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Armstrong, Chris; Schonwetter, Tobias

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CURRENT AFRICAN INTERSECTIONS BETWEEN INTELLECTUAL PROPERTY RIGHTS AND KNOWLEDGE ACCESS

Chris Armstrong
AJIC Guest Editor
Visiting Fellow, LINK Centre, University of the Witwatersrand (Wits), Johannesburg

Tobias Schonwetter
AJIC Guest Editor
Director, Intellectual Property Unit, Faculty of Law, University of Cape Town

ABSTRACT
In this introductory article, the two Guest Editors of this 2015 thematic issue of *The African Journal of Information and Communication (AJIC)* – a thematic issue focused on the theme of "African Intersections between Intellectual Property Rights and Knowledge Access" – provide practical and conceptual context for the articles and thematic reports that follow.

KEYWORDS
intellectual property (IP), access to knowledge (A2K), access to medicines, Africa, openness, commons, Creative Commons, development, human rights, human security, WIPO, WTO, UNFCCC, climate change, TRIPS Agreement, Doha Declaration

INTRODUCTION: ACCESS TO KNOWLEDGE (A2K) IN AFRICA

There is widespread acceptance that knowledge resources are central to what Castells (2000) has called the "informational, global and networked" economy (2000, p. 77). And there is also wide agreement that knowledge resources are integral to socioeconomic development and participation, because, as De Beer and Bannerman (2013) write, "[k]nowledge is a prerequisite to – or, at least, a component of – poverty reduction, population health, food security, universal education and most other human development goals" (2013, p. 76).

Accordingly, the norms and rules that affect governance of information and knowledge are of great importance to the 21st century global economic order. One such set of important norms and rules is the international intellectual property (IP) rights regime. As Kapczynski (2010) explains,

> [b]ecause intellectual property law regulates strategies of information production and the appropriation of value from information in the marketplace, it has become a central battleground in the struggles over the structure and spoils of the contemporary economy. Because intellectual property law also regulates much more – from how we are able to learn, think, and create together to how and whether we have access to the medicines and food that we need to live – it has become a central site of political struggle, not just locally, but globally. (Kapczynski, 2010, p. 24)

Within this "central site of struggle" that Kapczynski describes, a key construct – both practical and conceptual – is "access to knowledge", also known as "A2K". A term coined in the early 2000s by a small international grouping of activists and diplomats, including participants from the African continent, A2K joins together a wide range of themes all related in some way or another to the need for IP rights dispensations to balance their closed, protectionist elements with strong elements of openness and access.

African realities, events and actors have been central to the A2K movement since its beginnings (since before it was called A2K, in fact), with the struggle over access to medicines in South Africa in the late 1990s serving as one of the movement's key early focal points. (As knowledge-embedded goods intimately linked to human well-being, medicines have always occupied a prominent place in the broader A2K terrain, particularly in African and other developing-world contexts.) As the articles and reports in this thematic issue of *The African Journal of Information and Communication (AJIC)* show, A2K and related issues are still very much alive and contested on the continent, in a wide range of sectors. The articles and thematic reports in this issue demonstrate that from African filmmakers to farmers, graffiti artists, government policymakers, small-scale entrepreneurs, people living with HIV/AIDS, and researchers interpreting government data, there is cognisance of the need to find appropriate (and often shifting) points along the IP continuum between knowledge protection and sharing, between fencing-off and opening-up, and between private ownership and the public domain.

In this article we provide both practical and conceptual contexts for the articles and reports that follow in this *AJIC* thematic issue. In the practical terrain, which is the focus of the next section, we trace key A2K-oriented events with relevance to the developing world, particularly Africa, since the coming into force, at the beginning of 1995, of the 1994 World Trade Organisation (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). We then turn to what we see as some of the most useful conceptual frames for contextualising the practical realities, including the realities discussed in the articles and reports of this thematic issue. And finally, we conclude with an acknowledgement that both the practical

and conceptual terrain will inevitably continue to evolve in such a way that while the appeal to "A2K" will still remain valid, useful, and powerful on the continent for the foreseeable future, use of this acronym will continually be re-fashioned and re-framed so as to account for evolutions in both practical and theoretical settings.

PRACTICAL EVOLUTION

The practical origins of what became the A2K movement lie in the negotiation of the aforementioned WTO TRIPS Agreement. Adopted in 1994 (at the time of the formation of the WTO) and coming into force on 1 January 1995, TRIPS was binding on all WTO Member States, taking IP rules that had previously been overseen without enforcement capacity by the World Intellectual Property Organisation (WIPO) and making them punishable via trade sanctions. In addition, the TRIPS IP standards were stronger than those that existed in most countries at the time, with developing countries, in particular, having IP dispensations far removed from what TRIPS mandated. In one of the pioneering analyses of TRIPS from a developing-country perspective, Correa (2000) writes that

> [i]ndustrialized countries forced developing countries to initiate negotiation of an agreement on TRIPS with the clear objective of universalizing the standards of IPRs protection that the former had incorporated in their legislation, once they had attained a high level of technological and industrial capability. (Correa, 2000, p. 3)

The onset of TRIPS thus threatened to exacerbate the technological and industrial gaps that existed between the developed and developing worlds in the mid-1990s. For Kapczynski (2010), there are parallels between the motivations behind TRIPS and the drivers of European colonialism in earlier centuries:

> TRIPS was an exceptionally audacious attempt to extract value from and exert control over informational domains in virtually all of the countries of the world. As such, it has less in common with localized enclosure movements than with colonial strategies of conquest. (Kapczynski, 2010, p. 26)

