Policy Implications of Changes in the Intellectual Property (IP) Legislative Environment and the Possible Impact Thereof on the Emerging 4th Industrial Revolution

Submitted to the Department of Arts and Culture

MEASURING & VALUING SOUTH AFRICA'S CULTURAL & CREATIVE ECONOMY
Policy Implications of Changes in the Intellectual Property (IP) Legislative Environment and the Possible Impact Thereof on the Emerging 4th Industrial Revolution

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1. Executive Summary

This research report examines the policy implications of changes in the Intellectual Property (IP) legislative environment and the possible impact thereof on the emerging 4th Industrial Revolution. It reviews the current and emerging legislative environment pertaining to IP; provides a brief overview of the 4th Industrial Revolution; exposes policy implications of the current and emerging legislative environment pertaining to IP; and further addresses the policy implications, requirements and impacts of the current and emerging legislative environment for the realisation of the 4th Industrial Revolution.

A review of the current legislative environment reveals that there is a lot of legislative work being carried out, in particular, by the Department of Trade and Industry to address the key and emerging issues regarding intellectual property rights and protection. Amongst these are the Bills on Intellectual property law, copyright, performers’ protection, plant breeders’ rights, promotion and protection of indigenous knowledge and the policy on intellectual property. Equally, South Africa in considering adopting some international instruments to bolster its intellectual property regime.

However, all these changes will be in vain if they do not take place in the cognisance of the current era characterised by the sheer exponential pace of the world’s technological advancement taking place in the breadth and depth and affecting all our systems in a manner never seen before. The experience that has been dubbed the 4th Industrial Revolution has become the mainstay of the human life today. South Africa as a developing country should not be left behind in this process. The threat exists and unless safeguards are created to support and cushion local developmental needs, the 4th Industrial Revolution may become an affliction more than a benefit. Otherwise, broadly speaking, the 4th Industrial Revolution brings with it a new way that should be embraced within the confines of local circumstances.

The criticisms being levelled against the current and emerging legislative framework suggests some disparity between law and practice. These range from the concern that the current laws do not speak the language of the practitioners; that some new foreign concepts that are being imported into our law are detrimental to local players; that the laws embrace the voices
of the big players and do not take note of the concerns of small and emerging players; that the law stifies than it spurs innovation; and that generally our intellectual property law lacks strategic theoretical and philosophical foundation.

The current laws and proposed amendments, especially on copyrights and performers protection particularly affects the arts, culture and heritage sector. There is considerable criticism of the Copyright Bill because of its new approaches on “user rights” and “fair use” exceptions which have an impact on the promotion of creativity and innovation going forward. However, performers on the other hand, it would seem, appreciate the amendments to the Performers Protection Bill to the extent that the new provisions seek to grant performers resale value. However, the growth of the arts and culture industry is not simply to benefit the players. Indeed, as the Revised White Paper on Arts, Culture And Heritage points out, “the arts, culture and heritage contribute to change and the creation of a better life for all by building on the achievements of the past two decades and creatively addressing the new opportunities and challenges that have arisen.” To fully benefit from the current wave of technological advancements, a few recommendations are made. Chiefly, South Africa needs to undertake a comprehensive review of its intellectual property laws through an inclusive approach that involves all stakeholders. However, this must be grounded in a theoretical and philosophical framework that is informed by the strategic objective of South African and its objectives. Crucially, the question whether a protective regime or an access regime is appropriate for meeting South Africa’s strategic objectives, must be answered.
2. Introduction

There is considerable understanding that Intellectual Property is an important policy instrument in promoting innovation, technology transfer, research and development, creative expression, consumer protection, industrial development and more broadly, economic growth. The National Development Plan (NDP) is a long term South African development plan, developed by the National Planning Commission in collaboration and consultation with South Africans. Among other things, it calls for a greater emphasis on innovation, improved productivity, an intensive pursuit of a knowledge economy and the better exploitation of comparative and competitive advantages. It therefore leans a lot on viable and sustainable intellectual property.

Joseph Stiglitz is a renowned economist and a Nobel Prize winner in economics. His view is that “IP has become one of the major issues of our global society. Globalization is one of the most important issues of the day, and IP is one of the most important aspects of globalization, especially as the world moves toward a knowledge economy.” Therefore it means the “inconclusive empirical evidence on the role of the patent system to encourage research and development and technology transfer makes it difficult to draw any clear-cut conclusion about the effectiveness of the patent system for economic development”. However, on the contrary, it has been advised with respect to developing countries such as South Africa that “[s]tronger IPR may constitute a barrier to the ability of its firms catching up to the frontier, even if it enhances innovation within the country. Because developing countries are engaged in catching up, the optimal IPR regime for them will in general differ from that for a more advanced economy.”

It is important therefore to regulate and administer intellectual property from an informed perspective so as to derive maximum benefit. This is particularly so in as far as it relates to arts and culture which can be regarded as expressions of consciousness and identity and the value of which differ from community to community. However, regardless of location and demographics, each community and its developmental needs forms part of the greater global movement towards the new era of the 4th Industrial Revolution. Therefore balancing between local and global needs in the current era becomes important.

There is no easy way of ensuring that South Africa rightly locates itself and caters for its needs in the current era. Judging by the speed and effect of the Industrial Revolution, one key word is always to "adapt". How does South Africa adapt to the current wave of the 4th Industrial Revolution? Put differently, where is South Africa and what is the country doing to be where it ought to be in the current circumstances?

