WIPO Journal

2011

IP in global governance: a venture in critical reflection

Chidi Oguamanam

Subject: Intellectual property. **Other related subjects:** Economics. International trade

Keywords: Developing countries; Globalisation; Intellectual property; International trade

***W.I.P.O.J. 196** Courtesy of the TRIPS Agreement and the monumental transformations in innovative technologies, especially in the bio and digital arenas, the global IP order has been fundamentally altered since a decade and a half ago. Not only has global awareness of IP increased, the latter's significance as a flashpoint of tension in regard to its practical impact on every sector of the global socio-economic and cultural constitutive process is felt now more than ever before. Consequently, IP is a subject matter for the global governance discourse. This article reflects on the failure, successes, accomplishments, challenges as well as the unsustainable nature of current global IP order. It argues that the current order has run its course. It is now time for change. Spotlighting the changing political and economic landscapes currently being re-drawn by emerging regional and global economic powers of the South, the article speculates on the future direction of global IP law and policy. These new economic and power blocs bear the seed or agency of the present urgency for a new approach to global governance of IP. At the core of that urgency is the imperative for mainstreaming equity, development imperatives and, overall, public regarding considerations in the current calibration phase toward a new global IP order.*

Introduction

A decade ago, the world was engulfed in taking precautionary measures in response to the apocalyptic prophecies on the advent of the 21st century via the magic “Year 2000”.[1] Especially prominent in the hyper-uncertainty associated with the Year 2000 was the focus on how the computing systems would crash, resulting in massive loss of data and unprecedented chaos in all sectors of the social and economic fabric of a world that barely begun to embrace the digital revolution.[2] The Year 2000 came and went like any other. There was no Armageddon. The doomsayers were wrong after all.

It is now 10 years after, and a new decade has begun. Despite the false hype and prophecies of doom that heralded the 21st century, there is no question that the turn of a century is a monumental milestone in every civilisation. No less so is the significance of a decade for mortals, institutions and governments. Ten years is a benchmark to assess the state of affairs in the past and to reflect on the nature of things to come. In this article, I take the platform provided by the new *WIPO Journal* to reflect, randomly, on the state of intellectual property (IP) law in the global governance context, especially in the last decade and a half since the commencement of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) of the World Trade Organisation (WTO) as the catalyst of the current global IP order. I identify some progress and accomplishments, some failures as well as some challenges, and speculate ***W.I.P.O.J. 197** on the future direction of global IP law and policy-making. I conduct this task against the backdrop of a changing global political and economic landscape currently being redrawn by the emerging regional and global economic powers. I argue that the status quo in the global governance of IP has run its full course and that the time is ripe for a new direction, or so it seems. Not much is certain regarding how this change would evolve. If anything is certain, it is the urgency for mainstreaming of the development imperative in the global governance of IP.

IP in global governance

IP in global governance implicates virtually all aspects of economic globalisation and its intricate relationship with global normative and political governance.[3] In the context of global governance, IP regulation implicates an unfolding, complex regime interaction, given the indeterminate nature of technological evolution. Inherent in the pattern of this interaction is the dynamism of resistance and counter-hegemonic reactions. Buoyed by the complex and indeterminable issue linkages to IP, more and more actors continue to crowd the IP policy space as agents of desirable control mechanisms

relevant to the specific issue areas within their primary jurisdictions or interests. Thus, in the context of global governance, the prominence of IP, a hitherto obscure and arcane discipline,[4] is a major reality of the new knowledge economy.

The narrative of IP in global governance affirms analysts' interpretive impression of global governance as both a descriptive enterprise and the study of a process in continual transition.[5] As part of that process, IP becomes a dynamic: in regard to which socio-political and economic arrangements are asserted and negotiated; on account of which interests are rotated on fluctuating values; in the context of which the balance among competing control forces are susceptible to ebb and flow; and in the governance of which schemes will continue to be re-invented.[6]

Rosenau was right to associate global governance with “powerful tensions, profound contradictions and perplexing paradoxes”, where the controlling authorities are obscure, where critical boundaries are in a state of flux defying simplistic binaries, and where the systems of rules are subject to continuing negotiation.[7] Perhaps only few aspects of the global process more directly validate these claims than the characteristics of IP in global governance.

Arising from the interaction of powerful tensions and embedded paradoxes, the global IP system has been driven to a crossroads.[8] Its currently unfolding future will be shaped by new forces, by a proactive engagement of old and new controlling authorities (be they obscure or self-evident) and by the unpredictable direction of new technologies and other endeavours. It is a future that is set not to accept every normative ***W.I.P.O.J. 198*** claim of the old order and would strive to eschew its mistakes and boomerang effects; it is set to confront the task of re-calibrating IP to respond to the contingencies of the ever-expanding circle of diverse stakes and stakeholders. It is a future that could hardly afford to further delay mainstreaming equity and the development imperative into the core of what analysts call the calibration phase of IP in global governance.[9] Without question, these objectives are attainable with the right will and resolve. But the answer to whether they actually will be attained, and how soon, is at best speculative and depends on the very unpredictable nature of the international process and the ancillary interests and priorities of the socio-political and economic actors engaged in the reform process.

A global IP order at a crossroads

The present global IP order is at a crossroads,[10] rocked on several fronts by crises of equity, imbalances of stakeholder interests and reckless insensitivity to social welfare, including public and development-regarding considerations. In its gradual but phased evolution from the national through the bilateral to the international and finally to the current global stage,[11] IP law- and policy-making, for the most part, has been dominated by developed countries and their industrial and information establishments, or the various right owning stakeholders within them.[12] The narrative of IP in global governance reveals deep-seated tensions between producers or owners and users of IP--an overly broad, though convenient, categorisation that hardly aligns neatly with the complex dynamics, interests and actors involved. Nonetheless, in essence, IP in global governance can be easily reduced to an interlocked series of conflicted binary relationships between, inter alia, developed and less-developed countries; private and public good; private and public domain; monopoly and competition; development and the under-development agenda.

Some rightly disclaim the inflammatory, sometimes unquestioned, and even unhelpful use of these binary terms.[13] But only a few analytical approaches to the issue capture and underscore the extent of the imbalance, which the current global IP order continues to sustain. Concomitantly, only a few approaches also underscore the urgent need for a critical re-configuration of the global governance scheme in regard to IP. For more than two centuries, developed countries have sustained a:

“maximalists' stranglehold on IP lawmaking exercises, which aims mainly to preserve a ‘knowledge cartel's’ comparative advantage in existing technological outputs at the expense of future innovation requiring more subtle forms of nurture.”[14]

The outcome of the maximalist approach, which reached an unprecedented height with the coming into force of the TRIPS Agreement[15] and its practical consequences, is an increased awareness on the part of the global public of the significance of IP rights. The adjunct to this development has been an escalation in diverse issue densities or issue linkages with IP and associated regime complexity at the intersection of such issue linkages.[16]

W.I.P.O.J. 199 The maximalist approach to global IP protection has been advanced through a harmonisation strategy pursued mostly under the outlook of the one-size-fits-all TRIPS regime.

Undoubtedly, there are some cosmetic attempts to create flexibilities or so-called “wiggle room” in the TRIPS Agreement and various trade regimes to modify the stricture of this regime.[17] However, these flexible accommodations are quite nuanced. In particular, TRIPS has a phased implementation time line directed at “developing” or “least developed” countries that was designed to accommodate the extraordinary challenges required in those jurisdictions to make their IP systems TRIPS-compliant. Although the Doha Declaration elaborated TRIPS' “development” content, only a few would quarrel with the impression that TRIPS was an overkill and that, in operation, its so-called flexibilities are hardly far-reaching.[18] Similarly, not many would dispute the suggestion that as the gold standard of the new global IP order, TRIPS has left in its wake a sobering list of negative outcomes for many in less-developed countries.[19]

It is in terms of those negative outcomes that TRIPS interacts with other relevant peripheral regimes that now constitute part of the global governance landscape for IP. That interaction implicates diverse issue linkages and issue aggregation in regard to IP. The categories of IP issue linkages are open-ended. Prominent ones include human rights, public health and access to pharmaceuticals, political economics of agriculture, food security, the digital divide, and traditional knowledge including genetic resources, expressive culture and cultural heritage.[20] When examined in the context of new technological revolutions of bio- and digital technologies and their complex interactions with globalisation and global governance and the undergirding regimes at the intersection of these issue linkages, the negative outcomes become palpable.[21]

In a way, IP has the potential to advance public-regarding considerations in all areas of issue linkages. But the reality is that given the maximalist approach to IP championed by the technology-exporting countries, the impact of IP rights in those areas, at least in regard to less-developed countries is, for the most part, negative. From access to medicine to food security to information and biotechnology innovations to broader human rights considerations, including those arising in the context of traditional knowledge, the interactions of IP with the forces of globalisation and global governance do not reflect equitable distributional outcomes.[22]

*W.I.P.O.J. 200 Modest progress

The search for fair distributional outcomes regarding the benefits of innovation is at the core of the complex regime dynamics that now characterise IP in global governance. To be certain, the continuing upward ratcheting of international IP norms has not gone unchallenged. Many countries from the less-developed world--especially those in the high and middle income group and their sympathisers (multivalent stakeholders including indigenous and local communities) and supporters (diverse NGOs, IGOs, civil society groups and categories of sub-state actors) have continued to push for a more balanced global IP order in different and opportune forums. Their efforts in these regards take the appearance of nuanced forms of a counter-regime or counter-harmonisation movement. The most recent manifestation of these initiatives is symbolised in the new development agenda adopted by WIPO in 2007.