Developing countries made their voices heard to some extent during the negotiation of TRIPS in the late 1980s and early 1990s under the Uruguay Round of talks under the General Agreement on Tariffs and Trade (GATT). During these TRIPS negotiations, Deere (2009) writes,

> [d]eveloping countries protested that the Agreement would consolidate corporate monopolies over the ownership of ideas, exacerbate the north-south technology gap, and perversely speed the transfer of capital from developing to developed countries. They argued that stronger IP standards would harm their development prospects and that they were ill-equipped to harness any purported benefits. (Deere, 2009, p. 1)

But the balance of power in the TRIPS negotiating sessions was clearly with the developed world, as a function of, inter alia, the central role played by developed-world transnational corporations in the development of, lobbying for, the Agreement. And thus TRIPS was adopted according to the vision of its developed-world framers. Once TRIPS was in place, there was pressure on WTO Member States to harmonise their national IP laws with the minimum standards provided in TRIPS – and, for African and other developing-world governments, to decide if and how to make use of IP flexibilities allowed by TRIPS.

ACCESS TO MEDICINES

There was pressure on developing-world states to, as Deere puts it, "abstain from using the flexibilities available in TRIPS" (2009, p. 1), and it was this pressure that was at the heart of the access-to-medicines battle in South Africa in the late 1990s, mentioned earlier. In 1997, the South African government under President Nelson Mandela proposed amendments to the country's Medicines and Related Substances Control Act that would allow for parallel importation into South Africa of patented HIV/AIDS drugs being sold more cheaply in other countries. The international pharmaceutical industry came out strongly against the amendments. The ensuing struggle between the South African government (supported by an international network of local and overseas activists, with the South African Treatment Action Campaign playing a crucial role) and the international pharmaceutical sector (backed by the US government and some EU governments) became a crucial early test of developing-country use of TRIPS flexibilities (in this case the parallel importation flexibility). The access-to-medicines campaign triumphed in this instance, through generating significantly negative publicity for the pharmaceutical firms, who abandoned their legal action against the South African government in early 2001 (t'Hoen, 2003).

According to Drahos and Braithwaite (2002), in their analysis of this access-to-medicines victory,

> [f]or the first time, mass publics in the West learnt that their governments had, in the 1980s, participated in trade negotiations that globally strengthened patent monopolies, that obliged developing countries to recognize product patents on pharmaceuticals and that reduced their sovereignty over health regulation. (Drahos & Braithwaite, 2002, p. 8)

Later the same year, in November 2001, the developing-world push to ensure that the TRIPS regime did not undermine poor countries' access to lifesaving medicines was formalised when the Fourth WTO Ministerial Conference adopted the Doha Declaration on the TRIPS Agreement and Public Health (WTO, 2001). Again there was a strong African dimension, with the African Group of WTO Member States, led at the time by Zimbabwe (which was chair of the TRIPS Council), instrumental in getting medicines access onto the Doha agenda (t'Hoen, 2003).

Among the reasons why the US government did not block the Doha Declaration, according to Drahos and Braithwaite (2002), was the fact that US policymakers were concerned to ensure that protest over the cost of patented drugs did not become a US domestic issue. It was already commonplace at the time for Americans to cross over into Mexico to buy patented drugs at lower prices:

> The worst of all possible worlds was one in which the debate over the price of patented drugs for the poor in developing countries spilt over into the price of patented drugs in the US. If the price of prescription drugs in the US had tripled in the last decade might they not triple again in the next? How many more US citizens, unable to afford patented drugs, would make that trip to Mexico? The bureaucrats that had been supporting the pharmaceutical establishment went into damage control mode. (Drahos & Braithwaite, 2002, p. 8)

COALESCENCE INTO A2K

Meanwhile, at the same time that the combined efforts of (mostly Northern) NGOs and (mostly Southern) governments were succeeding in giving international momentum to the access to medicines movement (as codified in the Doha Declaration), there were also other matters at the intersection of IP and access gaining traction. These issues included opposition to increased database protection, promotion of free and open source software (FOSS), advocacy for open access (OA) publishing of scientific research, and promotion of expanded and enhanced use of copyright limitations and exceptions for materials access by, inter alia, the visually impaired, libraries and educational institutions (Abdel-Latif, 2010a). But, writes Abdel-Latif (2010a), these movements represented "a fragmented constituency that was made up of a number of disparate groups with a focus on very specific issues that at first glance appeared to be not very much related to each other" (2010a, p. 110).

The coalescing of these groups into the A2K movement emerged from meetings of NGO actors and developing-country diplomats convened in New York in 2004 by the Consumer Project on Technology (CPTech) and Trans-Atlantic Consumer Dialogue. Here the decision was taken to adopt the term "access to knowledge" (later also given the acronym "A2K").

Other key developments in the early 2000s that framed the emergence of the A2K movement were the Budapest Open Access Initiative statement (2002), the report of the UK Government's Commission on Intellectual Property Rights (CIPR, 2002), the staging of the first International Centre for Trade and Sustainable Development (ICTSD) Bellagio Dialogue in 2002, the 2003 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (Berlin Declaration, 2003), and the 2003 Declaration of Principles of the World Summit on the Information Society (WSIS) (ITU, 2003). The CIPR report made a strong call for recalibration of the TRIPS-based international IP system so that the system could serve the needs of both developing and developed nations, and the WSIS Geneva Declaration contained A2K-oriented statements in a section of principles entitled "Access to information and knowledge" (ITU, 2003, pp. 7-8). In 2004, the same year that the term A2K was coined, the movement made its presence felt at WIPO via a proposal tabled in the WIPO General Assembly, by the governments of Brazil and Argentina, for a WIPO "development agenda" (WIPO General Assembly, 2004), and via release, by the coalition of civil society activists and academics that was now the A2K movement, of the Geneva Declaration on the Future of WIPO (Geneva Declaration, 2004). In 2005, parts of the same coalition, led by CPTech, produced a Draft A2K Treaty (Draft Treaty on A2K, 2005).