There is no doubt that government and all key stakeholders are alive to the need to adapt our approach on intellectual property law to the present demands for development. This is mainly achievable through legislative and policy interventions. The key question therefore is what is the current state of the policy and legislative approach to intellectual property and what is being done to adapt the same to the current wave of the 4th industrial resolution.

3. Problem Statement

The world has encountered a new wave and entered a new era of innovation seen through tremendous advancements in technology. There is a general understanding that access to recent technologies is a propellant for economic growth and ultimately poverty eradication. Promotion and access to innovation therefore becomes a key ingredient for development.

Intellectual property protection is the mainstay of innovation and creativity. However, intellectual property protection as a goal outside the other various policy considerations may equally become harmful. This is so much so in the current era of the 4th Industrial Revolution that has made human life so much dependent and imbedded with the current unprecedented levels of technological advancements and innovation. Nothing is spared, but it in the context of information, creativity and entertainment, new technologies have demanded a lot more
adaptation for musicians, authors, actors and various producers of creative work particularly because of the new ways of information sharing and distribution.

From a legislative perspective, the concern is the approach the current and emerging laws should take towards the protection of intellectual property in the 4th Industrial Revolution. The role of the law in stimulating or stifling innovation can never be understated. However, most importantly, the place of the law in the promotion of strategic intellectual property for the common good is invaluable.

Without the appropriate legal instruments, a developing country such as South Africa faces the possibility of being swept away by the wave of the current Industrial Revolution as other countries take full advantage to our detriment. There is no doubt that big global players such as Google and YouTube have better muscle. Developing players in this industry may need support and protection to survive.

Policies have been developed and legislation enacted to support and regulate innovation in a growing and competitive environment. What are the key legal instruments promoting and regulating intellectual property in South Africa? Does the current policy and legislative environment adequately address the apparent needs for innovation in South Africa within the context of the current era of the 4th Industrial Revolution? These issues will help to consider the appropriate policy position and facilitate a better understanding of the meaning of intellectual property for South Africa.

4. Methodology

This report analyses the current and emerging legislative environment regarding intellectual property law, the impact and importance of intellectual property and the current legislative environment in the 4th Industrial Revolution, in the context of relevant south African legislative and policy interventions and regulation. Therefore, the information needed for this research report is in literature. To this end, this report is compiled from a desktop analysis of the growing body of current and emerging legislative framework on intellectual property. The approach of this study is to analyse already primary existing data including scholarly commentary in the general subject area. Therefore, this research is a qualitative study based on primary sources
of the law, namely statutory law and judicial pronouncements. It will also utilise secondary sources of law in the form of books, academic journal articles as well as online material resources.

5. Review of the Current and Emerging Legislative Environment Pertaining to IP

5.1. Current IP Law in South Africa

In the Certification Case,⁶ when the South African Constitutional court was called upon to decide whether the Constitution provided for all universally acceptable fundamental human rights, freedom and civil liberties. It held that intellectual property rights were not universally accepted fundamental rights and did not require separate recognition beyond the right to property already provided for under the Bill of Rights in section 25 of the Constitution.⁷ However, it has become for accepted since the decision in Laugh it Off Promotions⁸ that intellectual property rights are equal to any other right under the Bill of Rights. It is refreshing to note that the SCA in this case held that “[t]rade marks are property, albeit intangible or incorporeal. The fact that property is intangible does not make it of a lower order. Our law has always recognised incorporeals as a class of things in spite of theoretical objections thereto.”⁹ Therefore, it is important to note that South African intellectual property rights are recognised under the supreme law and afforded entrenched protection.

However, how much of this protection will be left or rather to what extent it will be affected by the current drive towards the amendment of section 25 of the constitution is still yet to be seen.¹⁰ It maybe that the current debate about the expropriation of land without compensation and review of s25 may lead to the completely whole new wording and interpretation of property

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⁷ Section 25(1) of the Constitution of South Africa reads: “No one may be deprived of property except in terms of law of general application, and no law may permit arbitrary deprivation of property.”
⁸ See Laugh It Off Promotions CC v South African Breweries International (Finance) BV t/a Sabmark International and Another (CCT42/04) [2005] ZACC 7; 2006 (1) SA 144 (CC); 2005 (8) BCLR 743 (CC) (27 May 2005.
¹⁰ The Draft Expropriation Bill, 2019 was published in the Government Gazette in 21 December 2018 116 No. 42127
law especially when it comes to expropriation without compensation. The location of intellectual property in this provision means that whatever changes are made on the right to hold property under the new wording of this section will affect intellectual property rights. Therefore, it maybe that the expropriation without compensation, if not limited to land, may become equally applicable to intellectual property.\textsuperscript{11}

Constitutional protection highlighted above is equally not an end in itself but rather formulates the grundnorm of our legislative and policy approach to intellectual property. Thus, legislation in this area must be read and understood with this understanding. Apart from the constitution, our law has various pieces of legislation that deal with intellectual property. Although some are more relevant to the arts industry than the others are, in general, the most important intellectual property related statutes are:

