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THE ROLE OF INDIGENOUS KNOWLEDGE SYSTEMS IN NATURAL RESOURCE MANAGEMENT: THE CASE STUDY OF MUTASA RURAL DISTRICT, ZIMBABWE

Innocent Ndashaishei Chitsiku, Adejoke O. Oyewunmi**, Zanele Furusa****

Abstract

Although Indigenous Knowledge Systems (IKS) have been used from time immemorial in different parts of the world, data of its usage (which is so diverse) is yet to be fully compiled and understood. Communities have used this knowledge for survival through diverse means including the accruing of household assets for their livelihoods, socialisation, education, health, food, natural resource management and even climate resilience. Not much is known of IKS practices in natural resource management in Mutasa Rural District of Zimbabwe. This article seeks to fill this gap by exploring the role played by IKS in natural resource management in the district. Some of the major findings show that the Mutasa community uses IKS widely in the utilisation and management of natural resources. The study concludes that use of IKS is also dependent on factors such as age, status, religion, education levels and length of stay in the area.

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Keywords

indigenous knowledge, sustainable livelihoods, bio-piracy, asset portfolio, governance

Introduction

There is evidence in recent literature of an urgency in the adoption and importance of Indigenous Knowledge Systems (IKS) in achieving environmental sustainability and sustainable livelihoods in this decade (Kanene, 2016). Mposhi et al. (2013) highlight that IKS are a "valuable global resource and efforts to secure their protection should be actively supported both at national and international level". At the 1992 Earth Summit in Rio de Jenairo, it was concluded that, although indigenous peoples are the most vulnerable to unsustainable development and over-exploitation of natural resources, they do however possess vital knowledge that can be used in the monitoring and management of natural resources. At this summit, sustainable development was described as development which seeks to meet the needs and aspirations of the present without compromising the ability to meet those of future generations (Brundtland Report, 1987). IKS was therefore seen as critical and also turned indigenes from being marginal to being known and recognised custodians of the environment due to their unique, centralised and localised knowledge. Although IKS have been used from time immemorial in different parts of the world, data of its diverse usage is yet to be fully compiled. By nature, IKS is geo-specific and it is critical to explore the contextualised forms of how it is used and also how time and space have impacted this knowledge. There is, however, not much that is known of IKS practices in natural resource management in Zimbabwe. This article aims to fill this gap by exploring the roles played by IKS in natural resource management in the Mutasa Rural District of Manicaland, Zimbabwe.

What is, and why IKS?

IKS are regarded as unique, vital and valid local knowledge possessed by a particular society (Risiro et al., 2013). While research points out that there is no universally accepted definition of indigenous people, generally the term refers to culturally distinct ethnic groups that exist in particular parts of the world that now house other communities as a result of the influence of invasion and colonialism (Rugwiji, 2018). The distinctions of these ethnic groups arise from their cultural disposition and the long duration of stay in a place that over time has made them one with their surroundings (Kanene, 2016). Indigenous knowledge is therefore what the indigenous

people have known and practised over time and through trial and error allowing flexibility in times of change (Rugwiji, 2018).

A related term is traditional knowledge (TK), which is sometimes used interchangeably with indigenous knowledge in a number of literatures. However, there is a fine distinction between both terms. Indigenous knowledge refers to the understandings, skills and philosophies developed by local societies with long histories of interaction with their natural surroundings which knowledge provides a foundation for locally appropriate sustainable development (Magni, 2016). TK on its part, is used in a broader sense to encompass tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields (WIPO 2001, 2002). Thus, TK is tradition-based know-how, practices, skills, and innovations created by any individual or group of people whether indigenous or not. (WIPO, 2001, 2002). According to Kudngaongarm (2009), the major distinction between both terms relates to the holders rather than the knowledge *per se*. While both terms can be used interchangeably therefore, to the extent that this research focuses on knowledge systems of indigenous communities in the Mutasa District of Zimbabwe, it has opted to use the term "IKS", in line with the position of Kaya (2017) who states that IKS are the knowledge of people of a particular geographical area, hence they are geo-specific and also temporal.

IKS has been the basis for local decision-making in agriculture, health, food, education and environmental management (Kaya, 2017). Hence IKS plays a crucial role in sustainable livelihoods. Siambombe et al. (2018) view this body of knowledge as a tool that has survived the test of time in terms of knowing how to live in one's environment, which constitutes one's survival. They however point out adverse impacts of colonialism on IKS, especially how it destroyed the colonised societies' socio-economic, political and religious structures and thereby decimated IKS or rendered them dysfunctional. The ideals and principles of colonialism and western cultures fostered the idea that IKS is backward and heathen. In support, Kanene (2016) adds that this knowledge has been regarded as marginal and discriminated against in western philosophies.

Mararike (2014) also points out that in Zimbabwe, European settlers in the 1800s led to colonial redistribution of land, removal of indigenous people from familiar environments and disruption of IKS practices. Mararike notes that the application of IKS practices in managing familiar environments were now ineffective in the new marginal zones with different climatic characteristics, soil types, and landscapes as well as flora and fauna resources. Mararike (2014) sees this move as having totally paralysed stable communities and thrown them off-course for seasons until they learned to adjust to new, challenging environments. In addition,

Rugwiji (2018) points out that western colonial practices in education and religion alienated Africans from their IKS. Despite these challenges, IKS have survived and remain drivers for sound management and use of the environment as well as pro-poor sustainable growth and economic development programmes. The dynamism of IKS is aptly captured by the Canada-based Dene Cultural Institute (DCI, 1995) which alludes to the fact that indigenous knowledge builds upon the experience of earlier generations while adapting to the new technological and socioeconomic changes of the present. The DCI has a mission to preserve, protect, and promote the Dene indigenous system and is renowned for its guidelines on traditional ecological knowledge in an IP compliant, gender-sensitive, participatory and beneficial manner. (DCI Guidelines, 1991).

IKS and biodiversity protection

Many contemporary researchers see IKS as the basis for the conservation and protection of biodiversity, including in Africa, where historically, most of its land and water were intact and pristine without imperial and mercantile contact and occupation. Siangombe et al. (2018) assert that this was possible due to traditional institutions which provided very significant and deliberate ecological management of Africa's biodiversity. One of the methods identified by Siangombe (2018) and other scholars such as Mararike (2014) is transhumance, a practice of rotational grazing with summers in the highlands and winters in the valleys. This not only comforted the livestock and herders against the harsh cold but brought ecological balance and disease control which are critical elements in natural resource management.

IKS and development policies

The United Nations Declaration on the Protection of Indigenous People of 2007 supports the rights of indigenous people who are also recognisably different and require respect (UN, 2007). This automatically puts indigenous people in a position to influence development policies (which apparently includes management of natural resources) based on their knowledge of their environs. On the other hand, the global treaty on biodiversity was embraced by governments at the Rio Summit in 1992 under the Convention on Biological Diversity (CBD) (Guruswamy, 1999; European Commission, 2020). This prompted nation states to be vigilant and support the overarching goals of the Convention which are:

1. the conservation of biodiversity,
2. the sustainable use of its components, and
3). the fair and equitable sharing of the benefits arising from the utilisation of genetic resources. To this end, the indigenous people in small pockets of the globe would be engaged in effective conservation of biodiversity through the application of their IKS and also stand to benefit from it due to

this agreement. Consequently, nation states have set out their blueprints for development with the indigenes and IKS in the middle. The African Union (AU) Agenda 2063 has situated IKS in the context of the blueprint starting from specific nation states and moving up to the AU in general (Africa Union Commission, 2015). Some of the policy efforts in this regard include the AU Model Law for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (2000). The Model Law was based on the principle that the knowledge, technologies and biological resources of local communities are as a result of the tried and tested practices of several past generations; and provided for measures safeguarding communal rights to these resources, innovations, practices, knowledge and technologies. However, legislative and policy initiatives by African countries to adopt the Model Law were almost non-existent, perhaps due to the non-recognition of IKS under the conventional intellectual property regime.

One decade after the adoption of the AU Model Law, in 2010, the "Swakopmund Protocol" for the Protection of Traditional Knowledge and Expressions of Folklore (2010) was adopted by the African Regional Industrial Property Organization (ARIPO) in 2007 in Lesotho (Kongolo, 2016). The Protocol targets the protection of knowledge holders against any infringement of their rights. To this end, it requires users of local knowledge outside of its traditional context to acknowledge the holders of the knowledge, indicate its source/origin, and use the knowledge in a manner which respects the holder of the knowledge, and enter into consensual agreement with provision for benefit sharing. This is strongly linked to the overarching goals of the CBD mentioned in the previous paragraph. It therefore follows that IKS matters, not only for indigenous people but also to national and international levels.

It is important to note that participatory approaches to development that are regarded as contemporary and crosscutting strategies of development nowadays (Chambers, 2013), did not necessarily emerge recently but have been part and parcel of local IKS and community-based development processes. African communities through their experiences have already promoted inclusiveness in community projects that have also been adopted in community based natural resource management. The only missing part has been the inclusion of IKS in policy documents.

According to the Constitution of Zimbabwe Amendment (No. 20) Act, (2013:21) Chapter 2, objective 33, the nation has resolved to, "take measures to preserve, protect and promote indigenous knowledge systems" through such institutions as the Environmental Management Agency and the Ministry of Environment and Tourism. The desire by

Zimbabwe to embrace IKS in its Constitution and development process is also reflected in Chapter 2 article 73 page 37 which emphasises human well-being matched with environmental protection. As the Zimbabwean government embraces IKS supported by legislation, they give IKS value in development programmes.

Similarly, South Africa adopted its IKS policy in 2004 in an "effort to recognise, affirm, develop, promote and protect the indigenous knowledge systems in South Africa" (World International Property Organization (WIPO, 2019) just like Zimbabwe. Hence, South Africa is inclusive in its development processes as well because of its ability to promote participation, ownership and stakeholdership through collaboration with grassroots communities and their IKS. These trends noted in both Zimbabwe, South Africa and most nations, show a positive atmosphere shift in dialogues pertaining to development strategies for Africa which are inclusive of IKS and recognition of indigenous people in development.

IKS and biopiracy

A critical aspect of IKS and its role in the management of biological resources is that which relates to the medicinal and therapeutic uses of plants. Referred to as medicinal knowledge, this encompasses the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses (World Health Organisation, 2013). Abbot (2014) notes the benefits of traditional medicine as including health care, income generation and community identity. IKS in the context of medicinal knowledge encompasses the discovery, collection, domestication, cultivation and management of medicinal genetic resources. However, the economic benefits derivable from the utilisation of IKS are substantially threatened by biopiracy. Biopiracy refers to the ways that corporations and bodies outside of the IKS environment claim ownership of, free ride on, or otherwise take unfair advantage of the genetic resources and knowledge of developing countries (Mgbeoji, 2014; Goyes, 2017).

According to Mackey and Liang (2012), adverse impacts of biopiracy include depletion of biodiversity resources that are needed for indigenous communities for their own health care. This is because activities related to biopiracy include collection of plants and other natural resources identified as having medically active components. However, the collection may deviate from indigenous cultivation and management systems which ensure sustainability of the resources (Dhillionet. al., 2002). This is because these resources and the associated knowledge are sometimes acquired

through unfair and underhanded trade practices dating back to the earliest harbingers of colonial imperialism (Nagan, Mordujovich, Otvos et al., 2010), which strips indigenous people of an essential method for maintaining their economic viability.

The African Centre for Biosafety (2009) has decried such activities which leverage on Africa's natural resources and related IKS to develop new products and processes, secured by patents to the exclusion of IKS owners, thereby appropriating their value in the market economy. It is therefore important to ensure the recognition and protection of IKS associated with not only medicinal but also biodiversity and other natural resource management, in order to safeguard the goose laying the golden egg.