In various other forums, the pressure for a balanced global IP order is sometimes couched in the overlapping language of development, empowerment, access to knowledge (A2K), distributional equity, social welfare or adjustment of social costs, public good, public-regarding consideration and other similar characterisations. Significant strides have already been recorded in the burgeoning elaboration of IP rights from a human rights perspective,[23] including the IP rights of indigenous peoples and local communities in the context of various forms of traditional knowledge and as regards expressive culture and cultural heritage. Specifically in this issue area, developed countries' hegemony over IP norms and their relentless inclination to ratchet them up are increasingly confronted by counterbalancing arguments from less-developed states.[24]

In regard to global health, the public good argument has garnered traction by virtue of the activities of the World Health Organisation (WHO) and emergent public-private actors in the sector.[25] In agriculture and food security, despite its current weakness across regimes, the case for farmers' rights remains a counterbalancing challenge to the anti-competitive stranglehold of transnational agricultural and allied chemical corporate monopolies that have capitalised on the privatisation of genetic resources in public gene banks.[26] Moreover, as with health, the public good argument has now been advanced and translated in the activities of Food and Agriculture Organisation (FAO) and allied institutions, especially through forms of public-private partnership in CGIAR's federating International Agricultural Research Centres (IARCs).[27]

So is it in regard to traditional bio-cultural knowledge where, through a form of silent revolution at the

Convention on Biological Diversity (CBD), a new Nagoya Protocol on Access and Benefit Sharing (ABS) over genetic resources and associated traditional knowledge, however imperfect, has recently been ***W.I.P.O.J. 201*** negotiated.[28] Similarly, the WIPO IGC, from its modest and unsuspecting origins, mapped the complex jurisprudential landscape in regard to the protection of traditional knowledge, genetic resources and folklore. Presently, the IGC is on the verge of concluding negotiations of a treaty on its mandate subject(s).[29] Finally, recent policy and international lawmaking developments under the auspices of the UNESCO demonstrate bold initiatives to advance protection and safeguarding of intangible cultural heritage, and to promote cultural diversity and cultural exchange for sustainable development.[30] In addition to these international developments, domestic legal regimes, especially at the national and regional levels among many countries of the south, continue to adjust, reflecting the height of progress so far made in the various areas.[31]

Steps forward and steps back

The foregoing developments continue to evolve; in fact, they hardly constitute a dent or a counterforce to the unprecedented degree to which IP expansionism has been entrenched. What appears to have been accomplished remains inchoate, especially in light of the continuing strategic implementation of bilateral and, sometimes, multilateral or regional free trade agreements with TRIPS-plus components, particularly by the United States through its “divide-and-conquer” politics. Indeed, despite the significant or, more appropriately, symbolic, strides that have been made in the areas of traditional knowledge, such as via the CBD, the United States has yet to become a party to that convention. In addition, the loose language in its text, and that of the recent Nagoya Protocol on ABS, cast doubts on how seriously states may take their obligations under these international instruments.[32]

The CBD, WIPO, WTO, UNESCO, FAO (through the International Treaty on Plant Genetic Resources for Food and Agriculture), WHO and several other regimes, institutions, forums and instruments constitute part of the IP regime complex, subsuming IP in global governance to the dynamics of regime politics. The importance of regime proliferation as a counterbalancing force to the hard-edged approach to IP under TRIPS cannot be discounted. At the same time, analysts remind us that when regimes proliferate, for many reasons, stronger states benefit the most.[33] In part, this trend in regime proliferation is a consequence of the diversity of issues linked to IP. It is also an incidence of IP's ubiquitous presence and impact in virtually ***W.I.P.O.J. 202*** all sectors of the new knowledge-based economic order. But regime proliferation is not an efficient way to find workable solutions to the distributional inequity and increasing development gaps engendered by the current dynamic of IP in global governance.

What is urgently needed for IP in the 21st century is a more efficient regime and forum management approach to reconfigure the current global governance scheme in IP. Such an approach should be sensitive to the diversity and open-ended nature of issue linkages, and to the imperative for an effective way of mainstreaming development considerations into IP policy- and lawmaking. How this may come about takes us into the realm of complex permutation on a number of scenarios or possibilities. Of specific interest in that regard is the role of new and emergent economies, especially the high and middle income strands among less-developed countries and other actors. Related to that is whether and how these countries are able to leverage the influence of multinational corporations (MNCs) in their respective jurisdictions in the direction of a more development oriented approach to IP. The role of MNCs as agents of influence in the IP arena is itself a complex discourse outside the present project.

In addition to the negative effects of regime proliferation on the ability of less-developed countries to stem the tide of the maximalist approach to IP, pressures exerted by less-developed countries to induce a rethinking of the normative approach to IP have failed to yield desired results. Self-serving changes that have only helped to accentuate continuity in current global IP protection arrangements are readily secured by developed countries that wield coercive political clout. Development-oriented changes that touch on the aspirations of less-developed counties are often considered too burdensome on established IP norms. This view is often asserted with little or no regard to the historical malleability of IP norms and their susceptibility to political influences.

For example, opposition by developed countries led by the United States and Japan, sometimes with mixed signals from the EU, has ensured that progress remains elusive under the WIPO Patent Agenda, the TRIPS Council and even the Nagoya Protocol on ABS (which was established based on the desire of less-developed countries to incorporate disclosure of source or origin of genetic

resources and, where applicable, associated traditional knowledge in relevant patent applications as an aspect of a new patent jurisprudence).[34] This contrasts sharply with the rapidity with which the United States and its allies secured a pair of the post-TRIPS WIPO internet treaties in 1996 to attune copyright jurisprudence to the vagaries of the internet. Similar are the consistent lowering of the patent threshold regarding biotechnology-related inventions, especially around genes, and the pattern of extension of IP to platform science and innovations, including digital data sets. Yet traditional knowledge forms, including those in the bio-cultural context and in expressive culture remain problematic in their relation to IP because of the "gap question". The gap question, in the words of Professor Daniel Gervais, refers to "areas where current intellectual property norms leave traditional knowledge holders in the dark".[35] Overall, it includes a combination of the conceptual, philosophical and practical limitations around IP norms and their relation to traditional knowledge or lack thereof. Consequently, traditional knowledge forms remain perennial outliers to IP norms and jurisprudence. Rightly or wrongly, they are conveniently treated under the rubric of the category of legally inchoate secondary rights which are often depicted as sui generis.

*W.I.P.O.J. 203 IP overreach: The dangers of a boomerang effect

The consistent addiction of developed countries and their strong industry lobby to an unbalanced optimisation of IP rights has left the global IP order in a jurisprudential mess. Without question, less-developed countries' economies and their vulnerable populations are at the receiving end of the distributional disequilibrium regarding access to knowledge and public goods in this unbalanced global IP system. However, that is only part of the story. Continued calibration of IP rights to their maximum, in a bid to sustain the knowledge hegemony of a few countries in the new knowledge economy, has the potential to implode or flip over and to scuttle the pace of innovation even in those countries. As Reichman[36] remarks:

"Efforts [e.g. through the TRIPS Agreement] to rig a regime for short-term advantages may turn out, in the medium and long-term, to boomerang against those who pressed hardest for its adoption … by reaching for high levels of international [IP] protection (that could not change in response to less-favourable domestic circumstances), technology-exporting countries risked fostering conditions that could erode their technological superiority and resulting terms of trade over time."

This self-destructive potential or counter-productive scenario could upset the current balance in technology and innovation which stands in favour of a few technology-exporting countries, the so-called "knowledge cartel". The scenario could throw up new actors from high and middle income developing countries, especially those currently characterised to be at the "crossover point".[37] At this juncture, a radically abbreviated but critical perspective on the real and potential impact of maximum IP protection and expansion, which technology-exporting developed countries have foisted on the rest of the world via TRIPS and other measures, is in order. This would assist to underscore the real dangers of the ongoing IP overreach and what it forebodes for the future of IP in global governance.

In light of recent advances in bio- and digital technologies and the TRIPS Agreement, the indiscriminate extension of IP protection to all manners of innovation shows that the global IP system is designed to mirror the domestic regimes of developed countries. As in the United States, to some extent in the EU, and in most OECD countries, IP now extends to everything under the sun that is made by man.[38] The consequence of this overly permissive approach, especially in the bio- and digital technology arenas, is the escalation of patents based on a much lower non-obviousness standard and the undermining of the idea-expression dichotomy in copyright jurisprudence. In the biotech and software fields, this trend encourages a lousy and inefficient innovation culture in which big transnational corporations with strong capital and global factor endowments invest their resources in fencing off competition through the creation of patent thickets and copyright cartels.[39] The resulting situation is that the controllers of innovation are those who have learned how to "game", dribble or push the envelope of the domestic and global IP system with a view to perpetuating their monopoly, as opposed to those who make truly meaningful innovation.

These questionable captains of innovation thrive in creating "mounting thickets of rights that impede both technological progress and research".[40] They also escalate IP litigation costs and, most importantly, they corrupt and subvert the IP system by turning it into an anti-competition instrument. In this subverted *W.I.P.O.J. 204 IP order, genetic materials, software and digital data sets, among others, have become theatres of intense innovation intrigue or overlapping patents and copyrights patronised by rent-seeking entities interested in erecting barriers to entry and in scuttling healthy competition.

These forms of IP fence-making do not only obstruct the rise of cumulative and sequential innovations. They also ignore the all-important distinction between platform or basic science, research, information and technology and their applied or practical translations, not to mention cultural and ethical questions.[41] Unlike platform or basic science, the practical or functional technological applications constitute a composite all-important site of truly non-obvious innovation deserving of sound IP protection. In order to ensure qualitative innovation, access to basic or platform science and innovation is critical. But when IP is, unfortunately, nested in the platform arena, it distorts and disrupts technological and scientific progress and excludes medium level and even institutional interests, especially those that are publicly funded as well as others that have less factor endowment, from operating in this increasingly perverted global IP process.

The real and potential social costs of global IP at a crossroads reverberate in diverse sectors, including public health, access to essential medicines, food security and agricultural innovation, human rights and indigenous self-determination.[42] As part of the litany of social cost partly induced by the current regime of IP governance, a new scientific research culture is emerging. Presently, this research culture is transitioning from the customary knowledge sharing ethos to one driven by a code of secrecy and suspicion within the scientific community.[43] This emergent culture is fundamentally not suited to tackle or optimise the exponential possibilities and the promise of networked collaboration in research and development in the wake of advances made in bio- and digital technologies.[44] It is evident that developed countries have shunned those promises. They prefer to deploy IP in tolling platform information and critical data vital to a cost-effective, fair, efficient and integrated optimisation of bio- and digital technologies through cumulative and sequential innovation.

Having maxed or stretched IP to its limits, they have turned to technology to erect “thickets of rights” via technological protection measures, including terminator and similar technologies and forms of digital rights management, to undermine public-regarding aspects of IP rights.[45] Capturing these sentiments, Reichman[46] notes:

“Successful special interest lobbying at both the national and international levels has overprotected existing knowledge goods at the expense of the public domain, while compromising digitally empowered scientific research opportunities with little regard for the social costs and burdens imposed on future creation and innovation.”

