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CULTURAL, POLITICAL, AND SOCIAL IMPLICATIONS OF INTELLECTUAL PROPERTY LAWS IN AN INFORMATIONAL ECONOMY

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Summary

Shifts towards the commodification of intangible goods – apart from historical

means of economic management based on industrial strategies and the creation and sale of physical goods – have made intellectual property rights critical to capitalist accumulation in an increasingly globalized ‘informational’ economy. In mainstream policy discourses, intellectual policy rights are advanced as a means to provide incentives for creativity and innovation, and to secure economic rewards for investment in research and development while providing a socially optimal level of creative and technological goods. The broader cultural, political, and social implications of the increasing expansion and extension of intellectual property have attracted heightened attention and concern since the 1990s. A discussion of the historical justifications for intellectual property in Western legal traditions is followed by a consideration of how these laws increasingly shape conditions of culture and communication. We show how the trade-based expansion of intellectual property has reoriented the traditional balance between private property rights and public interests, further entrenching historic inequalities and providing new obstacles to the realization of development and human rights in the global South, while reinforcing the marginalization of non-Western states, peoples, and cultures. The impact of intellectual property on access to medicine, health care, education, agriculture, and the preservation of food security, and biodiversity, illustrates the dangers of expanding intellectual property rights without consideration of public interests or the desirability of securing basic public goods. Responses to these debates demonstrate the need for – and the emergence of – new coalitions of states, activists, and critics able to forge a new politics of intellectual property that better balances private and public rights while furthering human rights and sustainable development.

1. Introduction

The cultural, political, and social implications of intellectual property rights (IPRs) are matters of growing concern. In the late 20th century, economists and critical theorists recognized that in many developed countries, long dominant industrial economies based upon the manufacturing, distribution, and consumption of tangible goods were being eclipsed in size and social impact by an emerging economic system based upon the creation, commodification, exploitation, and control of intangible (or information-based) goods. Characterized in various ways – the knowledge-based economy, the condition of postmodernity, the information or network society, post-industrial society, the creative economy, or simply the new economy – new technologies of communication and distribution have given new impetus to the intangible or immaterial dimensions of goods and services. The formulas, compositions, trademarks, advertising, branding, software, screenplays, designs, and formats upon which such goods and services are based, and the merchandising opportunities they afford, have become a driving force and an autonomous basis for the further accumulation of capital. In an economy that capitalizes upon intangibles, IPRs provide the fundamental legal means for protecting these assets and securing future rents. Broadly construed, intellectual property (IP) includes

copyright, trademark, and patent rights and is sometimes seen to encompass related areas such as trade secrets, geographical indications, rights of publicity, and protections for industrial designs, plant varieties, databases, and integrated circuit topography. Generally these laws attach various individual proprietary rights to intangibles and thus enable these to be exchanged as commodities, thereby providing the basis for investment in informational goods including software, films, logos, modes of manufacture, pharmaceutical formulae, music, scripts, and business plans.

Purely economic considerations of IPRs, however, overlook the cultural, social, and political implications of these rights, as well as the consequences they may yield. The scope and strength of IP laws ensure problematic impacts far beyond their protection of economic goods, particularly since such laws have been effectively globalized through their expansion and projection in treaties, laws, and international trade agreements. The privatization of informational products and cultural expressions has significant implications for the nature of communications and the shape of political discourse in democratic societies and for states' capacities to further autonomous economic and social development. It poses issues of access and distributional equity with respect to vital goods such as medicine, food, and health care; increasingly it implicates both individual self-expression and community self-determination. This range of cultural, political, and social concerns calls for a more comprehensive approach to IP, one that is attentive to the ways in which law shapes social representations and knowledge, influences public perceptions and social meanings, dictates the terms of access to fundamental resources in order to create constitutive forms of social inclusion that work to negate processes of exclusion and marginalization.

Although we focus on those aspects of the cultural, political, and social implications of IP that have received the most sustained political advocacy and scholarly attention, the size of this chapter renders certain exclusions inevitable. We therefore bypass the large field of neoclassical law and economics, and sidestep cultural studies of trademark and branding, sociological studies of research, development and innovation, studies of creativity and innovation, literature on product counterfeiting, grey marketing and other forms of 'piracy,' as well as alleged links between IP infringement, organized crime, and terrorism. We do this not merely for reasons of expediency and space but because the scholarship addressing these topics has shown less interest in social justice issues.

We begin by briefly charting the historical establishment and justifications for IPRs in modern Western states, which, we will argue, have increasingly emphasized private interests in IP over the public concerns that have been historically central to the rationale for providing such protections. We illustrate this with reference to copyright in Section 3, where we explore growing alarm about the tendency of IP to limit creative expression and democratic dialogue to the detriment of public interests in access to knowledge and free expression.

These issues have expanded into global concerns about public goods in the light of the expansion of Western models of IP governance through the development and enforcement of international trade-based mechanisms for regulating IP, the topic of Section 4. Growing global inequities in access to informational goods have provoked widespread criticism and new forms of advocacy which insist that IPRs be reformed to better meet the social and economic development needs of a greater portion of the world's population, and to better reflect human rights norms and values. Moreover, the European Enlightenment emphases and prejudices of these laws are increasingly questioned, particularly as the global commons assumed and depended upon by IP may create constitutive disadvantages for populations in the global South as well as minority and indigenous peoples, whose communities' needs with respect to plant and human genetic resources, traditional knowledge, and traditional cultural expression are unaddressed by IPRs that are focused wholly on private rights and an undifferentiated public domain. These concerns suggest the need for a new and more pluralist legal dialogue to address the meaning and consequence of IP protections

2. Historical Justifications for Intellectual Property Protections and Current Realities

The history of IP protection dates back to the first patent statute, a Venetian statute of 1474, the first copyright law, Great Britain's Statute of Anne in 1709, and medieval guild marks as progenitors of modern (nineteenth century) trademark legislation. IP protection for creators and innovators, as well as those who publish, manufacture, and distribute works and innovations, is closely linked to the development of technologies that make it easier to reproduce, disseminate, and (re)appropriate literary, artistic, scientific, and commercial works. For example, without printing technologies and the means of creating copies of a book more readily than by manual transcription, there would have been little need for copyright, which originally extended privileges in the book trade to protect booksellers' investments. In the history of IPRs, intersecting social, technical, and legal factors are always at play. Political and social ideas about creation, innovation, and the character of existing and emerging technologies shape and are shaped by the legal institutions established to protect dominant and nascent interests. Following the advent of the printing press, subsequent media including photography, recorded music, radio, and video spurred further changes to copyright laws in order to maintain and extend the privileges of rights holders (rather than authors or creators), a tendency that has accelerated since the late twentieth century to the extent that the scope of private rights now far exceeds their historical justifications.