- Trade Marks Act 194 of 1993 which provides for the registration of trade marks, certification trade marks and collective trade marks; and to provide for incidental matters
- Patents Act 57 of 1978 which provides for the registration and granting of patents for inventions and for matters connected therewith.
- Copyright Act 98 of 1978 which regulates copyright and to provide for matters incidental thereto
- Designs Act 195 of 1993 which provides for the registration of designs and for matters connected therewith
- Intellectual Property Rights from Publicly Financed Research and Development Act 51 of 2008 which provides for more effective utilisation of intellectual property emanating from publicly financed research and development; establishes the National Intellectual Property Management Office and the Intellectual Property Fund; provides for the establishment of offices of technology transfer at institutions; and to provide for matters connected therewith
- National Environmental Management: Biodiversity Act 10 of 2004 which provides for: the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act 107 of 1998; the protection of species

\textsuperscript{11} There is no doubt the current Draft Bill focusses on land, but the final product of a legislative process is unpredictable.
and ecosystems that warrant protection; the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources; the establishment and functions of a South African National Biodiversity Institute; and matters connected therewith

- Merchandise Marks Act 17 of 1941 which makes provision concerning the marking of merchandise and of coverings in or with which merchandise is sold and the use of certain words and emblems in connection with business
- Plant Breeders’ Rights Act 15 of 1976 which provides for a system whereunder plant breeders' rights relating to varieties of certain kinds of plants may be granted and registered.

Apart from local legislation, South Africa is also party to various multilateral instruments. These include:

- Berne Convention for the Protection of Literary and Artistic Works (Berne Convention), since October 1928
- Paris Convention for the Protection of Industrial Property (Paris Convention), since December 1947
- WIPO Convention, since March 1975
- TRIPS Agreement, since January 1995
- Budapest Treaty (Deposit of Micro-organisms), since December 1997
- Patent Cooperation Treaty (PCT), since March 1999
- Protocol Amending TRIPS, since February 2016

Apart from these international instruments, South Africa is also a member of certain key organisations that have significant influence in the regulation of intellectual property. The World Trade Organisation for which South Africa is party to administers the Trade Related Aspects of Intellectual Property Law (TRIPS) Agreement. TRIPS has somewhat become a backbone of intellectual property regulation. South Africa continues to be a key participant under TRIPS. On the other hand, there is the World Intellectual Property Organisation (WIPO) that is also perhaps the most important organisation dedicated to intellectual property. South Africa plays an active role in the African Group and was also one of the countries that
supported and pushed for the adoption of the WIPO Development Agenda in 2007,\textsuperscript{12} which seeks to re-orient the thrust of WIPO’s work to take into consideration the concerns and aspirations of developing countries.\textsuperscript{13}

5.2. Emerging Laws in the area of IP in South Africa

There have been significant strides towards the improvement of South African intellectual property regime from both a both national and international viewpoint. It is much easier to look at the policy implications of the current and emerging legislative environment through a subject by subject analysis.

5.2.1. Copyright

The copyright Act of South Africa is an old age statute enacted about 40 years ago. However, it has gone through some amendments to adapt to the changing world. Despite these amendments over time, there is considerable consensus that change is imminent and necessary. The Copyright Amendment Bill currently under consideration is such an opportunity towards rethinking our copyright law in light of continued creativity.

However, the transformation that the Bill seeks to stimulate does not seem to have the confidence of other stakeholders. For example it has been described as “an abomination” and “ideologically skewed and fundamentally flawed in technical and other respects … [that] adoption into law will do untold damage to our law of copyright.”\textsuperscript{14}

Among other issues, commentators argue that the Bill does not deal with streaming i.e does streaming constitutes a reproduction? There is also a concern that the issues around commission remission by collecting agencies that has been topical for a while and is at the


\textsuperscript{14} See “Copyleft Amendments to Copyright” comments on the Copyright Amendment Bill Posted on Nov 26, 2018 by the Anton Mostert Chair in Intellectual Property Law available at \url{http://blogs.sun.ac.za/plaw/2018/11/26/copyleft-amendments-to-copyright/} accessed on 15 February 2019.
heart of copyrights and considerably worrying lobbyists is not adequately dealt with under the Bill.  

From a policy perspective, it has also been argued that the Bill lacks character in that policy makers have not set a clear approach of whether the purpose of the Bill is creating and supporting monopolies or breaking down monopolies. Thus it has been observed that "[w]hen South Africa announced its intention to review and modernize its copyright law, the original purpose was to benefit South African performers and authors who were not receiving fair remuneration for their own intellectual property creations. Unfortunately, the Copyright Amendment Bill strays far afield from this intended purpose." This is significant in the context of sustainable development of inclusive growth.

The Bill in s12A and 12B also abandons the "fair dealing" exception approach which has a closed least of exceptions for a "fair use" generalised approach used in jurisdictions such as the USA. Article 9(2) of the Berne Convention and Article 13 of the TRIPS Agreement, which South Africa is a party to both prescribe that limitations or exceptions to the protection of a copyright work must be confined to certain special cases. Consequently, these amendments might be violating South Africa’s obligations under these agreements. In any case, fair use, depends much more on interpretation and litigation, which is invariably expensive for a common person and favourable to the big industry players with financial muscle.

15 For further insight, listen to the discussion by Prof Sadulla Karjiker, the incumbent Chair of IP Law, joined Hugh Melamdowitz, partner at Spoor & Fisher, and Wiseman Ngubo, head of legal and business Affairs for CAPASSO (Composers, Authors and Publishers Association) on Classic FM 1027’s Classic Business to discussing the diversity of views on the latest draft of the Copyright Amendment Bill available at http://blogs.sun.ac.za/plaw/2019/01/30/great-listening-discourse-on-the-copyright-amendment-bill/ accessed on 08 February 2019.


