispensable for scientific research and creative activity.

4. The States Parties to the present Covenant recognize the benefits to be derived from the encouragement and development of international contacts and co-operation in the scientific and cultural fields.<sup>8</sup>

This elaboration highlights additional rights such as those relating to freedom of scientific research and to cultural knowledge; these rights may themselves have links to innovation and access, but fall beyond the scope of this paper. In the current

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<sup>5</sup> Universal Declaration of Human Rights, G.A. Res. 217A (III) A, U.N. Doc. A/RES/217(III), art. 27 (Dec. 10, 1948) [hereinafter UDHR].

<sup>6</sup> *Id.*

<sup>7</sup> See Yvonne Donders, *The Right to Enjoy the Benefits of Scientific Progress: In Search of State Obligations in Relation to Health*, 14 MED. HEALTH CARE AND PHIL. 371, 373 (2011).

<sup>8</sup> International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200A (XXI) A, U.N. Doc. A/6316, art. 15 (Dec. 16, 1966) [hereinafter ICESCR].

context, the key elements of ICESCR Article 15 are those establishing that States Parties must take steps “necessary for the conservation, the development and the diffusion of science” to ensure the realization of both the right to “enjoy the benefits of scientific progress and its applications” and to “benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.”<sup>9</sup> That these obligations also have an international dimension is clear from the explicit incorporation of the idea of international co-operation in the realization of these rights under Article 15(4).

Given their prima facie utility in this debate, the continued obscurity of the rights found under UDHR Article 27 becomes even more remarkable with the realization that similar provisions can be found in other human rights instruments ranging from *American Declaration of the Rights and Duties of Man*,<sup>10</sup> which predates the UDHR by a few months, to the *Arab Charter on Human Rights*<sup>11</sup> of 2004. Why then has this provision languished in obscurity? Despite the limited scholarship on Article 27, several authors suggest that its neglected status stems from being “tucked away” near the back of the UDHR.<sup>12</sup> While this suggestion is presumably tongue-in-cheek, for the most part no better suggestion has come to light. Whatever the reason, the limits of the Article 27 rights and their corresponding obligations, both individually and in balance with each other, remain largely unexplored. As Chapman notes, this neglect does create some barriers to the application of Article 27.<sup>13</sup> At the same time, it also means this framework is largely free of interpretive baggage that might restrict its adoption, leaving it an untested, but also untarnished, tool.

### III. THE GLOBALIZATION OF IP

Before dusting off this unjustly overlooked framework and putting it to work, however, it is useful to review some of the shortcomings of the current patients versus patents debate, beginning with the concerns raised by the current global approach to intellectual property and continuing with the inadequacies of using the right to health as the primary counterpoint to addressing those concerns.

While other forms of intellectual property such as trademarks, and more recently, data exclusivity, can and do play a role,<sup>14</sup> the patent is at the center of the health and intellectual property debate. Although variously described as a necessary incentive for innovation and economic growth, and an amoral monopoly on the building blocks of development, the intended purpose of a patent, as noted earlier, is to promote both innovation and access. This being the case, a properly functioning patent system should strike the balance between encouraging innovators by ensuring

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<sup>9</sup> *Id.*

<sup>10</sup> Chapman, *supra* note 4, at 5.

<sup>11</sup> *Arab Charter on Human Rights 2004*, 24 B.U. INT'L. L. J. 147, 160 (2004).

<sup>12</sup> Donders, *supra* note 7, at 371; *see also* Chapman, *supra* note 4, at 1.

<sup>13</sup> Chapman, *supra* note 4, at 12.

<sup>14</sup> Rep. of the U.N. High Comm'r, *Economic, Social and Cultural Rights: The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights*, paras. 10–11, U.N. Doc. E/CN.4/Sub.2/2001/13 (June 27, 2001) [hereinafter High Comm'r Report].

their labors are rewarded, and making the innovations available for public benefit. Over the past few decades, however, the international standardization of intellectual property has dramatically tipped the scales.<sup>15</sup>

Historically, the balance inherent in the patent bargain has been one that countries have been able to reach themselves. Many struck the balance differently for different categories of invention to better reflect their perceived societal value, whether by limiting the scope of what is patentable, or the term of the patent.<sup>16</sup> Although international agreements have existed for a long time—notably the *Paris Convention for the Protection of Industrial Property* of 1883—such agreements left leeway for countries to tailor their systems with domestic priorities in mind, provided they adhered to basic principles regarding non-discrimination, national treatment, and priority.<sup>17</sup>

Even these shared principles marked a change from some national approaches; for instance, while the American Patent Act of 1793 did not permit non-citizens to acquire patents,<sup>18</sup> the domestic acquisition of useful foreign inventions was encouraged; consequently, the United States was able to benefit—and industrialize—by accessing European innovations free from patent restrictions, while simultaneously ensuring domestic innovators were protected.<sup>19</sup> Other industrialized countries adopted similar approaches at various stages of their histories; that many such countries, such as Germany, Japan, and the United States, are today vocal proponents of stringent international intellectual property standards has led to accusations they are “kicking away the ladder,”<sup>20</sup> preventing developing countries from following the same path to development.

At the center of the shift towards international patent standards is the Trade-Related Aspects of Intellectual Property Rights Agreement, better known as TRIPS, which came into effect in 1995.<sup>21</sup> The purpose of TRIPS is to set out minimum standards of intellectual property protection for WTO member states.<sup>22</sup> As such, the agreement is mandatory for all WTO members; at 159, States Parties to TRIPS are roughly equal in number to the 160 States Parties to the ICESCR, drawing an interesting parallel in terms of global reach.<sup>23</sup> In theory, this standardization

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<sup>15</sup> See Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS] (recognizing the need for a standardized multilateral approach to intellectual property rights).

<sup>16</sup> Rogeer Hoedemaekers, *Commercialization, Patents and Moral Assessment of Biotechnology Products*, 26 J. MED. & PHIL., 273, 275 (2001).

<sup>17</sup> Christopher May & Susan Sell, *Forgetting History is Not an Option! Intellectual Property, Public Policy and Economic Development in Context* 15 (Int'l. Property Rights for Business and Society, Birkbeck College 2006), available at <http://www.dime-eu.org/files/active/0/MaySell.pdf>.

<sup>18</sup> Patent Act of 1793, Ch. 11, 1 Stat. §§ 318–23.

<sup>19</sup> Peter Andreas, *Piracy and Fraud Propelled the U.S. Industrial Revolution*, BLOOMBERG (Feb. 1, 2013, 11:24 AM), <http://www.bloombergview.com/articles/2013-02-01/piracy-and-fraud-propelled-the-u-s-industrial-revolution>.

<sup>20</sup> Ha-Joon Chang, *Kicking Away the Ladder*, 54 MONTHLY REV. 10, 10–13 (2003).

<sup>21</sup> Roy Love, *Corporate Wealth or Public Health? WTO/TRIPS Flexibilities and Access to HIV/AIDS Antiretroviral Drugs by Developing Countries*, 17 DEV. IN PRAC. 208, 211 (2007).