At the international level, these concerns are being sought to be addressed in varying extents at diverse fora, including by the WIPO, through its Inter-Governmental Committee (IGC) on Genetic Resources and Traditional Knowledge. The IGC continues to provide a platform for the much needed negotiations and compromises required to bring stakeholders to a just and equitable consensus. The latest of the efforts was in the June 2019 IGC meeting, where the General Assembly of WIPO has further renewed the mandate of the IGC for 2020/21 to continue the process (WIPO: IGC Mandate 2020/21, 2019). In the meantime, national governments and regional bodies rely on diverse positive and defensive approaches for protection of IKS (Oyewunmi, 2013; Kuruk, 2015). Positive regimes provide for the recognition of property rights in biodiversity and IKS, while defensive systems provide for invalidation of patents and other rights based on IKS which do not comply with laid down protocols including disclosure, benefit sharing and collection of natural resources. In this way, IKS for indigenous management of natural resources and medicinal knowledge is being placed at the heart of development efforts.

Methodology and Study Area

Mutasa District lies in the eastern part of Manicaland province of Zimbabwe which is in Agro-Ecological Region I, characterised by a dual agricultural system. For this research, random and purposive sampling methods were used to select 140 households from which informants were sourced. Field observations and surveys were used to collect information by interacting with the informants in a more naturalistic setting without using predetermined ideas, measurement or responses. Focus group discussions (FGDs) were held as part of the collection of qualitative data. To augment that, Key Informant Interviews (KIIs) were also used in complementing information collected from FGDs. The key informants

included the chief, the headman, the counsellor, one well-respected elderly woman as well as traditional healers and herbalists. Secondary data was sourced from publications relating to this topic found in local libraries and also from EMA reports.

Research Findings

Gender of respondents

Of the 140 respondents interviewed in this study, 80 were females (57.14 percent) and 60 were males (42.86percent) (See Figure 1, below). As shown in Figure 1, women were greater in number and therefore participated more in environmental issues.

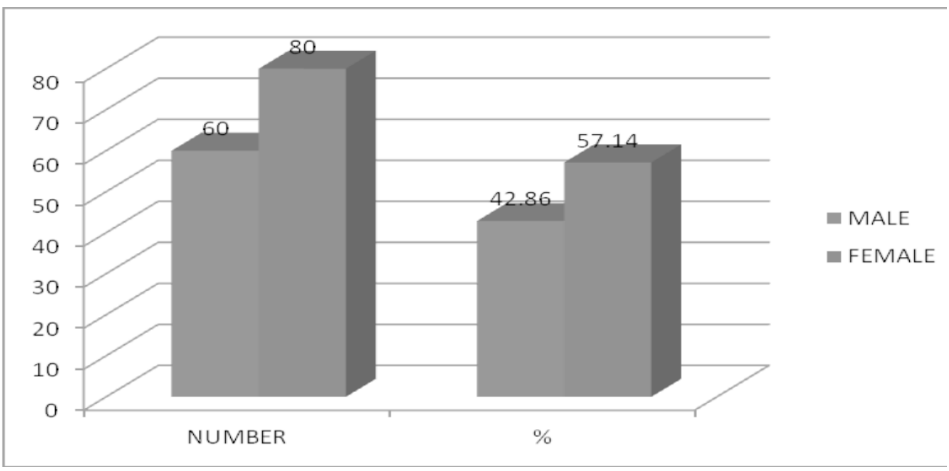

Figure 1: Gender analysis of respondents

Through FGDs it was established that most households are women headed as a result of the effects of out-migration of men and HIV/AIDS. UN (2012) sums up the large contribution of women to community projects in the following statement, "…women are vital actors who bring peace and stability through their knowledge about natural resources and the crucial role they play in managing them."

Age variations, educational levels and use of IKS

There was a clear distinction in quality and quantity of information provided by the respondents between the younger ages (range of 21-30) and the more mature ages of around 51+ years. More comprehensive discussions were held with the respondents of 51+ years. Having asked younger respondents about their totems, their responses were not as detailed as that of the aged who clearly explained the characteristics and the symbolism of the different totems and the reason for having the totems

according to the African traditional religion. The mid-age range of 31-40 and 41-50 had the greatest number of people and this showed very interesting variations according to perceptions. One respondent said, "…inyaya yekuti takangokura tichiita zvinhu zvacho" (this is because we grew up doing such practices) but personally some of them were not in favour of some of the practices as a result of the influence of western philosophy and education. Another respondent clearly acknowledged that the science behind the traditional knowledge systems written in books is relegated to be inferior in modern times.

Respondents with a higher level of education such as teachers and nurses perceived that the use of IKS together with conventional science (which is juxtaposed to the perception of the 51+ category) was more constructive and fitting to a dynamic world in which they found themselves. The 51+ age group, in fact thought conventional science was wrong outright and had brought problems to people and in particular their community. In their conversations in FGDs, the group attributed some of this lack of understanding the importance of IKS among part of this community to the influence of urban life that has embraced western philosophies and lifestyles. This age group also perceives that if children continued to listen to folk tales, riddles and songs and follow cultural practices provided by the elderly, they would not only pick up indigenous knowledge but also understand its contextual and deeper meaning which can only be understood after one experiences certain things in life.

Through oral tradition/stories, children are socialised into cultural norms and values of the community thereby allowing for information and technique transfer which build into the IKS of a people. Greater understanding is acquired with age, which later on transforms into knowledge imbedded in one's actions and belief system. Meanings of these actions, belief systems and knowledge forms become clearer with age thereby giving birth to wisdom. This is how the Mutasa people explain the existence of their deep cultural heritage which helps them have great intimacy with their environment and God whom they call "Musikavanhu" (Supreme Being). Great intimacy as explained in FGDs was developed over time through observation, innovation, experimentation and practice passed from one generation to the other.

The quality and quantity of knowledge about the local environment is commensurate to the time that the person has been in interaction with the environment. Those born in Mutasa or those who have stayed for a long time are more acquainted to traditional practices that work best for that area. Of the total respondents, 70 percent were local and 30 percent were aliens in Mutasa. The number of locals is more than double that of aliens implying that the influence from foreigners is very small or ineffective

allowing local Mutasa people to continue with their traditions with minimal external stimuli.

IKS in wildlife management

Table 1, below, shows four categories of natural resources found in Mutasa and the nature of IKS used in the management of the resources. Through FGDs it was echoed that chiefs possess the power to communicate with spirits through mediums on behalf of their people in all issues that pertain to the use and conservation of natural resources.

Table 1: Natural resources and nature of IKS used to manage them

Type of Natural Resource	Nature of Indigenous Knowledge Systems
Wildlife	Totems, taboos, fines, sacred game, sacred grounds
Trees and Forests	Taboos, sacred grounds, sacred mountains
Water resources	Taboos, sacred wells
Soil	Customary agricultural practices

Mutasa District respondents clearly noted the value of totems and their use for the conservation of wild animals and birds. One cannot hunt or eat the totemic symbol of their clan because this would lead to the hunter being unable to marry and if it is a woman she would always be divorced. Totems were designed to reduce the number of people who hunt particular species either for food or for commercial purposes. People believe that "Musikavanhu" or Supreme Being is the guardian of resources in the region. Many legend stories are spoken in this community especially the disappearance in the mountains of people, particularly foreigners, who go against traditional regulations enforced by the chief.

The killing of wild animals such as hyenas, monkeys and the young ones of all the species is also taboo. This is viewed as having serious implications such as droughts, which would then affect the whole society. Creatures such as pythons are regarded as sacred and the community is encouraged to let them be when they see them, thus promoting the protection of this species especially in mountain communities where they are vulnerable to extinction.

The use of the King's game concept is a major natural resource management strategy. The Mutasa people believe that only kings/chiefs can eat the meat from the King's game. This is also part of the process of selective harvesting of fauna thus reducing the target hunting.

Respondents mentioned that the pangolin (haka) can only be eaten by chiefs. Other game such as giraffes (furiramudenga) is royal and must not be killed by anyone. Taboos are used as management tools and they have helped protect such game from annihilation. Some of the game that lives in the sacred grounds or mountains that have much foliage and are protected because the sacred grounds cannot be accessed unless certain rituals are performed to get access or permission from the local guardian spirits (vadzimu). This can only be performed by the spirit mediums or traditional leaders and as a result it prohibits people from getting into these sacred lands.

IKS in forest management

Just as in game management, the Mutasa community practices selective harvesting of trees. Trees like parinari curatellifolia (muhacha) and adansonia digitata (muwuyu) are not to be cut because they provide thick shade throughout the year. They are believed to house spirits and therefore are regarded as sacred. These two species therefore are generally preserved for the wellbeing of households and the entire community. Table 2 summarises some of the Mutasa known taboos and consequences for the violation of these regulations.

Table 2: Role of taboos in the conservation of vegetation

Type of Tree	Taboo	Traditional Belief
Mukamba (pod mahogany); Muonde (fig tree); Mushakata (parinari curatellifolia)	It cannot be chopped for domestic use such as firewood	Traditional ceremonies are done under any of these trees. They are associated with ancestral spirits.
Mutarara (lacaniodiscus Fraxinifolinus)	It is not used for domestic purposes	It is placed on a grave after burial. Witches get confused if they attempt to exhume the body
Murungu (lucky bean tree); Mupanda	Not cut down for home use	It is planted on graves. As it grows it signifies life for the dead
Mvuko	Not cut for firewood	Planted on graves to allow the dead to avenge his/her killer
Gonde	Not to be used for firewood	Planted at the homestead to ward off lightning
Muzhanje/mushuku (uapaca kirklania)	Fruit trees are not cut down for any use such as firewood	Mishaps; crops can be consumed by wild animals
Muzeze (peltiforum africanum)	Not used as firewood or brought to the household	Bring in evil spirits and confusion at the home; causes decay of pumpkins
Mutovhoti (spirostactiys)	Not used to build a house	One will abandon the home before too long
Munyamharadza	Not used or brought home	Causes separation of married couples and bad luck
Mushuma (diosphyros mespiliformis)	Not used for firewood	Its smoke causes blindness

IKS, soil and water bodies

Mutasa people have taboos for the management of water resources. Water wells or water sources in the area are personalised. People embrace this view, and should they not obey and continue to personalise such resources, their water sources dry up. This is believed to mean that the ancestors are angry with the act of personalising a community resource or gaining personal profit whilst the whole community suffers. This was evident in one village called Saungweme in Ward 23, where a well suddenly dried up after a foreigner bought land and fenced it off from the villagers. Table 3, below, summarises some of the IKS used in the use and management of water in Mutasa. The management of water quantity and quality is also done together with the management of soil quality. Table 3 further captures some management practices that the Mutasa people use in both.

The Mutasa people are not allowed to fetch water, using pots that have been put on fire. It is believed that these tainted water sources eventually dry up and the culprit has to face the punishment from the spirit world. In the real world, it is clear that this strategy is meant to reduce levels of pollution. This is also supported by Principle 15 of the Rio Declaration of 1992 which states that for the environment to be protected there is need to apply the precautionary approach which stops degradation from happening before the cause has already been done.

Mutarazi Falls in Mutasa district is one of the water bodies that is believed to be habitat for mermaids. These are believed to be forms of spirits that protect the water bodies and can punish people who break the water laws. Villagers indicated that these mystic beings make people disappear. According to their belief system, this is because the offenders would be serving punishment in the spirit realm. Such traditional beliefs keep people in check at all times and limit the degradation of water bodies by means such as pollution. From the KIIs, most of the leaders indicated that there have always been violations of this belief system by tourists and therefore they are the ones that are affected the most.