 As part of the social cost or the “boomerang effect” of a lop-sided global IP regime, access to knowledge in diverse public-regarding contexts is now fiercely contested. For example, there is now a radical enclosure of public science space, a tolling of access to publicly funded research, a pull-back on IP exemptions in regard to scientific research, educational applications, and technological surveillance, and constriction of public libraries as centres for knowledge dissemination. Another aspect of the festering social cost of an IP system out of joint with the public interest is the external pressures that have resulted in the weakening of small and medium scale entities, such as genetic drug manufacturers, especially in less developed countries (as evident in the Indian experience after TRIPS).

In most industrial sectors, these entities are naturally positioned to make cumulative and sequential innovation from publicly accessible platform science, information and technologies. They are pivotal catalysts in the downstream translation of innovation and in the advancement of distributional justice in regard to innovation. However, in the bio- and digital technology arenas, such critical arteries in the innovation physiology have increasingly become victims of the choking or blocking effects of the proliferation of low standard patents designed to shut them out from the present anti-competitive and slothful innovation environment.

Given the identified flaws in the too smart-by-half politics through which major technology-exporting countries drive the global governance of IP, the ability to sustain their leadership in innovation should not be taken for granted. Consistently, these so-called knowledge cartels have increased the premium on IP by a combination of upward calibration of rights and unmitigated expansion of the scope and sphere of IP application. In their attempt to co-opt the rest of the world into a harmonised global IP order, they initiated a one-size-fits-all approach and erected a global IP floor without a ceiling. Since the coming into effect of the TRIPS Agreement, there has been virtually no let-up in the strengthening and upward protection of IP to a degree often insensitive to the development gap between industrialised and less-developed countries. Frustration over this state of affairs is symbolically reflected in the extreme or radical call for a “ceiling approach” to IP, as unconventional as that may seem.[47] The present stage of IP overreach has incrementally shown that its structurally defective floor-without-ceiling edifice is no longer safe. Nor is it able to sustain the present leadership

in innovation of the present crop of technology-exporting countries.

IP overreach: Alarms in critical constituencies

Like the poorly configured national IP systems in some of the leading developed countries that championed the current global IP order, such as the United States, Japan and members of the European Union, the current global system has important implications. In less-developed countries, it has generated consistent tensions. In the developed countries themselves, it elicits concerns in critical constituencies.[48] For instance, research communities are worried about the privatisation of publicly funded research, especially by ***W.I.P.O.J. 206*** universities, and the erosion of the sharing norms or ethics of public science. The protection of scientific databases and the role of overlapping foundational patents in clustering a wide ambit of interlinked sites of innovation around frontier science[49] is also a major source of worry among policy-makers.

The European Commission is presently concerned about how to enhance dissemination of knowledge and innovation, especially research outcomes, scientific information and educational resources as a strategy to contain the threat to public science posed by the extant IP culture in the European Union.[50] In addition, concerns about the widening digital divide and access to knowledge and information between technologically endowed and less-developed countries continue to engage stakeholders involved in the promotion of the information society.[51] In the United States, the current IP overreach continues to elicit strong public debates and notable objections to its unmitigated social costs.[52] Recent signals from the United States show a willingness by both the judiciary and Congress to attenuate the present addiction to the proliferation of patents on the basis of a lower non-obviousness standard.[53]

In the current era of bio- and digital revolution, perhaps only a few things signify the disquiet over a failing global IP order in the leading industrialised countries than does the popularity of open access ideology, A2K movements and the concept of scientific commons. Open access movements, including the Creative Commons movement, have not only successfully evolved in theory and application; they are generally presented as viable alternatives to address the deficient distributional outcomes of the global IP system in a manner that strikes at the core issue of access to information and knowledge. Not only do these open access or creative commons initiatives underscore the role of IP in negotiating or structuring social relations,[54] they also serve as catalysts for networked innovation to advance individual and collective creativity of all sorts. The legendary success of Wikipedia, various open source operating systems[55] and the liberalisation of collaborative information generation and sharing, especially through the activities of second generation social network sites and other creative commons platforms within and across geopolitical borders, have continued to foster the open access culture. They have also induced an increased attraction to apply the model of networked innovations, which attempt to bypass IP bottlenecks or, where possible, minimise their social cost for optimal distributional outcomes.[56]

From followers to leaders: Emerging and regional powers

Despite the concerns of critical constituencies within and outside the leading technology-exporting countries over the negative effects of perpetuating maximum norms of IP, it would be naive to expect that the desired change will come voluntarily, let alone quickly, from the same quarters that have rigged and led the global IP regime to its present crisis point. Regimes take time to form, and when they do, they assume a life of ***W.I.P.O.J. 207*** their own. But things do not look as hopeless as they seem. One of the lessons of IP in global governance is the presence of resistance, by way of counter-regimes or “cross-currents” as permanent features of both globalisation and global governance. For example, typical of trends in globalisation and global governance, the birth of TRIPS and its induction of a harmonised global IP order was, perhaps, the single most pivotal development responsible for eliciting different forms of resistance to the new IP order. In this regard, different institutions, instruments, NGOs, IGOs, sub-state actors and multifarious stakeholders--hitherto outliers in the normative discourses on IP--easily became sites or agents for critical exploration of IP issue linkages and for the elaboration of the development discourse.

So far, modest strides have been made, at least, to open up and intensify conversation--for example, on traditional knowledge-related rights, including farmers' rights, traditional cultural expressions, ABS, the intersection of IP with public health and human rights, and the safeguarding and protection of intangible cultural heritage and cultural diversity. These advances do not only reflect increased global awareness of the critical importance and ubiquity of IP. They also demonstrate the realisation that IP is fundamentally an interdisciplinary subject-matter and the target of multiple control mechanisms

outside the ambit of a single or few governance institutions as previously thought.

The new way of understanding IP and the stakes involved in its governance is empowering rather than intimidating, especially for those at the receiving end of the presently subverted and poorly configured global IP order. It is on this backdrop that less-developed countries and their global sympathisers (which transcend geo-political and economic borderlines) under the leadership of Brazil and Argentina, successfully pushed for the adoption of a new Development Agenda at WIPO in 2007. Though the Development Agenda is presently taking baby steps on its implementation journey and though its future remains uncertain,[57] for the purpose of this article, its symbolism is what matters.

In terms of significance, first, the Development Agenda reflects an acknowledgement that the ongoing harmonisation of global IP rules weighs abysmally poor on the development scale and, as such, it is in need of salvaging. Secondly, though it has a very weak legal grounding, that fact should not be over advertised. The process that resulted in the Development Agenda is legitimately robust, perhaps even more so than the one that yielded the TRIPS Agreement. Further, via its six clusters, the Development Agenda adopts a comprehensive outlook on global governance of IP. Thus it is both an approach and a framework, the pursuit of which would recognise and accommodate the non-hierarchical or non-conventional nature of actors, instruments and processes that forge control mechanisms in global governance.

Thirdly, and, perhaps most importantly, the Development Agenda symbolises the real and potential ability of less-developed countries, led by those increasingly described as emerging or regional powers, to influence a new vision for a global IP order through rethinking the present governance scheme or its reconfiguration. Lastly, the Development Agenda demonstrates, in accordance with David Kennedy's thesis, a reification of global governance in action; it objectifies “a dynamic process in which political and economic arrangements unleash interests, [attempt to] change the balance of forces, and lead to further re-invention of the governance scheme itself”.[58]

The ability of less-developed countries to actually change the balance of forces and to reconfigure the direction and governance scheme of the global IP process is an idea that holds great hope for many respectable analysts[59] as a way out of a global IP system at a crossroads. In a 2008 study commissioned by the Centre for International Governance Innovation (CIGI) titled *Building Intellectual Property Coalition for Development* (IPC4D), Peter Yu writes:

***W.I.P.O.J. 208** “The adoption of a Development Agenda … has provided less developed countries with a rare and unprecedented opportunity to reshape the international IP system in a way that would better advance their interests. However, if these countries are to succeed, they need to take advantage of the current momentum, coordinate better and with other countries and nongovernmental organizations, and more actively share with others their experience and best practices.”[60]

The potential of less-developed countries to shape the future of the global IP is not necessarily limited to addressing the development question for their own interest only. Indeed, as Yu observes, learning from the mistakes of the major technology-exporting countries or knowledge cartels is also critical. That approach provides a window of opportunity for less-developed countries to change the direction of the present global IP order, which will also benefit the developed countries in the long run. However, a pro-development approach, broadly understood, takes aim at most of the wrong elements of that order. Under its broad construct, development becomes a touchstone for rallying various open-ended IP issue linkages. To this extent, development provides a malleable framework for a holistic and critical outlook on the global IP order.

For instance, depending on one's conceptual approach, all of the 45 recommended proposals adopted in the Development Agenda,[61] even if overlapping, are comprehensive enough to accommodate most of the problematic or challenging issues highlighted by the present crisis besetting the global IP. The six different issue clusters into which they can be reduced--technical assistance and capacity building; norm setting, flexibilities, public policy and public domain; technology transfer, information and communication technologies and access to knowledge; assessment, evaluation, and impact studies; institutional matters, including mandate and governance; and, lastly, the omnibus “other issues”[62] --combine to give a clear sense of the issue compass compressed under the Development Agenda.

Pushing the Development Agenda: The benefits of a coalition imperative

According to Yu, the different but non-exclusive forms or platforms which the IP Coalition for

Development (IPC4D) could take include the formation of blocs, alliances, regional integration and miscellaneous co-operative arrangements by less-developed countries. He proposes four different co-ordination strategies for the development and implementation of IPC4D. They are: the building of South-South alliances, engagement in North-South co-operation, a joint or collaborative strategy for effective participation in the WTO dispute settlement process, and the development and patronage of regional development forums for capacity building and co-operative optimisation of factor endowment and various comparative advantages among less-developed countries.