The African Group of government missions in Geneva, which had been central to the WTO TRIPS Council processes leading up to the 2001 Doha Declaration, was also prominent in the push initiated by Brazil and Argentina for what in October 2007 became the official WIPO Development Agenda (WIPO General Assembly, 2007). Implementation of the Agenda's 45 recommendations is overseen by permanent WIPO Committee on Development and Intellectual Property (CDIP), which had its first sitting in 2008 – attended by representatives from roughly 100 WIPO Member States, from inter-governmental entities and from NGOs (De Beer, 2009, p. 8).

AFRICAN INITIATIVES

Just as the period 2004 to 2007 marked the global A2K movement's full arrival on the international stage, it was also the period when the African A2K push solidified. Key African initiatives in this period were: the 2004-05 Access to Learning Materials in Southern Africa (A2LMSA) project[1] hosted by the Consumer Institute South Africa; the 2005-06 Commons-Sense Project[2] managed by the University of the Witwatersrand (Wits) LINK Centre in Johannesburg; the 2005 launch of Creative Commons (CC) South Africa;[3] the Commonwealth of Learning (CoL) copyright experts meeting in Johannesburg (CoL, 2005); founding of the African Access to Knowledge Alliance (AAKA); the 2005 African Copyright Forum conference in Kampala; establishment of

1 http://www.aca2k.org/index.php/projects/a2lmsa.html
2 http://www.aca2k.org/index.php/projects/commons-sense.html
3 http://creativecommons.org/tag/south-africa

The African Commons Project (TACP);[4] and adoption of the Cape Town Open Education Declaration (Cape Town Declaration, 2007). Both the A2LMSA and Commons-Sense projects convened international conferences in Johannesburg in 2005, and the Commons-Sense conference included the launch of CC South Africa. The keynote speaker at that launch was one of CC's founders, Lawrence Lessig, a key figure in A2K's conceptual underpinnings (covered below under "Conceptual Frames"). CC's international iCommons initiative was run for two years by the aforementioned TACP, based in Johannesburg, which ensured strong African participation in three international A2K-oriented iCommons iSummits (in Rio, Dubrovnik and Sapporo) that focused on fostering modes of online sharing and collaboration (iCommons, 2007, 2008).

African A2K-oriented research and conceptual work also began to emerge from 2005 onwards. The A2LMSA, Commons-Sense, CC South Africa and TACP projects generated research publications, and *AJIC* (then called *The Southern African Journal of Information and Communication (SAJIC)*) published a special issue on "Intellectual property rights and creating an African digital information commons" in 2006 (Armstrong & Ford, 2005; Prabhala, 2005; *SAJIC*, 2006; Rens et al., 2006). There was also growth in Master's and PhD work on the continent adopting A2K orientations (see Schonwetter, 2005, 2009). Between 2007 and 2011, the African Copyright and Access to Knowledge (ACA2K) network,[5] managed by the Wits LINK Centre, conducted primary research into relationships between national copyright environments and learning materials access in eight countries: Egypt, Ghana, Kenya, Morocco, Mozambique, Senegal, South Africa and Uganda (Armstrong et al., 2010). Also conducting primary research during this period were the Publishing and Alternative Licensing Models Africa (PALM Africa) project and the Access to Knowledge in Southern Africa project. PALM Africa investigated the dynamics of publisher adoption of CC licences in Uganda and South Africa (Gray et al., 2010), and the Access to Knowledge Southern Africa project looked at A2K constraints faced by universities in seven Southern African countries (Abrahams et al., 2008). Meanwhile, in Egypt, The American University in Cairo (AUC) established its Access to Knowledge for Development Center (A2K4D), which began work with like-minded Egyptian stakeholders, including the Bibliotheca Alexandrina, to give A2K a foothold in that country.

In 2011, the eight-country ACA2K network evolved into a larger entity, the Open African Innovation Research (Open AIR) network,[6] which currently has members in 14 African countries. Open AIR, which includes researchers from the fields of law, economics, library and information science, innovation studies, political science and media studies, has four African hub institutions: the Intellectual Property Unit (IP Unit) in the University of Cape Town Faculty of Law, the aforementioned A2K4D in Cairo, the Lagos office of the Nigerian Institute of Advanced Legal Studies (NIALS), and the Centre for IP and IT Law (CIPIT) at Strathmore University in Nairobi. There is also an Open AIR Canadian hub, at the University of Ottawa Faculty of Law, which taps into overseas expertise, including the extensive African academic diaspora.

Open AIR's first round of research and publications, between 2011 and 2014, was related to the issue of A2K in that it investigated the open and collaborative innovation and IP approaches of African innovators and creators across diverse sectors in nine countries: Egypt, Nigeria, Ghana, Ethiopia, Uganda, Kenya, Mozambique, Botswana and South Africa (De Beer et al., 2014). During this period, Open AIR also developed three scenarios for the future of knowledge and innovation on the continent (Elahi & De Beer, 2013).[7] Running concurrently with the first phase of Open AIR was the Scholarly Communication in Africa Programme (SCAP) based at the University of Cape Town, which looked at, inter alia, dynamics around university open access (OA) publishing in Botswana, Mauritius, Namibia and South Africa (Trotter et al., 2104). Other significant additions to the development-oriented literature on IP in the past decade have come from studies commissioned by the ICTSD, the UN Conference on Trade and Development (UNCTAD), the South Centre, WIPO, the UN Educational, Scientific and Cultural Organisation (UNESCO), Consumers International, the Third World Network (TWN), and the Quaker United Nations Office.