17 Article 9(2) reads: (2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.

18 Article 13 reads: Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.

19 In their Written comments on the Copyright Amendment Bill 2017, the Anton Mostert Chair of Intellectual Property Law laments: “There is now ample evidence to suggest that companies, such as, Google have lobbied for such changes in South Africa and elsewhere, and have paid for “research” to further their cause. It appears that the DTI, and the Portfolio Committee, have been quite prepared to follow a biased agenda. While it is prepared to be “captured” by foreign lobbying, and to foster certain business interests, it appears to pay little heed to the possible economic consequences of its proposals on local copyright owners, publishers and innovation. In fact, while the DTI publicly proclaims to be concerned about the welfare of South African artists, its proposals will only serve to
The Publishers’ Association of South Africa (PASA) commissioned PriceWaterhouseCooper (PwC) to assess the anticipated impact of the Bill’s ‘fair use’ provisions and the copyright exceptions for education and other institutions on the South African book publishing industry. The report notes that –

a weighted 33% decrease in sales [is] expected. In many cases the response to these negative impacts would be significant restructuring, retrenchments and – in some cases – business closure. On a weighted basis, a 30% decline in employment is expected in the event that the Bill is promulgated. It is also likely that the volume of imported publications will increase and exports will decrease. South Africa would become more dependent on imported knowledge production.20

The inclusion of these provisions relating to access of educational materials would seemingly weaken the protection of authors for schools and university books. Worst still, it has been opined that the “[h]ardest hit will be authors writing in indigenous languages as their readership among the general public is small, and their books are only bought in large numbers when prescribed for schools and universities”.21 This concern is shared by the International Federation of Reproduction Rights Organisations (IFRRO) which noted that “appropriate and effective legal measures are already in place to ensure access to published works by educational institutions, including collective licensing by DALRO, the local copyright management organisation and member of IFRRO.”22

Thus, for some, the Bill will do more harm to the industry against its apparent objective to promote and protect the creative industry.


21 See Monica Seeber “Law Changes will make Writers Poorer” in City Press 18 November 2018.

22 See IFRRO “Statement on Supporting Creativity and Empowering Authors and Publishers in South Africa” Resolution adopted by the IFRRO Annual General Meeting in Athens on 24 October 2018.
5.2.2. Patents

The Department of Trade and Industry published the Intellectual Property Policy of the Republic of South Africa Phase 1 in 2018. Its main objective is stated in the following terms:

“The overarching objective is to ensure that this comprehensive IP Policy becomes a just, balanced, and integral part of the broader development strategy for South Africa by assisting in transforming the South African economy, and thereby leveraging human resources for the broader economic benefit, increasing local manufacturing, and generating more employment.”23

The Policy proposes a substantive search and examination (SSE) for patents. This is a significant shift from the current regime where there is no examination of a patent before registration. South Africa does not conduct SSE prior to the grant of patents. Section 34 of the Patents Act 57 of 1978 (Patents Act)24 read together with Regulations 40 and 41 of the Patent Regulations, 197825 have the effect that the Companies and Intellectual Property Commission only conducts examination in relation to the formalities of the application. Hence, South Africa employs a so-called depository system. Generally, capacity constraints have been raised as a hindrance to pre-registration examination, despite desirability. Therefore, this could be welcome development as it would ensure that only patents that have been rigorously examined and passed are registered.

The policy also proposes Patent oppositions in order to allow members of the public to be involved during the registration of a patent and to oppose any registration on substantive grounds. The policy also recommends that in the meantime our law must recognise a third party submission system or “observation” to stand in for the pre-grant opposition process and for existing provisions in administrative law to be used in lieu of post-grant oppositions.


24 Section 34 reads: The registrar shall examine in the prescribed manner every application for a patent and every complete specification accompanying such application or lodged at the patent office in pursuance of such application and if it complies with the requirements of this Act, he shall accept it.

25 Regulations 40 and 41 reads: 40. Examination. Any application accompanied by a provisional specification shall be examined to ensure that the documents lodged are legible and capable of reproduction. 41. The registrar shall examine the application accompanied by a complete specification in order to ensure that it complies with the prescribed formalities.
However, the effectiveness of this approach is doubted because in essence observation without opportunity for opposition will not yield any result.

Further, the policy proposes a review of the patentability criteria in line with international law and approaches adopted in other jurisdictions in order to achieve what the policy describes as appropriate levels of protection. The policy refers to the examples of Australia which, in 2012 adopted legislation which upwardly adjusted standards for patentability and is currently considering further changes to the inventiveness test in its patent law to ensure that patents are awarded to inventions that are “socially valuable” and “additional”.26

A curious suggestion by the Policy is that research should be allowed on patented products. It proposes to facilitate research, development and testing of IP products in the commercial and industrial sectors prior to the expiry of the patent term, in order that said products might reach the market as soon after the expiration date of the patented period as possible, in order to provide maximum benefit to society.

Finally yet importantly, among some of its new proposals, the Policy suggests a strengthening of the compulsory licences in view of “South Africa’s unique challenges, including especially vulnerable populations and urgent development concerns.”27 The Policy indicates that guidelines will be introduced, including legal process for government use, and a renewed effort to facilitate the process of exporting IP goods, such as medicines, to the African continent.