The advantages of a dedicated collaborative approach to IP by less-developed countries are simply innumerable and require a few highlights. Under this strategy, leading countries in the pack, such as the Brazil, Russia, India and China (the BRIC alliance),[63] and potential contenders thereto, are able to share their knowledge and experiences and to disseminate their best practices in navigating the TRIPS Agreement, the WTO dispute settlement and other trade and development-sensitive processes. A collaborative approach ensures context-sensitive training, education and capacity building, as well as the optimisation of negotiation ***W.I.P.O.J. 209** or bargaining leverage. It also provides what Peter Yu calls “a combine-and-conquer strategy”,[64] which helps counterbalance the divide-and-rule mentality of the United States and its European allies. This approach further minimises the prospects of retaliation, isolation and other negative forms of diplomatic backlash that arise when small states “pick fights” with powerful ones.

In addition, a focused collaborative approach would, be cost efficient overall in regard to optimising access to the wiggle room, or for exploiting the flexibilities of the current global IP order and other relevant multilateral trade negotiation arrangements. Many analysts rightly contend that less-developed countries have consistently under-explored the wiggle room or flexibilities offered by TRIPS and other multilateral trade agreements.[65] Stretching or pressuring those wiggle room and flexibilities is now more important than before. This is not only because the post-TRIPS global IP order and the WTO process have crystallised, but also because pending any future reforms in the global IP policy- and lawmaking regime, less-developed countries will continue to play by the current rules. Perhaps, it is only when the capacity of those flexibilities is optimally explored would appropriate and informed lessons be learned in regard to their strengths and weaknesses. Such an outcome is important for fashioning future policies.

Emerging powers and their dramatic transitions in context

Increasing optimism in the ability of less-developed countries to spearhead change in the global IP policy and lawmaking is not an isolated speculation. It is integral to the confidence in their ability to realign the balance of forces in the broader global political and economic equation in the 21st century.[66] The basis of this optimism is not far-fetched. First, from the late 20th century, most regions and countries of the global South have witnessed significant political and economic transitions. Without renouncing its communist political structures, China embraced the market economy with unprecedented and unstoppable energy, marked by remarkable progress. India, the world's largest democracy, has maintained strong economic growth along with a strong profile in the bio- and digital technology sectors. America's emergence as the sole super-power after the Cold War left South American military dictatorships without America's strategic support that they had enjoyed in the Cold War era. The continent consequently shed its unviable association with brutal military dictatorships in exchange for democracy, with Brazil as the beacon of that change. In the African region, South Africa, like a phoenix, rose from the ashes of apartheid and strategically re-positioned itself for leadership in the region. Much of the rest of the continent, including Nigeria, despite regular political hiccups, social conflicts and military interventions in government, have transitioned via infant steps into some forms of fledgling democratic cultures. Yet the economic and political ramifications of the ongoing 2011 revolutions in the Arab Middle East and North Africa have yet to ripe for informed assessment.

One effect of the positive political transitions in these countries and regions is the opening up of economic and political opportunities through which their voices are heard in international regulatory processes, including those dealing with IP and trade, the environment and sustainable development. The freeing up of democratic spaces in these nations also enhances regional, bilateral and multilateral forms of co-operation. For instance, most of the countries of the south are involved at one level or the other in every conceivable form of coalition building, including regional, continental, sub-continental, and special interest-driven trans-regional groupings.

***W.I.P.O.J. 210** The role and influence of leading developing countries such as Brazil, India and China in the post-TRIPS IP world has become quite significant. This is so, especially in regard to the

Doha Declaration and generally in regard to the development rounds of multilateral trade negotiations. It is also the case in relation to the specific heads of IP issue linkages and the overall dynamics of various institutional forums relevant to IP in global governance. Economic analysts have grouped Russia with Brazil, India and China as the BRIC bloc of countries and have gradually nudged them into appreciating their enormous political and economic potential as a bloc.[67] Gradually, these four big countries have become engaged as an unofficial economic and political pressure bloc of great significance.[68] In 2010, the bloc announced the formal admission of South Africa into the BRIC league.

With more than 25 per cent of world's land mass and 40 per cent of its total population, the BRIC (excluding South Africa) have a collective GDP of US$15.5 billion. Recently, the original “Big Four BRIC” have begun to leverage their economic and political clout to counter, reverse or otherwise influence the United States' hegemonic role in critical subjects, including IP and trade. The emergence of the BRIC is another important layer on the growing South-South alignment, which builds on pre-existing historical and contemporary formations such as the non-aligned movement (NAM), G77+China, and even the North-South strategic engagement forums such as Outreach 5 of the G8 and the G20.[69]

Except South Africa, all the BRIC countries rank among the five most populous countries in the world. Save for the United States and Japan, which occupy the third and tenth positions, less-developed countries make up 80 per cent of the world's most populated territories. With continuing economic prosperity in the BRIC bloc and in other strategic middle income countries like South Africa, Argentina, Mexico, Thailand, Indonesia, Malaysia and South Korea, the political and economic clout of less-developed countries and its implication for re-engaging the crisis of equity in the global IP arena has never looked more promising.

Leading countries of the global South are now commonly referred to by analysts as regional or emerging powers. These countries have continued to cultivate and consolidate their regional clout as an important platform for engaging in cross-regional bridge-building which is very relevant for advancing IPC4D and other trade and development oriented objectives. An example in this regard is South Africa, which, since its integration into international comity at the end of apartheid, adopted Africa as the centre of its foreign policy and has shown strong leadership within the Southern African Development Community (SADC) and the African Union (AU). India's engagement in the subcontinent is also evident in its historical commitment to the South Asian Association for Regional Cooperation (SAAARC) and other regional groupings. Similarly, as South America's most populous country and its largest economy, Brazil's influence in the region has been quite natural, as evident in its leadership role in such forums as the Mercosur (Southern Common Market) and the Union of South American Nations. Indonesia and its regional partners in the ASEAN region also have remained engaged in the nurturing and transformation of the South East Asian countries into a competitive regional economic and trading bloc.

Building upon their regional influences, two of the original BRIC countries, India and Brazil, have formed a trilateral union with South Africa called IBSA (India-Brazil-South Africa). This association, which came into life in 2003, transcends:

 “geographical, historical and regional differences in order to promote their individual and collective interests at a time when the current economic hardship and declining US hegemony mean greater opportunities for emerging countries in the global South.”[70]

As a trans-regional grouping, IBSA provides a platform “for sharing of best practices between member countries and strengthens the voice of the developing world as a whole”[71] in critical areas such as trade and IP negotiations. Within the short period of its existence, a report on IBSA by the Woodrow Wilson International Center for Scholars shows increased trilateral trade and co-operation among IBSA members in the G8, and an increase in “similarity among their votes in other international forums”.[72] According to the report, the combined population of IBSA countries is estimated at 1.3 billion with a nominal GDP of US$3 trillion, or in the alternative, US$5.7 trillion based on purchasing power parity. All the IBSA countries “encompass an area three times bigger than the European Union”.[73]

With the prospect of Mexico joining IBSA,[74] only a few alliances better suit Yu's vision of a model of South-South co-ordination strategy for developing IPC4D. As three strategic regional leaders who also double as emerging powers, countries of the IBSA coalition are aware of the current opportunity for “re-engineering the [global] economic architecture of the Bretton Woods Institutions”[75] for a more

representative and development oriented outcome. Divergences in the historical and political profiles and experiences of these countries should not (as has always been the reason for pessimism over South-South solidarity) be an impediment to their co-operation. In fact, bridging the development gap is a shared permanent interest of most, if not all less-developed countries, including the regional and emerging powers among them. This realisation is critical for forging IPC4D and for reconfiguring the global governance scheme for IP. The recent formal admission of South Africa into the BRIC bloc (more appropriately BRICS,) however, raises concerns not only about the future of IBSA but also about the potential danger of loss of direction likely to plague the indiscriminate duplication of these alliances.

Development: A common denominator

Unlike their developed counterparts, the shared common interests of less-developed countries, including the regional and emerging powers among them, in a new development-oriented world IP order, stems from diverse reasons, few of which I identify here. First, the asymmetrical gap between the rich and poor in those countries--for example, in China, Brazil, India, South Africa and Mexico--is simply phenomenal. Even with the present unprecedented pace of economic prosperity, the rich-poor gap in those countries cannot be adequately bridged over a generation. Thus, addressing the development question, for instance, in regard to access to knowledge, essential medicines and human rights, and in regard to the distribution of miscellaneous benefits from innovation, remains a critical economic and political necessity.

Secondly, because most of these emerging powers are home to a majority of the world's indigenous and local communities, a humane and just resolution of the interface between IP and traditional knowledge will become more urgent in the new IP order. A related third point is that these emerging powers are also centres of origin of global biodiversity, and are reservoirs of cultural treasure and heritage. As such, they have a permanent and vested interest in proactively reversing the deliberate lethargy with which the developed countries have addressed those issues in the current global IP regime. Lastly, as late entrants ***W.I.P.O.J. 212*** into the extant global IP policy and lawmaking order, they are keenly aware that the system has not served their interests well. Increasingly aware of their new economic and political clout and the power in solidarity, they have an opportune moment to break the now fragile hegemony of the present global knowledge cartel.

The history of IP demonstrates that when countries transition into hi-tech creative and innovative economies, they become champions of stronger IP protection, as the United States, Japanese, German and South Korean experiences demonstrate.[76] It is a history of getting to the top and kicking away the ladder.[77] The logic of that history dictates that given the political and economic disparities among the countries of the South, especially in relation to the middle income or emerging regional powers like China, India, Brazil, Mexico, Argentina and South Korea, this group of countries could soon get to the “crossover point”. Singing the old tune, they could begin to succumb to the problematic “high-protectionist delusions”[78] of the present day knowledge cartels. Jerome Reichman observes that IP remains critically important to the advancement of the emerging economies. He argues, rather bluntly, that they have two clear choices on the table:

“One is to play it safe by sticking to time-tested IP solutions implemented in OECD [Organisation for Economic Co-operation and Development] countries, with perhaps a relatively greater emphasis on the flexibilities still permitted under TRIPS (and not overridden by relevant FTAs). The other approach is to embark on a more experimental path that advanced technology countries currently find so daunting.”[79]

Similarly, broaching the issue of choices available to the high-income emerging powers in his reflections on the undetermined future of the global IP order, Peter Yu observes:

“Although intellectual property in these countries will no doubt improve in the near future, there is no guarantee that these countries will be interested in retaining the existing intellectual property system once they cross over to the other side of the intellectual property divide. Instead, these new champions may want to develop something different -- something that builds upon their historic traditions and cultural backgrounds and takes account of their drastically different socio-economic conditions.”[80]

Without over-flogging the issue, the ability of the emerging powers to chart a new global IP order will depend, for the most part, on how they may successfully forge meaningful IPC4D. The success of this and related efforts at coalition building will be undermined if they approach it from the sometimes

unhelpful confrontational binary of “us-and-them”, South-and-North or other related sentiments. Indeed, given the reality of the boomerang effect on account of the overweening reach of the current global IP arrangement, both developed and less-developed countries have valuable stakes in a reconfigured global IP order.