SOUTH-SOUTH DIMENSIONS

There is a growing trend towards A2K-oriented research, advocacy and policy engagement focusing on the Global South – i.e., Africa, the Asia-Pacific, and Latin America and the Caribbean – and generating South-South cross-fertilisations and comparisons. For instance, a study of the access dynamics of media piracy in developing and emerging economies drew on data from, inter alia, South Africa, Brazil, Mexico, Bolivia and India (Karaganis, 2011). And there are currently at least three large A2K-oriented research networks with members from across the Global South: the Open Data Research Network,[8] the Open and Collaborative Science in Development Network (OCSDNet),[9] and the Research on Open Educational Resources for Development (ROER4D) network.[10] In addition, the aforementioned Open AIR network is forging links between its work and efforts elsewhere in the Global South.

One key forum for South-South cross-fertilisation is the Global Congress on IP and the Public Interest,[11] as first initiated by the Program on Information Justice and Intellectual Property (PJIP)[12] at the American

4 http://www.africancommons.org
5 http://www.aca2k.org
6 http://www.openair.org.za
7 Several of the contributors to this thematic issue, including the authors of this article, are members of the Open AIR network.
8 http://www.opendataresearch.org
9 http://ocsdnet.org
10 http://roer4d.org
11 http://global-congress.org
12 http://www.pijip.org

University Washington College of Law. The first meeting of the Global Congress was in Washington in 2011, followed by Rio in 2012, and Cape Town in 2013 (hosted by Open AIR). For the 4th Global Congress, in December 2015, New Delhi was chosen as the host city. As an illustration of the strong Global Southern presence in these gatherings, the Cape Town Congress in December 2013 had delegates from 54 countries, and 38 of those nations were in the Global South (23 countries in Africa, nine in Latin America and the Caribbean, and six in the Asia-Pacific). Also building South-South cross-fertilisation is Yale Law School's Information Society Project (ISP),[13] which coordinates the A2K Global Academy. The Academy's members are university centres in both the North and South, including members in Latin America, Asia and Africa, with the African centres being the UCT IP Unit in Cape Town and AUC's A2K4D in Cairo. Yale ISP has also supported studies of A2K in Egypt, South Africa, Brazil and India (Rens & Khan, 2009; Rizk & Shaver, 2010; Shaver, 2008; Subramanian & Shaver, 2011).

At the level of intra-governmental IP norm-setting, the power of Global South solidarity has been apparent since the early 2000s and continues to manifest itself. The 2001 WTO Doha Declaration was a clear early example, as were the WIPO General Assembly's adoption of the Development Agenda in 2007 and, more recently, adoption of the 2013 WIPO Marrakesh Treaty on access for the blind, visually impaired and print-disabled (WIPO, 2013). Another intra-governmental forum that has emerged as a critical platform for Southern state-level solidarity on IP matters is the annual meetings of the Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC) of 1992. A central issue at the UNFCCC COP meetings in recent years has been how to ensure low-cost developing-world access to the patented developed-world environmentally sound technologies that must be urgently implemented if the world is to have any chance of arresting global warming at the target level of two degrees above pre-industrial levels (Abdel-Latif et al., 2011; Rimmer, 2011b).

In addition to the developing-country solidarity on IP and technology transfer matters in the UNFCCC talks, developing-country representatives are also working together to push forward the same agenda at meetings of the WTO Council for TRIPS (WTO Council for TRIPS, 2014). Also prominent in recent TRIPS Council's sessions has been the least-developed-country (LDC) push for extension of the LDC waiver, due to expire on 1 January 2016, on the WTO obligation to enforce IP rights on pharmaceutical products (New, 2015).

CONCEPTUAL FRAMES

At the time of the coining of the term "A2K" in the early 2000s – according to one of the African participants in that conception, Abdel-Latif – the term was conceived as a response to, inter alia, the potentially exclusionary and inequitable manifestations of the rapidly globalising knowledge economy. As Abdel-Latif writes:

> [I]f the "knowledge economy" was the new paradigm in the global allocation of wealth and resources, then "access to knowledge" became the indispensable other side of the coin in order to make the economic globalization process underpinning the knowledge economy inclusive and equitable. (Abdel-Latif, 2010, p, 111)

This conception of what A2K represented in the early 2000s still largely holds true today, but there has, in the intervening years, been a substantial growth in conceptual work in the broad, interdisciplinary terrain of A2K, and in this section we outline what we see as some of the conceptual frames most relevant to the articles and reports in this AJIC thematic issue.

The pioneering development-oriented conceptual discussions of the TRIPS-based international IP dispensation were published in the early 2000s, with these kinds of approaches only becoming somewhat common from about 2005 onwards. Today there is a strong body of literature to draw on when seeking to conceptually frame intersections between Africa's IP and developmental imperatives. We now briefly discuss four cross-cutting areas of conceptual framing that we regard as useful for contextualising the articles and reports that follow in this thematic issue:

- Access
- Openness
- Development
- Human rights and human security

ACCESS

As we saw in the "Practical Evolution" section above, the notion of knowledge *access* – as instrumentalised for advocacy purposes via the term access to knowledge and the acronym A2K – has had, and continues to have, significant power in global, Global Southern, and African practical engagements with IP dynamics. But how *conceptually* useful is the access notion today, now that the conceptual terrain has become substantially more nuanced?