<sup>22</sup> Susanna F. Fischer, *Dick Whittington and Creativity: From Trade to Folklore, From Folklore To Trade*, 12 TEX. WESLEYAN L. REV. 5, 59 (2005).

<sup>23</sup> TRIPS, *supra* note 15, art 1.

provides a level playing field for all member states in terms of protecting intellectual property, ensuring creators are equally protected around the world, and thus spurring increased trade and investment as well as innovation. In practice, however, the benefits have tended to accrue disproportionately to developed countries with existing innovative capacity rather than serving to encourage innovation across the development spectrum.<sup>24</sup> For instance, according to the World Intellectual Property Organization (“WIPO”), the entire continent of Africa accounted for only 0.6% of all patents filed in 2010.<sup>25</sup> As the World Health Organization (“WHO”) has noted regarding the effects of the international standardization of patent law on health:

An implicit assumption in the justification for patents is that they are applied in an economic and technological context where they can induce innovation, principally by the private sector. But the validity of this assumption depends on the context such as, for instance, the nature of the industry concerned. The assumption may be generally correct in developed countries and in a few developing countries which have the required capital and innovative capacity, but this is not the case in those developing countries which lack both a significant scientific and technological infrastructure and a private sector capable of innovation. It is also assumed that society at large will be able to benefit from present and future innovation. But where most consumers of health products are poor, as are the great majority in developing countries, the monopoly costs associated with patents can limit the affordability of patented health-care products required by poor people in the absence of other measures to reduce prices or increase funding. Thus the overall effect of intellectual property regimes is context-specific . . . .<sup>26</sup>

#### IV. PHARMACEUTICAL PATENTS

The pharmaceutical industry is an area where this disparity is particularly obvious, and where its consequences are particularly far-reaching. Prior to TRIPS, nearly “50 countries did not grant patent protection for pharmaceutical products,” a list spanning the gamut from least-developed countries (“LDCs”) to emerging economies like India and Brazil, to industrialized nations like Spain.<sup>27</sup> During the Uruguay Round of trade negotiations that ultimately led to TRIPS, countries with strong

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<sup>24</sup> COMM’N ON INTELLECTUAL PROPERTY RIGHTS., REPORT OF THE COMMISSION ON INTELLECTUAL PROPERTY RIGHTS 22, 24 (Sept. 2002), [http://www.iprcommission.org/papers/pdfs/final\\_report/ciprfullfinal.pdf](http://www.iprcommission.org/papers/pdfs/final_report/ciprfullfinal.pdf).

<sup>25</sup> WORLD INTELLECTUAL PROP. ORG., 2012 WIPO IP FACTS AND FIGURES 14 (July 2012), [http://www.wipo.int/export/sites/www/freepublications/en/statistics/943/wipo\\_pub\\_943\\_2012.pdf](http://www.wipo.int/export/sites/www/freepublications/en/statistics/943/wipo_pub_943_2012.pdf).

<sup>26</sup> WHO, PUBLIC HEALTH, INNOVATION, AND INTELLECTUAL PROPERTY RIGHTS: REPORT OF THE COMMISSION ON INTELLECTUAL PROPERTY RIGHTS, INNOVATION AND PUBLIC HEALTH 32 (April 2006), <http://www.who.int/intellectualproperty/documents/thereport/ENPublicHealthReport.pdf>.

<sup>27</sup> WHO, THE TRIPS AGREEMENT AND PHARMACEUTICALS: REPORT OF AN ASEAN WORKSHOP ON THE TRIPS AGREEMENT AND ITS IMPACT ON PHARMACEUTICALS 11 (May 2000), <http://apps.who.int/medicinedocs/pdf/h1459e/h1459e.pdf>.

innovative pharmaceutical sectors lobbied hard for international protections. Other countries were reluctant to accept such changes but eventually succumbed to counterbalancing benefits like increased access to new agricultural markets.<sup>28</sup> The poorest countries, often with minimal domestic pharmaceutical industry of any kind, brought little bargaining power to the table. Thus, the perceived benefits of other aspects of WTO membership on different sectors of the economy placed a heavy thumb on the scales weighing innovation and access in the pharmaceutical sector. Under Article 27 of the resulting agreement—not to be confused with UHDR Article 27—WTO members were obliged to expand the range of patentable inventions to include, among others, pharmaceuticals.<sup>29</sup>

Even without the complications introduced by international standardization, there are serious questions about how effectively patents work in the context of pharmaceuticals. Within a single country such as the United States, the accuracy of figures commonly cited by the pharmaceutical industry to justify the costs of new drugs on the basis of high research costs remains the subject of considerable controversy.<sup>30</sup> Whatever the precise costs, however, they are high enough that companies are more likely to make minor alterations—of varying utility—to existing drugs rather than develop truly novel drugs.<sup>31</sup> Such “evergreening” of patents through minor tweaks of existing drugs also contributes to high healthcare costs.<sup>32</sup> In this way, patents fail to properly incentivize risky innovation while rewarding lesser innovations. Coupled with high, and well-publicized, profit margins in the pharmaceutical industry, and its habit of spending more on marketing than on research and development, this reflects the continued accuracy, two decades later, of the WHO’s 1993 conclusion that there is “an inherent conflict of interest between the legitimate business goals of manufacturers and the social, medical and economic needs of providers and the public to select and use drugs in the most rational way.”<sup>33</sup>

As serious as these issues may be at the national level, they are magnified at the international level. This is particularly true when different countries are on different sides of the scale. Frequently, pharmaceutical companies are based in countries comparatively unaffected by disease, whose burden in turn weighs more heavily upon countries without innovative capacity to develop new drugs, or the financial resources to pay for them. The resultant imbalance manifests in a number of ways. The first is where the Economics 101 rules of market-based incentives for innovation fail to tell the whole story. There may be a high demand for new products, but for many diseases, that demand may be focused among those—both persons and countries—with little purchasing power.<sup>34</sup> Consequently, it is not the number of

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<sup>28</sup> See Abbott, *supra* note 2, at 1, 2, 12, 16.

<sup>29</sup> TRIPS, *supra* note 15, art. 27.

<sup>30</sup> Donald W. Light & Rebecca Warburton, *Demythologizing the High Costs of Pharmaceutical Research*, 6 *BIOsocieties* 34, 35, 36, 37 (2011).

<sup>31</sup> Nathalie Vernaz et al., *Patented Drug Extension Strategies on Healthcare Spending: A Cost-Evaluation Analysis*, 10 *PLOS MED.* 1, 1 (2013).

<sup>32</sup> *Id.* at 2, 6, 9.

<sup>33</sup> *Pharmaceutical Industry*, WHO, <http://www.who.int/trade/glossary/story073/en/> (last visited Apr. 15, 2014); see also GRAHM DUKES, *THE LAW AND ETHICS OF THE PHARMACEUTICAL INDUSTRY* 183 (2006).

