

The IP Law Book Review

IP Law Center, Golden Gate University School of Law

Vol. 6, No. 1 (March 2016) pp. 1-6

INNOVATION & INTELLECTUAL PROPERTY - COLLABORATIVE DYNAMICS IN AFRICA, by **Jeremy de Beer, Chris Armstrong, Chidi Oguamanam and Tobias Schonwetter**. University of Cape Town Press, 2014. 408 pp. Softcover \$45.00

Reviewed By Joseph F. Turcotte

Communication and Culture Program, York University and Ryerson University
jfturco@yorku.ca

The ambitious volume **INNOVATION & INTELLECTUAL PROPERTY** is edited by members of the Open African Innovation and Research Training Project (Open A.I.R. Project) who are law professors and researchers based in Canada and South Africa. The Open A.I.R. Project is a “pan-African and globally interconnected research and training network” (p. v) focused on raising awareness about Intellectual Property (IP) in African settings, empowering an IP-oriented community in Africa, and identifying and analyzing IP-related problems and opportunities for collaboration and innovation. This volume and its sister report, **KNOWLEDGE AND INNOVATION IN AFRICA**¹, as well as the Open A.I.R. Project more generally will be of interest to IP scholars, practitioners, and policy-makers interested in the role IP and alternative knowledge management practices can play to facilitate collaborative innovation in Africa, other developing state contexts, and the evolving knowledge-based economy.

The volume includes sixteen chapters written by the editors and an interdisciplinary array of contributors who responded to a call for papers seeking to answer: “How can existing or potential IP systems be harnessed to appropriately value and facilitate innovations and creativity for open development in Africa?” (p. 4). Reflecting the diversity and geographic size of the African continent, the resultant chapters cover 9 countries spanning the four primary regions of the African continent. The majority of chapters are based on case studies of particular countries, formal and informal economic industries or arrangements, and specific IP-related issues with respect to emerging areas of innovative and creative activity. To various degrees, each chapter employs domestic and international legal and doctrinal analysis as well as other research methodologies from the social sciences, including quantitative and qualitative data analysis based on interviews and surveys. Collectively, these case studies offer detailed insights into the ways in which IP law facilitates or discourages innovation and creativity in particular socio-economic and geographic contexts.

In Chapter 1, De Beer, Oguamanam, and Schonwetter introduce the impetus for the edited volume within the broader objectives of the Open A.I.R. Project. The authors frame the case studies to address the transnational legal and governance environment and the polarized opinions surrounding IP's impact on economic growth and development. The chapter does not focus on this polarization and, instead, situates the volume in relation to emerging narratives about the role and efficacy of IP law in development-oriented contexts and with respect to concerns over access to knowledge. Within this framing, the focus becomes whether or not the prevailing transnational IP regime is undervaluing or undermining African innovation and creativity—or some combination of both. Chapter 1 draws a distinction between “innovation” and “creativity” while also highlighting the similarities of the two terms as “twin ideas” (p. 10). Specifically, “innovation” is described as creating new products, services, or business practices for economic and industrial potential; “creativity” is described in a more holistic way, which recognizes non-market and socio-cultural oriented developments—concepts De Beer, Sowa, and Holman further elaborate in Chapter 2. The distinction between “innovation” and “creativity” is important for highlighting how creative activities and knowledge-based resources more generally are *necessary for* but not necessarily *constitutive of* market-oriented exchange and economic growth. By framing innovation and creativity as twin ideas, Chapter 1 illuminates how rigid adherence to individualized forms of IP law may inhibit socially desirable activities at the service of economically oriented calculations, which can serve to foreclose subsequent and beneficial innovative or creative activities. For example, the authors foreground the idea of “open development” (p. 8) as an alternative to the “closed” proprietary mechanisms largely perpetuated by dominant understandings of IP. Attention to “open” forms of development allows both the macro-level IP public policies and micro-level IP management practices of states, communities, individuals, and businesses in formal and informal activities to be unpacked and analyzed according to how they contribute to or detract from socially and economically desirable outcomes. Following Chapter 2, which further theorizes many of the arguments presented in Chapter 1, the remaining case study-based chapters are grouped into roughly six interconnected thematic areas: 1) informal appropriation; 2) trademarks and geographic indications; 3) traditional knowledge (TK); 4) copyright; 5) patents; and, 6) publicly funded research (pp. 13-14). These groupings demonstrate how existing or potential forms of IP are best suited to meeting the economic and socio-cultural needs of the heterogeneous array of actors in Africa.