In relation to IP rights, the notion of access has, in fact, always been an exercise in conceptual shorthand – shorthand for a broader set of conceptual matters comprising knowledge creation, access, distribution, sharing,

13 http://isp.yale.edu

use, re-use and adaptation. It can easily be argued that the time has come to rely less on this conceptual shorthand and focus more on broader concepts such as "justice" (as the African scholarly network ASK Justice, a contributor to this thematic issue, does) or "governance".

However, it is our view that the access concept should not be marginalised. As demonstrated above, access is a concept with a rich practical history in relation to the quest for a more equitable international IP dispensation, and this successful practical history should not be separated from evaluation of the value of the concept. And we agree with Kapczynski's (2010) statement, in her "conceptual genealogy" of the A2K movement, that

> [t]he demand for access is an inherently relational one – a claim from those excluded that they be included, that they be given something that others already enjoy. In this sense, it marks perhaps the only – or at least the most prominent – demand for distributive justice emanating from the A2K movement, which otherwise borrows more from discourses of freedom. (Kapczynski, 2010, p. 37)

This notion of "distributive justice", which Kapczynski cites as being central to the concept of access, remains extremely salient in many African contexts. The need to transition from a state of exclusion to a state of access is felt daily by millions on the continent – in relation to myriad matters, among which knowledge is prominent and interwoven. Knowledge exclusion exacerbates, or causes, or is caused by, a web of other exclusions felt by impoverished individuals, households and communities – e.g., exclusions based on income, gender, education, health, visual impairment, age, technology, ethnicity, language and civic/political association. The concept of access thus helps to conceptually and practically tie together problems of knowledge exclusion with myriad other (often less abstract) exclusions on the African continent (and elsewhere in the Global South, and even in the North). Accordingly, the concept of knowledge access is linked in the articles and reports of this thematic issue to a range of other access dimensions, inter alia, access to medicines (the Hobololo thematic report and the Rens & Pfumorodze thematic report), access to technological information (the Belete thematic report); access to educational materials and to Internet (the Baraki thematic report) and access to farm-saved seed (the Munyi & De Jonge article).

However, it must always be borne in mind that, as pointed out above, the concept of access is often deployed as shorthand within the A2K space for a diverse set of concepts concerned with, or connected to, efforts to craft more equitable, more development-friendly approaches to treatment of IP in processes of knowledge creation, access, sharing, use, re-use and adaptation. Prominent among that set of concepts is *openness*, to which we now turn.

OPENNESS

The concept of *openness* has never strayed far from the conceptual centre of the push for more equitable international IP norms and practices. No small amount of credit for the prominence of this concept is owed to the "open source" software movement, today known as the free and open source software (FOSS) movement. In practical terms, FOSS pre-dates TRIPS, with key open source initiatives gaining traction in the 1980s. But in conceptual terms, much of the key work of FOSS proponents – and, with the spread of the Internet in the 1990s, the work of proponents of various software-, information-, and knowledge-related peer production initiatives – provided the evidence needed for growth of the conceptual terrain now characterised by notions of the commons (Boyle, 2003, 2008; Ostrom, 1990), peer-to-peer (P2P) networking, peer production, and Benkler's (2002, 2006) concept of "commons-based peer production".

A pioneering work that presents a strong case for the dynamics of openness in the development and use of knowledge is the 2002 volume *Information Feudalism* by Drahos and Braithwaite, in which the authors extol the virtues of, inter alia, "borrowing". They write that

> [c]opying and imitation never leave us, and without it a lot of socially valuable information would never be transmitted or learnt. The creator of innovation is also always the borrower of ideas and information from others. Intellectual property rights put a price on information, thereby raising the cost of borrowing. Raising the costs of borrowing through the imposition of very high standards of intellectual property will progressively choke innovation, not increase it. Most businesses, we argue, will be losers, not winners. (Drahos & Braithwaite, 2002, p. 2)

Lessig's 2004 book *Free Culture* also pushed the discussion of openness in relation to IP in many useful directions. Among Lessig's observations in that volume is that "[d]igital technologies launch a kind of bricolage […]. Many get to add to or transform the tinkering of many others (2004, p. 46). Lessig also points out that "[t]he law and, increasingly, technology interfere with a freedom that technology, and curiosity, would otherwise ensure (Lessig, 2004, p. 47). Like Drahos and Braithwaite (2002), Lessig emphasises the centrality of the borrowing and "follow-on" (2004, p. xiv) dimensions of innovation and creativity, and he goes to great lengths to show the extent to which intellectual output is never completely new, and thus never completely the product, let alone the property, of one single creator or firm. The value of Lessig's work also comes from his effort to propose ways to work within the parameters of the IP regime created by TRIPS – e.g., via the CC licensing system Lessig helped found – in such a way that the system's potential negative externalities are minimised.