<sup>34</sup> ADRIAN TOWSE ET AL., *DRUGS AND VACCINES FOR DEVELOPING COUNTRIES* 1, 6, 9, 20 (2011).

potential consumers but their ability to pay that influences pharmaceutical innovation; the result is that there is little desire on the part of the pharmaceutical industry to invest in treating diseases that affect primarily poor countries. This phenomenon has been termed “The 10/90 gap,” reflecting the fact that only 10% of the world’s health research expenditures go towards developing world problems causing 90% of premature mortality.<sup>35</sup> In such circumstances, it soon becomes clear that the global IP system does not effectively promote either innovation or access for some of the world’s most serious health concerns.

There are also diseases such as HIV, for which markets exist in both developed and developing nations. Given a worldwide increase in non-communicable diseases such as cancer, diabetes and a host of conditions associated with obesity, many developing countries now face what has been termed a “double burden of disease.”<sup>36</sup> As a result, demand for pharmaceuticals for non-communicable diseases—many of them chronic and requiring a lifetime of treatment—will continue to rise. In such cases, pharmaceutical companies may have sufficient motivation to develop drugs for wealthy markets, but the costs of those drugs will be a barrier to access in less wealthy ones. It is in this context of access to medicines and the internationalization of patent laws that the right to health ascended, both for better and worse, to become the primary focus of the innovation/access debate.

## V. RIGHT TO HEALTH

The idea of health as a human right has proven to be a very powerful rhetorical tool in drawing attention to the debate over intellectual property and health, as the slogan “Patients versus Patents” might suggest. It has also proven successful in certain aspects of the debate, particularly in shifting the international status quo around access to medicines so that the “starting point for a consideration of the operational aspects of IP systems with regard to access to drugs is that access to essential drugs is a human right.”<sup>37</sup> Despite these successes, it is not a tool that effectively translates to broader issues of innovation and access, nor indeed to addressing many key issues even in the context of health. Rather, its prominent role in the innovation/access debate came about through a confluence of circumstances.

Like the Article 27 rights, the right to health is rooted in the UDHR, where it is found, along with other rights relating to food, shelter, and social security, under Article 25.<sup>38</sup> And, just as with the Article 27 rights, it is both codified and elaborated upon under the ICESCR, in Article 12:

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<sup>35</sup> D. Vidyasagar, *Global Notes: The 10/90 Gap Disparities in Global Health Research*, 26 J. PERINATOLOGY 55, 55 (2005).

<sup>36</sup> Sarah J. Marshall, *Developing Countries Face Double Burden of Disease*, 82 BULL. WORLD HEALTH ORG. 556, 556 (2004).

<sup>37</sup> High Comm’r Report, *supra* note 14, para. 42.

<sup>38</sup> UDHR, *supra* note 5, art. 25.

1. The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.
2. The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for:
  - (a) The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child;
  - (b) The improvement of all aspects of environmental and industrial hygiene;
  - (c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases;
  - (d) The creation of conditions which would assure to all medical service and medical attention in the event of sickness.<sup>39</sup>

Although the right to health has long had a far higher profile than the Article 27 rights, it became a central focus of the innovation/access debate in the aftermath of attempts to make use of a compulsory licensing provision under Article 31 of TRIPS, which itself lays out the parameters for the “limited exceptions to the exclusive rights conferred by a patent” permitted under TRIPS Article 30.<sup>40</sup> Neither article explicitly mentions health. However, they, and TRIPS itself, became intimately linked with health after a number of member states—notably Brazil and South Africa—attempted to issue compulsory licenses for HIV treatment.

At the time TRIPS was first implemented, HIV had gone from a disease that, in the early 1980s, was associated with communities of gay men and intravenous drug users in North America and Europe, to one inseparably linked to a generalized heterosexual epidemic in Sub-Saharan Africa. The first HIV drug had appeared in 1987;<sup>41</sup> however, it was only in 1996 that the first genuinely effective treatment, Highly Active Antiretroviral Therapy (“HAART”), was announced.<sup>42</sup> Unfortunately, HAART cost more than \$15,000 per year, putting it far out of the reach of many who needed it even in the world’s wealthiest countries, let alone the vast majority of those infected in the global pandemic.<sup>43</sup>

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<sup>39</sup> ICESCR, *supra* note 8, art. 12.

<sup>40</sup> TRIPS, *supra* note 15, art. 30.

<sup>41</sup> Mary T. Griffin, *AIDS Drugs & the Pharmaceutical Industry: A Need for Reform*, 17 AM. J. L. & MED. 363, 379 (1991) (noting that Azidothymidine was the first FDA approved drug for the treatment of HIV); see also Margaret A. Fischl et al., *The Efficacy of Azidothymidine (AZT) in the Treatment of Patients with AIDS and AIDS-Related Complex*, 317 NEW ENG. J. MED. 185, 186 (1987) (confirming in a double blind placebo controlled study that Azidothymidine resulted in significantly fewer mortalities than the placebo test group).

<sup>42</sup> John G. Bartlett, *Ten Years of HAART: Foundation for the Future*, MEDSCAPE, Feb. 5-8, 2006, at 1, available at <http://www.medscape.org/viewarticle/523119> (last visited Feb. 21, 2014).

<sup>43</sup> U.S. DEPT OF HEALTH & HUMAN SERVS., THE AIDS EPIDEMIC AND THE RYAN WHITE CARE ACT PAST PROGRESS, FUTURE CHALLENGES 8 (2002–03), <http://hab.hrsa.gov/data/files/progressrpt200203.pdf>.

In both South Africa<sup>44</sup> and Brazil,<sup>45</sup> pharmaceutical companies challenged attempts to permit compulsory licensing of HIV medications, in each instance with the backing of the United States. Reaction to these highly publicized cases was swift, not only within those countries, but worldwide, with the governments of developing countries and civil society around the world heaping criticism on the pharmaceutical companies and the governments who supported them. Organizations like South African NGO Treatment Action Campaign (“TAC”), which advocated in favor of access to antiretroviral treatment both on the streets and in the courtroom, made the right to health a central pillar of such campaigns.<sup>46</sup> While in both cases the specific trade complaint was ultimately withdrawn in the face of the public outcry, it was already too late to put the right to health genie back in the bottle.

Accompanying the controversy was a huge volume of academic commentary and institutional reports, as well as extensive media coverage. Although the concept of essential medicines had been around for decades—the WHO published its first list in 1977—the controversy around access to HIV medications brought it into the public eye. This controversy also led to pressure on the WTO to clarify the ability of members to protect public health under TRIPS. Just as they had argued in favor of expanding the reach of patents in the original agreement, clarification around the issue of protecting public health was opposed by key pharmaceutical manufacturing countries like the United States, Australia, Canada, Japan, and Switzerland.<sup>47</sup> Despite such objections, ongoing pressure ultimately led to the Doha Declaration on the TRIPS Agreement and Public Health, which explicitly recognizes that the TRIPS Agreement “can and should be interpreted and implemented in a manner supportive of WTO Members’ right to protect public health”<sup>48</sup> and reaffirms the right to use the internal flexibilities of TRIPS for this purpose. The Declaration also grants extensions for certain countries before they are required to fully implement TRIPS provisions on pharmaceuticals; for least-developed countries, such implementation has been delayed until 2016.<sup>49</sup>

The impact of the campaign for access to antiretroviral treatment should not be underestimated. Within just a few years, the idea of providing treatment for HIV in Africa went from pipe-dream to cornerstone of the response to the disease.<sup>50</sup> At the 2001 UN Special Session on HIV/AIDS, UNAIDS Director Peter Piot observed that

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<sup>44</sup> TREATMENT ACTION CAMPAIGN, FIGHTING FOR OUR LIVES: THE HISTORY OF THE TREATMENT ACTION CAMPAIGN 47 (2010), available at <http://www.tac.org.za/files/10yearbook/index.html>.