Throughout the early history of their development, both public benefits and private interests in the extension and enforcement of IPRs were subjected to legal, political, and public scrutiny. In these debates, some regarded IP as simply

another form of private property held by way of natural right, while others perceived access to information and knowledge as the primary interest to be facilitated by state-granted rights in knowledge-based goods perceived as unique privileges. The very fact of publication (both of literary works and innovations) was considered a gift to the public that made a work unavoidably common. Neither books nor inventions were seen to exist in isolation but were regarded as linked into complex networks of communication. Thus, acceptance of a natural property right – which would legitimate perpetual rights – has always been rejected in principle as inhibiting the advancement of learning and knowledge. Nevertheless, in no small part due to Enlightenment and Romantic philosophy, during the eighteenth century the belief in the individual-as-creator took on a more prominent role in the law.

IPRs were ultimately designed to create a balance between private and public interests, granting authors and inventors a limited-term monopoly over works that could be assigned to publishers and manufacturers to protect their investments. Once this term ends, the protected works enter the public domain and are available for reproduction, imitation, appropriation, and transformation. This social balance is designed to bestow rights-based incentives for creators, by promising monetary rewards in a market society. Yet, to the disservice of the free flow of ideas, expressions, and technology in European and Anglo-American public spheres, IPRs tend to grant exclusive rights to private individuals – and, more recently, to corporations, under the legal fiction that granted them the status of individuals – on the basis of utilitarian calculations about the enhanced social benefits that would ensue. Authors' exclusive rights under copyright, for instance, may be viewed as a necessary evil in a free market economy – a limited monopoly to encourage creation for the purpose of furthering the arts and sciences, the learning essential to an enlightened citizenry, and the ongoing enrichment of the public domain. Copyright, protecting only a work's expression or an innovation's form, rather than the underlying ideas these contained, was thus regarded as a kind of tax on the public, strictly limited in time and in scope but needed to provide incentives for innovation.

Although patent monopolies were created prior to copyright legislation, the historic development of both legal systems shares a similar trajectory with respect to the priority given to the maintenance and promotion of a public pool of knowledge. Patent protection is granted to craft-makers and trades-people to protect the fruits of individual labor and to spur subsequent and parallel inventions. Patents are accorded to ensure that critical details be accessible to the public through disclosure of the pertinent information necessary to enable subsequent inventions. Simultaneously, patents protect inventions from being copied by competitors. Patent holders therefore benefit from limited exclusive rights attached to their works, which they can exploit until the patented information becomes appropriable by the public. Like copyright, the utilitarian arguments underlying patent laws aim at creating incentives for research, development and the creation of new products and ideas. Some philosophical

traditions put individual ownership over patents at the very core of private property, while others see patents as limited monopolies that would, if not for the social benefits they bestow through disclosure, be illicit forms of unfair competition that limit free trade. The rights granted by patents, then, ensure a limited-term monopoly over the making, use or sale of protected information only in so far as these rights do not excessively prohibit other socially useful innovations. This inherent conflict between public and private rights as well as the tension between innovation and monopolization remains crucial to ongoing IP debates.

By the late nineteenth century, IP was regarded as an instrumental tool for maximizing social and economic benefits in an industrial society, rather than as a natural right to be afforded to individual creators as a mere consequence of creative effort. Nonetheless, market-savvy actors have always profitably exploited such rights in pursuit of private, rather than public agendas. The early history of US copyright lawmaking, for instance, is regarded as a classic demonstration of the instrumental role of the state in advancing the interests of capital and aligned elites. If IPRs were designed to foster social development, the major beneficiaries nonetheless were those accumulating private capital. As a consequence of this opportunity to profit, strong private, corporate and industrial lobbies are today pushing for more stringent, extensive and longer term IPRs, a tendency foreseen by early critics of these laws including drafters of the US Constitution.

The historical development of IP laws ideologically privileged Enlightenment concepts of liberal individualism and Romantic notions of individuated authorship and authorial control, despite the fact that their benefits primarily accrued to corporate collectivities as employers of creative labor and assignees of rights which creators and innovators cannot individually exploit. For this reason, IP operates largely to protect investment capital. Nonetheless, more relational understandings of creativity and innovation have gained greater credence in the late twentieth century, as has the capacity of technologies to democratize the dissemination of works and technologies and to de-legitimize individual authorial rights, particularly when these are exercised to support corporate censorship or rent-seeking behavior. For many artists, activists, scholars, and consumers today, the shared use of socially developed technologies promises a far greater pool of creative resources and services than those provided via the perpetuation of private monopolies based upon an ideological individuation of creativity and innovation. The increasing ubiquity of digital information and communications technologies and the capacities these afford for ever-greater networked social collaboration in creative expression and technological innovation are furthering claims that the IP system faces a crisis of legitimacy.

3. Shaping Cultural Life and Conditions of Communication

Many critical scholars of intellectual property have remarked upon the capacity of IPRs – copyright, trademark and publicity rights particularly – to shape communications by affecting forms of private censorship. The nature and consequences of the potential conflict between freedom of speech and copyright power is the subject of great concern, much of it critical of the overreach of corporate copyright and trademark holders into the public realm of expressive freedoms. Although this conflict was first addressed in the US constitutional context, the issue has also surfaced and attracted critical attention in Canada, Europe, the United Kingdom, and South Africa. Copyright, arguably, is not appropriately put under a ‘new economy’ umbrella because it does not merely spur innovation but also regulates speech. It is, in other words, not merely an economic vehicle, but a communications instrument relevant to cultural policy. Copyright is understood to underwrite the free speech necessary to democratic society. It does so by providing a subsidy for a robust and independent media landscape, but it also imposes limitations to free speech that cannot always be justified, mainly by prohibiting or imposing prohibitive costs on expressions that copy or transform the expressive work of others (e.g., in the forms of parody, collage, or artistic criticism). Many IP systems afford fair use or fair dealing for such actions; however, the threat and subsequent cost of litigation often creates a chilling effect on these uses.