Another key writer in this conceptual area is May (2000, 2010), who emphasises the strategic utility of the openness construct not just for critics of the TRIPS dispensation but also for TRIPS proponents. According to May (2010), "the appeal to openness may in the end save the intellectual property system from the social resistance that the most extreme efforts to expand its scope have engendered" (2010, p. 68). May's view is that the "narrative of openness" offers a way forward to a transformed system that potentially both TRIPS opponents and proponents can live with:

> A reformism that seeks to balance the fervent appeal to the rights of private owners with an equally strong appeal to the narrative of openness may provide a way forward that recognises the criticisms of the intellectual property system, but uses these to transform a system that may retain some clear social value. (May, 2010, p. 68)

While we agree with May (2010) that the openness narrative in some respects offers a bridge between camps in the IP discourse, we also agree with Kapczynski's (2010) argument that appeals to the concept of openness also in some respects strike at the very foundations of the logic of IP protection. Kapczynski sees openness and "sharing" as twinned concepts, and argues that calls for openness and sharing are "posited against the ethic of exclusion" (2010, p. 34), thus representing a central "challenge to the neoclassical model of the rational, self-interested actor" (2010, p. 35) central to the logic of IP protection.

Conceptions of openness are addressed by most of the articles and reports in this thematic issue. The Willmers, Van Schalkwyk and Schonwetter article looks at open data portal projects in Kenya and the City of Cape Town and how they are approaching licensing of their content. Baraki's thematic report looks at the potential for open licensing of copyrighted scholarly and educational materials in Ethiopia. Rizk's article on the work of Egyptian and Tunisian graffiti artists looks at how these creators to some extent re-use, transform and build upon the graffiti work of their peers – a finding that prompts Rizk to recommend that the graffiti artists consider publishing their works online under CC open licences that allow for permission-free copying and adaptation. The article by Flynn on the work of filmmakers in South Africa, highlights, inter alia, the need for the South African Copyright Act to provide broader copyright exceptions for filmmakers' permission-free use of extracts from other works in their films – so as to better enable filmmakers to engage in historical reflection, criticism, parody, and other forms of borrowing and follow-on creativity essential to documentary-making. And the De Beer and Armstrong article surveys conceptual work and research findings relevant to understanding the dynamics of openness-oriented innovation in African small enterprises.

DEVELOPMENT

The *development* conceptual frame is central to the push for better-balanced, more equitable international IP norms and policies. It is also a highly contentious frame, because proponents of TRIPS-style strong IP rights also typically see their approach as pro-development, with one WIPO Director-General referring to IP as a "power tool for development" (Idris, 2003).

One of the pioneering critics of the developmental credentials of TRIPS was Correa, who in 2000, just five years into the TRIPS era, rejected its proponents' claim "that enhanced and global protection of IPRs [will] foster technology and investment flows to developing countries, thus promoting their participation in trade and economic development" (2000, p. 23.) For Correa, it was clear by 2000 that such benefits "are not materializing" (2000, p. 23). Correa was, however, careful to make the important point that the countries of the developing world are by no means homogenous, and that the impact of TRIPS "will significantly vary in accordance with the levels of economic and technological development of the countries concerned" (2000, p. 24).

Another strong, early critique of TRIPS proponents' pro-development claims was the volume by Drahos and Braithwaite (2002), who wrote that

> [u]nderneath the development ideology of intellectual property there lies an agenda of under-development. It is all about protecting the knowledge and skills of the leaders of the pack. (Drahos & Braithwaite, 2002, p.12)

Around the same time, Sell (2003) sounded a similar note:

> the dramatic expansion of the scope of IP rights embodied in TRIPS reduces the options available to future industrializers by effectively blocking the route that earlier industrializers followed. […] The industrialized countries built much of their economic prowess by appropriating others' intellectual property; with TRIPS, this option is foreclosed for later industrializers. (Sell, 2003, p. 9)

A key mainstream legitimation in the early 2000s of the emergent academic and civil society critique of the developmental impact of TRIPS arrived in the form of the 2002 report of the UK Commission on Intellectual Property Rights (CIPR). Mandated by the UK government to interrogate the developmental impacts of the TRIPS dispensation, and with Correa serving as one of the commissioners, the CIPR delivered a powerful rebuke to the international IP norm-setting machinery. The CIPR report stated clearly that the TRIPS-based IP order had been crafted by rich-world interests, and that it had the potential to further entrench those

interests, unless "far more attention" was "accorded to the needs of the developing countries in the making of international IP policy" (2002, p. 8).

Putting a lie to the argument that TRIPS was pro-development, the CIPR concluded that development still remained "to be integrated into the making of IP rules and practice" (CIPR, 2002, p. 8), and that

> developing countries should not be deprived of the flexibility to design their IP systems that developed countries enjoyed in earlier stages of their own development, and higher IP standards should not be pressed on them without a serious and objective assessment of their development impact. (CIPR, 2002, p. 8)

In the 13 years since the release of the CIPR report, there have been (as we saw in the previous "Practical Evolution" section) many additional instances of mainstream recognition of the need to reorient the TRIPS-based IP system towards development, most notably the WIPO General Assembly's adoption in 2007 of the Development Agenda.

The conceptual terrain in relation to the intersection between IP and development has also grown significantly since aforementioned pioneering work of Correa (2000), Drahos and Braithwaite (2002) and Sell (2003) and others, and the pioneering report of the CIPR in 2002. One strong example of how far the conceptual work has come since the early 2000s is the 2014 volume, *Intellectual Property Rights: Legal and Economic Challenges for Development*, edited by Cimoli, Dosi, Maskus, Okediji, Reichman and Stiglitz.