It is evident in the foregoing analysis that there are more areas of shared factor deficits, and more areas of similarity in the socio-economic, political and cultural situations of the regional and emerging powers potentially positioned to lead the charge to reform the global IP order, than there are areas of disparity and difference among them. By way of just one example, those countries collectively share in the transformative experiences of the two defining technologies of the new knowledge economy--namely, bio- and digital technologies--and the latter's ubiquitous multiplier effects. Not only have these technologies ***W.I.P.O.J. 213*** facilitated the integration of the economies of those countries into the global economy, they have also empowered them in a manner which assures their strategic importance and potential in the emerging global economic order.

In addition to the earlier allusion to the positive effects of political transformation and ideological shift in some of the emerging economic and political powers, their rise is not unconnected to the unexpected emancipatory impact of globalisation and its relationship with the two epochal technologies of the knowledge economy in whose continuing evolution these countries play major roles. Further, analysts point out also that the rise of the new economic powers coincides with the perceived decline of the neoliberal hegemony and the “Washington Consensus”.[81] Without question, the emergence of these new powers implicate complex factors, not the least of which is the overbearing posture of the neoliberal hegemony toward other states, its market fetishism and its insensitivity to context and balance, that is, its disregard for the need to pay appropriate attention to the omnibus issue of development.

Santos suggests that the weakening of the neoliberal hegemony is a consequence, in part, of:

“its practices over recent decades [that] intensified exclusion, oppression, and the destruction of means of subsistence and sustainability of large populations of the world.”

This attitude created the extreme situation “where inaction and conformism” by those at the receiving end were hardly options.[82] In a nutshell, this observation is true in regard to the overall outlook of the American-led global economic order following the Cold War. It is truer with regard to IP and trade policies as a composite ancillary part of that global ordering.

Issues for a new global IP order

Detailing the direction for a new global governance structure for IP requires an entirely new project beyond the present one. A highlight of the key issues that should engage such an order is apposite. First, I recognise that from most indications, the emerging regional and global powers are in a better position to chart a new course for the future of global IP. In this context, much would depend on the nature of future technologies and on whether or the extent such emerging powers are able to engage MNCs in their jurisdictions as agents of influence in IP policy. Secondly, I assume that to press forward, a strategy of coalition building is critical. Thirdly, any such coalition would involve diverse and complex alignments encompassing South-South and North-South actors that share a dedicated focus on development. Fourthly, active engagement of the new global governance drivers and stakeholders, including MNCs, NGOs, IGOs, sub-state actors from North and South with expertise in IP and development, is necessary for building the coalition. The importance of these so-called unconventional actors as engineers of control mechanisms in global governance should not be underrated. Related to this is the need to boost the number of IP user advocate groups to counterbalance the over-representation of rights owner lobbies in the activities of WIPO and other relevant organisations.

Pending the transition to a reconfigured global IP regime, it would be necessary to increase the co-operative participation of less-developed countries in the WTO dispute settlement process in order to explore, exploit and stretch limits of existing flexibilities and wiggle room. Alongside, less-developed countries should take more aggressive national legislative and policy initiatives to optimally exploit or leverage their residual sovereign rights to fashion domestic IP policies. This is in regard to the rights that are not affected or constricted by the WTO/TRIPS and other multilateral agreements. Brazil, India and ***W.I.P.O.J. 214*** China, and regionally, the ANDEAN region, have shown commendable leadership in this regard through their IP and related reforms.[83] The rest of less-developed countries have a lot to learn from the best practices and experiences of the three

countries and the Andean region in this regard.

To meaningfully initiate change, stakeholders would have to urgently pressure relevant actors and forums to put on hold the WIPO Patent Agenda, and the negotiation of various FTAs and bilateral arrangements with TRIPS-plus components. In 2007, the Geneva Declaration on the Future of WIPO called for a moratorium on such arrangements as a show of good faith toward the new Development Agenda.[84] Thus, a compelling logic of the Development Agenda is the need for IP policy-makers to take the issue of development seriously. As such, better training on the development aspect of IP is an imperative of a new IP order.

Refashioning a new global IP order does not mean a reinvention of the wheel. Rather, it would require the agents of the desired change and their allies in IPC4D to penetrate present institutional structures of global governance of IP with the objective of influencing a change in the institutional culture in the direction of development. For instance, taking into account the six issue clusters of the Development Agenda, they can push for an elaborate reorientation in the curriculum of the WIPO Academy and other national, bilateral, regional and professional IP education and training programmes in order to mainstream development in IP education and training.[85] Since institutional culture is hard to change, and assuming that changing people's orientation would impact policy direction ultimately and conceding that such an approach will take time to yield results, the best place to start is education and the training of a new crop of global IP law and policy leaders at national, regional and global levels. In this regard, the strategic support of northern NGOs and other public interest and civil society groups with expertise on IP and development in various issue linkage areas is crucial. Needless to say, education and training are critical to reforming the present misaligned global IP system.

A thorough audit of the “boomerang effects” of the current IP order is necessary to gain a comprehensive understanding of the mistakes and failures of the present knowledge cartel. In this regard, minimising the social cost of IP in relation to A2K, promoting sequential and cumulative innovation, restoring competition to moderate the prevailing IP overreach--especially in relation to the proliferation of patents of lower non-obviousness standards--and using technological protection measures (in regard to the quickly entrenched culture of copyright abuse) are all matters of priority. Another important aspect of mitigating the social cost of IP is to mainstream the notion of the creative commons and isolate platform technology and basic and public science from over-protection under a new IP norm. This must be accompanied by deliberate entrenchment of the public interest in negotiating privatisation of publicly funded research to guarantee appropriate social returns and to provide ample discretion respecting access and mitigation of the social cost of such privatisation.

Part of the challenge emerging economic powers face is:

***W.I.P.O.J. 215** “[H]ow to adjust the shifting relations between private and public goods [including] [e]ducation and public health, agricultural improvement, scientific research and other areas still heavily dependent on the public sector in most of those countries.”[86]

Clearly, emerging economies have a vested interest in a new IP order that addresses these questions in a transparent and dedicated manner.

One of the obvious lessons of IP in global governance is the overwhelming reality of regime complexity and how the “regime game” more likely places less-developed countries in position of disadvantage in comparison to their developed counterparts. As much as regime dynamics is a permanent feature of the international process, the nature of IP issue linkage across regimes remains open ended. As such, the prospects of future issue linkages to IP and what regimes or intra-regime dynamics they may throw up depends on the direction of future innovation or technology and their potential socio-economic impacts, among others. Consequently, regime proliferation in IP is a consequence of the dynamic of the rotation of interest by actors in the international process, as well as an incidence of the indeterminate proliferation of IP issue linkages. In this sense, another key issue to consider in a potential reconfiguration of the global governance scheme in IP is devising a strategy for efficient regime or forum management, in contrast to the present deliberate regime proliferation or regime-shifting game which actors play on the global IP chessboard.

The logic of IP issue linkage and its correlating regime complexity is the imperative for an intentional holistic approach to IP in any attempt to reposition IP regulation in global governance. The fact that multiple, evolving and probably open-ended IP issues are linked and associated with complex regimes necessarily requires renegotiating the extant space in which institutional jurisdiction is exercised in relation to IP. Indeed, as much as WIPO and WTO's significance in IP norm-making and administration is important, there is no single, and not even a few, institutions today that are designed

to exercise comprehensive jurisdiction over IP issues in the global knowledge economy. Being an inherently complex transdisciplinary subject-matter, tackling IP policy- and lawmaking challenges in the 21st century would require tremendous flexibility and acute and concerted institutional networking between traditional IP institutions such as WIPO/WTO and innumerable others with direct and indirect jurisdiction in specific IP issue areas.

A holistic and concerted institutional approach to IP reordering is not beneficial only to the global IP arrangement. Such an approach must be premised on a similar ordering at the national level. To fully appreciate the complexity of IP in the new knowledge economy in both developed and less-developed countries, domestic IP agencies and authorities must understand the need for inter-agency collaboration. That form of collaboration is the base on which the issue linkages engaged by IP are to be navigated in order to entrench a holistic approach to IP regulation in global governance. A recent work that examined IP training and education from a development perspective found that partly because of Nigeria's burgeoning movie industry, that country has a proactive copyright agency that dominates the IP policy space with a heavy bent on copyright enforcement only. The agency, the Nigerian Copyright Commission (NCC), embarked on a reform of IP curricula in Nigerian educational institutions with little or no consultation with other important sectors within that country's innovation constituencies, which are also relevant to IP policy development, especially biotechnology and traditional knowledge.[87] Nigeria has some parallel with India in relation to their thriving movie industries and their rich biodiversity and traditional knowledge endowments. It is hard to imagine an Indian approach to global IP policy that focuses on its movie industry without accommodating its incredibly rich traditional bio-cultural knowledge, medical traditions and stakes in agricultural, pharmaceutical and biotechnology innovations.

*W.I.P.O.J. 216 Conclusion

The effects of a changing international political and economic environment and the opportunities it presents are compelling and profoundly amenable to the current swirling momentum of the global IP policy- and lawmaking process. In the words of the South African Minister of International Relations and Cooperation:

“The world we live in today has changed significantly since the end of the Cold War. A new group of economically influential countries, such as Brazil, Russia, India and China are on the ascendancy, and are mapping the contours of political and economic power in the global system … Emerging powers are an important force in shaping the coordinates of a better global system, characterized by greater representation of fairness and equity.”[88]

Applying the above sentiments to IP in global governance, all actors agree that among others, the issues of fairness, equity, balance and access to knowledge, conveniently encapsulated by the notion of development, are at the core of a new IP order. Both developed and less-developed countries have vested interests in reconfiguring the global governance scheme for IP in the framework of development. It is matter of urgency if we are to stem the tide of the current global IP order from its present flow in the direction of the unaccountable deep social costs that threaten to drown the progress of our civilisation at a time that, not many would disagree, is witness to one of the greatest technological and innovation transformations in history.