Copyright, like trademark and publicity rights, affects the ways in which meanings may be expressed and ideas circulated, preventing people from using some of the most powerful, accessible, and popular cultural forms to express alternative visions of social worlds. Because it controls reproduction, copyright limits flows of information, regulates the production and exchange of meaning, and shapes social relations of communication. Through the concentration in private hands of ownership over the cultural products they enable, copyright and trademark laws can be used as tools for the private, rather than governmental, control over speech. In many contemporary media landscapes, this results in the excessive control of free speech and flows of information by corporate actors in news, media, entertainment, and technology sectors.

Although copyright laws aim to ensure fair access to cultural goods, current laws pose special obstacles to creativity, cultural critique, and democratic dialogue because of limited fair use and fair dealing exemptions, widely acknowledged to be in need of re-conceptualization and reform. Although they are inherent and crucial aspects of human expression, copying and reproductive appropriation are throttled by copyright law and its recognition of limited exceptions that are not meaningfully related to the reality of creative expression, particularly in a networked digital milieu that facilitates and indeed depends upon copying, sharing, and new forms of collaboration.

Despite ever more convincing theoretical explanations of the critical work that acts of creative appropriation accomplish, the legal landscape, even around contemporary ‘appropriation art,’ is far from settled, and the ethics of cultural appropriation constitutes an emerging and controversial field of study, as does the increasingly impassioned rhetoric surrounding IP in digital environments and its consequences for public policy.

The uncertainties posed by copyright to everyday activities as well as its increasing obstruction of learning and creativity in digital environments are widely lamented, especially now that practices of reusing and copying – once the critical tools of an artistic avant-garde and other subaltern communities – are employed by all users of digital media as the underlying basis of the ‘cut and paste’ operations we regularly perform in digital contexts. Inherently reproductive digital technologies provide the most important tools of creativity for a new generation for whom digital remixing is a fundamental form of speech, thought, and identity. The average person inadvertently accomplishes an unseemly number of infringements daily, which has led to a tense situation where youths in particular have become targets of increasingly didactic and moralistic "anti-piracy" campaigns that simultaneously bring copyright law into ever greater disrepute while imperiling important new forms of creativity. Critics, frustrated by the lack of overarching cultural policy principles able to balance the restrictions imposed by corporate IP holders, are founding initiatives such as Free and Open Source Software, Creative Commons, and the Access to Knowledge (A2K) movement to establish processes of civil society cultural policy-making in the absence of decisive government political activity to better serve public needs for greater access to protected materials.

The chief argument of many open source thinkers is that software -- and by extension other culturally expressive work -- that is *not* subject to the constraints of IPRs better supports both the creative process and the public discourse vital to democracy. Among the most significant tools of such thinkers is the public license, which encourages the use of copyright powers to enforce sharing rather than restrict it. By insisting that all who participate in open source communities agree not only to contribute their efforts to a common pool, but also to share derivative creations, ever more sophisticated common resources can be cumulatively developed. The popularity of public licensing has now expanded far beyond the world of software, and includes cultural objects of all sorts, as the Creative Commons license illustrates.

Arguing against a ‘pay per use’ culture in which every cultural form is conceived of as a work to be protected by IPR and thus explicitly owned so as to require clearance before it can be used, cultural critics advocate the global adoption of the practices and conventions of peer-production-based communities (some of which are enabled through donations, while others are profit-oriented) such as Flickr and Wikipedia, which are built on similar principles of collaboration, sharing, and on the provision, rather than on the limitation of access to informational goods.

This approach does not refute the regime of copyright, but actively engages its principles as tools to be deployed for public purposes. The novel exercise of such rights has helped to forge new communities and legitimizes and popularizes new norms. Corporate copyright holders are responding to the success of the popularity of peer-to-peer file sharing with new technological means for concentrating and restricting the online circulation and use of digital cultural works. Digital Rights Management (DRM) systems, which encrypt content in order to limit access to it, provide a 'technological Px' to this problem, enabling rights holders to physically and legally control and manage digitally distributed information. The emerging digital landscape is increasingly governed by privately generated norms and technological measures backed up by legislative bodies, displacing public deliberations around the scope of copyright and its limits, which functions to turn large amounts of what was once in the public domain into private goods. Deployments of DRM result in violation of users' rights of fair use and freedom of expression; they have spurred a countercurrent of protest and resistance. Various solutions to this standoff have been proposed to provide compensation to owners without controlling the behavior of users with little consequence.

Although technologies for preventing unauthorized file sharing are still under development and their long-term viability is uncertain, rights holders are still assuming they will hold exclusivity in cyberspace. After initial standoffs and skirmishes, some entertainment industry actors, including distributors of video and online games, are embracing and encouraging fan-produced derivative works, largely within the parameters of strict permissions, with the ultimate purpose of generating further profits built upon the cultural content produced by appropriated consumer creativity. Scholars and activists urge consideration of greater user rights and policy reforms that take into account the important functions of digital realms of IP-protected culture as creative and learning environments and that defend users' circumvention of corporate technological barriers to their creativity.

The growing ubiquity of digital technology in consumer societies has renewed critical interest in the concept of the public domain and its limits. The public domain is constituted by intangible goods and forms that lack IP protection and is characterized as a cultural 'commons' or commonwealth. It has been described as a realm of socially shared informational goods lacking commodity status or defined through gift relations, and is occasionally considered a dimension of the public sphere. Methods for defining and mapping the public domain abound, but pragmatists suggest that it is more important to articulate what the public domain needs to be. Copyright critics argue that a reading of the existing case law in common law jurisdictions points to a more positive rendering of the public domain as an enlarged space of cultural productivity that serves the public interest, rather than a mere group of works that do not have IPRs attached. This point has been taken up with respect to IP and public goods more generally rather than under conditions of globalization.