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26 See Australian Patents Act 1990 (Cth).
5.2.3. Performers’ Protection Amendment Bill

As the Bill itself notes, the current Bill seeks to:

- amend the Act so as to insert, delete or substitute certain definitions; to provide for performers’ economic rights; to extend moral rights to performers in audiovisual fixations; to provide for the transfer of rights where a performer consents to fixation of a performance; to provide for the protection of rights of producers of sound recordings; to broaden the restrictions on the use of performances; to extend the application of restrictions on the use of performances to audiovisual fixations; to provide for royalties or equitable remuneration to be payable when a performance is sold or rented out; to provide for recordal and reporting of certain acts and to provide for an offence in relation thereto; to extend exceptions from prohibitions to audiovisual fixation and sound recordings and include exceptions provided for in the Copyright Act, 1978; to provide for the Minister to prescribe compulsory and standard contractual terms as well as guidelines for a performer to grant consent under this Act; to provide for prohibited conduct and exceptions in respect of technological protection measures and copyright management information respectively; to provide for further offences and penalties; to substitute certain expressions; to provide for transitional provisions; and to provide for matters connected therewith.

Commentators suggest that the revision of the Act was long overdue and the amendments will go a long way. Under the South Africa Guide of Actors’ (SAGA), performers have raised concern on the current state of the law which entitles them to fees for performance only. That is, for example, when a show or film is resold by a broadcaster to a new market, the performer does not get any royalties. This is the same for reruns by the broadcaster. The resale or rerun value goes to the broadcaster. A commendable introduction of the Bill is its provision for an actor’s right to royalties in the situation where their image is redistributed and is earning an income for the broadcaster.

Discussions and comments on the Bill should ensure that the Act is strengthened to give adequate protection to performers in line with local needs and in the context of international developments. Although there is considerable support of the Bill from performers, the practicalities of its proposals are yet to be tested.
5.2.4. The Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill

There is no multilateral approach to protect what has become known and “indigenous (or traditional) knowledge, or indigenous (or traditional) cultural expressions”. South Africa is taking a national approach to protect indigenous knowledge.

The bill takes an approach of its own kind to protect indigenous knowledge. It has created a special protection which is separate from the traditional forms of intellectual (copyright, patent, trademarks and design). However, there is criticism of the same Bill to the extent that it makes itself subject to other laws dealing with intellectual property in that it might very well be undermining the creativity of its own uniqueness. Moreover, though quite commendable and of its own kind, the national approach also means that only South Africans will be restrained from exploiting registered Indigenous Knowledge whilst other countries can use it without censure. Thus, it will also be crucial to push this matter at international stage through any suitable approaches available to the government.

5.2.5. The Intellectual Property Laws Amendment Bill

Among other things, the Intellectual Property Laws Amendment Bill aims to use forms of existing intellectual property legislation such as trademarks, copyrights, geographical indications, designs and patents to protect indigenous culture. Under this proposed law, cultural expressions such as dances, folklore, music and paintings, and trademarks, would be protected from exploitation and traditional knowledge holders would benefit financially from their use. The major criticism of this Bill is the approach it seeks to adopt towards the protection of indigenous knowledge. By folding indigenous knowledge into the domain of existing forms of intellectual property, the Bill in fact may be making itself redundant because indigenous knowledge protection may not easily qualify under any of the existing forms of intellectual property. More crucially, it adopts a reverse protection system in that generally protection is afforded to work that a person creates so that it can be put in the public domain. What the Bill seeks to do is to protect work that is in the public domain for the benefit of a certain small community. Thus, the introduction of a completely different law that protects indigenous

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[28] Other countries have adopted the national approach in the absence of a multilateral system.
knowledge taking into cognisance its unique character has been regarded as the best way. To the extend that the Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill does so, it is quite commendable. However, its full effect may very well only be realised if the Intellectual Property Amendment Bill is not passed into law.

5.2.6. International Instruments

Apart from the International agreements which South Africa is already a party to, the Intellectual Property Policy notes that the country will explore legal instruments and international treaties that are critical to advance the objectives of the IP Policy. The key instruments that have been identified already and look set to be ratified include the Madrid Protocol, which introduces a system whereby business owners in any signatory country can file for a trademark in their local office, which, after consultation with WIPO, can translate into global trademark protection across all 100+ signatory Countries. Another international instrument that appears to be under serious consideration is the Marrakesh Treaty which entered into force on 30 September 2016 whose goal is to end the “book famine” especially for people with disabilities.

Generally, South Africa is taking a number of steps to amend its existing laws on intellectual property. This, however, has to be undertaken with great cognisance of the current era we live in of the 4th Industrial Revolution which others refer to as the knowledge society or the knowledge economy.

6. A Brief Overview of the 4th Industrial Revolution

The invention of the puddling process which was able to turn pig iron into wrought iron by Henry Cort in 1784 is today regarded as the milestone towards the launching of what has now become known at the First Industrial Revolution. Beyond this beginning of automation, came the Second Industrial Revolution beginning around 1870 which generated even higher levels of automation via the development of mass production and more efficient connectivity in production via the division of labor whilst making further progress in use of energy sources such as electricity and petroleum. After the Second Industrial Revolution came the rise of digital age that is of more sophisticated automation, and of increasing connectivity between
and within humanity and the natural world which began in 1969 and has now become known as the Third Industrial Revolution.