<sup>45</sup> See Dirceu B. Greco & Mariangela Simão, *Brazilian Policy of Universal Access to AIDS Treatment: Sustainability Challenges and Perspectives*, 21 AIDS S37, S41 (2007).

<sup>46</sup> See Mark Heywood, *South Africa’s Treatment Action Campaign: Combining Law and Social Mobilization to Realize the Right to Health*, 1 J. HUM. RTS. PRACTICE 14, 17 (2009) (noting that the right to health is “recognized in international covenants, national constitutions, and jurisprudence[.]” but is difficult to effectively utilize).

<sup>47</sup> Abbott, *supra* note 2, at 13.

<sup>48</sup> World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/1, 41 I.L.M. 746 para. 4 (2002) [hereinafter Doha Declaration].

<sup>49</sup> *Id.* para. 7.

<sup>50</sup> See GLOBAL HIV/AIDS RESPONSE, EPIDEMIC UPDATE AND HEALTH SECTOR PROGRESS TOWARDS UNIVERSAL ACCESS 2 (2011), available at [http://www.aidsdatahub.org/sites/default/files/documents/UNAIDS\\_Global\\_HIVAIDS\\_Response\\_Progress\\_Report\\_2011.pdf](http://www.aidsdatahub.org/sites/default/files/documents/UNAIDS_Global_HIVAIDS_Response_Progress_Report_2011.pdf) (detailing the successes of the international response to the AIDS epidemic).

all Western nations present except France “totally opposed of mentioning the word antiretroviral therapy and to have a target or a goal on treatment for people living with HIV.”<sup>51</sup> Only two years later, UNAIDS and the WHO jointly launched the three by five initiative with the goal of providing three million HIV-positive people living in low and middle-income countries with ART by the end of 2005.<sup>52</sup> Universal access for antiretroviral therapy was also included within the Millennium Development Goals.<sup>53</sup> In the process, it raised the profile not only of access to medicines for other diseases, but the right to health in general.

Yet while the Doha Declaration was widely hailed as a breakthrough for human rights not only by access to medicines campaigners but by the broader human rights community, closer examination reveals this achievement is not so great as it first seemed. In reality, it serves only to carve out a narrow exception to intellectual property protections rather than to contribute to a broader resolution to the innovation/access debate. TRIPS explicitly mentions health,<sup>54</sup> but only as one example of a reason to employ one of the flexibilities incorporated into TRIPS. The Doha Declaration thus does little more than define the parameters of one of the “limited exceptions to the exclusive rights conferred by a patent” envisioned under Articles 30 and 31,<sup>55</sup> rather than contributing to a more expansive interpretation of TRIPS granting leeway to national sovereignty in balancing innovation and access in all spheres of development.

Thus, the result of the focus on health is a further narrowing of a mechanism that was already skewed in favor of intellectual property. As the UN High Commissioner notes:

It is clear that while links between the promotion and protection of human rights, on the one hand, and the rights covered by the TRIPS Agreement, on the other, exist, there remain fundamental differences of approach. First of all, the overall thrust of the TRIPS Agreement is the promotion of innovation through the provision of commercial incentives. The various links with the subject matter of human rights—the promotion of public health, nutrition, environment and development—are generally expressed in terms of exceptions to the rule rather than the guiding principles themselves and are made subject to the provisions of the Agreement. A human rights approach, on the other hand, would explicitly place the promotion and protection of human rights, in particular those in ICESCR, at the heart of the objectives of intellectual property protection, rather than

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<sup>51</sup> Peter Piot, *AIDS: Exceptionalism Revisited, Address at the London School of Economics and Political Science*, UNAIDS 1 (May 15, 2008).

<sup>52</sup> STEPHEN LEWIS, *RACE AGAINST TIME: SEARCHING FOR HOPE IN AIDS—RAVAGED AFRICA* 213 (2d ed. 2009).

<sup>53</sup> U.N. Secretary-General, *Millennium Development Goal 6*, <http://www.un.org/millenniumgoals/aids.shtml> (last visited Apr. 17, 2014).

<sup>54</sup> TRIPS, *supra* note 15, art. 8.

<sup>55</sup> Doha Declaration, *supra* note 48, para. 5.

only as permitted exceptions that are subordinated to the other provisions of the Agreement.<sup>56</sup>

The circumstances leading to the Doha Declaration compound the shortcomings of this skewed framework. For one, the access to medications movement has had the negative effect of overemphasizing the impact of patents on the right to health. While it is crucial that the serious limitations of the current patent regime—both in promoting needed innovation and in ensuring access—be recognized, that recognition should not come at the expense of factors equally important to realization of the right to health. Although much of the public discourse has focused on pharmaceutical patents making drugs too expensive to be accessed by those who need them, this view, taken on its own, does not tell the full story. The Special Rapporteur on the right to health has noted that accessibility to medications has four dimensions:

[F]irst, medicines must be accessible in all parts of the country . . . . Second, medicines must be economically accessible (i.e. affordable) to all, including those living in poverty . . . . Third, medicines must be accessible without discrimination on any of the prohibited grounds . . . . Fourth, reliable information about medicines must be accessible to patients and health professionals so they can take well-informed decisions and use medicines safely.<sup>57</sup>

Patents do not fully account for any these factors. Most of the drugs on the WHO Essential Drugs List—particularly if HIV drugs are not considered—are either not under patent in the countries that need them most, or are not patented at all.<sup>58</sup> Indeed, it remains an unfortunate truth that even if all of the drugs in question were not only unpatented but also available free of charge, many people who are most in need would still not receive them.<sup>59</sup> Systemic issues like inadequate health infrastructure, broken or nonexistent distribution chains, and shortages of trained health workers all have a considerable impact on access to medications.<sup>60</sup> And this is if emphasis remains on access to medications, a focus that itself diverts attention not only from other factors within the health system, but also the broader social determinants of health.

By contrast, Article 27, by nature encompasses all areas where humankind has both needs and the ability to innovate in order to meet them. While the focus is often

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<sup>56</sup> High Comm'r Report, *supra* note 14, para. 22.

<sup>57</sup> Human Rights Council Special Rapporteur, *The Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health*, para. 49, H.R.C., U.N. Doc. A/61/338, (Sept. 13, 2006) [hereinafter *HRC Right to Health*].

<sup>58</sup> Amir Attaran, *How do Patents And Economic Policies Affect Access to Essential Medicines in Developing Countries?*, 23 HEALTH AFFAIRS 155, 157 (2004).