4. Neoliberalism and the Informational Economy: Balancing Private

Interests and Public Goods

Theorists of the global network society have demonstrated that emerging information, communications and media technologies are reorienting the economy as a new mode of development rooted in technological advances that have spurred the development of industries based upon the creation, accumulation, selective sharing, and protection of information, thereby contributing to the fundamental restructuring of many capitalist modes of production. State-centric modes of production, based upon national and international relationships, are giving way to internationally oriented production models facilitated by networked organizational structures and the 'out-sourcing' of production processes. Under this internationally networked structure, the centrality of the state is replaced to a large degree by international mechanisms as the locus of control and regulation.

Information technologies not only facilitate new possibilities for a globalized market but within that market they enable the rise in importance of informational and symbolic goods. IPRs, however, are necessary to enable such goods to have value. Without IP, knowledge resources would tend to be widely available as part of a social reservoir of intangible goods. By enabling the commodification of such goods, IPRs amplify market conditions of exclusivity by making such goods artificially scarce. Assuming that expressive and innovative goods would not be created without market-based incentives and thereby reifying economic rationalism as a natural human trait, the law imagines and naturalizes the human subject as a sort of *homo oeconomicus* where all dimensions of human life are cast in terms of market rationality. IP law thus projects the ideology that unfettered private control of resources fosters the most efficient distribution of these resources and enables a larger public good, namely an abundant proliferation of products and services. Acceptance of this neoliberal logic and the global expansion of IPRs has ensured that IP ownership and control of the networks through which IP flows have become major pillars of economic and political power under information capitalism.

Processes of economic globalization have rationalized the expanded reach of IPRs, and thus of private property rights, both into new jurisdictions and into new realms of human life and livelihood, a phenomena which has transformed both international governance and social relations of power. The same technologies that give capital expanded reach and efficiencies also create greater risks, convincing capital interests that new institutional and technical innovations are necessary to protect IPRs from the swift advance of digital information technologies. To the extent that such technologies enable ever more rapid dissemination of information and the reproduction of informational goods, IPRs are perceived by some as being in need of greater strength and enforcement, both to enhance the benefits derived from these changing economic dynamics and to protect investments against 'free riders' who could operate at greater distances, and with greater speed than ever before. Many states at first attempted to balance their domestic needs against the increasingly international interests of IP holders operating in global markets, but these efforts have been met by strong lobbies and transnational interest groups that push for more global solutions through international law.

Indeed, critical political economists have suggested that since the early 1980s, international law has grown dramatically as the principal instrument through which the rule of private property was extended in the world economy and the means through which the rights of transnational capital was safeguarded through ideologies of harmonization, standardization, and uniformity of regulation and enforcement, which both misrecognize the phenomenon of uneven development and serve to exacerbate it. Globalization is marked by international legal changes which favor advanced capitalist countries, free transnational capital of spatial and temporal constraints, and privilege market ethics, while eliminating equity concerns from international economic relations through the imposition of state enforcement mechanisms that secure greater capitalist accumulation in knowledge-based goods. IPRs have a fundamental and catalyzing role in knowledge-based economies, determining access and terms of access, the prices to be paid for informational resources, and possible business models for competitive enterprise. Not surprisingly, the power of corporations who trade in such goods has dramatically increased, particularly to the extent that they have influenced the establishment and enforcement of new international trade laws to protect their investments and turned states into agents for their interests. The World Trade Organization (WTO) regime exemplifies this shift in what has been called a neoliberal revolution, and the incorporation of IPRs perhaps most clearly illustrates it.

The incorporation of IPRs into the international trade framework was a goal first aspired to by US corporate interests and lobbyists who were able to build and then capitalize upon widespread social fears over deindustrialization and the potential loss of US competitiveness in the 1980s. Increased protection for and the global harmonization of IP laws was on the agenda of the world's leading content and technology exporters (transnational corporations in the pharmaceutical, life science, chemical, motion picture, computer and software industries) and the subject of aggressive lobbying campaigns both domestically and internationally. Within the UN system and international conventions administered by the World Intellectual Property Organization (WIPO), the US and other postindustrial states lacked leverage. Under a 'one country, one vote' system, they could be outvoted by developing countries. Moreover, WIPO had no enforcement mechanisms and entertained fundamental disagreements amongst member states over the ways in which IPRs should be promoted, with developed and developing countries often disagreeing about how IP should be implemented based on different domestic social and economic development needs. By contrast, under the WTO system, the US and developed allies have substantial power as the most significant markets for developing country exports. The US business sector advocates the use of all levers of US power (from foreign aid to loan restructuring) to achieve greater global IP enforcement. Providing evidence of 'estimated losses' due to 'piracy,' the IP Committee of the US Council for International Business created alliances with foreign business communities to pressure other governments to include IPRs into trade negotiations where developed country IP expertise relative to developing

counterparts would put them at a clear advantage. The existing trade framework allowed deals to be freely negotiated such that developing countries might secure gains in some areas (like favorable terms for textile and agricultural exports) if they gave up their resistance in others (like the extension of IPRs). Developing countries agreed to these related non-IP trade advantages under the assumption that they outweighed the costs of the new IP measures, although these countries' relative lack of IP expertise at this time put them at a disadvantage for understanding what those costs might be.

Coming into effect in 1995, the WTO system, which now incorporates virtually all of the world's nation states, brought IP protections under the trade umbrella so that a country's failure to adequately protect the IP of foreign nationals effectively constitutes a non-tariff trade barrier and may be subject to sanctions in other fields of trade, such as agricultural exports, as well as fines by other states who seek to force IP compliance. Through the WTO, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) effectively globalized a set of principles for minimum levels of IP protection because most states in the world were or wanted to become members of the WTO. Nonetheless, for nearly all of these states such 'minimum' protections were higher than any they had hitherto recognized or enforced, imposing tremendous administrative and legal costs on these countries to protect the private monopoly privileges of foreign interests from which they derive little benefit. The effective capturing of the global regulatory process for IP standard setting by private interests undermines the ability of governments in developing countries to promote their own national systems of innovation and erodes national control over the provision of diverse public goods.

Two trends have become evident in the wake of the adoption of TRIPS after 1995. Industry representatives have kept states under strict surveillance to ensure TRIPS compliance. The global IPR system reflects the action, power and values of a small corporate elite who continue to influence global policy through the advocacy of new bilateral trade agreements, which they closely monitor as members of advisory bodies to the US Trade Representative Office providing detailed assessments of IP-compliance in foreign countries while promoting strengthened IP standards that meet their needs. Meanwhile, a global civil society movement has mobilized around opposition to TRIPS, focusing on issues such as software freedom, access to drugs, patents on life forms, farmers' rights, food security, and indigenous cultural rights, ensuring an increasingly politicized and polarized global policy environment.