The 4th Industrial Revolution can be described as the advent of “cyber-physical systems” involving entirely new capabilities for people and machines. While these capabilities are reliant on the technologies and infrastructure of the Third Industrial Revolution, the 4th Industrial Revolution represents entirely new ways in which technology becomes embedded within societies and even our human bodies.30

Industrie 4.0 was initially introduced during the Hannover Fair in 2011; furthermore, it was officially announced in 2013 as a German strategic initiative to take a pioneering role in industries which are currently revolutionising the manufacturing sector. 31

It is perceived that the 4th Industrial Revolution will highlight a shift from societal and opportunity transformation to rapidly growing technological advancements that change humanity as we know it. Even though it is difficult to perceive what the fourth revolution really entails, it is clear that even in its infancy it has transformed human interactions and connectedness. There is obviously potential to develop beyond robotics; 3D printing, nanotechnology; biotechnology; Artificial Intelligence (AI); internet of things (IoT), autonomous vehicles, materials science; energy storage and quantum computing, among other breakthroughs.

While it is believed by other scholars that what could be the advent of a fourth revolution is just an extension of the third revolution, Klaus Schwab believes otherwise. According to him, the major distinctions that can be made between the fourth revolution and the previous industrial revolutions are in terms of velocity, breadth and depth; and stems impact.32 He believes the fourth revolution is evolving at an exponential rather than linear pace, consequent to the interconnectedness of current world.33 The 4th Industrial Revolution is built on the digital revolution and is a combination of many technologies that will lead to unprecedented paradigm

shifts in all sectors of life. Essentially, it affects how things are done as well as human nature. In a nutshell, the fourth revolution changes the entire global system. Furthermore, it involves the transformation of the entire system across companies, industries and the society as a whole.  

Technological developments continue to alter the traditional behaviours and systems of production and consumption. For this reason, it has been suggested that there is need for governments, businesses, academics and all relevant stakeholders to work together and eliminate the element of uncertainty over what technology would be like in the next few decades. The result would be a shared and common understanding of how technology is affecting the lives of the current as well as future generations. That will create a framework and platform for comprehensive dialog on the core issues surrounding technological revolution.

As it is we have unprecedented automation and industrial systems whereby virtual and physical systems of manufacturing work hand in hand in what has been termed ‘smart factories’. This means that human beings are slowly being replaced by machines, which essentially have no storage, transportation replication costs. For this reason, the revolution is more acceptable to companies.

Due to the fact that the 4th Industrial Revolution is multi-faceted it warrants a cautious approach that guards against it becoming a divisive and destructive tool. Already Artificial Intelligence has been incorporated into daily human activities, from self-driving cars to virtual assistants. The benefits for consumers are incontrovertible. The downside of the fourth revolution is that it poses a decline in GDP as a result of the fall in the relative price of investment goods. This therefore means that there is an imbalance and the supply side in the world of work and production, suffers while providers of intellectual or physical capital benefit. An obvious consequence is the wealth gap between those who depend on their labor and those who own capital, and a selected few are on the advantage side.

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39 Klaus Schwab, The Fourth Industrial Revolution (Penguin 2016) 12
In this context, the 4th Industrial Revolution needs to be approached with an appropriate balance by mitigating its consequences to ensure maximum benefit.

7. Policy Implications of the Current and Emerging Legislative Environment Pertaining to IP

Despite amendments that have been enacted in the various laws that regulate intellectual property in South Africa, there is considerable consensus that our laws are largely outdated and need review in line with the changing world. There is no denying that change is necessary and that change is inevitable. However, any such change must adequately respond to competing needs both local and international.

The affirmation by our courts that intellectual property is a right of equal status with other rights under the constitution is a ground-breaking position in that it sets intellectual property as an entrenched constitutional right. Therefore, all laws relating to intellectual property must be deliberately enacted to give protection and promotion of intellectual property rights. How this will be balanced with other rights will continue to be a subject for debate.

There is a view that the current copyright laws do not adequately address urgent concerns from the arts industry regarding the payment and remission of royalties. Equally, the industry feels that the protection granted by the law should be strengthened. Among other things, the legislature has responded by introducing the Copyright Amendment Bill which seeks to allow for further limitations and exceptions regarding the reproduction of copyright works; to provide for the sharing of royalties in copyright works; to provide for the payment of royalties in respect of literary, musical, artistic and audiovisual works; to provide for resale royalty rights; to provide for recordal and reporting of certain acts; to provide for the accreditation of collecting societies; to provide for a mechanism for settlement of disputes; to provide for access to copyright works by persons with disabilities; to provide for the licensing of orphan works; to strengthen the powers and functions of the Copyright Tribunal; to provide for prohibited conduct in respect of technological protection measures; to provide for prohibited conduct in respect of copyright
management information; to provide for protection of digital rights; to provide for certain new offences …

However, the major issue of concern is the lack of a definite policy approach by the legislature. There is not clarity of whether the copyright approach is protectionist or more liberal. That is, what is in the best interest of South Africa? Is it to strengthening the protection of monopolies or to dismantle the monopolies? Without a clear approach there may not be adequate benefit derived from our protection of copyrights. Equally, the new approach of “fair use” versus the current approach might be a policy shift from the protection of vulnerable groups because litigating “fair use” will deter many would be copyright owners.

Regarding Patents, the key issue again remains whether patent protection is promoting or hindering economic development. The topical issues such as access to essential medicines have for long being the movers of the debates on the limitation of patentability of certain inventions. It appears from the Policy on Intellectual Property law that the target that has emerged is the registration of patents and the process that is followed. The introduction of the substantive search and examination of patents on registration is at the centre. Although this is, admittedly, an expensive process that requires capacity building, there is hope that this process will clean out weak patents and only allow the patenting of true patents. Apart from this, the desire to strengthen the compulsory licencing system suggests that South Africa will now lean more towards a public policy oriented approach more than a promotion of private monopoly.