<sup>59</sup> See Amir Attaran, *Do Patents for Antiretroviral Drugs Constrain Access to AIDS Treatment in Africa?*, 286 J. AM. MED. ASS'N. 1886, 1891 (2001) (explaining that even if pharmaceutical companies discount or donate antiretroviral drugs, poor African countries would still be unable put them to use).

<sup>60</sup> Trevor M. Jones, *Reasons for Inadequate Health Care Vary*, 321 BRITISH MED. J. 1159, 1160 (2000).

on applications, the benefits of scientific progress also include knowledge itself, precisely the kind of “reliable information about medicines” highlighted above.<sup>61</sup> Thus, even where explicit consideration of Article 27’s balance of innovation and access is absent, its value in the broader development context can be seen throughout the Millennium Development Goals. Examples range from targets relating to health, such as 8E (“In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries”<sup>62</sup>) to those that are important for other areas of development like 8F (“In cooperation with the private sector, make available benefits of new technologies, especially information and communications”<sup>63</sup>).

## VI. ABSENCE OF ARTICLE 27

Nevertheless, even though the balance of rights integral to Article 27 captures the specific issue of access to pharmaceuticals while also lending itself more effectively to broader application on issues of innovation and access, it has seldom been put to practical use. The outpouring of scholarship and public debate implicating both intellectual property and the right to health that accompanied the access to antiretroviral treatment movement contained only a trickle of direct references to Article 27 rights. Though numerous UN reports and resolutions focus precisely on the issues of intellectual property, access to medicines, and health, many contain no real mention of either half of the Article 27 balance. Such documents include the UN Commission on Human Rights 2001 resolution on “[a]ccess to medication in the context of pandemics such as HIV/AIDS,”<sup>64</sup> the Human Rights Council’s 2009 resolution on “[a]ccess to medicine in the context of the right of everyone to the enjoyment of the highest attainable standard of physical and mental health,”<sup>65</sup> and even the UN Special Rapporteur’s corresponding report on the issue of TRIPS, free trade, and access to medicines.<sup>66</sup> Article 27 rights are also widely overlooked in documents incorporating a broader discussion of innovation and health, meriting a single passing mention<sup>67</sup> in the Global strategy on public health, innovation, and intellectual property approved by the World Health Assembly, even as the document highlights that “[a]dvances in biomedical science have provided opportunities to develop new, affordable, safe and effective health products and medical devices, particularly those that meet public health needs. Urgent efforts

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<sup>61</sup> *HRC Right to Health*, *supra* note 57, para. 49.

<sup>62</sup> U.N. Secretary-General, *Millennium Development Goal 8*, <http://www.un.org/millenniumgoals/global.shtml> (last visited Apr. 17, 2014).

<sup>63</sup> *Id.*

<sup>64</sup> U.N. Comm’n on Human Rights, *Access to Medication in the Context of Pandemics such as HIV/AIDS*, U.N. Res. 2001/33 (Apr. 2001).

<sup>65</sup> Human Rights Council, *Promotion and Protection of All Human Rights, Civil, Political, Economic, Social, and Cultural Rights, Including the Right to Development: Access to Medicine in the Context of the Right of Everyone to the Enjoyment of the Highest Standard of Physical and Mental Health*, H.R.C. U.N. Res. 12/24 (Oct. 12, 2009).

<sup>66</sup> *HRC Right to Health*, *supra* note 57.

<sup>67</sup> World Health Assembly, *Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property*, paras. 9–12, U.N. Doc. WHA/61/21 (May 24, 2008).

should be made to make these advances more affordable, accessible and widely available in developing countries.”<sup>68</sup>

It would of course be inaccurate to say that Article 27 rights were displaced by the right to health when few paid attention to them in the first place. A more accurate characterization might be that the right to health was used to partially fill an Article 27-shaped void. Indeed, many of the first real attempts to address Article 27 rights do not appear until after universal access to medicines, particularly for HIV, had become established as a widely accepted human rights norm. Even then, despite Article 27’s value being greater than the sum of its parts, its components have frequently been addressed separately. In one of the few documents to address them as a whole, the Committee on Economic, Social, and Cultural Rights (“CESCR”) made the following statement, which should be kept in mind throughout the subsequent discussion around balancing the two sides:

Article 15 of the Covenant sets out the need to balance the protection of public and private interests in knowledge. On the one hand, article 15.1 (a) and (b) recognizes the right of everyone to take part in cultural life and to enjoy the benefits of scientific progress and its applications. On the other hand, article 15.1 (c) recognizes the right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author. When adopting and reviewing intellectual property systems, States should bear in mind the need to strike a balance between those concurrent Covenant provisions. In an effort to provide incentives for creation and innovation, private interests should not be unduly advantaged and the public interest in enjoying broad access to new knowledge should be given due consideration.<sup>69</sup>

## VII. THE RIGHT TO ENJOY THE BENEFITS OF SCIENTIFIC PROGRESS AND ITS APPLICATIONS

The Right to Enjoy the Benefits of Scientific Progress and its Applications (“REBSPA”)<sup>70</sup> corresponds with the half of the framework represented by UDHR Article 27(a). In 2009, a series of meetings organized by the United Nations Educational, Scientific, and Cultural Organization (“UNESCO”) led to the Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications. It is indicative of the novelty of this effort that the Statement—over sixty years after the drafting of the UDHR—refers to its contents as “preliminary

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<sup>68</sup> *Id.* para. 5.

<sup>69</sup> U.N. Econ. & Soc. Council, Comm’n. on Econ., Soc., & Cultural Rights, *Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: Human Rights and Intellectual Property*, para. 17, UN Doc E/C.12/2001/15 (Dec. 14, 2001) [hereinafter ECOSOC].

<sup>70</sup> Amrei Muller, *Remarks on the Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications (Article15(1)(b) ICESCR)*, 10 HUM. RTS. L. REV. 765, 765 (2010).

findings and proposals.”<sup>71</sup> The approach adopted is expansive; while acknowledging the interplay between the right to enjoy the benefits of scientific progress and the right to health, this is only one of a number of highlighted interactions. In this way, it supports the idea of using this right in furtherance of a broad range of other human rights.

Taking this idea even further, the Statement also proposes that the state obligation to fulfill this right should include the duties “to adopt a legal and policy framework and to establish institutions to promote the development and diffusion of science and technology in a manner consistent with fundamental human rights” as well as “to take measures to encourage and strengthen international cooperation and assistance in science and technology to the benefit of all people and to comply in this regard with the States’ obligations under international law[.]”<sup>72</sup> In the process of laying the groundwork for explicit state obligations, the Statement thus also highlights their place in the context of international development.