Mutasa community acknowledge soil as the basis for all biodiversity; hence the growth of crops, pastures for livestock, forests and all their purposes, feed for wild animals and many other uses of soil such as in construction and source of ground insects necessary in their diet. Mutasa communities protect soil from being eroded through the use of bench terraces. Table 3 summarises some of the IKS-based practices in both soil and water conservation and management.

Table 3: Role of traditional practices in management of soil and water

Soil management	Soil moisture management	Water conservation
-Use of organic matter, -Livestock manure and other farmyard manure to give soil structure. -Use of plants such as sedge and cats-tail grass, to predict the return of soil fertility. -Mixed cropping -Intercropping	-Use of leaf-litter to keep moisture -Raised beds to drain access water -Intercropping, to reduce runoff and to increase soil fertility. -Use of sedges *(cyperusssp)* -Position of the moon to predict coming of rains, then determine best soil moisture times -Natural fires on hilltops predicts coming of rains. -Use of fauna and flora to predict the rain season and crops to grow -Use of the mixed cropping practice	-Taboo system on use of springs, sponges and sacred days -Cultural beliefs of spirit mediums: give sanctions to resource use and predict crop seasons -Rituals and ceremonies mukwerera bring rains -Use of indigenous trees *ficus sur* (mukuyu) and *cordatum syzygium* (mukute) if not removed, help preserve springs and sponges -Use of banana plants and sugar cane for increased infiltration.

Table 3 clearly shows that through IKS, the Mutasa community can understand rainfall regimes and therefore predict their seasonal activities and resource management practices which include how to care for vegetation cover to maintain soil moisture. Male participants in FGDs indicated that if there is likely to be low rainfall, they discourage excessive harvesting of the thatching grass by women. This is done to make sure there is enough pasture for livestock unlike in good years, hence resource management patterns emerged and were strongly guided by IKS. It is also important to note that the behaviour of natural resources by themselves, does have influence on other natural resources as well as practices adopted by a people. One such example is the belief that when cicadas (nyenze) make a lot of the shrieking sound it signifies heavy rainfall that season. By virtue of their importance in this manner, the cicadas naturally would not be harvested to depletion to ensure that they will always be available for this purpose.

Conclusion

This article has established various IKS used in Mutasa District for the management of natural resources. These include the use of totems and taboos over sacred grounds, sacred game and sacred water. IKS are also deployed in guiding the use of land for agriculture and also the harvesting of resources to sustain livelihoods. Traditional customs, norms and values are fully embedded in the community's day to day living. Religion,

especially the guiding role of the Supreme Being Musikavanhu, is at the helm of the IKS of the Mutasa people and most importantly, in processes of asset acquisition and livelihood outcomes. Compliance with norms relating to natural resource management is enforced by the fear to displease Musikavanhu who might punish the offender. Apart from the dependence on their belief systems in the management of resources, the Mutasa community also uses traditional practices such as bench terracing, mixed cropping and intercropping which give the ground a year-round cover and also increases soil moisture and biota, thus improving soil and water quantity and quality. To the communities in Mutasa district, IKS are therefore very necessary, affordable, dependable, efficient and a viable way of managing resources sustainably since they emanate from within their way of life and through it, they have managed to safeguard the precious flora and fauna of their area.

Policy Recommendations

Against the background of the findings and conclusion about the importance of IKS to natural resource management in Mutasa District of Zimbabwe, the article makes the following key recommendations:

- An analysis of IKS and its various uses should be undertaken on a larger geographical scale, to provide a database of information for the nation.
- There should be funding to fully support the institutions that would be dealing with the use and management of IKS.
- Ownership and property rights need to be respected and those compromised should be compensated fairly.
- Since the problem of biopiracy is an international issue, the government of Zimbabwe should safeguard its IKS, and explore strategic partnerships with other countries for better impact.
- More research focused on indigenous intellectual property (IP) rights and its enforcement should be encouraged.

References

Abbott, R. (2014). Documenting Traditional Medical Knowledge. WIPO. https://www.wipo.int/export/sites/www/tk/en/resources/pdf/medical_tk.pdf (Accessed on April 1 2020).

African Centre for Biosafety, Pirating African Heritage: The Pillaging Continues, Briefing Paper No 3 (2009).

African Union Commission. (2015). Agenda 2063, The Africa We Want https://www.un.org/en/africa/osaa/pdf/au/agenda2063.pdf (Accessed on 25 May 2020).

Chambers, R. (2013). Participation for development: A good time to be alive, in Thomas, P. ed. (2013) Challenges for Participatory Development in Contemporary Development Practices. Development Bulletin. Issue 75 Australia.

Constitution of Zimbabwe. (2015). http://www.zhrc.org.zw/wp-content/uploads/2017/07/Constitution-of-Zimbabwe.pdf (Accessed on 11 October, 2019).

Dene Cultural Institute (DCI) Guidelines of 1991. https://www.wipo.int/export/sites/www/tk/en/data.bases/creative_heritage/docs/dci_guidelines.pdf (Accessed on 28 August 2020).

Dhillion, A., Svarstad, H., Amundsen, C. & Bugge, H. (2002). "Bioprospecting: Effects on Environment and Development" Ambio Vol. 31: 6, (2002) 491.

European Commission. (2020). Environment. https://ec.europa.eu/environment/nature/index_en.htm.

Guruswamy, L. (1999). The Convention on Biological Diversity: Exposing the flawed foundations. Environmental Conservation Vol. 26: 2, 79–82 DOI: 10.1017/S0376892999000120.

Goyes, D. (2017). "Biopiracy from a Green Criminological Perspective." Department of Criminology and Sociology of Law. Oslo, University of Oslo. PhD 199 (2017).

Kanene, K.M. (2016). Indigenous practices of environmental sustainability in the Tonga community of southern Zambia. Jamba: Journal of Disaster Risk Studies Vol 8:1 DOI: 10.4102/jamba.v8i1.331 .

Kaya, H. O. (2017). Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges. Alternation, Vol. 20:1 (2013) pp.135 – 153. Kongolo, T. (2016). African Contributions in Shaping the Worldwide Intellectual Property System. Routledge New York.

Kudngaongarm, P. (2009)."Human Rights Standards for the Protection of Intellectual Property: Traditional Knowledge and Indigenous Resources" (Part I), Vol 1: 12.

Kuruk, P. (2015). Regulating Access to Traditional Knowledge and Genetic Resources: The Disclosure Requirement as a Strategy to Combat Biopiracy, 17 San Diego International Law Journal 1 (2015).

Mararike, C. G. (2014). Survival Strategies in Rural Zimbabwe, Harare: Mond Books (Juta, Zimbabwe).

Mgbeoji, I. (2014). Global Biopiracy: Patents, Plants, and Indigenous Knowledge. UBC Press.

Mackey, T. & Liang, B. (2012). "Integrating Biodiversity Management and Indigenous Biopiracy Protection to Promote Environmental Justice and Global Health". American Journal of Public Health, Vol. 102: 6 (2012) 1091.

Magni, G. (no date). "Indigenous Knowledge and Implications for the Sustainable Development Agenda", Background Paper Commissioned for the Global Education Monitoring Report: Education for People and Planet: Creating Sustainable Futures for all (UNESCO: 2016) online at https://unesdoc.unesco.org/ark /48223/pf0000245623, accessed 20 June 2020.

Mposhi, A., Manyeruke, C. & Hamauswa, S. (2013). The importance of patenting traditional medicines in Africa: the case of Zimbabwe. IJHSS 3: 1.

Nagan, W.P., Mordujovich, E.J., Otvos, J.K. and Taylor, J. (2010). "Misappropriation of Shuar Traditional Knowledge (TK) and Trade Secrets: A Case Study on Biopiracy in the Amazon" Journal of Technology, Law and Policy 9: Vol. 15.

Oyewunmi, A. (2013). "Sharpening the Legal Tools to Overcome Biopiracy in Africa through Pro-Development Interpretation of Normative International Standards: Lessons from Brazil, South Africa and India". African Journal of International and Comparative Law, University of Edinburgh Vol 3.

Risiro, J., Tshuma, D.T. & Basikiti, A. (2013). Indigenous Knowledge Systems and Environmental Management: A case study of Zaka District, Masvingo Province, Zimbabwe. International Journal of Academic Research in Progressive Education and Development, January 2013, Vol. 2.

Rugwiji, T.T. (2018). Identity Reconstruction of the Great Zimbabwe National Monument: An Indigenous Knowledge Systems Perspective. http://orcid.org/0000-0002-1825-0097 (Accessed 10 December 2019).

United Nations (2007). Declaration on the Rights of Indigenous Peoples. UNDRIP_E_web.pdf (Accessed 26 February 2020).

United Nations Educational, Scientific and Cultural Organization (UNESCO) (no date). Local and Indigenous Knowledge Systems (LINKS), online at https://en.unesco.org/links, accessed 20 June 2020.

World Intellectual Property Organization (WIPO 2001, 2002). Intellectual Property Needs and Expectations of Traditional Knowledge Holders, WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998-1999) (Geneva April, 2001).

World Intellectual Property Organization (WIPO) (2019). Summary Report of Assemblies of the Member States of WIPO Fifty-Ninth Series of Meetings (Geneva, September 30 to October 9, 2019) online at https://www.wipo.int › edocs › mdocs › govbody, (Accessed 22 November, 2019.

PROTECTION OF PERSONALITY OR IMAGE RIGHTS: POSSIBLE LEGAL ALTERNATIVES AND LESSONS FOR NIGERIA

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Abstract

Image rights have taken the front burner as an intangible property right which is capable of commercial exploitation. The 'currency of images' is evident in the sports and entertainment industries particularly through endorsement contracts. In addition, for political office holders, a wrongful use of their images and personality can mar their career and affect the likelihood of success at the polls. More so, the unauthorised use of the images of private citizens impinges on the right of such persons to control the use of their images as well as encroaches on their privacy. Despite this, the legal protection of image rights in Nigeria is largely undeveloped. This article employs the doctrinal method of legal research to examine the protection of image rights through various legal means such as copyright, trademarks, torts and legislations. It suggests possible alternatives for the protection of image rights in Nigeria and draws lessons from options available in other jurisdictions. It concludes that there is a need to ensure that there is an adequate legal framework that offers optimal protection for image rights which is currently lacking in Nigeria.

Keywords

image rights, character merchandising, publicity rights, personality rights, Nigeria

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Introduction

Image rights (IR) have taken the front burner as an intangible property right capable of commercial exploitation. For public figures and celebrities, the unauthorised commercial use of their images signify possible loss in remuneration they could have earned through endorsement contracts. For politicians, it can mar their careers and affect success at the polls. It also impinges on the right of private citizens. Although IR is prominent in the sports and entertainment industries, they are pertinent to a large spectrum of persons.

The concept of IR is becoming popular in Nigeria with the booming entertainment industry. Large corporations, businesses and schemes adopt celebrities as brand ambassadors through endorsement deals/advertisements (Odunaike, 2016). The internet/social-media and phone cameras also make discussions on IR pertinent. For instance, in a recent court decision, the 2019 presidential candidate of the Peoples Democratic Party (PDP), Alhaji Atiku Abubakar, and his campaign director, Dr Bukola Saraki, were ordered to pay ₦5 millon damages to a trader, Amuda Adeleke, for unauthorised use of her photograph on their campaign billboard (Unini, 2020). Jumia Fashion, on its Instagram page, used, without authority, the image of Richard Mofe Damijo (RMD), a popular Nollywood actor in a way that suggests to an average consumer that the actor endorsed Jumia Fashion (Olapoju, 2016). In Temitope Akinyemi v The Sun Publishing Limited (Suit No: FHC/WR/CS/87/16) the Plaintiff who took a picture of herself was informed that her picture was published in the Daily Sun newspaper as the 'Sun Girl' and also on the publisher's website but under a wrong name and with a wrong phone number.