Chapters 2 and 3 demonstrate how informal knowledge management practices can be conceptualized within the informal economy in Africa and how these relate to other scholarly literature focused on entrepreneurship, innovation, and creativity. In Chapter 2, De Beer, Sowa, and Holman extend some of the arguments and theorizations presented in Chapter 1, focusing on how the operations of the informal economy in Africa can be linked to IP-based paradigms. In doing so, they present a more holistic framework for development through IP, which takes into account the possibility of enhancing the capabilities necessary for development by furthering political, economic, and social rights by recognizing and facilitating the innovative and creative acts taking place in informal economies. In Chapter 3, Kawooya helps to ground the previous chapter's discussion by examining formal and informal

economic interactions in the automotive sector of Kampala, Uganda. Kawooya's research discovers that artisans and actors in the informal sector are central to the innovative outputs of formal activities but are more incentivized by concerns over sharing and the dissemination of knowledge than the economic incentives deemed critical by prevailing IP theories.

The next two chapters examine how trademarks and geographic indication (GI) titles can be used as a form of collaborative branding to distinguish and characterize conditions of origin and local specificity. In Chapter 4, Oguamanam and Dagne focus on Ethiopian coffee and Ghanaian cocoa industries and the use of GIs to facilitate open development. The authors find that the benefits accrued from branding products based on their place-based origins must be considered in light of the economic costs and social efforts necessary for establishing a GI-based management regime. Such regimes offer export and development oriented opportunities, while entailing considerable economic expenditures and social reorganizations necessary for maximizing commodity production. The authors find that these burdens can be mitigated due to existing capacities in the countries and by implementing GI strategies in coordination with the practices and institutional settings of local producers already amenable to open and collaborative forms of production. Adewopo, Chuma-Okoro, and Oyewunmi focus on the possible applicability of communal trademarks for Nigerian leather and textile products. In Chapter 5, the authors study the existing legal and industry environments in Nigeria and determine that small-scale producers of leather and textile goods are challenged by market access problems, which detracts from their economic performance. They conclude that communal trademarks (such as GIs) are useful tools for product differentiation and can be implemented and deployed to increase market access opportunities. Both Chapters 5 and 6 demonstrate how community-oriented forms of product differentiation and knowledge management are used to generate locally specific forms of socio-economic growth and development.

Similarly, Chapters 6 and 7 explore the idea of a "traditional knowledge commons" as a means of facilitating open forms of knowledge exchange and collaboration, while also protecting the valuable knowledge-based resources of local and traditional communities from external misappropriation. In Chapter 6, Ouma examines the policy context for adopting a commons-based approach to TK management in Kenya. Ouma finds that the existing legal system has the necessary elements to support a legal and policy framework for a TK commons and that earlier efforts to create a digital archive of Maasai knowledge provide the basis for supporting related TK commons initiatives. However, the Kenyan legal system and the earlier digital archive initiatives focus primarily on conventional forms of IP protection and will need to be re-oriented to adhere with TK concerns. Training and capacity building with respect to TK commons will be critical for such efforts. The idea of a legal "trust" for TK healers in South Africa is considered in Chapter 7. Cocchiaro, Lorenzen, Maister, and Rutert argue that the creation of a "trust" with TK healers acting as the trust's beneficiaries will improve the protection, sharing, and benefit from IP-related TK by allowing the healers to manage a TK-based commons based on access and benefit sharing as well as prior informed consent. These chapters provide examples of how the construction and maintenance of a

“TK commons” can be beneficial for furthering creative endeavors and enabling innovative activities.

The protection, construction, and maintenance of knowledge-based resources via copyright are examined in the next two chapters. In Chapter 8, Rizk examines the extent to which the independent music industry in Egypt has “commons like” characteristics. The chapter is based on research from surveys and interviews with stakeholders in the sector, including musicians and consumers. Rizk finds that the Egyptian independent music industry contains diverse and dynamic attitudes about copyright and the sharing of musical outputs; business models based on a “digital commons” modeled off of Creative Commons efforts could be useful for promoting continued access to musical resources while providing financial benefits to producers by compensating collaborators for their creativity. Open access (OA) scholarship in Kenya is similarly examined for its potential for rewarding creators while promoting open development, in Chapter 9. Sihanya finds that authors are open to alternative publishing formats as a means of enhancing the reach of their scholarly work in order to bolster their academic reputations as well as a reticence to embracing OA due to the loss of economic rights and possibilities afforded by copyright. Sihanya concludes the chapter by recommending two broad changes to reform the Copyright Act of 2001 and strengthen copyright administration and procedures, as well as seven specific recommendations for promoting a progressive role for copyright and OA in Kenya.