Global controversy focuses on the increasingly contentious practice of turning public goods into objects of private property. For example, in the realm of knowledge, information and scientific data, the use of a property model that emphasizes the desirability of socially enforced rights to exclude trespassers leads to economic policies in scientific and technological research that focus energy and investment on work which produces commercial applications while

de-legitimizing the pursuit of open science requiring patronage from diverse sources of grant and contract funding. The global management of pandemic risks has been undermined by the patent system, which in some cases has prevented the countries most at risk from stockpiling necessary medicines or from importing or manufacturing them. It is anticipated that the diffusion of climate-change technologies will also be crucially affected by IPRs.

As global institutions and multilateral forums became highly politicized environments in which the growth and extension of IPRs were increasingly contested, transnational corporate interests shifted focus to other points of trade leverage. Impasses at the WIPO and the WTO have resulted in ‘forum shifting,’ in which developed countries seek to further increase IP protections through the negotiation of hundreds of new bilateral and plurilateral free trade agreements. Such tactics have become more pronounced since the turn of the century. They are frequently taking place outside of multilateral initiatives such as the WTO, and go well beyond this organization’s standards by insisting upon even greater IP protections than those called for in TRIPS. Initiatives such as the Anti-Counterfeiting Trade Agreement bypass existing multilateral institutions and create a complex web of policies that exclude both developing country and civil society representatives in their negotiation while effectively increasing IP standards. Global rules are set amongst states representing dominant IP holding interests who clearly regard these agreements as ways to further extend and entrench strong IP enforcement without the need for public and inclusive international deliberations or democratic scrutiny and debate. Thus, the trajectory of international IP law continues to perpetuate historic and emergent inequalities that are, nonetheless, becoming ever more politicized

5. The Global Regime of Intellectual Property and Emerging Inequalities:

Human Rights and Development

International law has played an unprecedented role in creating and congealing inequalities in international governance systems and international IP law is considered a prime illustration of this process. International discussions of IP increasingly focus on the negative socioeconomic effects of a globalized, neoliberal information economy governed by international law. In response, various state actors as well as non-governmental organizations (NGOs) and international government organizations foreground development and human rights concerns when discussing the future of global IPRs. Concurrently, the Western philosophical rationales historically used to justify IPRs are criticized as biased towards a particular and narrow set of values. While international agreements and institutions seek to internationalize dominant norms surrounding IPRs, these are not universal, nor are they universally accepted. The myth that justifications for IPRs have been internationalized obscures the ways in which appeals to a so-called ‘level playing field’ in trade works ideologically both to exclude significant forms of social creativity in the Global South as well as to create fundamental inequalities of bargaining power in the international arena.

Developed countries, which are primarily the major content and information technology exporters, have sought to extend IP protections internationally to secure export markets. Developing countries that are net importers of informational goods, and rely upon access to them for their own development, seek greater access to these goods to boost their own economic growth. Developed and developing countries are not homogenous groups, however, and even developed countries may be reluctant to support IPR expansions based on foreign lobbying given the relative power of their domestic industries. So-called developing countries include emerging economies, such as Brazil, India and China, which have become increasingly prominent voices in international affairs, as well as least developed countries with dire social and economic needs. Indigenous communities with distinctive cultural values, moreover, exist in both developed and developing states, further problematizing the idea that IP has been harmonized or that it has attained universal legitimacy. This leads to a highly contested field of policy deliberation driven by a global network of civil society activists.

At the same time, new struggles over the interpretation and implementation of TRIPS provisions are emerging, as countries are becoming more fully aware of the Agreement's consequences. The UN Development Programme has highlighted the ways in which IPRs under the TRIPS regime exacerbated tendencies that undermine low-income and developing countries by putting too many essential technologies out of reach. Activists have attempted to ensure that developmental concerns, international human rights norms, and environmental commitments are not usurped by purely economic, trade-related focuses (often by moving the debates from the WTO to other, more sympathetic organizations in the UN system). Indeed, one incentive for developing countries signing the TRIPS Agreement was the promise of greater technology transfer(s), which has largely been neglected. It is now widely acknowledged that the availability and enforceability of IPRs provides little incentive for technology transfer(s). Open trade and investment regimes encourage development and structural transformation only when markets for information and technology are competitive in ways that permit innovation, learning, and diffusion to flourish, meaning that poor countries need to absorb, implement, adapt and develop new technologies. Greater protection and higher prices for information-based goods and technologies due to restrictive IP laws reduce the capacity of developing countries and their industries to acquire such goods at manageable costs, creating significant barriers to entry for states and domestic industries. Such international developments bear little relationship to the traditional objectives of IP systems, which sought optimal balance between commercial profitability and public-interest concerns. This globally imposed imbalance makes it harder for developing countries to obtain needed inputs and effectively removes necessary rungs on the ladder to economic advancement. Moreover, neither foreign direct investment nor migration of multinational enterprise has necessarily been facilitated by strengthened IPRs. Historically, countries were able to import or generically reproduce technologies which foreign owners did not actively use or commercialize in their territories and here was considerable scope for compulsory licensing to advance domestic development objectives.

The projection of Western-based notions of IPRs is ill suited for a global agenda because different societies have such different needs. In a global situation that consists of Western and non-Western states at varying levels of development with regard to different industries and services, the promotion of a ‘one-size-fits-all’ style of IP appears both untenable and unjust. Throughout their own historical development, so-called developed states, particularly Korea, the US, European countries and Japan, excessively imitated and copied technologies gaining access to knowledge that would be prohibited in the contemporary IPR regimes under which poorer societies now struggle. Historically, relatively weak international protection for IP allowed developing states to build domestic industries comparatively quickly by borrowing and adapting technologies; quite often, these have become international competitors or leaders. The same opportunities are foreclosed to today’s developing countries, whose domestic industries will likely stagnate under strong protection regimes and whose loss of sovereignty over innovation policy via the burden of higher financial and transaction costs to acquire technology are likely to offset any gains in efficiency that global IP harmonization might entail. Another byproduct is the potential erosion of national control over the provision of public goods, such as health care, biodiversity, plant genetic resources, cultural heritage, none of which are expressly regulated by the TRIPS Agreement, all of which are negatively effected by expanded IPRs serving foreign private interests. Efforts to address these inequities and inequalities as well as to balance the private interests of IP holders with larger public interest objectives have focused new attention on development and human rights frameworks to enable broader global policy conversations about the impact of IPRs on health, education, food security, biodiversity, agriculture, and traditional knowledge and cultural expression.