In 2012, the newly-reappointed UN Special Rapporteur in the field of cultural rights took these ideas further, submitting a report on the right to enjoy the benefits of scientific progress and its applications.<sup>73</sup> Similar to the Venice Statement, the Special Rapporteur adopts a broad and cross-cutting approach to human rights and development, remarking that “[o]ne core principle is that innovations essential for a life with dignity should be accessible to everyone, in particular marginalized populations. The potential implications of scientific advances likely to have a significant impact on human rights, such as electricity, information and communication technologies, nanotechnology and synthetic biology, need attention.”<sup>74</sup> Given her official title, it is little surprise that the Special Rapporteur’s report extends beyond the innovation/access debate to include other factors considered under Article 27(a), including participation in the cultural life of the community. At the same time, she does give considerable consideration to REBSPA. One point she highlights in this regard is drawn from the travaux préparatoire around ICESCR 15(1)(c), which confirms that the drafters intended REBSPA to apply to everyone, not merely those who participated in the particular innovative advance.<sup>75</sup> Thus, the two highest profile considerations of REBSPA highlight the expansiveness of the right as well as its role in the broader context of development. What remains is to address those tensions within the context of the balance between Articles 27(a) and 27(b).

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<sup>71</sup> U. N. Educational, Scientific and Cultural Organization et al., *Venice Statement on the Right to Enjoy the Benefits of Scientific Progress and its Applications*, para. 2 (July 2009), [http://www.eiuc.org/tl\\_files/EIUC%20MEDIA/News%20Files/venice\\_statement\\_on\\_rebsp\\_july2009.pdf](http://www.eiuc.org/tl_files/EIUC%20MEDIA/News%20Files/venice_statement_on_rebsp_july2009.pdf) (last visited Apr. 17, 2014) [hereinafter *Venice Statement*].

<sup>72</sup> *Id.* paras. 16(a), (d).

<sup>73</sup> Special Rapporteur in the Field of Cultural Rights, *The Right to Enjoy the Benefits of Scientific Progress and its Applications*, U.N. Doc. A/HRC/2-/26 (May 14, 2012) (by Fraida Shaheed).

<sup>74</sup> *Id.* para. 29.

<sup>75</sup> Committee on Economic, Social and Cultural Rights, *Drafting History of the Article 15 (1) (c) of the International Covenant on Economic, Social and Cultural Rights*, para. 45, U.N. Doc. E/C.12/2000/15 (Oct. 9, 2000) [hereinafter *Drafting History*].

### VIII. RIGHT TO BENEFIT FROM THE PROTECTION OF THE MORAL AND MATERIAL INTERESTS OF AUTHORSHIP

While the above analyses of REBSPA do note tensions with intellectual property, largely absent from either analysis is a direct comparison with the corresponding right under 27(b). The closest that the Venice Statement comes is to acknowledge that:

the right to enjoy the benefits of scientific progress and its applications may create tensions with the intellectual property regime, which is a temporary monopoly with a valuable social function that should be managed in accordance with a common responsibility to prevent the unacceptable prioritization of profit for some over benefit for all.<sup>76</sup>

Similarly, the Special Rapporteur discusses access to medicines and remarks upon the “potential of intellectual property regimes to obstruct new technological solutions to critical human problems such as food, water, health, chemical safety, energy and climate change”<sup>77</sup> but does not engage directly with 27(b).

This is similar to the approach taken by many human rights arguments against intellectual property. What such approaches overlook is the fundamental importance of defining the relationship between intellectual property regimes and the right outlined under Article 27(b), rather than either treating them as interchangeable or, as more commonly done, ignoring the existence of a right altogether. The most authoritative exploration of this relationship is found in General Comment 17 by the CESCR, focusing specifically on the iteration of the right found under ICESCR 15(1)(c): “[t]he right of everyone . . . to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author.”<sup>78</sup>

After affirming that 15(1)(c) constitutes a human right, the CESCR clarifies that “[t]his fact distinguishes article 15, paragraph 1 (c) . . . and other human rights from most legal entitlements recognized in intellectual property systems.”<sup>79</sup> It goes on to explain the difference as follows:

In contrast to human rights, intellectual property rights are generally of a temporary nature, and can be revoked, licensed or assigned to someone else. While under most intellectual property systems, intellectual property rights, often with the exception of moral rights, may be allocated, limited in time and scope, traded, amended and even forfeited, human rights are timeless expressions of fundamental entitlements of the human person.<sup>80</sup>

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<sup>76</sup> *Venice Statement*, *supra* note 71, para. 10.

<sup>77</sup> *Right to Enjoy*, *supra* note 73, para. 56.

<sup>78</sup> ICESCR, *supra* note 8, art. 51.

<sup>79</sup> Committee on Economic, Social and Cultural Rights, *Rep. of the Economic and Social Council*, U.N. GAOR, E/2006/22, at 126 (Nov. 21, 2005).

<sup>80</sup> *Id.*

This is a key distinction with important implications for the Article 27 framework. It demonstrates on the one hand that, in contrast to human rights that embody universal values, there is nothing inherently universal about intellectual property regimes as a whole that would require international standardization as a matter of course. On the other, it makes the important observation that there is a protected human right at the center of such regimes that does require consideration alongside other human rights, explicitly stating:

the right of authors to benefit from the protection of the moral and material interests resulting from their scientific, literary and artistic productions cannot be isolated from the other rights recognized in the Covenant. States parties are therefore obliged to strike an adequate balance between their obligations under article 15, paragraph 1 (c), on one hand, and under the other provisions of the Covenant, on the other hand, with a view to promoting and protecting the full range of rights guaranteed in the Covenant.<sup>81</sup>

The CESCR analysis also highlights that there are two components to this right. The one most associated with patents is that of material interests. A crucial conclusion of the CESCR analysis is that there is a human rights basis for financial compensation, and that as a legal obligation “[s]tates parties must abstain from unjustifiably interfering with the material interests of authors, which are necessary to enable those authors to enjoy an adequate standard of living.”<sup>82</sup> However, they also provide guidance on the extent of that material interest and its relation to other rights:

[a]s a material safeguard for the freedom of scientific research and creative activity, guaranteed under article 15, paragraph 3 and article 15, paragraph 1 (c), also has an economic dimension and is, therefore, closely linked to the rights to the opportunity to gain one’s living by work which one freely chooses (art. 6, para. 1) and to adequate remuneration (art. 7 (a)), and to the human right to an adequate standard of living (art. 11, para. 1).<sup>83</sup>

Furthermore, the CESCR is very clear that although legal entities are included among the holders of intellectual property rights under existing international IP protection regimes, “their entitlements, because of their different nature, are not protected at the level of human rights.”<sup>84</sup> This clarification, particularly when contextualized with adequate remuneration and an adequate standard of living, would seem at odds with high profit margins for corporations spending less on research than marketing. However, this does raise another point worth considering.

As Chapman highlights, the UDHR and ICESCR provisions were drafted at a time when science was thought of more as a public good than a commercial property;

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<sup>81</sup> *Id.* at 136.

<sup>82</sup> *Id.* at 134.

<sup>83</sup> *Id.* at 127.