Despite its importance, the jurisprudence of the protection of IR has not developed in Nigeria. Heavy reliance shall therefore be placed on decisions from other jurisdictions which are not binding on Nigerian courts but are of persuasive effect.

This article examines the concept of IR and identifies certain fundamental principles that should shape the legal framework for the protection of image rights in Nigeria. It also examines some legal options for the protection of IR and then draws lessons for Nigeria in protecting these rights.

The Concept of Image or Personality Rights

Image rights (IR) generally refer to the rights of a person to control the use of his or her images or expression of personality in the public. The image can be that of an individual, group of individuals, legal personality or a fictional character which may be human or non-human (also called character/identity merchandising). Identity is a "person's uniqueness which individualises such person, and is manifested in various facets of personality (or indicia) which include one's physical appearance or image and is considered a separate right of personality" (Neethling, 2005). This right is infringed by the falsification of a person's true image or identity or creating false impressions in the mind of the public with regards to that person through the use of his or her image. A recognised form of this is the unauthorised use of a person's image for advertisement which creates a false impression that such person has consented to the advert or endorses the product, business or service in question (Neethling, 2005).

A justification for the protection of IR is the natural rights theory which considers, in this case, that every individual has a right to control the commercial exploitation of his or her persona by others (Synodinou, 2014; Walsh, 2013). Other justifications include the need to prevent unjust enrichment (Carty, 2004), incentive for persons to invest in their persona, image or brand (Dogan & Lemley, 2006), and prevention of misleading the consumer or public (Treece, 1973).

Firstly, Nigeria must choose the appropriate term to use in protecting IR. Names commonly used include 'image rights' (UK), 'publicity rights' (USA) and 'personality rights' (civil law jurisdictions) (Balcarczyk, 2010; Oyewunmi, 2015). Should Nigeria also adopt the name image rights simply because it inherited its laws from the British? The term 'image rights' could *prima facie* be considered limited since what the right entails is beyond the control of the images but it extends to other attributes of the person's personality such as signatures, voice and gestures. Many civil law jurisdictions use the term 'personality rights' which seems broader and encompasses not only images but also other indica of personality. However, the term 'personality' suggests that the right is attached to the person who is the owner or subject matter of the right. Hence, it may not be transferrable particularly upon death to others. Using the term 'image rights' may allow transfer to others. More so, in the broad sense, a person's image is not restricted to photographs but encompasses the totality of the representation of a person or the public perception of a person. It refers to "'persona' or, 'a fortiori, 'brand' and it is concerned with the extent to which persons have the legal right to control the commercial use of their identity" (Balcarczyk, 2010). The term 'publicity rights' may also not be appropriate

since it focuses more on the commercial use of a person's identity in that the defendant should have received some commercial advantage by the use of the image such as instances of character merchandising or false endorsement (Schulman, 2019). Violation of this right could however occur even where there is no established commercial advantage gained by the defendant. Based on these, the expression 'image rights' may be suitable for Nigeria.

Secondly, Nigeria needs an underlying philosophy for the protection of IR. IR could be protected based on the respect of dignity of the human person and the right to privacy (Synodinou, 2014; Rothman, 2018). It can also be viewed as a kind of right attached to personality which is extinguished at the death of the subject matter of the right. Nevertheless, the use of a person's image may be defamatory to the memory of the dead; hence, it is sometimes considered that it should be transferable after the death of the subject in order to allow for a better protection in honour of the dead (Rothman, 2018).

Another philosophy is to view IR as property right which can be transferred *intervivos* as it is done in the sports industry. It also has to be determined whether IR should be transferable *intestate* or by will just as copyright term was extended to after the death of the author in order to cater for the family of the author after his death (Asein, 2012). Issues that may arise include whether such posthumous transfer of right should be to any transferee at all or limited to the direct progeny of the right owner. Where the transfer is unlimited, a total stranger may obtain the right and can use it even in violation of the moral and other personal beliefs of the right owner such as uses that oppose the religious or other fundamental beliefs of the subject of the image. For these reasons, Rothman (2008, p.68) opposes the unlimited transferability of image rights as such unlimited transferability would shift "the right to our own name and likeness from a right that cannot be taken away from us, to one that can be." It can also lead to an emerging market of commercializing the dead where companies acquire the image rights of aging or ailing celebrities in order to commercialise same after the person's death. Even where image rights can be transferred to family members, a challenge may still arise where family members, who a celebrity may have strongly dissociated himself or herself from, inherits the right and use it to their gain.

A suggested balance of these two philosophies is that IR should be considered a property right that can be transferable *intervivos* such as assigning or licensing since this is the backbone of endorsement deals. It may be necessary to allow the right survive the owner, however, for a limited period of time such as 10 years and this transfer should be limited only to the direct progeny of the subject. This would already allow the

successors or heirs in title to be catered for, although for a limited period, and also prevent instances where a company who is not a relative may only be interested in making money off the dead without giving regard to the moral or religious inclinations of such dead personality. Hence, the dual nature of image rights which comprises the economic and the moral aspects may be considered just as it exists for copyright (Synodinou,2014). One cannot however rule out the possibility that some celebrities or persons are disavowed or estranged from their families and may not want to have anything to do with such family members. To address this, the right owner may indicate the person to whom the right should devolve or, in the absence of this, to his named next of kin.

Having established these underlying philosophies, the next section shall examine some of the options for protecting image rights and the pros and cons of each.

Alternatives for the Protection of IR

One of the alternatives available for the protection of IR is through specialised legislation. The Republic of Guernsey is the first jurisdiction to do so through its Image Rights (Bailiwick of Guernsey) Ordinance in 2012. IR are registered in the Register of Personalities and Images and the proprietor acquires a property right similar to trademarks which can be licensed and assigned (Evans, 2015). This registration system was applauded for making the meaning and scope of IR clear. However, since its establishment, it had not attracted as many registrations as envisaged (Coors, 2015). This article shall therefore focus on the exploring the protection of IR through other extant legal provisions such as copyright, trademarks, privacy rights, torts and the Cybercrime Act.

Copyright

The pertinent class of copyright work that may contain IR is artistic works. These include painting, drawings, works of sculpture and photographs (not in a cinematograph film) (Copyright Act 1988, section 51). While all these may contain a person's image or indica of a personality, photographs are probably the commonest form through which a person's IR may be violated (WIPO, 1994). The challenge of protecting IR through copyright law is that the author of a photographic work is the person who took the photograph (Copyright Act 1988, section 51). Ownership vests initially in the author even in instances of commissioned works unless an agreement is made to the contrary (Copyright Act 1988, section 10(1); 11(1)). This position differs from the works made for hire principle (US Copyright Act, 17 USC, section 201(b); UK CDPA (UK CDPA, section 11(2)).

Nevertheless, a person whose image is taken may make a contrary agreement by stipulating what the photographer can do or not do with the

photograph or any other conditions upon which the photograph is taken. The agreement may also include the transfer of ownership to the subject of the image. Such contrary agreement on ownership is to be in writing (section 10(2)). An oral or implied contract would not suffice in this regard. Therefore, without such an express agreement, copyright regime does not adequately protect IR in Nigeria.

The UK's copyright law has been amended to protect the right to privacy of a person who commissions the taking of a photograph or making of a film for private and domestic purposes. Section 86 CDPA provides that "A person who, for private and domestic purposes, commissions the taking of a photograph … has, where copyright subsists in the resulting work, the right not to have copies of the work issued to the public, the work exhibited or shown in public, or the work **[**communicated to the public**]".** A similar provision is needed under Nigerian copyright law to protect the privacy of persons who commission photographs for private or domestic purposes, thereby giving them control over the use of their images.

Despite this, the provision applies to commissioned works and copyright infringement is generally only for copying all or a substantial part of the original work (Rainen, 2005; Copyright Act 1988, s6(2)). In *Bauman v. Fussell* (1978) an artist created a painting based on a copyrighted photograph, the court held that there was no infringement because the artist creatively infused originality into it, and therefore the painting was not substantially similar to the original photograph. Hence, copyright law does not provide adequate protection for IR thereby there is a need to look to other aspects of law.

Trademarks

Section 67(1), Nigerian Trade Marks Act 1965 defines a mark as "a device, brand, heading, label, ticket, name, signature, word, letter, numeral, or any combination thereof". Celebrities may therefore register their names, stage names, signatures or drawing of a part of their body as part of a trademark. With respect to the use of trademarks to protect IR, a challenge is that, at registration, it must be indicated what class of goods or services that the trademark relates to (Trademarks Act, 1965, s4). Hence, celebrities that do not have any specific goods or services may have a challenge registering. More so, infringement under Trademarks Act is based on likelihood of confusion of the average consumer. In the absence of this, an action for infringement is not likely to succeed (Trademarks Act 1965, s5(2) & 6). In addition, the registration of a trademark does not interfere with any *bona fide* use by a person of his own name or the name of his place of business or of any of his predecessors in business (Trademarks Act, section 8(a)). Therefore, this legal regime has its limitations in protecting IR.

Nevertheless, other relevant provisions under the Nigerian trademark regime that can be useful in the protection of IR include Section 1(a) of the Trade Malpractices (Miscellaneous Offences) Act which provides that "any person who advertises any product in a manner that is false or misleading or likely to create a wrong impression as to its quality, character, brand name, value commits an offence." This provision may be extended to apply to situations where a person's image is used to advertise without consent as this would be false endorsement and misrepresentation to the public (Odunaike, 2016). Section 5(2) (a) of the Trade Marks Act 1965 may also be extended to protect image rights where it provides for the "use of a mark in physical relation to goods…or other advertisements issued to the public" (Odunaike, 2016, p.72).

Right to privacy

Section 37 of the Nigerian Constitution (1999) guarantees the right to private and family life. IR is closely associated to the privacy rights and can be violated where there is a disclosure of true facts to outsiders contrary to the will of the person concerned. This is premised on the right to determine the destiny of private facts, and the ambit and method of disclosure of such facts *(National Media Limited and Another v Jooste*). McQuoid-Mason (2000, p.231) contends that the unauthorised use of a person's image is a violation of a person's right to decide who should have access to their image and likeness – something that goes to the root of individual autonomy or privacy.

This perspective of using privacy rights to protect IR is common in civil law countries particularly in the EU based on Article 8 of the European Convention on Human Rights (ECHR) although the way each jurisdiction protects privacy differs (Horsey & Rackley, 2011). In France, invasion of privacy is a crime making it easier for persons including celebrities to keep their private lives really private. In Germany, there is a lesser protection of privacy although it forms part of the Constitution hence the personal information about citizen's private lives is protected from the public.

For celebrities and public figures, is there a limit to their right to privacy by virtue of their professions/industry? It may be argued that since these personalities 'court' fame, they should accept the inevitable intrusion into their private lives especially by the media. Despite this, they still need their privacy if they are to maintain their human dignity and sanity. The challenge for celebrities is that the uncontrolled and unauthorised use of their images for commercial purposes can affect the value of their endorsement contracts. In the absence of Nigerian cases, decisions from other jurisdictions shall be examined.

In *Von Hannover v. Germany ((*2004) ECtHR) the German courts, where she initially filed her action, had held that as a public figure par excellence, Princess Caroline of Monaco should expect members of the public to take an interest in her daily life. The ECthr however disagreed with this and held that the pertinent question was whether the information would be 'in the public interest' and not what the public might be interested in. The court also differentiated between her public functions and her private life. Where she is performing a public function or attending one, there would be a legitimate public interest in her pictures being published. Similarly, in *Julia Basetsana Kumalo v. Cycle Lab (Pty) Ltd* (2011) it was held that while the plaintiff's status as a celebrity may require her to accept that when appearing in public she may attract more attention than others who are not celebrities, she retains the right to be protected against an infringement of her right to privacy and identity by the non-consensual publication for advertising purposes of a photograph taken when she was on a private shopping trip.