Though the rise of the countries of the South as emerging powers cannot be denied or lightly accounted, it would be too simplistic to reduce the present challenges facing IP governance in the global knowledge economy to a narrow North-South binary, even if the invocation of that binary is often irresistible in an analysis of the politics of IP in global governance. However, as the US National Intelligence Council rightly observed in a 2004 self-fulfilling prediction, the rise of the emerging powers has:

“the potential to [and has since] render[ed] obsolete the old categories of the East and West, North and South, aligned and nonaligned, developed and developing. Traditional geographic groupings will increasingly lose salience in international relations … competition for [new] alliances will be more open, less fixed than in the past.”[89]

This is so, as soon-to-be-displaced powers begin to re-evaluate their clout in the emergent order.[90] In these realignments of forces and concomitant rotation of interests, there is perhaps no better opportunity for strategically positioned emerging powers to push forward a new global IP framework that tackles, head-on, the prevailing development deficit of the extant regime.

 The author thanks Leon Tovey and David Dzidzornu for their research support. This article is based on the author's forthcoming book: *Intellectual Property in Global Governance: A Development Question* (London/New York: 2011).

W.I.P.O.J. 2011, 2(2), 196-216

---

1. Also known as “Y2K”.

2. See Jerome Marilyn Murray, *The Year 2000 Computing Crisis* (New York: McGraw-Hill, 1996).

3. The association of IP with global governance is not an isolated conceptual construct but is one that has yet to be fully explored. Recognising the variation in emphasis, narratives of IP from diverse international lawmaking and policy perspectives are, clearly, components of the global governance discourse. In her work in intellectual property in global governance in the context of public health, Sell argues that “Global governance means devising, implementing, and enforcing policies in a way that accommodates a broad range of stakeholders and publics”. See Susan K. Sell, “The Quest for Global Governance of Intellectual Property and Public Health: Structural, Discourse, and Institutional” (2004) 77 *Temple Law Review* 363, 363-364; see also Thomas E. Novotny, “Global Governance and Public Health in the 21st Century” (2007) 38 *California Western International Law Review* 19. See generally Kal Raustiala, “Density and Conflict in International Intellectual Property Law” (2007) 40 *UC Davis Law Review* 1021. According to Weiss and Thakur, “global governance is the sum of laws, norms, policies and institutions that define, constitute and mediate relations [on specific and interlinked subject-matters] among citizens, society, markets, and the state in the international arena -- the wielders and objects of international public power”. See Thomas G. Weiss and Ramesh Thakur, *Global Governance and the UN: An Unfinished Journey* (Bloomington, IN: Indiana University Press/CIGI/UNIHP, 2010); see also United Nations Economic and Social Council, *Committee of Experts on Public Administration: Definition of Basic Concepts and Terminologies in Governance and Public Administration,* UN Doc E/c.16/2006/4 (January 5, 2006), at *http://unpan1.un.org/intradoc/groups/public/documents/un/unpan022332.pdf* [Accessed March 29, 2011].

4. See Peter K. Yu, “International Enclosure, the Regime Complex, and International Property Schizophrenia” [2007] *Michigan State Law Review* 1, 33.

5. See James N. Rosenau, “Governance in the Twenty-first Century” (1995) 1 *Global Governance* 13; see also Lawrence S. Finkelstein, “What is *Global Governance* ?” (1995) 1 Global Governance 367; David Kennedy, “The Mystery of Global Governance” (2008) 34 *Ohio Northern University Law Review* 827.

6. Kennedy, “The Mystery of Global Governance” (2008) 34 *Ohio Northern University Law Review* 827, 832.

7. Rosenau, “Governance in the Twenty-first Century” (1995) 1 *Global Governance* 13, 13-14.

8. See Peter K. Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPO Journal* 1, 1.

9. On the calibration thesis, see Daniel Gervais, “TRIPS and Development” in Daniel Gervais (ed.), *Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPS-Plus Era* (Oxford: Oxford University Press, 2007), p.iv; see also Jeremy de Beer (ed.), *Implementing the WIPO Development Agenda* (Ottawa: CIGI/Winifred Laurier University Press, 2009), p.15.

10. See Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPO Journal* 1, 1.

11. See Peter Drahos, “The Universality of Intellectual Property: Origins and Development” (Geneva: WIPO), at *http://www.wipo.int/tk/en/hr/paneldiscussion/papers/pdf/drahos.pdf* [Accessed March 29, 2011] (for an analysis of the evolution of global intellectual property order in three phases).

12. John Braithwaite and Peter Drahos, *Information Feudalism: Who Owns the Knowledge Economy?* (New York: The New Press, 2002).

13. See Yu, “The Global Intellectual Property and Its Undetermined Future” (2009) 1 *WIPO Journal* 1, 7.

14. See Jerome H. Reichman, “Intellectual Property in the Twenty-first Century: Will Developing Countries Lead or Follow?” (2009) 36 *Houston Law Review* 1115, 1165.

15. Agreement on Trade-Related Aspects of Intellectual Property Rights (Annex 1C of the Marrakesh Agreement establishing the World Trade Organization) 1869 U.N.T.S. 299; 33 I.L.M. 1197 (1994).

16. See Laurence R. Helfer, “Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking” (2004) 29 *Yale Law Journal* 1; Laurence R. Helfer, “Regime Shifting in the International Intellectual Property System” (2009) 7 *Perspectives on Politics* 39; Yu, “International Enclosure, the Regime Complex, and International Property Schizophrenia” [2007] *Michigan State Law Review* 1; Raustiala, “Density and Conflict in International Intellectual Property Law” (2007) 40 *UC Davis Law Review*

1021; Ruth L. Okediji, "The International Relations of Intellectual Property: Narratives of Developing Country Participation in the Global Intellectual Property System (2003) 7 *Singapore Journal of International and Comparative Law* 315; Chidi Oguamanam, "Regime Tension in the Intellectual Property Arena: Farmers' Rights and the Post-TRIPS Counter Regime Trends" (2006) 29 *Dalhousie Law Journal* 413.

17. See Jerome H. Reichman, "Securing Compliance with the TRIPS Agreement After the US v. India" (1998) 1 *Journal of International Economic Law* 585.

18. Joseph E. Stiglitz, "The Economic Foundations of Intellectual Property Rights" (2008) 57 *Duke Law Journal* 1693, 1717 (describing TRIPS so-called flexibilities as actually inflexible).

19. See Jerome H. Reichman, "The TRIPS Agreement Comes of Age: Conflict or Cooperation with Developing Countries?" (2000) 32 *Case Western Reserve Journal of International Law* 441.

20. For a more detailed exploration of these heads of issues in the context of intellectual property in global governance, See Chidi Oguamanam, *Intellectual Property in Global Governance: A Development Question* (London/New York: Routledge, forthcoming in 2011).

21. Oguamanam, *Intellectual Property in Global Governance,* 2011 forthcoming.

22. See generally Sell, "The Quest for Global Governance of Intellectual Property and Public Health" (2004) 77 *Temple Law Review* 363; see also Amir H. Khoury, "The 'Public Health' of the Conventional International Patent Regime & the Ethics of 'Ethicals': Access to Patented Medicines" (2008) 26 *Cardozo Arts & Entertainment Law Journal* 25; Peter K. Yu, "Access to Medicines, BRICS Alliances, and Collective Action" (2008) 34 *American Journal of Law and Medicine* 345. In regard to food security and the political economics of agriculture, see Brian Tokar (ed.), *Gene Traders: Biotechnology World Trade and Globalization of Hunger* (Burlington, VT: Toward Freedom, 2004); Carmen C. Gonzalez, "Institutionalizing Inequity: The WTO Agreement on Agriculture" (2002) 27 *Columbia Journal of Environmental Law* 433; Carmen C. Gonzalez, "Trade Liberalization, Food Security, and the Environment: The Neoliberal Trade to Sustainable Rural Development" (2004) 14 *Transnational Law and Contemporary Problems* 419; Chidi Oguamanam, "Agro-Biotechnology and Food Security: Biotechnology and Traditional Agricultural Practices at the Periphery of International Intellectual Property Regime Complex" [2006] *Michigan State Law Review* 215.

23. See generally Laurence R. Helfer and Graeme W. Austin, *Human Rights and Intellectual Property: Mapping the Global Interface* (Cambridge: Cambridge University Press, 2011); Laurence R. Helfer, "Human Rights and Intellectual Property: Conflict or Co-existence" (2003) 5 *Minnesota Intellectual Property Review* 47; Laurence R. Helfer, "Towards a Human Rights Framework for Intellectual Property" (2007) 40 *UC Davis Law Review* 971; Laurence R. Helfer, "The New Innovation Frontier? Intellectual Property and European Court of Human Right" (2008) 49 *Harvard International Law Journal* 1; Philippe Cullet, "Human Rights and Intellectual Property Protection in the TRIPS Era" (2007) 29 *Human Rights Quarterly* 403; Audrey R. Chapman, "The Human Rights Implication of Intellectual Property Protection" (2002) 5 *Journal of International Economic Law* 861; Peter K. Yu, "Reconceptualizing Intellectual Property Rights in a Human Rights Framework" (2007) 40 *U.C. Davis Law Review* 1039; Peter K. Yu, "Ten Common Question About Intellectual Property and Human Rights" (2007) 23 *Georgia State University Law Review* 709 (distinguishing between human rights and non-human rights aspects of IP and exploring the conceptual morass implicated in the human right-intellectual property intersection).

24. See above fn.16 and accompanying text.

25. See Keith E. Maskus and Jerome H. Reichman, "The Globalization of Private Knowledge Goods and the Privatization of Global Public Good" (2004) 7 *Journal of International Economic Law* 279; see also Susan K. Sell, "TRIPS-Plus Free Trade Agreements and Access to Medicines" (2007) 28 *Liverpool Law Review* 41 (discussing WHO's commitment and solidarity of purpose by segments of developing countries in the pursuit of public health outcomes through the exploitation of "TRIPS flexibilities").