<sup>84</sup> *Id.* at 129.

the attitude of both governments and scientists emphasized discovery rather than financial gain from that discovery.<sup>85</sup> Subsequent shifts, such as the adoption in the United States of the Bayh-Dole Act, which permitted scientists to patent discoveries made with government funds, have shifted this dynamic. Similarly, the mode of discovery has changed. Green remarks that “[w]e face a world with issues that the drafters of the ICESCR could never have envisaged,” not least because “the drafters do not seem to have been thinking in terms of the corporation-held patent, or the situation where the creator is simply an employee of the entity that holds the patent or the copyright.”<sup>86</sup> Today, most scientific breakthroughs are not made by lone scientists huddled in their basement laboratories. Instead, many discoveries come as the result of efforts made by massive teams of researchers spread across multiple institutions and international borders. While a human right does not extend to a patent-holding corporation, the evaluation of adequate compensation does nevertheless need to reflect the increased number of human participants; how far from the lab bench and up the corporate structure this evaluation needs to climb remains an open question.

At the same time, it is important not to overlook the second component of the authorship right, the moral interest. This concept was at the core of discussion on these issues during the drafting process of the UDHR, being associated more with Continental European views on authors’ rights than the largely commercial considerations found in the common law system.<sup>87</sup> Such rights are more likely to be explicitly considered in the case of copyright; however, even if such rights may have been a more salient motivation in the era of science as a public good as outlined by Chapman, peer and public recognition is important even today, something with implications later in this paper. Finally, while affirming that states have the freedom to enact intellectual property protections, the CESCR makes it clear that it is a core obligation of states:

To strike an adequate balance between the effective protection of the moral and material interests of authors and States parties’ obligations in relation to the rights to food, health and education, as well as the rights to take part in cultural life and to enjoy the benefits of scientific progress and its applications, or any other right recognized in the Covenant.<sup>88</sup>

This parallels the conclusion that “it is essential that any system for the protection of the moral and material interests resulting from one’s scientific, literary and artistic productions facilitates and promotes development cooperation, technology transfer, and scientific and cultural cooperation.”<sup>89</sup> This conclusion is shared by one of the few UN documents to directly address the Article 27 rights balance as a whole, in which the High Commissioner concludes that:

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<sup>85</sup> Chapman, *supra* note 4, at, 8.

<sup>86</sup> *Drafting History*, *supra* note 75, para. 44.

<sup>87</sup> *Id.* para. 5.

<sup>88</sup> Economic & Social Council, *Comm. On Economic, Social & Cultural Rights, General Comment No. 17*, para. 39(e), 35th Sess., Nov. 7–25, 2005, U.N. Doc. E/C.12/GC/17 (Jan. 12, 2006).

<sup>89</sup> *Id.* para. 38.

Article 15 should be read in conjunction with article 5 of ICESCR, which states that nothing in the Covenant can justify any act aimed at the destruction of any of its rights or freedoms or to limit a right beyond what is provided for in the Covenant. In the context of article 15, this suggests that, whatever balance is struck between private and public interests in intellectual property, the balance should not work to the detriment of any of the other rights in the Covenant.<sup>90</sup>

This analysis sets out not only the inherent tension holding together the balance of rights under Article 27, but the limits of that tension. The human rights under Article 27 must be afforded minimum protections, but any other legal rights, as in an intellectual property regime, that extend beyond the scope of those human rights must be considered subsidiary to other human rights. Article 27 thus provides a framework for placing innovation and access on equal footing, and viewing them through the same human rights lens.

#### IX. AN ARTICLE 27 APPROACH TO TRIPS

The utility of the Article 27 framework can be illustrated by swapping it in for the right to health in the context of the access to medicines debate under the TRIPS Agreement. Doing so, it is immediately apparent that the balance under Article 27 is closely aligned with the underlying objectives of TRIPS as laid out under TRIPS Article 7:

The protection and enforcement of intellectual property rights should contribute to the promotion 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.<sup>91</sup>

It also seems that, on the surface at least, TRIPS shares Article 27's breadth of scope, recognizing the need to balance innovation and access across the whole spectrum of innovation, not merely within the context of health. The parallels between TRIPS and Article 27 had been drawn in the UNDP's 2001 Human Development Report,<sup>92</sup> although the comparison is made in passing without real exploration of its implications. It was also drawn in the initial statement by the CESCR examining ICESCR Article 15 as a cohesive unit, where they noted an example of the necessary balance "can be found in the recent Declaration on the TRIPS Agreement and Public Health, which recognizes that intellectual property

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<sup>90</sup> High Comm'r Report, *supra* note 56, para. 13.

<sup>91</sup> TRIPS, *supra* note 15, art. 7.

<sup>92</sup> U.N. DEVELOPMENT PROGRAM, HUMAN DEVELOPMENT REPORT: MAKING NEW TECHNOLOGIES WORK FOR HUMAN DEVELOPMENT 102 (2001), [http://hdr.undp.org/sites/default/files/reports/262/hdr\\_2001\\_en.pdf](http://hdr.undp.org/sites/default/files/reports/262/hdr_2001_en.pdf) (last visited Apr. 17, 2014) [hereinafter HUMAN DEVELOPMENT REPORT].

protection is important for the development of new medicines, but at the same time also recognizes the concerns about its effect on prices.”<sup>93</sup> Most importantly, perhaps the most direct comparison originates from WIPO itself, in a submission to the UN Secretary General on the issue of human rights and intellectual property:

The objectives of the TRIPS Agreement, set out in article 7, put emphasis on the public interest rationale of intellectual property protection. This article, entitled “Objectives,” says that “the protection and enforcement of intellectual property rights should contribute to the promotion 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.” This corresponds with the objectives of article 15 (1)(a) and 15 (1)(b) of the International Covenant on Economic, Social and Cultural Rights (ICESCR), which recognize the right of everyone to take part in cultural life and to enjoy the benefits of scientific progress and its applications. It can be argued that the TRIPS Agreement also seeks to give effect at the multilateral level to article 15(1)(c), which establishes everyone’s “right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.”<sup>94</sup>

Unfortunately, as the High Commissioner comments:

recognizing the links between the standards in the TRIPS Agreement and the promotion and protection of human rights is not the same as saying that the TRIPS Agreement takes a human rights approach to intellectual property protection. The primary question is whether the TRIPS Agreement strikes a balance that is consistent with a human rights approach.<sup>95</sup>

The Doha Declaration, issued a few months after the Commissioner’s comments, seems to answer that question in the negative. Although the right to health was central to discussions leading to the Doha Declaration, what transpired ultimately took place within an internal TRIPS framework that already assumed the primacy of intellectual property. The 2016 deadline for LDCs to implement pharmaceutical patents is a prime example of how health is framed as an exception to the rules, and only a temporary one at that, rather than a legal principle of equal—if not greater—importance to intellectual property itself that must be balanced in the public interest. In hindsight, the High Commissioner seems prescient in observing that:

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<sup>93</sup> ECOSOC, *supra* note 69, para. 17.

<sup>94</sup> Rep. of U.N. Secretary-General, *Economic, Social and Cultural Rights: Intellectual Property Rights and Human Rights*, para. 7, 52d Sess. June 14, 2001, U.N. Doc. E/CN.4/Sub.2/2001/12 (June 14, 2001).