It is therefore apparent that public figures or celebrities have a legitimate expectation of protection and respect for their private lives. The determining factor is therefore whether such intrusion is in the public interest or for the public benefit. The defence of being a public figure cannot avail a defendant where the plaintiff has been placed in a false light or his or her image has been wrongfully used for advertising purposes (McQuoid-Mason, 2000).

Even where a celebrity may have expressly or impliedly consented to the use of his or her photograph for a specific purpose in a contract, such use must be confined within the ambit and for the purposes in respect of which consent was given. To use the image for other purposes would be infringing on the right of the celebrity or subject of the image. The defence of consent can only succeed if the defendant's actions fall within the limits of the consent given (*National Media Limited amd Anor v Jooste* 1996 (3) SA 262 (A) at 272; *Kidson v SA Associated Newspapers Limited* 1957 (3) SA 461 (W)). However, the protection of IR through privacy is limited by the right to freedom of expression and the press (Constitution, section 39).

Torts

Many common law jurisdictions do not have IR per se. This is because there are classical torts that are sometimes used to protect IR (Synodinou, 2014). Some of these torts are discussed below.

Passing off

Passing off seeks to protect the goodwill or reputation of a business and would prevent a person from presenting his goods as that of another or seeking to deceive the public in order to benefit from or free ride on the

goodwill of another business (Olubiyi, 2017). For a successful action in passing off, the claimant must prove the 'classical trinity' that:
a) he has goodwill/reputation,
b) there is a misrepresentation by the defendant, and
c) the claimant has suffered or really likely to suffer some damage due to the defendant's misrepresentation (Kodilinye and Aluko, 1999).

In the United Kingdom, although there is no recognised IR, recent judicial decisions have extended passing off to protect the right of celebrities and persons in the media to control the use of their images (Very, 2005).

In *Moorgate Tobacco Co Limited v Philip Morris Limited ((*(1984) 56 ALR 193 at 214) the court adapted passing off to deceptive or confusing use of names of celebrity in order to persuade consumers to believe that such goods or services have an association with or the endorsement of the celebrity. Therefore, an action in passing off would arise in cases of false endorsements that mislead the members of the public and cause harm to the celebrity or public figure (Odunaike, 2016).

In *Robyn Rihanna Fenty v Arcadia Group Brands Ltd (T/A Topshop)* [2013] EWHC 2310 (Ch). Birss J made it clear that there was in England no general right for a person to control the reproduction of his images and that the instant case was about the action of passing off. In this case, the defendant sold shirts which had the images of the claimant (Rihanna). The court found that the claimant has sufficient goodwill to succeed in an action for passing off being a famous pop star who ran large merchandising and endorsement operations. Also, it found there was misrepresentation as the public could be misled to believe the shirts were connected or approved by the claimant. Since a substantial number of customers were persuaded to buy the shirts on the existing false impression, this will amount to loss of the claimant's merchandising business and lead to a loss of control over her reputation.

Earlier in *Irvine v. Talksport Ltd* [2003]EWCA Civ 423, where the defendants operated a radio station and used the picture of the claimant on the cover of their brochure without his consent, he right to use the picture had been obtained legally but they had edited the picture to remove the mobile phone the claimant was holding and replaced same with a radio with the words 'Talk Radio'. The claimant succeeded in an action of passing off on the ground that it created a false impression that he had endorsed the radio station. Nigerian courts can extend the frontiers of passing off to protect IR.

Breach of confidence

The action for breach of confidence arose from equity and is designed to protect secrets or confidential information usually related to business or

commerce but may also be used to protect personal secrets (in this case, a person's image). The action will succeed in situations where a duty of confidence arises. To succeed, the information must be confidential in nature, the defendant should have an obligation to keep such information confidential and there must have been an unauthorised use of the information by the defendant (*Coco v. AN Clark (Engibeers) Ltd* (1968)). This does not mean that there must be pre-existing relationship between the claimant and the defendant (*AG v. Guardian Newspapers Ltd* (NO 2) (1990). Essentially, where the defendant knows or ought to have known that such information is confidential, the court would impose a duty of confidence on the defendant.

In *Douglas, Zeta-Jones and Northern & Shell Plc v. Hello! Ltd.* (2005), a celebrity couple, got married in a private wedding. A freelance photographer took photographs of the wedding and sold same to a magazine. The court held that there had been a breach of confidence and the defendant should have realised there is an obligation of confidence in relation to the photographs since the photographer took the pictures secretly and had no authority for their use particularly since it was widely publicised that the wedding was a private event.

The defence to an action for breach of confidence is to show that the disclosure of the information is justified in the public interest (Horsey and Rackley, 2011). The court constantly has to weigh the public interest in the disclosure or having access to information (freedom of expression and the press) and the confidentiality of the claimant (*Campbell v. Mirror Group Newspapers (MGN*) (2004)). The test is whether the claimant had a "reasonable expectation of privacy" or in situations where this is not obvious, to ask whether the disclosure of the information would cause an offence to a "person of ordinary sensibilities" (Horsey and Rackley, 2011, p.462). Thereafter, it is pertinent to ask whether the claimant's interest in maintaining privacy outweighs the defendant's freedom of speech.

Defamation

Defamation relates to injury to reputation resulting from spoken or written words which lowers the claimant in the estimation of right thinking members of the society or expose him to hatred, contempt or ridicule, or cause other persons to shun or avoid him or discredit him in his office, trade or profession or to injure his financial credit (Kodilinye and Aluko, 1999). Most cases therefore involve public figures who have a great interest in people's opinion.

Libel is defamation in a permanent form which is usually written or printed words and this can bepainting, cartoon, photograph, statute or film (Horsey and Rackley, 2011; Defamation Law 1961, section 3). Images

therefore fall within the meaning of 'words' in an action for defamation and can be useful to protect IR where the use of the image is defamatory. To succeed in an action for defamation, the claimant must prove that the words (use of his images) were defamatory, the words referred to the claimant and the words were published to at least one person other than the claimant (Kodilinye and Aluko, 1999). An action for libel is actionable *per se* and the claimant does not need to prove malice or actual damage (*Williams v. The West African Pilot* (1961) 1 All NLR 866). These are presumed by the court in the absence of lawful excuse by the defendant (*Nthenda v. Alade* (1974) 4 ECSR 470).

The crux of the claimant's action is hinged on proving that the use of his image was defamatory and that it is obvious or reasonably obvious to the average person that the image used is that of the claimant (*O'Shea v. MGN Ltd (2001).* The latter requirement is essential where for instance it is not the entire face that is used such as where a shadow, back of the head, hand or other insignia is used. An action for defamation would also succeed where a person's image is used to create or insinuate false and derogatory innuendos. Innuendos refer to veiled attacks on a person's reputation and may arise in statements that do not appear defamatory but because of background knowledge of information, people may nevertheless think worse of the claimant (Horsey and Rackley, 2011; *Tolley v. JS Fry and Sons Ltd (1931)*).

Action Iniuria or *Action Injuriarum*

In South Africa, the tort of *action iniuria* (or *action injuriam)* is used to protect IR. This is possible because the South African legal system is a hybrid system combining a civil law tradition from the Dutch and a common law tradition from the British together with its customary law. The *actio iniuria* is an action for delict or tort which "not only seeks to protect an individual's dignity and reputation but also his or her physical integrity" (Loubser, 2012, p.212). The purpose of the *actio iniura* is to protect a plaintiff against wrongful and intentional infringements of their personality interests, which include the right to corpus, dignitas and fama (Gowar and Visser, 2013).

The aspect of *action iniura* that is relevant for the protection of IR is the protection of a person's *dignitas* or dignity. The concept of *dignitas* is a collective term embracing all personality rights and interests with the exception of the right to a good name (fama) and bodily integrity (corpus), and embraces privacy, dignity and presumably the right to identity (*Jackson v SA National Institute for Crime Prevention and Rehabilitation of Offenders* 1976 (3) SA 1 (A)).To succeed, the Claimant must establish (1) an intention on the part of the defendant to produce the effect of his act; (2) an overt act which the person doing it is not legally competent to do and

which, at the same time, is (3) an aggression upon the right of another, by which aggression the other is aggrieved and which constitutes an impairment of the person, dignity or reputation of the other (Villiers, 1899). Identity is infringed by the falsification of a person's true image or identity and this includes using or appropriating a person's image without his or her permission for advertising purposes, creating the false impression that such person has consented to such conduct or supports the advertised product, service or business. In *Julia Basetsana Kumalo v. Cycle Lab (PTY) Ltd (*2011), the court stated that the fact that the defendant did not use the plaintiff's name in the advertisement is legally irrelevant: what matters is that use of the plaintiff's image had not been authorisedl and was used in a misleading way. It is also not necessary that the photograph depict the plaintiff in an objectively degrading, humiliating or insulting manner.

Cybercrime Act

The Cybercrime Act 2015 is also useful in the protection of IR in Nigeria, although to a limited extent. Section 22(3) makes it an offence for any person to fraudulently impersonate another entity or person, living or dead, with intent to gain advantage for himself or another person, cause disadvantage to the entity or person being impersonated or another person. This provision is useful for the violation of IR in the online environment. It can be argued that making use of a person's image without consent amounts to fraudulent impersonation as it gives the public the impression that the subject of the image is connected or has endorsed the product. This can cause loss to the subject of the image such as loss of endorsement contracts.

The Cybercrime Act is also useful where a person's sexually explicit image is shared online without his or her consent (revenge porn). In this regard, section 24 of the Act is useful in controlling the unauthorised use of one's image (which is grossly offensive, pornographic or of an indecent, obscene or menacing character) or where such image causes annoyance, inconvenience danger, obstruction, insult, injury, criminal intimidation, enmity, hatred, ill will or needless anxiety to another. For instance, in 2018, The Federal High Court (Ado Ekiti) sentenced one Ayan Olubunmi to two years in prison and a fine of ₦500,000 for posting nude pictures of his ex-lover (revenge porn) on Facebook (Bassey, 2019). The Cybercrime Act may therefore complement other legal alternatives for the protection of IR in the online environment.

Lessons for Nigeria

Despite its commercial value, the legal framework for the protection of IR is not yet developed in Nigeria. With increased value being attached to image rights, it is expected that the courts would soon have to grapple with these issues. A specialised legislation is not yet recommended because the development and popularity of this right in Nigeria has not necessitated such. The specialised legislation in Guernsey seems not to have achieved significant registrations as expected and it is unclear whether the law has indeed made any significant impact in the protection of these rights. It is rather recommended that the existing legal framework in Nigeria be expanded and adapted for the protection of IR. These include the copyright and trademark laws, privacy rights, cybercrimes laws and torts such as passing off, breach of confidence and defamation.

With regards to the fundamental philosophies that need to be determined. It is recommended that Nigeria adopts the expression 'image rights'. While, this seems to be limited to the photographs in the narrow sense of the term, in a broad sense, it refers to a person's identity and perception in the eyes of the public. This term is preferred compared to personality right which presupposes that this right is not a property right or transferrable. Also, IR should encompass both economic and moral rights; and the latter should be transferable upon the death of the right owner, however to a limited extent. This transfer can be to a named person by the right owner and for a period of 10 years posthumous.