26. See Keith Aoki and Kennedy Luvai, "Reclaiming "Common Heritage" Treatment in International Plant Genetic Resources Regime Complex" [2007] *Michigan State Law Review* 35.

27. For example, through the HavestPlus Challenge Program, the FAO's International Consultative Group on International Agricultural Research (CGIAR) is involved with its federating IARCs in using insights from biotechnology and public science to improve the nutritive quantity of major stable food crops of developing countries as a public good. For an overview of the programme, see CGIAR, "HarvestPlus Challenge Program: Medium Term Program 2010-2012", at *http://www.harvestplus.org/content/who-we-are* [Accessed March 29, 2011].

28. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity, at *http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf* [Accessed March 29, 2011]. The Protocol was opened for signature on February 1, 2011.

29. On the activities and mandate of the WIPO Intergovernmental Committee on Intellectual Property, Genetic Resources Traditional Knowledge, and Folklore, see *http://www.wipo.int/tk/en/igc/* [Accessed March 29, 2011]. The IGC is currently undertaking text-based negotiations with a view to raising international treaty documents on its mandate areas.

30. A number of these initiatives include the 2003 Convention for the Safeguarding of Intangible Cultural Heritage, October 17, 2003; 2368 U.N.T.S. 3; the Convention on the Protection and Promotion of the Diversity of Cultural Expression (October, 20, 2005), UN Doc CLT-2005; 2440 U.N.T.S. and UNESCO's Universal Declaration on Cultural Diversity, adopted by the 31st session of the UNESCO General Conference in Paris (November 2, 2001).

31. According to GRAIN's database on biodiversity rights and related traditional knowledge laws, and CBD's database on ABS measures, there are about 96 recent country legislative and six regional initiatives relevant to ABS. See Genetic Action Resources International, "Biodiversity Rights Legislation" at *http://www.grain.org/brl* [Accessed March 29, 2011]; see also CBD Database on ABS measures, at *http://www.cbd.int/abs/measures.shtml* [Accessed March 29, 2011]. Regional initiatives on ABS include those in regard to the African Union, the Andean Pact, Central America, the Nordic Region, and the Himalayan Region through some legislative/regulatory schemes including the African Union Model Law on Rights of Local Communities, Farmers and Breeders and Access (2000), The ASEAN Framework Agreement on Access to Biological and Genetic Resources (2000). For the Himalayan project, see *http://www.icimod.org/abs/resource.php?id=349* [Accessed March 29, 2011].

32. For a critical perspective on the Nagoya Protocol, see ICTSD, "CBD Clinches ABS Protocol in Nagoya" (2010) 10 *Bridges Trade Biores* 20, at *http://ictsd.org/i/news/biores/94075/* [Accessed March 29, 2011]; see also Daniel Robinson and Brendan Tobin, "Dealing with Traditional Knowledge under the ABS Protocol" (2010) 4 *ICTSD Environmental and Natural Resources Programme* 3, at *http://ictsd.org/i/environment/87124/* [Accessed March 29, 2011].

33. See Stephen D. Krasner, *Power, the State and Sovereignty: Essays in International Relations* (London/New York: Routledge, 2009), p.8; Helfer, "Regime Shifting" (2004) 29 *Yale Law Journal* 1, 7; Yu, "International Enclosure, the Regime Complex, and International Property Schizophrenia" [2007] *Michigan State Law Review* 1, 16. See generally Stephen D. Kranser (ed.), *International Regimes* (Ithaca, New York: Connell University Press, 1983).

34. The principal argument against the incorporation of mandatory disclosure of origin and/or source of genetic resources into the patent process supported by the US and its allies is that such a requirement would unduly burden the patent jurisprudence and would be difficult to implement. See Emanuela Arezzo, "Struggling Around the 'Natural' Divide: The Protection of Tangible and Intangible Indigenous Property" (2007) 25 *Cardozo Arts and Entertainment Law Journal* 367; Chidi Oguamanam, "Genetic Resources & Access and Benefit-Sharing: Politics, Prospects and Opportunities for Canada After Nagoya" *Journal of Environmental Law and Policy,* 2011 forthcoming.

35. See Daniel Gervais, "Traditional Knowledge: Are We Closer to the Answer(s): The Potential Role of Geographical Indications" (2009) 15 *ILSA Journal of International & Comparative Law* 551, 556; see also IGC-commissioned "Draft Gap Analysis" (on the protection of traditional cultural expressions/expressions of folklore (TCEs/EoF) and on the protection of traditional knowledge (TK)), at *http://www.wipo.int/tk/en/igc/gap-analyses.* html [Accessed March 29, 2011].

36. See Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1119 (footnotes omitted); see also Jerome H. Reichman "Intellectual Property and International Trade: Opportunities and Risks of a GATT Connection" (1989) 22 *Vanderbilt Journal of Transnational Law* 747, 891.

37. Yu, "The Global Intellectual Property and Its Undetermined Future" (2009) 1 WIPOJ 1, 10-11.

38. This is pursuant to the US Supreme Court's 1982 landmark decision of *Diamond v Charabarty* 447 U.S. 330 (1980) which upheld a patent for a non-naturally occurring genetically modified bacterium designed to break down crude oil as an environment containment device. In that case, the Supreme Court (Chief Justice Warren Earl Burger) sanctioned a liberal interpretative approach as one that best justifies Congress' intention in regard to a patentable subject-matter pursuant to s.101 of the US Patent Code.

39. See generally Drahos and Braithwaite, Information Feudalism, 2002.

40. Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1132.

41. See Ikechi Mgbeoji and Byron Allen, "Patent First, Litigate Later! The Scramble for Speculative and Overly Broad Patents: Implications for Access to Health Care and Biomedical Research" (2003) 2 *Canadian Journal of Law and Technology* 83; Margo Bagley, "Patent First, Ask Questions Later: Morality and Biotechnology in Patent Law" (2003) 45 *William and Mary Law Review* 469; Daniel J. Kevles and Ari Berkowitz, "The Gene Patent Controversy: A Convergence of Law, Economic Interests and Ethics" (2001) 67 *Brooklyn Law Review* 233.

42. See Oguamanam, *Intellectual Property in Global Governance,* 2011 forthcoming.

43. See Chidi Oguamanam, "Patents and Pharmaceutical R&D: Consolidating Private-Public Partnership Approach to Global Public Health Crises" (2010) 13 *Journal of World Intellectual Property* 556; see also Chidi Oguamanam "Beyond Theories: The Intellectual Property Dynamic in the Global Knowledge Economy" (2009) 9 *Wake Forest Intellectual Property Law Journal* 104, 144. See generally Jocelyn Downie and Matthew Herder, "Reflections on Commercialization of Research Conducted in Public Institutions in Canada" (2007) 1 *McGill Health Law Publication* 23.

44. See Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1151; see also Oguamanam, "Beyond Theories" (2009) 9 *Wake Forest Intellectual Property Law Journal* 104, 144-146.

45. On the real economic harm of intellectual property overprotection, see Dan L. Burk, "Anticircumvention Misuse" (2002-03) 50 *UCLA Review* 1095; see also Siva Viadhyannathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity* (New York: New York University Press, 2003); Jerome Reichman and Paul F. Uhlir, "Database Protection at the Crossroads: Recent Developments and Their Impact on Science and Technology" (1999) 14 *Berkeley Technology Law Journal* 793; Debora Kemp "Copyright on Steroids: In Search of an End to Overprotection" (2010) 41 *McGeorge Law Review* 795; Kenneth D. Crews, "Copyright Duration and the Progressive Degeneration of a Constitutional Doctrine" (2005-06) 55 *Syracuse Law Journal* 189.

46. Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1152.

47. See Annette Kur "International Norm-Making in the Field of Intellectual Property: A Shift Toward Maximum Rules? (2009) 1 *WIPO Journal* 27, 30. Between a maximalist (overprotection) and minimalist (underprotection) approach to IP, Reichman and Uhlir proposes a middle course, a more moderate approach to IP protection, one that allows room for genuine progress in regard to sequential and cumulative innovation while accommodating the upward calibration of rights in accordance with the state of progress in a given sector. See Reichman and Uhlir, "Database Protection at the Crossroads" (1999) 14 *Berkeley Technology Law Journal* 793.

48. The following literature reflects the diversity of contexts and subject-matters in which concerns regarding the unsustainable direction of the current global intellectual property order are expressed: European Patent Office, "Scenarios for the Future", at *http://www.epo.org/topics/patent-system/scenarios-for-the-future.html* [Accessed March 29, 2011] (a study commissioned by the EPO which identifies four future scenarios and directions in the potential evolution of IP law and patenting in the next 15 years); see also Lawrence Lessig, "The Creative Commons" (2003) 55 *Florida Law Review* 763; Lawrence Lessig, *Free Culture: The Nature and Future of Creativity* (New York: Penguin Books, 2004); James Boyle "The Second Enclosure Movement and the Construction of the Public Domain" (2003) 66 *Law and Contemporary Problems* 33; Michael Heller, *The Gridlock Economy: How Too Much Ownership Wrecks Market, Stops Innovation and Costs Lives* (New York: Basic Books, 2008); Adam B. Jaffer and Josh Lerner, *Innovation and Its Discontent: How Our Broken Patent System is Endangering Innovation and Progress, and What to Do About It* (New Jersey: Princeton University Press, 2005); Peter Drahos (ed.), *The Death of Patents* (Oxford: Lawtext and Queen Mary IP Research Institute, 2005); Anthony D. So, Bhaven N. Sampat, Arti K. Rai, Robert Cook-Deegan, Jerome H. Reichman, Robert Weissman and Amy Kapczynski, "Is Bayh-Dole Good for Developing Countries? Lessons from the US Experience" (2008) 6(10) PloS Biology, at *http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2573936/* [Accessed March 29, 2011]; Joshua Gay (ed.), *Free Software, Free Society: Selected Essays of Richard M. Stallman* (Boston, MA: GNU Press, 2002).

49. Sapna Kumar and Arti Rai, "Synthetic Biology and Intellectual Property Puzzle" (2007) 85 *Texas Law Review* 1745 (alluding to the potential negative effects of foundational patents in biotechnology and software on the development of innovation in synthetic biology and the option of "open source"-type model).