Addressing IPRs through development and human rights lenses calls to attention their larger social, cultural, and political implications. These efforts have ignited significant debates about the appropriate limits and functions of IPRs in a heterogeneous global situation where diverse needs co-exist and many developing and least-developed countries face grave and fundamental disadvantages. In response, the UN adopted the WIPO Development Agenda, an initiative resulting from 2004 proposals from Brazil and Argentina (backed by many states and prominent NGOs) to have the WIPO, as a United Nations agency, address the economic and social development concerns of countries in the Global South. However, as critics warn, the decision to adopt such recommendations is of little consequence without concrete forms of implementation, although it offers room for optimism for those committed to broader policy discussions of IPRs in all sectors. This Agenda may provide states with opportunities to nuance their domestic IP policies to claim entitlements to meet basic needs in food and health, while increasing capabilities for education, protecting cultural heritage, and sustaining the environment for future generations. Development and human rights discourses and practices provide globally legitimated values and norms, adding moral force to efforts seeking to broaden the scope of international IP debates to give greater priority to issues of access to goods, services, and technologies as well as rights to knowledge.

Human rights perspectives are becoming more important in proposed reforms to IP laws and policies so as to balance the granting of exclusive IPRs with rights of access to the benefits of science and technology –commitments that nearly all of the world’s countries have made pursuant to global human rights covenants, which should take priority over trade considerations according to international law. Unfortunately, the international trade regime has both stronger powers of enforcement and also serves global corporate actors’ concerns, interests that have defined public interests in narrow terms to serve their own private objectives. Struggles against such interpretations have emerged on numerous fronts.

Social movements seeking to protect global public health and to promote access to medicine in low-income and developing countries presented one of the first and most highly publicized demonstrations of the human rights implications of expanded IPRs. Transnational corporations were clearly able to exert considerably more influence over the availability of patentable medicines once IPRs were incorporated into a global trade regime. However, in response to the global AIDS crisis in the 1990s, linkages between IPRs, the World Health Organization (WHO) and access to life-saving medicines and treatments were established by activists concerned with the huge differentials in imminent mortality facing those suffering from HIV and AIDs in developed and developing countries. During this decade the WHO developed a Revised Drug Strategy built upon the concept of ‘essential drugs’ – drugs and medicines deemed basic and necessary to meet a population’s health needs – that recommended countries implement domestic policies to support the use of generic rather than patented medicines. Following the implementation of the TRIPS Agreement, the objectives of the Strategy ran counter to international trade norms with respect to pharmaceuticals.

It became clear that the capacity of states to develop autonomous health policies, including the import and manufacture of lower cost generic drugs, was threatened by trade sanctions. Guidelines for developing countries to meet TRIPS obligations while securing access to essential medicines became a primary focus of a coalition of NGOs who found the WHO a more sympathetic forum for building support, forging strategy, and providing policy guidance to developing countries. As a consequence, the interpretation and potential amendments to the TRIPS Agreement’s provisions pertaining to medicine and public morality became highly politicized, with access to medicine representing the first globally publicized struggle in what has become a worldwide access to knowledge movement. Such a shifting of forums has become a popular tactic of activists concerned with the development and human rights implications of IPRs. Resistance has been mounted by AIDS activists aiming to make existing remedies more readily available to countries that had been coerced into compliance with narrow interpretations of TRIPS that are not necessarily in their best interests. The debate over access to medicines (and other health-related products such as diagnostic tests and medical research data) was designed to balance the patent system with access to health care as a basic human right and to address pricing issues.

Both access to medicine and the safeguarding of public health remain issues in the most recent round of WTO negotiations, with both NGOs and less developed states pressing for IPR exemptions that has resulted in the adoption of the Doha Declaration on TRIPS and Public Health in which state parties affirmed that: "the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health . . . the Agreement can and should be interpreted and implemented in a manner supportive of WTO Members' right to protect public health and, in particular, to promote access to medicines for all." Significantly, its provisions restate and reinforce some of the flexibilities contained in the TRIPS Agreement, such as the freedom to grant compulsory licenses (under specified procedures) and to establish parallel importation regimes and emphasizing that policies and practices designed to capitalize on such flexibilities cannot be subject to dispute settlement at the WTO.

Despite the success of such initiatives, fundamental inequalities of bargaining power in international trade remain. Developing and low-income countries have been slow and indeed reluctant to use the built-in flexibilities found in the TRIPS Agreement in the face of reprisals from developed countries and their industries. The United States' use of a 'Special 301' provision is but one example whereby TRIPS provisions are ignored and those countries deemed to be in non-compliance with IPRs – by virtue of the corporate surveillance (in which pharmaceutical companies are dominant) that informs US federal trade representatives of countries' activities – are threatened with direct trade sanctions. This creates a chilling effect whereby states are unwilling to take advantage of potential TRIPS provisions that might permit compulsory licenses for generic drug manufacturers to meet local needs for fear of losing export markets. However, the scope of patent eligibility for drugs, genetic sequences, and diagnostic methods is under great scrutiny even in developed countries, which creates additional promise for change. Since 2002, moreover, many proposals for radical changes in approaches to the financing of new medicines and vaccines have been proposed in order to reform incentive structures away from private property models that restrict access to knowledge and inhibit research in order to delink research and development incentives from product prices. The World Health Assembly's Commission on Intellectual Property Rights, Innovation, and Public Health brought the impact of IPRs on access to medicine and the capacity of research scientists to advance the development of remedies for all diseases to global attention, eventually bringing hundreds of scientists on side with developing countries to advance proposals for the creation of new medical research and development models. By 2008, a global strategy and plan of action for the reform of research and development incentives was approved; advocates continue to persuade greater numbers of stakeholders and policy makers of the imperative to separate the market for health innovation from the market for products.