<sup>95</sup> High Comm’r Report, *supra* note 14, para. 21.

[o]n the one hand, the Agreement sets out in considerable detail the content of intellectual property *rights*—the requirements for the grant of rights, the duration of protection, the modes of enforcement. On the other hand, the Agreement only alludes to the *responsibilities* of IP holders that should balance those rights in accordance with its own objectives.<sup>96</sup>

The Doha solution—emphasizing a narrow exemption from a rule—both distorts the issue of innovation and access, and makes a general, and generalizable, balancing principle for innovation and access more difficult to establish. Consequently, an exemption granted for pharmaceuticals for reasons of public health provides only marginal guidance for an issue like climate change.

An Article 27 framework, by contrast, offers the possibility of avoiding these pitfalls. By incorporating both authorship and access rights on equal footing, and by doing so in a manner directly paralleling the stated objectives of TRIPS under Article 7, it becomes difficult to tip the balance towards an inherent superiority of intellectual property, whether consciously or not, particularly where the scope of intellectual property rights extends beyond the core protected by Article 27. Secondly, Article 27 demands a broader evaluation of TRIPS flexibilities, encompassing more than just health. Even if applied specifically to health, as per the Doha Declaration, the use of Article 27 would draw immediate parallels to other areas of human endeavor, thereby paving the way for similar interpretations across a range of rights.

The utility of Article 27 can also be seen in the way it provides a quicker path to a similar outcome. Consider the issue of compulsory licensing that brought the debate into the headlines. Rather than evaluating whether health is an appropriate reason for making use of an exception, an Article 27 analysis would shift from evaluating exceptions to balancing of otherwise equal issues. Here, the costs of medicines were too high; consequently, an imbalance existed between financial interests of the authors and access interests of the public, necessitating a shift toward the center. Compulsory licensing by its very nature ensures that patent holders receive a licensing fee, ensuring that the authors' interests always maintain a minimum level of protection. The fees of compulsory licensing can thus be used to ensure adequate financial compensation, particularly in previously underserved markets where no compensation was previously being generated because no customers could afford the product. At the same time, the innovators—and by extension, their employers—retain the right to be associated with the product, an association which now has positive connotations among those receiving treatment. And, of course, the groups formerly denied access now have life-saving medications. The journey to justifying compulsory licensing is thus shorter and more straightforward under an Article 27 analysis than through the discussions around the Doha Declaration.

Furthermore, the inherently rights-based framework of Article 27 is more readily transferable to other international intellectual property regimes than the highly TRIPS-specific Doha Declaration. So-called TRIPS-Plus agreements—often bilateral agreements between countries of unequal bargaining power—promote more

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<sup>96</sup> *Id.* para. 23 (emphases in original).

onerous intellectual property protections while potentially lacking even the faulty rights-balancing mechanisms of TRIPS.<sup>97</sup> An Article 27 analysis can be used to evaluate the balance existing under TRIPS-Plus provisions, and alert countries where such provisions constitute a violation of binding national or international human rights provisions. It can also be used domestically, evaluating the strength of a patent of questionable novelty or utility to determine how to balance access and authorship rights.

Article 27 is also useful in addressing the international cooperation aspect of development. Unlike the right to health, the Article 27 framework offers an explicit—albeit still weak—connection to international cooperation and technology transfer, through ICESCR Article 15(4): “States Parties to the present Covenant recognize the benefits to be derived from the encouragement and development of international contacts and co-operation in the scientific and cultural fields.”<sup>98</sup> This provision, and its links to other calls for cooperation under the ICESCR, are highlighted in a declaration of the Sub-Commission on Human Rights, which:

[c]alls upon States parties to the International Covenant on Economic, Social and Cultural Rights to fulfil the duty under article 2, paragraph 1, article 11, paragraph 2, and article 15, paragraph 4, to cooperate internationally in order to realize the legal obligations under the Covenant, including in the context of international intellectual property regimes.<sup>99</sup>

This complements parallel international cooperation and technology transfer mechanisms in IP regimes, like Article 66(2) of TRIPS, even if it too is sorely lacking.

There is one further way in which Article 27 can itself recalibrate the innovation/access scales: it can direct explicit attention to the moral interests of the authors. For an example, one can think back to one of the greatest triumphs of innovation and access in the service of health. When Jonas Salk created the first polio vaccine, he famously declared that nobody owned the patent to the vaccine he had pioneered, since to do so would be akin to patenting the sun.<sup>100</sup> While there is evidence that both the University of Pittsburgh and the National Foundation for Infantile Paralysis had in fact investigated the possibility of patenting and abandoned it based on prior art<sup>101</sup>—itself a lesson in an era of patent evergreening—there is little disputing the ripple effect. When Albert Sabin created the oral polio vaccine shortly afterwards, he followed Dr. Salk’s lead, and did not patent his vaccine. Between them, the two vaccines have nearly eradicated polio worldwide. It is impossible to know exactly how patents might have affected the anti-polio campaign, but estimates of the royalties foregone stretch into the billions of

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<sup>97</sup> Carlos María Correa, *Implications of Bilateral Free Trade Agreements on Access to Medicines*, 84 WORLD HEALTH ORG. BULL. 399, 400 (2006).

<sup>98</sup> ICESCR, *supra* note 8, art. 51.

<sup>99</sup> OHCHR, Res. 2001/21, 53rd Sess., U.N. Doc. E/CN.4/Sub.2/RES/2001/21 (Aug. 16, 2001).

<sup>100</sup> Global Citizen, *Could You Patent the Sun?*, YOUTUBE, <https://www.youtube.com/watch?v=erHXKP386Nk> (last visited Apr. 17, 2014) (showing the video of Jonas Salk explaining why there is no patent for his polio vaccine).

<sup>101</sup> JANE S. SMITH, PATENTING THE SUN: POLIO AND THE SALK VACCINE 220 (William Morrow & Co.)(1990).

dollars.<sup>102</sup> In such a case, the 'material interests' of the authors seem to have struck a balance of their own, against the 'moral interests' of the discovery. In striking the innovation/access balance in the context of the most serious challenges of global health, it is worth remembering that moral interests, in all senses, should have some weight as well.

This is not to deny that the Article 27 framework—like even the most effective patented pill—is not itself a panacea for global health. For instance, while it provides an easier path to compulsory licensing, compulsory licensing itself has proven not to be an effective solution in practice. What it does offer is a novel way of examining important issues relating to intellectual property and health, and doing so in an expansive way that can readily be applied to questions of innovation and access in other fields. This use of Article 27 may thus prove a useful innovation for addressing a crucial issue; fortunately, it is one that is already available to everyone.

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<sup>102</sup> Amar Prabhu, *How Much Money Did Jonas Salk Potentially Forfeit by Not Patenting the Polio Vaccine?*, FORBES.COM, (Aug. 9, 2012, 12:40 P.M.), <http://www.forbes.com/sites/quora/2012/08/09/how-much-money-did-jonas-salk-potentially-forfeit-by-not-patenting-the-polio-vaccine/>.