Furthermore, the Copyright Act should be amended to incorporate the right to privacy of the subject of an image or film where same was made for personal or non-commercial purpose similar to the provision of section 86 of the CDPA. This will ensure that the copyright law is better adapted for the protection of IR. The courts are also enjoined to expand the frontiers of privacy rights under the Constitution and the tort of passing off to protect IR where the facts of the case are suited for these causes of action. While the *action iniuria* is not recognised under our laws, the tort of defamation can be expanded to cover injury to the identity or dignity of a person which includes or incorporates an unauthorised appropriation of a person's image. The Cybercrime Act is also another veritable tool that Nigerians can use of in protecting their image rights.

Finally, there is a need for increased awareness on these various legal alternatives among celebrities, public figures and the general populace. Lawyers must also be bold and creative to explore these existing legal frameworks for the protection of the IR of their clients. This would not be strange to the Nigerian jurisprudence as from time to time, the court has

taken the lead in developing the law and based on this the legislature has enacted or amended extant laws to catch up with the court's interpretation of the law. An area in which this has been common in Nigeria's jurisprudence is that of electoral matters.

Conclusion

The Nigerian entertainment sector is growing significantly and it is becoming a force to reckon with not only within the country but also outside the shores of Nigeria. This boom has led to increased character merchandising of celebrities and other public figures particularly through endorsement contracts. There is therefore a need to catch up with this emerging area by having an adequate legal framework for the protection of image rights in Nigeria.

References

Asein, J.O (2012). *Nigerian copyright law & practice* (2nd ed.) Books& Gavel Publishing, Abuja.

Balcarczyk, J. (2010). Sports image rights – a comparative overview. *Zbornik radova Pravnog fakulteta u Splitu, 47 (*2), 327.-334.

Bassey, V.(2019). Revenge Porn in Nigeria; The Legal Effect - Victoria Bassey (Nov 21, 2019) https://dnllegalandstyle.com/2019/revenge-porn-in-nigeria-the-legal-effect-victoria-bassey/ (accessed 06 June 2020).

Baumen v, Fussell (1978). RPC 493.

Carty, H. (2004). Advertising, publicity rights and English law. *Intellectual Property Quarterly*, *209*, 247-252.

Coors, C. (2015). Are sports image rights assets? A legal, economic and tax perspective. *The International Sports Law Journal*, *15* (1), 64-68. DOI: 10.1007/s40318-015-0066-8.

Copyright Act 1988. CA C28, Laws of the Federation of Nigeria (LFN) 2004.

Copyright Act, 17 United States Codes .

Copyright Designs and Patents Act 1988.

Cybercrime (Prohibition, Prevention, Etc) Act, 2015.

Defamation law 1961. Cap 34, laws of Lagos State 1973.

Defamation law 1959. Cap 32, Laws of Western Nigeria.

Dogan, S. L. & Lemley, M. A. (2006). What the right of publicity can learn from trademark law. *Stanford Law Review*, *58* (4), 1161 – 1220, doi:10.2307/40040289*s.*

Evans, D. (2015, May). Can You Protect Your image Like Your Brand? *WIPO Magazine.*

Gowar, C. &Visser, C.J, (2013). *Actio iniuriarum* – One action, but only one iniuria? Le *Roux v. Dey* 2011 3 SA 274 (CC). *Journal of Contemporary Roman-Dutch Law*, *76*,490-498.

Horsey, K. & Rackley, E. (2011). T*ort Law* (2nd ed.) Oxford University Press

Image Rights (Bailiwick of Guernsey) Ordinance, 2012.

Julia Basetsana Kumalo v. Cycle Lab (Pty) Ltd (31871/2008) [2011]. ZAGPJHC 56.

Kidson v SA Associated Newspapers Limite 1957 (3) SA 461 (W).

Kodilinye, G. & Aluko, .O. (1999). *Nigerian Law of Torts* (2nd ed.) Spectrum Books Ltd.

Loubser, M. et al.(eds) (2010). The law of delict in South Africa. Cape Town, South Africa : Oxford University Press.

McQuoid-Mason, D. (2000). Invasion of privacy: common law v. constitutional delict – Does it make a difference? *Acta Juridica* 227-261.

National Media Limited and Another v Jooste (335/94) [1996]. ZASCA 24.

Neethling, J., Potgieter, J.M. & Visser, P.J. (2005). *The law of personality.* (2nd ed) Durban: LexisNexis Butterworths.

Neethling, J. (2005). The concept of privacy in South African law. *South African Law Journal, 122*(1)18-28.

Odunaike, D. A. (2016). Personality merchandising in Nigeria: Prospects and challenges. *Journal of Law, Policy and Globalization, 55,* 69-77.

Olapoju, K. (2016). The True Story behind RMD's Legal Dispute with Jumia. *The Cable* (July 27,2016) <https://www.thecable.ng/the-true-story-behind-rmds-legal-dispute-with-jumia> (accessed on 06 June 2020).

Oke, E.K. (2014). Image rights of celebrities in the digital era: Is there a need for the right of publicity in Ireland? *Irish Journal of Legal Studies*, *4*(1) 92-100.

*O'Keeffe v Argus Printing & Publishing Co Limited and Another (*1954 (3) SA 244 (C).

Olubiyi, I.A. (2017). Developing a legal framework for effective protection against unfair competition in Nigeria. *ABUAD Private and Business Law Journal*, *1*(1), 33-56.

Oyewunmi, A.O. (2015). *Nigerian law of intellectual property.* UNILAG Press and Bookshop Ltd.

Rainen, C. (2005). Current development, the right of publicicty in the United States and the United Kingdom. *New Eng Journal of International and Comparative Law*, 12, 197.

Rothman, J.E. (2018). *The right of publicity: Privacy reimagined for a public world.* Harvard University Press.

Schulman, A. (2019). Image Rights, Personality Rights and the Right of Publicity in The US and The EU. https://www.jayaramlaw.

com/blog/2019/07/image-rights-personality-rights-and-the-right-of-publicity-in-the-us-and-the-eu/ (accessed 06 June 2020).
Synodinou, T. (2014). Image right and copyright law in Europe: Divergences and convergences. *Laws*, *3*, 181–207, doi:10.3390/laws3020181.
Trademarks Act, 1965. Cap T13, Laws of the Federation of Nigeria , 2004.
Trade Malpractices (Miscellaneous Offences) Act, Cap. T12, Laws of the Federation of Nigeria, 2004.
Treece, J.M. (1973). Commercial exploitation of names, likeness, and personal histories. *Texas Law Review*, *(53)* 637.
Unini, C. (2020). Court orders Atiku, Saraki to pay N5m for unauthorised use of photos for campaign (April 28, 2020) https://thenigerialawyer.com/court-orders-atiku-saraki-to-pay-n5m-for-unauthorised-use-of-photos-for-campaign/ (accessed on 06 June 2020).
Very,R.W. (2005). *Towards a European unfair competition law: A clash between legal families,* Martinus Nijhoff Publishers.
Von Hannover v. Germany [2004] ECHR 294.
Villiers, M. (1899). Roman and Roman-Dutch Law of Injuries.
Walsh, C. (2013). The justifications underlying personality rights. *Entertainment Law Review, 24*(1), 17–21.

EFFECTS OF ARTIFICIAL INTELLIGENCE (AI) AND BLOCKCHAIN TECHNOLOGY ON THE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS

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Abstract

This article briefly analyses the evolution of the copyright management systems and to some extent how machines such as artificial intelligence (AI) are competing with humans to create copyright and related rights works. It discusses the effect of blockchain in licensing and the collective management of copyright and highlights some of the key roles that AI and blockchain technology are already playing in the copyright and related rights sector and some of the legal implications and challenges in defining copyright ownership. The article analyses some of the responses to these challenges by the various actors within the copyright ecosystem. In conclusion, the article discusses the role of government and other stakeholders in tackling the fundamental issues enshrined in the copyright and related rights system.

Keywords

Artificial intelligence (AI), Blockchain technology, Copyright and Related Rights, Collective Management Organisation and Licensing

Introduction

Since the emergence of the copyright management systems in the seventeenth century in France until the 1990s, copyright protection was to

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ensure that right holders benefit from the use of their works by third parties. These include legitimate entities, theatres, broadcasting organisations, to name a few. It was also meant to protect the rights holders from unauthorised use.

Copyright exploitation was mainly based on physical reproduction of copyright works, which were to some extent not too complex or difficult to monitor or manage. However, it is evident that digital technologies including the internet have and continue to be vital platforms for the delivery of digital content such as movies, music, books, news, and software. Most importantly, the global reach of the internet enables digital content to be instantaneously delivered to any part of the world. This means that many of the barriers associated with the exchange of physical content products such as costly transportation and import tariffs are significantly reduced or eliminated. It also underscores the importance of copyright as an incentive mechanism for the creation and dissemination of digital content. The way copyright is reproduced, distributed and accessed is quite different from what it was in the last century.

The emerging and ever changing disruptive technologies such as artificial intelligence and blockchain in the recent years have had an impact on the collective management of rights in the digital environment. The legal regime, at the international level seems to be lagging behind as most of these developments came after the adoption of the Internet Treaties (WIPO Copyright Treaty, WIPO Performers Treaty and WIPO Beijing Treaty,) This, in a way has created various challenges that have to be addressed especially since the technologies seem to deal more with the creation and usage of the works and disrupt the copyright system.

These technologies have brought in their wake ethical, commercial and economic issues which have to be addressed by policy making and rethinking through the fundamental principles of IP. Of particular interest is how these technologies are impacting on the copyright management system.

Artificial Intelligence and Copyright and Related Rights

The emergence of disruptive technologies has affected different sectors of the economies of the world. As the world grapples with the challenges of COVID-19 with its attendant effect of slowing down economies and creating serious challenges for various institutions and industries, the intellectual property system has not been spared.

Artificial intelligence (AI) is a programme developed for machine learning purposes. It has a built in algorithm that allows it to learn from data input, and to evolve and make future decisions that may be either directed or independently made. The creation of works in the age of AI poses a serious challenge for the copyright system in relation to authorship, originality, duration of protection and enforcement of rights in the current copyright system. These notions as provided for in the existing copyright laws allude to the fact that copyright works are human creations. Article 2 (1) of Berne Convention protects computer-generated works under literary works. There was no question for ownership of copyright, because the programme was merely a tool that supported the creative process, very much like pen and paper. Be that as it may, technological tools have, since the establishment of the copyright system, been employed to produce copyright works such as the use of camera to take photographs, use of musical instruments to produce music and use of robotic artists to produce works of art. All these tools do not create works themselves but are utilised as means for the creation of the work. Therefore the concept of originality has been construed to require a human author.

In recent years the world is witnessing a new wave of creative work entirely generated by a machine with minimum or no human involvement, the so called machine creation. This is what AI is capable of doing. It has been estimated that artificial intelligence could add about US$ 13 trillion in creative works to the global economy by 2030 and investment in this technology is also growing at an average rate of 48 percent per annum. There is no doubt that if AI-generated works qualify for copyright protection, it will have an adverse economic effect on human creators as works such as music, books, movies, software, among others and machines will edge out the human authors. AI is already being used to generate various copyright works. These works could in theory be deemed free of copyright or considered to be in the public domain, because they are not created by a human author. As such, they could be freely used and reused by anyone.

As already indicated, t is expected that by 2030, AI will increase global GDP by 14 percent, making it the most significant commercial opportunity in today's economy (PWC, 2017). This projection has led companies in Asia to invest about USD39 billion into AI. The creative sector is also hugely impacted as the data that feeds AI machines is the fruit of human creativity. This information is being used to create new cultural expressions such as songs created by (AIVA and Amper)[1] a short script written by a programme called 'Benjamin' and filmed as 'Sunspring' (Davis, 2018). For the very first time in October 2018, a painting, 'Edmond Belamy,' which depicts a fictional man created by an algorithm (Generative Adversarial Networks) known as GANS, was auctioned by Christies and sold for $

432,500[2]. However, such works created by AI will still fail to qualify for copyright protection under the current copyright rules as they currently exist in all ARIPO Member States and provided for in section 8 and section 31 of the ARIPO Model Law (ARIPO, 2019). The ARIPO Model describes an author of a work " in relation to- (a) a literary, musical or artistic work, means the person who first makes or creates the work" and original ownership of copyright subject to the provisions of subsections (2) to (5), the original owner of copyright is the author who has created the original creation.