It may not be worth to talk about the Intellectual Property Amendment Bill which appears to have been shelved and never to be put on the statute book. However, of particular importance is the clarity that must be provided. The Bill might create confusion to the extent that the Copyright Amendment Bill anticipates its passing into law and thus refers to it whilst it looks like the Bill will eventually not be passed into law. In addition, and most crucially, it may undermine the effective protection of indigenous knowledge if it operates in competition with the Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill.

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41 See in particular, Minister of Health and Others v Treatment Action Campaign and Others (No 1) (CCT9/02) [2002] ZACC 16; 2002 (5) SA 703; 2002 (10) BCLR 1075 (5 July 2002)
42 Parts of the Bill refers to the Intellectual Property Amendment Act yet it has not yet been passed into law.
Regardless of the piecemeal manoeuvres our law seems to take, the most crucial question yet to be answered is whether the foundations of South African intellectual property law is to protect intellectual property law or to create access. This is important and can best be answered when it becomes known whether protection or access is the common good. Therefore, it is important to invest deeper and further into research that deals with this question. In light of the current state of knowledge that the benefits of protection on growth are not known, it maybe be an opportunity for South Africa to review and reconsider its position in line with its developmental needs. The experience with essential medicines maybe a cause for further reflection whilst the new approach towards indigenous knowledge may still need further research and understanding.

Overall, there seem to be a legislative appetite for protecting intellectual property. However, without sufficient information on whether this is the beneficial approach, overprotection may create challenges for public interest. The Policy on Intellectual Policy 2018 seems to appreciate the challenges that may be posed by protection without taking into consideration the best interests of the country.

8. Policy Implications, Requirements and Impacts of the current and Emerging Legislative Environment for the Realisation of the 4th Industrial Revolution

The 4th industrial revolution will invariably change the way we live, interact and understand ourselves as humans. At the centre of this revolution is knowledge and information creativity. The tools of success in this new world order are therefore access to information both in its abstract form and in its tangible form in the form of emerging technologies. Our intellectual property should therefore create space and opportunity for knowledge creation and accumulation. Such knowledge must be valuable for development.

As the 4th Industrial revolution is anchored on innovation, it follows that without innovation and adequate protection of locally created information, growth and development will be much more difficult for a developing country such as South Africa. This therefore may also call upon a balancing approach. The concerns being raised by the experts around the “fair use” approach in Copyright exception comes to mind. Laws that ignore the current demographics of our society and promotes external players may have an impact on economic and social
development. As is stands, the big players with adequate resources for litigation will be the winners. Yet, curiously, the big players in information technology are capitalist multinational corporations which may not necessarily have a development agenda for South Africa.

To the extent that South Africa creates an intellectual property environment that makes it a consumer and importer of information technology without taking deliberate steps to promote and encourage local generation may lay the possibility of being left behind in this new era. In particular, how do local and emerging artists adapt to the new forms of technology such as digital platforms that affect the creation and distribution of their work?

The important consideration therefore must be how to make sure that our laws speak to our needs in this 4th Industrial Revolution. For, like globalisation, without locating oneself in the globe, the uneven distribution of the benefits of the current era will invariably make others suffer. How then do we make our environment ready to adapt to speed and force of this current revolution? There is no doubt that we must embrace the new era. However, how this new era can be embraced in a beneficial way is the question.

The experience with patenting of essential medicines might have taught us the dangers of “heading and depending on another farmer’s cattle”. Adequate protection must be created to ensure that the poor and needy are not downtrodden in the contest for domination. A proper balance must still be maintained between protecting the creative work of others and public welfare. The constitutional balancing of interests approach must be kept in mind. Even more so, the law of general application may become handy in balancing individual rights.

It is pertinent that our law now seeks to protect indigenous knowledge. Musicians, for example, have lamented how much they have to procure patented musical instruments yet their indigenous instruments such as the mbira is being made all over the world without any economic benefit for the local economy despite the possibility that the instrument is of local or at least African origin. The key question therefore is how to create value and afford protection to local intellectual property for development. This is partly where the current Bill on the protection of indigenous knowledge is limited. The Bill may only limit local production of the mbira for example, but may not stop the production of it abroad. Thus, an international approach for the protection of indigenous knowledge may be important. However, even in the absence of such international protection, indigenous knowledge may be used to limit the registration and protection of some claims of intellectual property in South Africa to the extent that these claims offend existing indigenous knowledge. As some have always suggested, the
herbs that are used to make some of the most expensive medicines originate from local communities. Thus, the protection of the local herb may be interpreted to mean the lack of inventiveness in crushing that same herb, put it in a bottle and then call it by another name.

Although the 4th Industrial Revolution denotes era of fast paced advances in technology centred on innovation and creativity, the awareness of the demands of the current era is also an important angle. Together with embracing the current era, people must also be able to create safeguards for drawbacks just as they must create for themselves an environment that makes them fully utilise and adapt to this era. In this context, educating the people on the new era and the role of intellectual property cannot be understated. The Policy on Intellectual Property 2018 seeks to pursue a coordinated approach to creating awareness about IP among South Africans, so as to protect nationally-owned Intellectual Property that is related to indigenous resources, traditional innovation and traditional knowledge.