In the final chapter of this volume, the five editors make several compelling assertions. They argue against the binary view of strong IP protection as being helpful to the developed world and unhelpful to the developing world, arguing instead that strong IP norms are damaging to both these worlds. In the developed world, they write, "all innovations build on previous innovations, and by making the fruits of existing innovations less accessible, the progress of science and technology may be inhibited" (Cimoli et al., 2014, p. 503). Furthermore, they argue, to the extent that strong IP is more damaging to the innovation prospects of the developing world than to those of the developed world, this too is negative for all countries, because "even the advanced industrial countries have an interest in the rapid growth of all other countries: growth in emerging markets and developing countries can be complementary to that of the advanced countries" (Cimoli et al., 2014, p. 503).

Cimoli et al. (2014) also put forward a compelling argument in relation to IP and global public goods, arguing that

> everyone has an interest in the promotion of global public goods – in doing something, for instance, about global warming. For example, concerns about having to pay large rents to developed countries that control access to emission-reducing technologies is one important impediment to reaching a global climate accord. At the same time, without some incentives to undertake risky innovation, there may be fewer emission-reducing technologies available. (Cimoli et al., 2014, p. 504)

Cimoli et al. (2014) also forcefully state the "humanitarian interest in avoiding unnecessary suffering" that requires "access to life-saving medicines and better seeds and agricultural technologies", and that can only be provided by an international IP order "designed to facilitate both innovation and access, without imposing unnecessary impediments, as the current system does" (2014, p. 504).

Two of the pieces in this thematic issue – by Hobololo, and Rens and Pfumorodze – touch on the access-to-medicines challenge alluded to in the preceding Cimoli et al. (2014) quotation, demonstrating that this access issue continues to be at the heart of the push for a development-oriented international IP order. Another dimension touched on in the preceding Cimoli et al. quote – access to seeds – is also covered in this thematic issue, via the Munyi and De Jonge article on the intersection between plant varieties protection (PVP) and African smallholder farmers' access to farm-saved seed.

The Cimoli et al. (2014) references, quoted above, to "humanitarian" dimensions, and to "global public goods" such as the shared global need to tackle climate change caused by global warming, provide a link to the next conceptual frame we wish to discuss: *human rights and human security*.

HUMAN RIGHTS AND HUMAN SECURITY

As the Rens and Pfumorodze thematic report in this thematic issue points out, *human-rights*-oriented conceptualisations of IP are quite established, dating back to the 1966 International Covenant on Economic, Social and Cultural Rights. What is not well established, however, as Rens and Pfumorodze outline, is integration of the human rights dimension into IP policy processes and instruments.

In addition to the human rights framing, we feel that, particularly given the current global prominence of climate change matters, there is value to be had in giving more prominence to the *human security* conceptual framework – a framework that includes, and is in many respects grounded in, human rights, but which, at the same time, is potentially broader in its focus, through its emphasis on the need for actors at all levels – individual, community, state, intergovernmental – to take the steps necessary to enhance human security.
The founding statement of the human security framework is widely seen as being the 1994 UN Human Development Report (UNDP, 1994), which states that

> [t]he list of threats to human security is long, but most can be considered under seven main categories:
> - Economic security
> - Food security
> - Health security
> - Environmental security
> - Personal security
> - Community security
> - Political security. (UNDP, 1994, pp. 24-25)

There are arguably links between each of these seven listed human security categories and developmental approaches to IP. The 1994 *Human Development Report* sought to re-calibrate development discourse in the run-up to the 1995 UN World Summit for Social Development in Copenhagen in 1995. The *Report* positioned human rights as but one of the goals to be achieved through a focus on human security, stating that

> it will not be possible for the community of nations to achieve any of its major goals – not peace, not environmental protection, not human rights or democratization, not fertility reduction, not social integration – except in the context of sustainable development that leads to human security. (UNDP, 1994, p. 1)

Among the core consultants who inputted on the 1994 *Human Development Report* was economist and Nobel Laureate Amartya Sen, proponent of the "capability approach" to understanding development (Sen, 1999). Sen, whose ideas are cited in the Baraki report in this thematic issue, went on to serve as one of the two co-chairs of the UN Commission on Human Security, along with former UN High Commissioner for Refugees Sadako Ogata. The Commission's report, published in 2003, stated that

> [h]uman security complements state security, enhances human rights and strengthens human development. It seeks to protect people against a broad range of threats to individuals and communities and, further, to empower them to act on their own behalf. And it seeks to forge a global alliance to strengthen the institutional policies that link individuals and the state – and the state with a global world. Human security thus brings together the human elements of security, of rights, of development. (UN Commission on Human Security, 2003, pp. 3-4)

This human security framing seems to us to provide an extremely useful conceptual frame for all manner of developmental approaches to IP. It is a frame that potentially captures all of the articles and reports that follow in this thematic issue.

Ramcharan's 2013 book *International Intellectual Property Law and Human Security* makes a compelling case for positioning development-oriented IP as a matter of human security. As Ramcharan (2013) writes:

> The human security framework can help the international community arrive at equitable balances between the regime of international intellectual property law and the needs of developing countries and indigenous peoples on the ground. (Ramcharan, 2013, p. x)

Ramcharan calls for the international IP system to "be regulated and managed in such a way as to advance human security worldwide", and he argues that "in the era of global harmonization of IP law, the notion of the 'public' encompasses not only the national public but the global public." (2013, p. 24). Ramcharan's reference to the "global public" resonates with the quotation from Cimoli et al. (2014) provided above, in the "Development" sub-section, in relation to "global public good" characteristics of efforts to address global warming.

The 2003 report of the UN Commission on Human Security does, in fact, directly cite IP dimensions. The report states that "[t]he recent acceleration of global trade has sparked international debate over the ownership and application of knowledge for human health and security" and goes on to make reference to the patent provisions of the 1994 WTO TRIPS Agreement, and to the 2001 WTO Doha Declaration.