The Consolidated Comparative Study on copyright laws of ARIPO Member States and adherence to international instruments on copyright and related rights shows that in all ARIPO Member States (https://www.aripo.org/member-states/) excluding Somalia, the original owner of copyright is the author who created the work except in the case of commissioned works during the course of employment or created under commission agreement, (ARIPO, 2018). However, with the latest types of AI, the computer is no longer a tool; it actually makes many of the decisions that are involved in the creative process without human intervention. Recently, a court in Shenzhen, China, ruled that an article created by AI is protected by copyright (SAWERS, 2020). This precedent is a notable landmark for AI's credentials as a creative force.

Also the issue of 'authors own intellectual creation' is seriously at risk in this new AI age. This is usually understood as meaning that an original work must reflect the author's personality, which clearly means that a human author is necessary for a copyright work to exist. As in the case of Naruto, the "monkey selfie"[3], a rare crested macaque monkey, picked up the camera and snapped the famous photo of 2011. A photographer, by the name of Mr Slater, whose camera was used by the monkey to take a selfie won a two-year legal battle against an animal rights group (PETA) about copyright over the image.

As stated above, that original copyright works should reflect the person (human being) who first makes or creates the work thus automatically eliminates Naruto to qualify as an author or owner of copyrighted works. It was also clear that Naruto lacked the constitutional "standing" to sue and that animals cannot sue under the United States Copyright Act of 1976. On that note the trial judge dismissed the case on the basis that even if Naruto had taken the pictures by "independent, autonomous action," the suit could not continue as animals do not have standing in a court of law and therefore cannot sue for copyright infringement.

An option in terms of legality of AI to claim copyright protection is evident in a few countries such as Hong Kong (SAR), India, New Zealand and the

UK. However, this approach is best encapsulated in the UK Copyright law; section 9(3) of the Copyright Design and Patents Act 1988 which states that, "in the case of literary, dramatic, or artistic work which is computer generated, the author shall be taken to be the person by whom the arrangement necessary for the creation of work are undertaken". It goes further in section 178 to define computer generated work as one that "is generated by computer in circumstances such that there is no human author of the work". Such provision is an exception to all human authorship requirements by recognising the work that goes into creating a programme capable of generating works, even if the creative spark is undertaken by a machine.

The Kenyan definition of authorship is similar to the UK definition and includes computer generated works, see section 2(g) of the Kenya Copyright Act 2001 as amended in 2019. It does not define what is a computer generated work rather section 2 (h) defines who is a computer programmer. In reality it will be difficult to draw a clear distinction between works of human authorship where AI might be a 'tool', and computer-generated works where there is no human author. While the boundary between human-authored and computer-generated works is not entirely clear, the likelihood for authorship disputes becomes increasingly eminent, especially as AI-generated works often arise as a result of collaborations between those providing AI software and others providing data to train the AI and setting the AI to a particular task. Issues of infringement may also arise in the use of works which are still under copyright protection for creating entirely new works. Infringements will not certainly occur if the works (data) used are already in the public domain as it occurred in the digital reconstruction of Rembrandt van Rijn (famous Dutch painter who died 450 years ago) which was unveiled in Amsterdam, Netherlands, recently. Probably, the IP system may be heading towards the establishment of a *sui generis* copyright system where the author is a machine.

Block Chain, Copyright and Related Rights

Currently, there is no common or agreed definition for blockchain in the literature and multiple definitions are provided but have differences in detail. In general, blockchain technology can be defined as a sort of Distributed Ledger Technology (DLT) which is a "distributed, shared and encrypted" database that stores information in an irreversible and incorruptible manner. Block chain technology has the ability to automate payment in crypto currency and to provide access to a shared ledger of data, transactions, and logs in a decentralised, secure, and trusted manner.

Further, with smart contracts, block chain has the ability to govern interactions among participants with no intermediary or a trusted third party. AI, on the other hand, offers intelligence and decision- making capabilities for machines similar to humans.

Media industries can use blockchain technology in their business. The Athens Technology Centre in Greece has come up with the "Bloomen project" for better copyright and related rights protection mechanisms. It has reached a stage where there is no mechanism to sell the news worthy photographs of big events to media houses because everyone including freelancers have a smart phone and can take a photo and upload them independently using their smart phones or other devices Professional photographers have been forced to compete with others in taken and sharing or uploading photos of big events.

The Bloomen project creates a platform where anyone can upload photos and they are controlled by watermarks for security and big consumers can enter the platform to browse and choose the photo they want and sign a smart contract. If any anonymity is required of the uploaded photo, this is respected. No one can use a copyright photo without being noticed in the system. Soon the Bloomen project will be launched as a commercial application whereby one can set prices on the photos they upload, and all transactions are recorded as block chain. The future of the Bloomen project is to look at the rights management and put the creators at the centre of the transactions where they are paid when their works are used. Block chain applications can take details from a smart phone, the GPS, the time the photo was taken, and this may be useful in case of disputes.

In the copyright domain, different elements may be represented by cryptographic token: works, ownership metadata, licensing terms and remuneration. Cryptographic tokens can be referred to as "cryptocurrencies that are digital currencies used to facilitate transactions (making and receiving payments) along the blockchain". With these characteristics, DLT appear to provide a decentralised platform to build and maintain registries of works. Relying on the registries of such tokenised elements, smart contracts may automate and standardise a multitude of copyright-related transactions, for instance, those authorising the use and exploitation of copyright-protected content, and remuneration. Indeed, despite the early stages of the application of blockchain technology to copyright goods and services, there is booming deployment of applications in this domain, in particular in the online music sector. However, it should be noted that the copyright management system has survived the test of time and this period is just another very interesting one within the copyright domain. In so many quarters, the emerging technologies may be seen as a threat to the copyright

management system, but if leveraged upon it's a great opportunity for not only the right holders, but also the users of copyrighted materials.

This is so, as blockchains is doing for business transactions what the internet has done for communication, it can be used for the collection and distribution of royalties. It is believed that blockchains enables right holders to securely manage their rights through the following: uploading their content, hashing or coding the content, time stamping (date) and certificate of ownership is produced. This technology also allows smart contracts to be undertaken, which in turns enhances licenses agreements and the collections of royalties, thus could be very useful to the creative sector within ARIPO Member States and the Continent as a whole especially online copyright management as the lack of effective management systems has exposed the continent to substantive loss of revenue from unauthorised use of works in the digital environment.

How the Copyright System is Responding to the Challenges Posed by the Internet, AI and Blockchain Technology

In response to the challenges posed by the internet, WIPO and its Member States adopted the WIPO Copyright Treaty (WCT)[4], WIPO Performers and Producers of Phonogram Treaty (WPPT)[5] and the Beijing Treaty for Audiovisual Performers. Everything changed in the digital world when high speed broadband came along. Consumers quickly realised that they can easily download works from various digital platforms without any authorised permission by right holders.

However, digital rights management (DRM) systems provide right holders with the ability to restrict the use of copyrighted digital materials. DRM tools are deigned to protect the rights of the copyright holder and prevent unauthorised modification or distribution of their works through technologies such as watermarks. It also creates a direct commercialisation of their works. Right holders are able to determine and negotiate with their potential consumers or directly interact with their fans. There is no doubt that download and physical reproduction are flat-lining and even declining while streaming services such as Neflix, Spotify and Deezer are growing. Streaming services have become an increasingly important sales channel and source of revenue for record labels and artists. The Global Collections repo (CISAC, 2019)t (CISAC, 2019), based on data collected for 2018, states that digital income continues to be the driving force behind the growth of music collections, accounting for 19.1 percent of the total collections.

However, there is still a serious gap to be covered with regards the internet and now AI and blockchain, which, if not quickly addressed in terms of ownership and individual or collective right management protection, the copyright system will be in jeopardy. On that note, collective effort is needed to ensure that the copyright system continues to serve its purpose effectively. This includes amongst others to discourage the usage of works without the permission of the right holders or creators of the work, to prevent illegal usage of works such as music and video file sharing in many cases without providing an equivalent market in the form of legal downloads; monetized file-sharing.

In addition, it is worth noting that the enforcement of copyright is facing challenges in relation to the inability to monitor and enforce copyright in the digital space. It is high time statutory safeguards are put in place to foster copyright balance as the current legal frameworks are no longer seen as sufficient to guard against misuse of digital works. The fact that technologies such as blockchain can facilitate efficient licensing agreements and algorithmic enforcement through AI filtering of digital content. However, digital security of works transacted through these technologies can be prone to digital piracy. This would necessitate putting in place the requisite policy and legal framework at national level to address these issues.

The copyright system has and continues to be faced with many challenges due to the unprecedented evolution of the internet and technological development. These have adversely affected copyright management in the digital space. One of the main challenges is the lack of harmonised legal mechanisms. The recent approval of the Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market (DSM Directive) by the European Union has caused a considerable storm among the internet users, scholars, and practitioners in the copyright industry. Particularly controversial was the original obligation of ISPs to filter the content upload by platform users for the purpose of avoiding copyright infringements in the draft of Article 13. For this reason, the Directive has even been named the "death of the internet".

Article 17 (4) of the DSM Directive imposes a duty of care on Online Content Sharing Service Providers to prevent copyright infringements from taking place on their platforms, and this has seen the deployment of AI technology to do the filtration. Moreover, section 48 to 55 of the ARIPO Model Law provides for the liability of internet service providers . Also section 35 (A) to 35 (C) of the amended Copyright Act of Kenya 2019 provides for the role of the internet, protection of the internet and take down notices. There is still a long way to go in order for law makers to provide the much needed guidance that is seriously and urgently needed

to ensure that the copyright system continues to benefit creators and right holders, which will stimulate the creation of more content for human consumption.

In order to address these challenges and translate them to opportunities for the management of copyright, interdisciplinary research and multi-stakeholder conversations is recommended in order to make sure that these new technologies do not simply become a disadvantage to right holders, but rather improve the current state of affairs, wherein, right holders and creators can benefit more from their creativity. A more radical solution is in the form of a user-rights approach, a framework for analysing limits on permissible uses set by private ordering. This could restore copyright balance as users' interests could not be threatened by expensive licenses and copyright infringement vulnerability.

Conclusion

It is contrite to state that emerging technologies are here to stay and there is need for continued engagement, consultations, discussions and most important, updating of laws to match this reality. Interestingly, the responses have begun as the first legal precedent has been set in China as stated above. For this and so many reasons, the African Regional Intellectual Property Organization is looking forward to undertake a research on the benefit of AI and blockchain technology in Africa.

Nevertheless, the copyright system is like a cat with so many lives; it will survive, only if prudent measures are taken into consideration by government in establishing clear laws on who owns what right and a rethink of the perception on creativity, *vis a vis* originality, ownership and collective management of copyright and related rights works in the digital age.

Notes

[1] https://filmora.wondershare.com/audio-editing/best-ai-music-composer.html

[2] https://www.christies.com/features/A-collaboration-between-two-artists-one-human-one-a-machine-9332-1.aspx

[3] https://edition.cnn.com/2018/04/24/us/monkey-selfie-peta-appeal/index.html

[4] The WCT protect (i) computer programs, whatever the mode or form of their expression; and (ii) compilations of data or other material ("databases")

[5] The WPPT provides provision for performers (actors, singers, musicians, etc.); and (ii) producers of phonograms (persons or legal entities that take the initiative and have the responsibility for the fixation of sounds).