Along the lines of public health, development initiatives are only successful in environments where education is also enabled and access to basic knowledge is secured. A well informed, educated and skilled citizenry is indispensable to the development process, and the impact of the availability of textbooks on basic learning is well established. Since the 1970s, global experts have been aware that textbook availability was the single most consistent correlate of academic achievement in developing countries and public investments in educational reading materials were necessary and justified, given the inability of markets to deliver quality, efficiency of distribution or optimal prices. Nonetheless, the lack of adequate textbook provision for basic education in developing countries is well documented, and for most of the world's students, access to basic tools for learning is so limited as to constitute a major crisis. The globalization of IPRs has exacerbated this crisis, leading to a greater concentration of textbook publishers in industrialized countries, exacerbating a failure of multinational publishers to engage in differential pricing given a lack of interest in developing country markets, the domination of publishing in the major international languages entailing greater dependency of developing countries on publishers who have little incentive to negotiate translation rights. These circumstances make these countries open to opprobrium, blame and censure for piracy if they attempt to make essential learning materials locally available in accessible languages. As a result, the glaring need to build local capacity in publishing for education goes unaddressed. Even in those developed countries that can more easily bear the distributional burdens; there are ongoing debates about whether copyright law has over-privileged publishers and submerged the needs of students and readers.

Copyright law clearly creates barriers to access by increasing the prices of materials to levels that are out of the reach of many public education institutions, despite the fact that Article 10(2) of the Berne Convention (incorporated into the TRIPS Agreement) allows for domestic exceptions to copyright laws for the purposes of promoting and enabling access to education materials. Regardless, textbooks and other education materials remain scarce commodities in many developing countries for which imports are both necessary and expensive because the use of TRIPS flexibilities is discouraged by the industrialized countries and industries that dominate the trade regime. The rise of digital technologies and publishing practices create opportunities for enabling greater access to learning materials that can be imported at lower cost, but these have come with further barriers, such as DRM technologies that in many cases cannot be circumvented pursuant to international law.

In order to legitimate and solidify principles of access to learning materials for education purposes, new mandatory minimum exceptions to copyright are proposed by activists so as to foster education, public libraries and archives as well as to meet the educational needs of the disabled. Advocates for balanced IPRs argue that a new global regime for copyright limitations and exceptions is needed to match the new regime of 'minimum' protections for rights holders and to restore the balance originally enshrined in the idea of copyright law as a social contract. Pursuant to human rights principles, such an instrument would necessarily contain limitations on private property rights to serve needs relating to freedom of expression as well as the needs of the vulnerable and disadvantaged, particularly those with perceptual disabilities.

The linkages between food security, agricultural concerns and IP may be less readily apparent than those pertaining to medicine and educational materials. Article 25 of the Universal Declaration of Human Rights affirms a broadly defined right of access to sufficient and nutritious food. However, domestic agriculture and farming industries are hampered by restrictive patents that disadvantage farmers in developing countries where food and seeds are scarce. While poverty remains the main reason for hunger, technological changes in the ways in which foodstuffs and agricultural products are produced and distributed have disrupted traditional agricultural processes based upon the cultivation, sharing, and saving of seeds and crop resources, while making farmers more dependent upon patented fertilizer and pesticide technologies. IPRs such as plant variety protection (PVP), plant breeders' rights, and patents applied to genetic resources, biodiversity components, and biotechnological processes may limit possibilities to freely grow certain crops and to consume various agricultural products, thus undermining some of the most basic human needs on which life depends.

Biotechnological developments have commodified the generation and sharing of seeds, instituting private property relations with respect to basic life forms used for growing food through the extension of patents to living organisms. Although the TRIPS Agreement allows for the creation of *sui generis* forms of PVP to meet domestic priorities and values, this flexibility is challenged by new bilateral and regional trade agreements that insist upon more restrictive forms of IP protection in food production. Governments, NGOs, plant breeders, farmers, and researchers seeking to protect and promote the sustainable development of the world's plant genetic diversity have shifted the forum for negotiations to the UN Food and Agricultural Organization (FAO), which is seen to be more sympathetic to developing nation food security issues and the global need to maintain food genetic diversity.

Equitable benefit sharing for the development of crop genetic resources and more balanced forms of IPRs are deemed necessary to prevent concentrations of wealth and privilege with respect to basic food crops and to enable farmers to continue cultivating such crops and engage in plant breeding, seed sharing, and other forms of local food security provision without interference from holders of private patents. One consequence of forum shifting to the FAO was the creation of the International Treaty on Plant Genetic Resources for Food and Agriculture in 2001, celebrated as both the first international treaty of the new century and one that created a limited global public domain in basic crop resources. Nonetheless, this public domain is a fragile one; it remains to be seen whether material taken from international seed banks and other public repositories of genetic resources and genetically isolated or otherwise purified or modified will be protected by patents, and what the consequences of such privatization of public resources might be.

As with the case of traditional medicine, the uncompensated taking of traditional agricultural knowledge and its incorporation into private IP is controversial, with issues of such 'bio-piracy' being condemned, particularly under the Convention on Biological Diversity (CBD), which demands that IPRs be exercised in such a way as to recognize the traditional environmental knowledge of local and indigenous communities. Although the legal impact of these treaty provisions remains limited, as a forum the Convention has provided a more supportive atmosphere for developing new soft law methods including guidelines, access and benefit sharing protocols, as well as contractual models for genetic material transfers that provide new forms of community benefit.

In this as in other areas, developing countries, NGOs and activists have shifted discussions and negotiations toward new international legal regimes in order to analyze those aspects of the TRIPS regime they find most problematic and to exchange information and share policy ideas about means to revise, reject, avoid, subvert, or supplement IP rules, thereby facilitating the creation of alternative norms and values that more fully meet development needs and human rights norms. These developments may represent an intermediate strategy that provides political groundwork for influencing new rounds of IP lawmaking in the future as well as providing evidence of the contemporary concerns of the community of nations which may aid in interpreting the meaning of evolutionary provisions in the TRIPS Agreement itself.

6. Conclusion and Coda

This chapter has surveyed many social, cultural, and political implications of intellectual property laws, illustrating how a market-based IPR system has become increasingly unbalanced. In the intensification of the informational economy, access to information, knowledge, and technology becomes paramount, not only for markets but also in order to meet the needs of economic, social, and cultural development. IPRs have fundamentally worked to advance private rather than public interests, often using an ideology that assumes the public interest to be best served by unfettered market exchange.