The Commission's citing of "environmental security" provides a useful bridge to perhaps the most far-reaching human security (and IP) challenge of today: climate change. One of the most contentious issues in climate change negotiations is how to speed up transfer, from the developed to developing world, of environmentally sound technologies essential to both climate change mitigation and adaptation. Patented clean energy technologies are mostly devised in developed world countries, prompting developing nation representatives to the annual meetings of the Conference of the Parties (COP) to the 1992 UN Framework Convention on Climate Change (UNFCCC) to push for mechanisms to provide low-cost or even free access to the IP in these technologies. Accordingly, technology transfer wasone of the key negotiating points at COP21, the Paris UN Climate Change Conference at the end of 2015. One of the reports in this thematic issue, by Belete, touches on the issue of technology transfer, and provides a useful reminder that developing nations' "absorptive capacity" also plays a role in the effectiveness of transfers of technological information.

But the intersections between IP and climate change go beyond the issue of transfer of patented green technologies. Food security in the face of climate change is likely to be impacted by plant breeders' rights – an IP topic also touched upon in this thematic issue in the article by Munyi and De Jonge. And climate change also intersects with issues of copyrighted information resources, and green trademarks.

In their analysis of the intellectual property "impasse" in UNFCCC negotiations, Abdel-Latif, Maskus, Okediji, Reichman and Roffe (2011) argue that "unless the role of intellectual property is addressed in a constructive and balanced manner, the potential for achieving sustainable and realistic outcomes from the climate talks could be compromised. (2011, p. 1) Abdel-Latif et al. (2011) compare the "urgency" of climate change matters with those of the access to medicines issue, writing that "in both public health and climate change, there is a sense of moral urgency to address public policy objectives that requires going beyond the 'status quo' and 'business as usual' practices, including in the IP system" (2011, p. 3). At the same time, Abdel-Latif et al. (2011) point to research findings (see Abbott, 2009; Barton, 2007) that suggest that loosening up IP controls on climate change technologies and ensuring competitive markets in the technologies should be an easier battle than the battle in the essential medicines sector, because "the wide range of climate change mitigation and adaptation technologies contrasts with the pharmaceutical sector, where one single patent over a molecule can give the patent owner significant market power to set high prices, particularly in the absence of generic competition" (2011, p. 3).

Another forum where the IP dimensions of climate change are currently the subject of contestation is the WTO Council for TRIPS, where, as we saw above in the "Practical Evolution" section, developing-world Member States have in recent years been pushing for steps to generate quicker and more affordable transfer of patented green technologies. Based on his analysis of UNFCCC, WTO TRIPS Council and WIPO Green [14]processes, Rimmer (2014) calls for a joint declaration from the UNFCCC, WIPO and the WTO on IP and climate change. In a similar vein, Khor (2012), calls for a new TRIPS Declaration, similar in character to the 2001 Doha Declaration, "in relation to use of TRIPS flexibilities to improve developing world access to climate-related technologies" (2012, p. 15).

Khor (2012) positions the "climate crisis" as a human security issue and argues that, accordingly, developing-world TRIPS Member States should consider invoking their rights under TRIPS' "Security Exceptions" in Article 73 (WTO, 1994) in order to secure more affordable access to patented green technologies. Khor (2012) writes:

> Article 73 states that in situations of war or other emergency in international relations, nothing in TRIPS will be construed as preventing a Member from taking any action which it considers necessary for the protection of its essential security interests. There is a strong case for equating the climate crisis with a global emergency situation. […] In such conditions, individual commercial interests such as patents can be suspended so that there can be concerted global and national actions in the most effective way, to face the common threat. Developing countries require technologies at the cheapest possible prices. If they obtain the needed technology at one third the price, they can increase the rate of change to put into effect mitigation and adaptation measures many times more rapidly and effectively. (Khor, 2012, p. 17)

With regard to the UNFCCC, Khor (2012) argues that it "should adopt the principle that developing countries can exempt climate-friendly technologies from patents" (Khor, 2012, p. 19).

CONCLUSION

We have seen that certain founding practical and conceptual matters have remained central to the African, Global South and global dimensions of the A2K construct since its beginnings two decades ago in the wake of the adoption of TRIPS. But we have also seen that, at the same time, there has been substantial evolution and expansion in both the practical and conceptual terrains of A2K. Accordingly, it can be expected that African activists, researchers, academics and policymakers seeking developmental IP dispensations on the continent – and stakeholders outside the continent focused on similar goals – will, going forward, continue to combine loyalty to the founding elements of the movement with efforts to forge new elements.

Already the founding practical components – e.g., the push for life-saving medicines, for flexible copyright, for use of TRIPS flexibilities, for a development-oriented WIPO – have being supplemented by emphasis on, inter alia, government open data, informal-sector innovators, farmers' rights, and green technologies. This path of practical supplementation can be expected to continue, as new developmental challenges and new technologies emerge. (What, for instance, will be the practical A2K dimensions of diffusion of 3D printing technology in various African settings?) So, too, has A2K's founding conceptual element – access – been gradually enriched by interlinkages with conceptions of openness, development, and human rights. And, as we have argued, there would seem to be conceptual potential in forging deeper linkages with the concept of human security.

Appropriately, the articles and reports in this thematic issue address both founding and emergent elements of the A2K terrain in contemporary African settings. It is hoped that the reader will find, in these pieces, practical and conceptual statements that serve to spark some of the follow-on creativity and knowledge production necessary to continued evolution of the A2K construct.

14 http://wipo.int/green

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