50. See European Commission, "Green Paper on Copyright in the Knowledge Economy" COM(2008) 466/3, at *http://ec.europa.eu/internal_market/copyright/docs/copyright-infso/greenpaper_en.pdf* [Accessed March 29, 2011]; see also Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1152-1153.

51. See Peter K. Yu, *Building Intellectual Property Coalition for Development,* Center for International Governance Innovation (CIGI) Working Paper Series No.37 (2008), p.2 (IPC4D) (citing concerns over global digital divide which preoccupied deliberations on the 2003 and 2005 World Summit on Information Society held in Geneva and Tunis); see also Peter K. Yu "The Trust and Distrust of Intellectual Property Rights" (2005) 18 *Revue Québécoise de Droit International* 107.

52. See Kemp, "Copyright on Steroids" (2010) 41 *McGeorge Law Review* 795; see also Crews, "Copyright Duration and the Progressive Degeneration of a Constitutional Doctrine" (2005-06) 55 *Syracuse Law Journal* 189; Emily Meyers, "Art on Ice: The Chilling Effect of Copyright on Artistic Expression" (2006-07) 30 *Columbia Journal of Law and Arts* 219.

53. Heller, *The Gridlock Economy,* 2008, pp.65-66; see also Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1128.

54. Madhavi Sunder, "IP3" (2006) 59 *Stanford Law Review* 257, 288.

55. See Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1148.

56. See Lea Shaver (ed.), *Access to Knowledge in Brazil: New Research on Intellectual Property, Innovation and Development* (New Haven, CT: Yale University Law School, 2008); Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven, CT: Yale University Press, 2006); Gay (ed.), *Free Software, Free Society,* 2002.

57. See generally de Beer (ed.), *Implementing the WIPO Development Agenda,* 2009.

58. See Kennedy, "The Mystery of Global Governance" (2008) 34 *Ohio Northern University Law Review* 827, 832.

59. For example, see sentiments expressed in Yu, *Building Intellectual Property Coalition for Development,* 2008;Yu, "Access to Medicines, BRICS Alliances, and Collective Action" (2008) 34 *American Journal of Law and Medicine* 345; Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115.

60. See Yu, *Building Intellectual Property Coalition for Development,* 2008, p.3.

61. See WIPO 45 Adopted Recommendations under the WIPO Development Agenda, at *http://www.wipo.int/ip-development/en/agenda/recommendations.html* [Accessed March 29, 2011] (as listed under six clusters: A-F).

62. See WIPO 45 Adopted Recommendations under the WIPO Development Agenda, cluster F, at *http://www.wipo.int/ip-development/en/agenda/recommendations.html* [Accessed March 29, 2011].

63. Since the BRIC concept was floated about nine years ago by the Goldman Sachs asset management chairman, Jim O'Neil, some countries, including the following, are touted or even self-promote as potential contenders for membership in the coveted club: Indonesia, Mexico, Nigeria, South Africa and Turkey. On December 28, 2010, China (as the current rotating chair of BRIC) announced that the bloc had issued an invitation to South Africa to join the club, following South Africa's application, thus making South Africa an official member of the economic bloc. See Mu Xuequan, "South Africa Joins BRIC as Full Member", at *http://news.xinhuanet.com/english2010/china/2010-24/c_1366213.htm* [Accessed December 27, 2010].

64. Yu, *Building Intellectual Property Coalition for Development,* 2008, p.7.

65. See Sonia E. Rolland, "Developing Country Coalition at the WTO: In Search of Legal Support" (2007) 48 *Harvard Law Journal* 483; Yu, *Building Intellectual Property Coalition for Development,* 2008, p.8. See generally Sisule F. Musungu, Susan Villanueva and Roxana Blasetti, *Utilizing TRIPS Flexibilities for Public Health Protection Through South-South Regional Frameworks* (Geneva: The South Centre, 2004) (also cited IPC4D: Yu, *Building Intellectual Property Coalition for Development,* 2008).

66. See Jeffrey E. Garten, *The Big Ten: The Big Emerging Market and How They Will Change Our Lives* (New York: Basic Books, 1997); Gerald Schmitz, "Emerging Powers in the Global System: The Challenges for Canada", PRB-05-70E Parliamentary Library (2006), at *http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm* [Accessed March 29, 2011].

67. For a more critical insight into the evolution and the future of BRICS, see Goldman Sachs, "BRICS", at *http://www2.goldmansachs.com/ideas/brics/index.html* [Accessed March 29, 2011].

68. See Dominic Wilson and Roopa Purushothaman, "Dreaming the BRICs: The Path to 2020", Global Economics Paper No.99, Goldman Sachs, New York (October 1, 2003), at *http://www2.goldmansachs.com/ideas/brics/book/99-dreaming.pdf* [Accessed March 29, 2011]; see also Michael Schuman, "The BRICS: Plotting A New World Order?", *Time: Curious Capitalist* (April 16, 2010), at *http://curiouscapitalist.blogs.time.com/2010/04/16/the-brics-plotting-a-new-world-order/* [Accessed March 29, 2011].

69. See Woodrow Wilson International Center for Scholars, Special Report: "Emerging Powers: India, Brazil and South (IBSA) and the Future of South-South Cooperation" (August 2009) (IBSA Report), p.13, at *http://www.wilsoncenter.org/events/docs/brazil.IBSAemergingpowers.pdf* [Accessed March 29, 2011].

70. *IBSA Report,* 2009, p.1.

71. *IBSA Report,* 2009, p.2

72. *IBSA Report,* 2009, p.9.

73. *IBSA Report,* 2009, p.10.

74. Remark made by the South African High Commission (Ottawa) Policy Officer Anesh Maistry, at a presentation titled "South Africa as Emerging World and Regional Power", under the auspices of the Dalhousie University Centre for Foreign Policy Studies at Dalhousie University, Halifax, Nova Scotia, Canada, November 25, 2010.

75. *IBSA Report,* 2009, p.15.

76. See Yu, *Building Intellectual Property Coalition for Development,* 2008, p.24.

77. See Drahos and John Braithwaite, "Hegemony Based on Knowledge: The Role of Intellectual Property" (2004) 21 *Law in Context* 204; see also Lawrence Lessig, "The Creative Commons" (2003) 55 *Florida Law Review* 763.

78. See Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1121.

79. Reichman, "Intellectual Property in the Twenty-first Century" (2009) 36 *Houston Law Review* 1115, 1126.

80. Yu, "The Global Intellectual Property and Its Undetermined Future" (2009) 1 WIPOJ 1, 13.

81. See Boaventura de Sousa Santos, "Globalizations" (2006) 23 *Theory, Culture and Society* 393; see also Boaventura de Sousa Santos, "The World Social Forum and the Global Left" (2008) 36 *Politics and Society* 247. See generally Susanne M. Soederberg, *Global Governance in Question: Empire, Class, and the New Common Sense in Managing North-South Relations* (Winnipeg: Arbeiter Ring, 2006). For an overview of the Washington Consensus (as a global economic vision chiefly driven by an unmitigated free market ideology) see Narcis Serra and Joseph E. Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance* (Oxford: Oxford University Press, 2008).

82.

Santos, “The World Social Forum and the Global Left” (2008) 36 *Politics and Society* 247, 248.

83. For instance, China's third amendment to its patent law in 2008 introduced a policy of development and promotion of innovation in China. To this end, China will require disclosure of origin of genetic resources in patent applications with the consequence of invalidation of patent when an applicant fails to disclose. The reform broaches the idea of extended exemption for scientific research and a more flexible compulsory licensing regime. Both India and China, Reichman writes, “have recently begun to formulate competition law and policy with a view to circumscribing the exclusive rights of IP law”. See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1162. Brazil's new copyright reform proposal is hailed as progressive, in part, because of its more proactive approach to not allowing technology to subvert public-regarding considerations, as it makes allowances for aspects of user rights such as fair-dealing. See Michael Geist, “Brazil's Approach to Anti-Circumvention: Penalties for Hindering Fair Dealing”, at *http://www.michaelgeist.ca/content/view/5180/125/* [Accessed March 30, 2011] (referring to art.107 of Law 9610 of February 19, 1998 on Copyright and Neighbouring Rights).

84. Sponsored by a coalition of civil society groups, non-profit organisations, scientists, academics and individuals, the Declaration called on WIPO to focus more on the needs of less-developed countries and to approach intellectual property as an instrument of development rather than underdevelopment, especially in regard to less-developed countries. It provided momentum for the adoption of the WIPO Development Agenda in 2007. For the text of the Declaration, see *http://www.cptech.org/ip/wipo/futureofwipodeclaration.pdf* [Accessed March 30, 2011]. The Declaration notes specifically that “There must be a moratorium on new treaties and harmonization of standards that expand and strengthen monopolies and further restrict access to knowledge”.

85. Jeremy de Beer and Chidi Oguamanam, “Intellectual Property Training: A Development Perspective”, ICTD Issue Paper No.31 (November 2010), at *http://ictsd.org/i/publications/96914/* [Accessed March 30, 2011].

86. See Reichman, “Intellectual Property in the Twenty-first Century” (2009) 36 *Houston Law Review* 1115, 1124.

87. De Beer and Oguamanam, “Intellectual Property Training: A Development Perspective”, 2010, p.31.

88. See Maite Nkoana-Mashabane, “The Relationship Between South Africa and the Emerging Global Powers”, a speech by the South African Minister of International Relations and Cooperation to the South African Institute of International Affairs (November 1, 2010), pp.1-2, at *http://www.saiia.org.za/images/stories/saiia/saia_spe_min_maite_nkoana_mashabane_20101101.pdf* [Accessed March 30, 2011].

89. National Intellectual Council (US), “Mapping the Global Future, Report of National Intelligence Council 2020 Project”, Washington, D.C., at *http://www.dni.gov/nic/NIC_2020_project.html* [Accessed March 30, 2011]; see also Schmitz, “Emerging Powers in the Global System”, 2006, p.1, at *http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm* [Accessed March 29, 2011].

90. See Schmitz, “Emerging Powers in the Global System”, 2006, p.5, at *http://www2.parl.gc.ca/content/lop/researchpublications/prb0570-e.htm* [Accessed March 29, 2011]; see also Steven W. Hook (ed.), *Comparative Foreign Policy: Adaptation Strategies for Great Emerging Powers* (Upper Saddle Rivers, NJ: Prentice Hall, 2002).