Overall, a thorough study needs to be undertaken on what the 4th Industrial Revolution means for South Africa, within the current and emerging regional and global context. This will enable us to identify the appropriate intellectual property strategic objectives. It will enable us to come up with ways of fully benefiting whilst creating adequate safeguards for growth. Equally, it will enable us to understand the innovation that is pertinent for our needs and come up with approaches of promoting such. This all can only best be done however, once we have managed to establish the relationship between intellectual property protection and innovation. This theoretical foundation has no certainty yet. Apart from protecting the private interest of the creator, there is no sufficient knowledge on whether protecting intellectual property spurs or stifles innovation.

9. Conclusions and Recommendations

South Africa has a plethora of legislative instruments dealing with intellectual property law. Those range from the constitution to various statutes as amended. Although, as is normal, there is always need for review and update of legislation, there is no shortage of legislation in

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this area. In addition, South Africa is party to the various international instruments on intellectual property and an active member of organisations that promote and regulate intellectual property.

Intellectual property protection is central to innovation and creativity. However, there is no empirical evidence to prove a causal relationship between intellectual property protection and an increase in creativity and innovation. Indeed, without adequate safeguards, experience has shown that intellectual property rights protection may have a negative impact on public welfare.

A review of the current and emerging legislative environment shows that a lot is changing. In fact, it is safe to say that all our statutes on intellectual property law are undergoing some review in one way or the other. What is not clear is whether there is a common theoretical and philosophical approach to these changes. There does not seem to be a single thread of ideology informing the law. Of course, there is an understanding that intellectual property is crucial for economic development and other strategic objectives as outlined also in the National Development Plan. However, there is no certainly regarding the theoretical and philosophical underpinnings of this legislative agenda. That is, how is intellectual property supposed to play a key role in the achievement of our strategic developmental objectives?

A sentiment emanating from artists is that the current tone and language of our laws does not speak their local language is worrisome. Indeed this adds to the view that “other developed countries have aggressively exported their stringent intellectual property rights regimes to the rest of the world.”45 How common the sentiment is, is subject to empirical research. However, suffice it to say there is a feeling that the current and emerging intellectual property regime if Eurocentric and moulded to protect foreign interests against local players and that the nature of local practices of innovation and creativity are not adequately catered for. Perhaps this is a matter that needs more research. Nevertheless, concerns raise fundamental issues on the relationship between theory and practice. The voices of industry players and all stakeholders are important in regulation of intellectual players.

Development requires a confluence of all stakeholders. The nature of the 4th Industrial Revolution and the speed with which it has impacted our day to day lives requires a constant

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touch between the law and practice. This is so because the 4th Industrial Revolution is not only so much about the advancements in technology that it has brought but also in the manner and way in which people interact with such advancements.

The 4th Industrial Revolution will leave others behind if the necessary safeguards are not put in place to ensure a safe integration of the global community. This will disproportionately affect those of us in the developing world where there is limitation of either the resistance or copying mechanisms due to capacity constraints.

However, apart from the fears that the uneven distribution of the benefits of the current era may bring, there is no doubt that the 4th Industrial Revolution is unstoppable and generally embraced as the new course towards a new humankind. This said, South Africa has to locate itself and prepare to accommodate the future than remain stagnant and resentful. This means revising current laws to offer opportunity for advancement and equally remove any hindrances. Crucial questions may need to be asked and answers provided in line with public policy considerations. For example, what constitutes an invention in this era may require a different standard from the one currently applicable. In this context, the question is already being asked whether things like software are inventions that warrant protection.46 Also, considering the current state of technology, should protections for essential medicines still be granted? These are some of the questions that should occupy our minds as we embrace this new way of life.

Looking at the contradictions that have emerged in the current efforts towards the amendment of existing laws, it is recommended that an all-inclusive approach towards the intellectual property legislative agenda be adopted. The criticisms levelled again current Bills suggest a lack of coordination and stakeholder participation.

The protection of intellectual property law must be done within the broader economic and social considerations. Thus, among other things, firstly, the current Copyright Bill should be reconsidered in as far as it changes our law from “fair dealing” approach or “fair use” exceptions approach. Secondly, the initiative to review the patent registration procedure may be commendable. Although substantive search and examination comes with its own difficulties and challenges, the key reform is to review the standard of inventiveness because what was an invention in the 3rd Industrial Revolution may not necessarily remain so today. A lot has indeed become commonplace and has to be addressed by setting the correct standards from

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the onset. Thirdly, there is considerable objection to the Intellectual Property Amendment Bill because of its inadequacies and the confusion it creates with other laws especially on the protection of indigenous knowledge. It appears this Bill has been shelved, which is highly commendable. Fourthly, it is crucial that a review of our intellectual property laws be conducted in a holistic manner. Thus, the work on the other current Bills relating to intellectual property must be conducted in a coordinated fashion within the same theoretical and philosophical underpinnings.

Lastly, information dissemination is always key. Our communities have little access to important information about their rights. The challenges facing artists and the rich indigenous knowledge laying dormant in the countryside are partly problems emanating from the lack of appreciation and understanding of the current global world driven but ownership of information and technology. The beautiful laws and their protections will not do much until the people know how to use such laws and the role of such laws in their industries. Robust information sharing and dissemination should therefore be undertaken. In this regard, the working being undertaken by the South African Cultural Observatory, a national statistical and socio-economic research project, established by the Department of Arts & Culture, is quite commendable and will go a long way.

10. References


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