Chapters 10, 11, and 12 examine the applicability of patent law in a similar way. In Chapter 10, Mgbeoji presents the results of a survey of patent stakeholders in 44 countries regarding the capacity of African patent offices. This research finds that most of the national patent offices were ill-equipped to examine patent applications and coordinate patent information in an easily and publicly available manner. Based on this under-capacity, the ability of African patent offices to facilitate the dissemination of information regarding patented products and processes hampers “open development” attempts as well as institutionalized forms of technology and innovation diffusion via the transnational IP regime. Dos Santos and Pelembe’s research in Chapter 11 examines small-scale, locally driven biofuel production in Mozambique, which relies on non-patented first generation technology available through the public domain. The authors find that current production activities are not directly impacted by patent law, however, future efforts to develop second generation technologies and local capacities will require government support and investment to promote accessible licensing agreements necessary for gaining access to emerging technologies; Mgbeoji’s research further suggests that similar action will be necessary to improve the capacity of patent offices to ensure the accessibility of relevant information. In Chapter 12, Awad and Abou Zeid focus on the biofuel sector in Egypt and find that only one domestically generated patent for biofuel technologies exists, as of 2012. The authors conclude that government support for policy mechanisms and information resources are needed to expand access to knowledge regarding “clean energy” technologies, which can help to spur advances in this field in Egypt. Specifically, Awad and Abou Zeid argue in favour of fast-tracked examination of clean technology related patents, and that the Egyptian Patent Office expedite its plans for the creation of an advanced patent database. They also argue that stakeholders consider the development of a “patent

commons” based on open source approaches for maximizing the sharing of information in order to promote collaborate forms of innovation. The three chapters on patents and the local capabilities of governmental and industrial actors to access information regarding innovative technologies demonstrate how foreign models of IP protection and administration run into difficulties when applied in developing contexts and how these problems can be mitigated through “open development” initiatives.

The final section of the volume explores the interactions between IP law and the ownership of knowledge and information derived from publicly funded research. As demonstrated in the previous section on patents, IP regimes designed for different local circumstances can negatively impact the dissemination and accessibility of publicly funded innovation and creativity. In Chapter 13, Ncube, Abrahams, and Akinsanmi focus on the University of Cape Town (UCT) and the University of the Witwatersrand (Wits) to examine how commercially driven IP and knowledge management guidelines impact the creation and dissemination of knowledge and information at these universities. The authors find that both UCT and Wits have been active in implementing new provisions of South African legislation focused on leveraging publicly funded research for commercial purposes. These efforts have resulted in a transition from purely research-oriented work towards more “mixed research and innovation orientation” (p. 308). This transition can be harnessed for development oriented purposes by ensuring that universities do not merely adopt a “compliance perspective” focused solely on increasing the number of patents that are attained by university researchers; instead, the authors argue that UCT and Wit, and universities in general, should take into account the development considerations engrained in legislative and policy frameworks created to promote innovation and creativity through publicly funded research. Belete’s research in Chapter 14 focuses on the intentions of Ethiopia’s innovation policy framework and the on-the-ground realities encountered by researchers in the country. The chapter finds that the state’s focus on IP promotion overlooks the lack of human resources and infrastructure necessary to generate innovative and creative research. Ethiopian universities are, therefore, playing only a limited role in the generation of innovative research and the adaptation of foreign technologies for industry-related purposes. Scarce resources for university level research may, therefore, be better used to increase the capacity of the research sector to produce innovative and creative outputs while employing alternative, collaborative IP and knowledge management regimes for maximizing commercial possibilities. Ama’s research into publicly funded researchers in Botswana (Chapter 15) surveys the perceptions of these researchers towards IP policy frameworks as well as concerns regarding “open science” principles. This research finds that there is a lack of knowledge amongst researchers about the prevailing institutional, legal, and policy frameworks governing IP in Botswana and a commitment to leveraging publicly funded research through openness and the sharing of information. Chapter 15, as well as the chapters by Ncube *et al* and Belete in this section, helps to highlight the disconnect between institutional and national level policy objectives and frameworks based on IP-maximization efforts emanating from abroad and the local realities faced by individuals, communities, universities, and stakeholders working to create and disseminate innovative and creative research in local circumstances.

INNOVATION AND INTELLECTUAL PROPERTY concludes with a chapter co-authored by the editors, which draws conclusions based on the various case studies described above. De Beer *et al* are careful not to generalize from the diverse and specific research contained in the volume and, instead, work to identify the commonalities found within the cross-cutting and interconnected themes that the chapters have been grouped into and with respect to the volume's focus on "collaborative innovation and creativity", "openness", and "IP". The editors also include a section of instructive recommendations for African policy-makers to "avoid mistakes", "broaden IP conceptions", and "look forward." These recommendations are based on implementing "evidence-based rather than political decisions wherever possible" (p. 392). Given the vast array of countries, regions, industries, economic sectors, and ideas presented in the volume, this is sage and necessary advice for African policy-makers, IP focused policy-makers more generally as well as scholars and practitioners interested in the limits and possibilities of existing and possible IP and knowledge management regimes.

ENDNOTES

¹ Shirin Elahi and Jeremy de Beer with Dick Kawooya, Chidi Oguamanam, Nagla Rizk and the Open A.I.R. Network, KNOWLEDGE AND INNOVATION IN AFRICA: SCENARIOS FOR THE FUTURE (The Open A.I.R. Project, 2013).

© 2016 Joseph F. Turcotte