Revisiting the balance between public and private interests has been heuristically useful to consider the limitations of IP law; the metaphor of the social contract between private and public goods serves to helpfully reorient policy discussions. From different policy perspectives, the relationship between a public domain and an IP system may be characterized variously as harmonious synergy, a pragmatic accommodation, or an inherent tension, but the yoking of these terms does not exhaust critical inquiry. Our options have never been constrained by simple choices between absolute private monopolies and a wholly unbounded public domain.

The polarization of private rights and public domain may prevent us from seeing the full range of available policy options, because it discounts the policy choices over resources and priorities that must be made to promote an optimal range of public goods and the more positive senses of public ownership and responsibility this might entail. From preventing unfair competition, fostering cultural activities, using new technologies, promoting accurate expressive language in markets, or fostering diversity of expression and maintaining cultural heritage properties, the construction of higher order public goods demands more nuanced policy interventions for aligning interests and distributing goods than an undifferentiated public domain would entertain. Such considerations must engage equities and inequalities, communities and diversities, not merely adhere to a broad utilitarian public interest.

It is important to recognize that the public/private binary is itself a product of European modernity and neither natural nor universal and all-encompassing. This division does not exhaust the resources of all value systems that produce valuable goods, nor does it suggest many of the policy options that may be available through alternative frameworks. There are many forms of social creativity and innovation that will neither be supported by the extension of private rights nor by their relegation to the public domain. Indigenous peoples, for example, have never placed anything in the public domain; a term that has little meaning to them and has historically disenfranchised them of lands, resources, and political agency. Moreover, the term disregards the domains and values of customary and traditional laws and the responsibilities and obligations these uphold.

A human development approach to IP fosters environments in which people can develop their full potential and lead productive, creative lives in accordance with their needs and interests; such an approach also expands the choices that people have to lead lives according to their own values. Fundamental to enlarging these choices is building human capabilities – the range of things that people can do or be in life. The human capability perspective emphasizes the value of diverse cultural values and collective knowledge systems and demands a broader approach to IP issues. A human rights approach puts even greater emphasis upon cultural diversity as a human good, cultural integrity as a value, and rights to heritage as a source of identity and sustainable development. In light of all of these norms as well as ongoing technological changes, we suggest that IPRs will need to evolve in a more pluralist fashion to engage a wider range of peoples, values and commitments in the twenty-first century.

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Glossary

- Access To Knowledge (A2K)** : Is an activist movement involving civil society actors, governments and individuals concerned with promoting fair and just means of access to knowledge in various spheres, including medicine, agriculture, education, and technology, to achieve larger objectives of justice, democratic freedoms, cultural preservation and economic development.
- Biodiversity** : Relates to the degree of variation of life forms and species in given ecosystems, areas, and the planet, as well as variability within life forms and species.
- Commons** : Is a term that refers to resources that are held collectively and not subject to private and proprietary rights. These include things as diverse as land, territory and natural resources as well as information-based and intangible, cultural goods. Activists believe that a diverse and accessible commons is necessary for the promotion of creativity and innovation.
- Copyright** : Is a legal right granted to the creators of works—such as authors, composers, playwrights, and artists—over the reproduction, sale and certain uses of intangible assets, such as literary, musical, dramatic or other artistic works. Copyright may be assigned or licensed by a creator to a distributor or other owner who thereby acquires these rights. Corporations may also become holders of copyright in works created by employees under the work for hire doctrine.
- Cultural Heritage** : Denotes physical as well as intangible artifacts and attributes of a group, community or society that are maintained over generations and passed along for the benefit of future generations. Cultural heritage includes tangible forms of cultural expression, such as buildings, monuments, landscapes, books, works of art and artifacts, as well as intangible expressions, such as traditional knowledge and traditional cultural expressions such as songs, stories, proverbs and ritual.

- Development** : Relates to issues of improvement in economic, social, and cultural well being with a particular emphasis on the needs of peoples and countries in non-Western circumstances, particularly in the Global South.
- Fair Use** : Is a legal principle in the United States that limits the exclusive rights of copyright holders on the grounds of the public good. Purposes such as criticism, comment, news reporting, teaching, scholarship or research are privileged over the exclusive rights of intellectual property holders, particularly when these are non-commercial in nature.
- Human Rights** : Are commonly understood as fundamental and inalienable rights that exist because an individual is a human being. Human rights are entrenched internationally by the UN Declaration on Human Rights and are perceived as universal and egalitarian in nature. These rights ideally function both as natural and legal rights in domestic as well as international law.
- Informational Economy** : Denotes a shift away from a modern economy based upon the manufacture and exchange of material goods to an economy that increasingly focuses on building wealth on the basis of intangible goods such as knowledge-based goods and services. In this economy, knowledge and information are increasingly privatized in order to secure exchange value in global markets.
- Neoliberalism** : Is a political and economic movement that extends forces of capitalism and capital into previously untouched realms. It includes a transformation of the state's role in regulation towards enhancing the security of markets and is marked by increasing privatization and an enlarged role for the private sector in all aspects of society.
- Patents** : Are government grants of exclusive rights over the making, use, sale or importation of an invention within a given territory. Patents are limited term rights in that they expire and are granted on conditions of usefulness and the non-obviousness or novelty of the innovation (which may be mechanical, chemical, pharmaceutical, agricultural, technological or informational).
- Public Domain** : Refers to the field of works or other intangible goods to which intellectual property rights do not attach, have expired or have been forfeited.
- Trademarks** : Are granted for words, names, symbols or devices that are used to identify and distinguish goods and services in markets.

- Traditional Knowledge** : Refers to long-standing traditions and practices of groups, communities or societies based upon historical use and societal preservation. Traditional knowledge is seen to encompass knowledge and traditions passed throughout societies and communities across generations.
- Technology Transfer** : Refers to the transferring of knowledge, technologies and methods of innovation between governments, universities or other institutions to ensure that scientific and technological developments are accessible to a wide range of users. Technology transfer works to ensure that scientific and technological developments may be further used, manufactured, exploited and adapted by a broad range of peoples and societies for their own ends.

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