INTELLECTUAL PROPERTY AND THE USE OF TECHNOLOGY IN DOCUMENTING AND PRESERVING CULTURAL HERITAGE

*Kenneth Muhangi**

Abstract

Culture is the conglomerate characteristic and knowledge of a particular group of people, defined by everything from language, religion, cuisine, social habits, music and arts. Cultural content refers to the symbolic meaning, artistic dimension and cultural values that originate from or express cultural identities. Heritage encapsulates and embellishes culture ensuring its continuity through expression in a tangible or intangible manner. This article contextualises culture from the perspective of heritage and consequently uses the terms, 'culture' and 'cultural heritage' interchangeably. Preservation of cultural heritage is therefore critical in ensuring future generations feel acceptance, attachment, inclusion and kinship. The digital age has provided us with the tools to aid mankind in preserving both intangible and tangible expressions of cultural heritage. This article therefore examines the principal intellectual property rights (IPRs) that protect cultural heritage, the salient roles played by intellectual property rights in the protection of heritage; the role of existing and emerging technologies in protecting cultural heritage and the overarchingly pronounced issues in using technology to document and preserve cultural heritage.

Keywords

cultural heritage, intellectual property, blockchain, Uganda, digital age, copyright

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Introduction

Culture is the manifestation of human intellectual achievements expressed in ideas, customs and social behaviour of communities[1]. It is the shared patterns of behaviour and interactions, cognitive constructs and understanding that are learned by socialisation and therefore can be seen as the growth of a group identity, fostered by social patterns unique to the group. The social patterns in turn form social orders within those communities that may influence other communities.

Heritage solidifies and encapsulates these social patterns and denotes identity expressed in a tangible or intangible manner. Cultural heritage is therefore the embodiment of societal order and without it, it would be difficult to maintain the balance of the world as we know it. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), "heritage is the legacy that we receive from the past, that we experience in the present and that we will pass on to future generations"[2]. Aspects that pertain to culture in its diversity and therefore to cultural heritage are entrenched in the crux and core that: the human being has a set of inviolable rights, by the very virtue of being human[3]. The importance of the protection of cultural heritage, and the rectification where that protection fails therefore, cannot be more overemphasised. This is as cultural diversity forms a common heritage of humanity and should be cherished and preserved for the benefit of all[4]. Cultural heritage has for each and every human determined identity, peace of mind, standard of living and is the precursor for a meaningful existence buttressed by individual and societal rights that are inalienable and inviolable[5]. This is why cultural heritage should be protected, preserved and documented.

The impediments to the preservation of cultural heritage in most ways, begin in the colliding mindsets that are in themselves opposed to the growth and entrenchment of a global lifestyle that uses intellectual property (IP) and technology to protect and document cultural heritage. Instead, there also exist traditions that are even by law, criminal; energised by the very tools that should protect cultural heritage; and these are IP and technology as well. In using IP and technology to preserve and document cultural heritage, this is where work must begin- in the minds of a utilitarian social order.

Technology, Folklore, Art and Literature as Tools for Protecting and Preserving Cultural Heritage

Folklore, art and literature

Cultural expressions are defined by the 2005 United Nations Educational, Scientific and Cultural Organization (UNESCO) Convention[6] as embodiments of the creativity of individuals, groups and societies[7]. Such expressions include cultural property that, according to Francesco Francioni, may be perceived as objects endowed with an intrinsic value and as *expressions* of human creativity[8].

In legal parlance, cultural property expressed through literature, art, music and folklore may be protected and preserved as heritage using IP[9]. In 1994, The Paris Review interviewed the eclectic author, Chinua Achebe who was quoted in its Winter issue, "Chinua Achebe, The Art of Fiction, No.139":

> There is that great proverb — that until the lions have their own historians, the history of the hunt will always glorify the hunter. That did not come to me until much later. Once I realized that, I had to be a writer. I had to be that historian. It's not one man's job. It's not one person's job. But it is something we have to do, so that the story of the hunt will also reflect the agony, the travail — the bravery, even, of the lions.

Achebe emphasises the importance of literature as a way of ensuring an honest depiction of African stories and traditions, whilst preserving these traditions and stories for future generations. Achebe and other African authors like Ngugi Wa Thiong'o, Wole Soyinka and Chimamanda Adichie are revered for their use of diction that celebrates Africa and its people. Literature can accurately reflect the true potency of cultural expressions held in their symbolism, the relevance of cultural life for a functional existence and the imperative for many individuals and communities to maintain an untarnished comprehension of their cultural expressions in the minds of the rest of the world.

Literature, art and folklore are useful preservers of cultural heritage that require above all else skill and expertise at an individual level. These individuals, through harnessing talent become the voices of their communities and traditions albeit receiving individual recognition and compensation. Any individual recognition and/or compensation received celebrates the talent and innovation of the artist, creator, author that exists

in the expressed work of art, book or poem; it does not dilute or belittle the author/artist's cultural heritage.

In 2010, Yoweri Museveni, the President of Uganda, released a rap song, before the Presidential elections of February 2011[10]. The song was derived from two folklore poems traced to the Ankole community in Uganda. The President, applied for copyright protection from the Registrar of Copyright at the Uganda Registration Services Bureau and two Ugandan citizens objected to the registration. The objectors argued that the folklore in the song belongs to all the Ankole people and therefore cannot be attributed to the President. The President's legal team pointed out the difference between the traditional cultural expression in the Ankole poems and the copyright in the musical expression created by the President. He argued that the President is only electing to protect his derivative expression "rather than restrict the use of earlier and differently expressed versions."

The Registrar of Copyrights, concurred with the President's counsel and ruled that the transformation of a folksong was an original creation which as expressed constituted a derivative work that was entitled to copyright protection under section 5(1) of the Copyright and Neighboring Rights Act of Uganda. In summing up her ruling, the Registrar stated that:

> I am aware that the objectors were under the impression that the applicant was attempting to monopolise a piece of heritage of the Banyankole/Bakiga. I hope that they can now rest assured that the heritage of the aforementioned people can still be enjoyed by anyone and has not in any way been misappropriated but instead can now be enjoyed by anyone including the young generation whom, I hazard to say, may relate to the applicant's new arrangement of the said works.

Dr. Anthony Kakooza, a scholar and expert in IP, opined that both parties came out as winners in this matter;

> The President got the Copyright protection that he sought and the Objectors got the assurance that the original folklore was still free for their use…This matter, as the first legal contestation over property rights in folklore in Uganda, creates precedence in the balancing of interests between TCEs and derivative music in Uganda[11].

The case above is a classic example of one of the ways IP can be used as a means to preserve heritage albeit in the form of a derivative work protected by copyright.

In 1985, The World Intellectual Property Organization (WIPO) and UNESCO convened a Working Group meeting on the Protection of Expressions of Folklore by Intellectual Property and came up with the following definition of folklore:

> Folklore (in the broader sense, traditional and popular folk culture) is a group oriented and tradition- based creation of groups or individuals reflecting the expectations of the community as an adequate expression of its cultural and social identity; its standards are transmitted orally, by imitation or by other means. Its forms include, among others, language, literature, music, dance, games, mythology, rituals, customs, handicrafts, architecture and other arts.

Any IP protection accorded to folklore (and the other expressions that form cultural heritage) is in most instances for the good of a society or community and not for an individual. Individuals, may however still benefit by creating derivative works which may be protected under copyright as in the instant case.

Technology and the Digital Age

The role of technology in preserving cultural heritage must be understood in the context of the digital age. The famous American paleontologist and evolutionary biologist, Stephen Jay Gould postulated, in his book *The Mismeasure of Man*, "We pass through this world but once. Few tragedies can be more extensive than the stunting of life, few injustices deeper than the denial of an opportunity to strive or even to hope, by a limit imposed from without, but falsely identified as lying within[12]."

Gould's averments above may be juxtaposed with the need to preserve the veracity of cultural heritage in a digital age characterised by misinformation, IP infringement and cultural appropriation.

Through the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO established that certain places on Earth have "exceptional universal value," belong to the shared heritage of humanity and are an irreplaceable source of life and inspiration. Cultural heritage creates a rich and varied world, which increases the range of choice and nurtures human capacities and values, and therefore is a mainspring for sustainable development for communities, peoples and nations[13]. This can be articulated in the way that the world has become vastly globalised in aspects of trade especially, with different cultures bringing specific and particular attributes that cause the economic sector to thrive with vastness of benefit from diversity. UNESCO further guides that cultural heritage is not limited to monuments and collections of

objects. It also includes lived expressions inherited from our ancestors and passed on to our descendants. These include oral traditions, performing arts, social manners, rituals, celebrations, practices and knowledge and techniques related to traditional handcrafts[14].

In 2019, the Italian Embassy in Uganda, hosted a digitised exhibition dedicated to showcasing the works of the Italian maestro, Leonardo Da Vinci. Copyright in creative work lasts for the lifetime of the author and 50 years after the author's death[15]. This particular exhibit celebrated the 500th anniversary of the death of Italy's most renowned genius: Leonardo Da Vinci. The exhibit displayed seventeen high definition and true-to-scale reproductions of the masterpieces of Italy's most renowned genius, including the "Mona Lisa" and "The Last Supper". The pieces were produced with the most advanced technologies of the graphic sector, to the point to be considered as "digital paintings"[16]. The work displayed in the exhibition was originally protected under Copyright but after 500 years is now considered as a part of Italian cultural heritage.

In October 2019, the National Museum of Kenya and Google announced a partnership to digitise and showcase the museum's collections online[17]. The Google Arts and Culture project, "Utamaduni Wetu: Meet the People of Kenya" tells stories from 28 communities around Kenya. Speaking after the launch in Nairobi, Cabinet Secretary for Sports, Culture and Heritage, Amina Mohamed was quoted; "This will enable audiences explore the country's cultural heritage, which then provides us with a connection to forgotten social values, beliefs and custom…. the exercise will encourage real-life visits to the country's museums, monuments and heritage sites."

Blockchain

The application of blockchain technology may aid the enforcement of IP rights that may exist in cultural heritage. A blockchain is a continuously growing list of records, called blocks, which are linked and secured using cryptography[18]. By design, Blockchains are inherently resistant to modification of the data. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, which requires collusion of the network majority.

In 2018, it was reported that a team from China's, Tsinghua University sought patent protection for a system they developed that can store and share digital versions of culturally important objects using a blockchain[19]. The system created by the University employs a 3D computing model that can scan a culturally important object and store it in a ledger on a designated blockchain platform via a cryptographic process called hashing. Consequently, and owing to the nature of blockchain[20], the 'digital

art' or scanned artifact will forever remain in the network thus preserving the essence of the artifact for future generations. ArtChain Global, a company founded by former managing director of Citibank's global funds business in Europe, Kay Sprague, employs blockchain technology to prove art provenance and enable trading[21].The platform enables art owners to attach their own personal identifiers to art pieces as a means of verification and makes independent verification of art work possible.

Article 4 of the General Data Protection Regulation (GDPR)[22], defines 'personal data' as any information relating to an identified or identifiable person referred to as a data subject. An identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, academic, genetic, mental, economic, cultural or social identity of that natural person. Preservation of heritage will require more Initiatives like ArtChain that curb art forgery and make it easier for art connoisseurs to verify the authenticity and origin of artwork.

Governments are also testing blockchain by studying how it may help track Indigenous art. In an effort to crack down on the sale of inauthentic Indigenous cultural products, Australia is investing in a pilot program to label and track authentic Aboriginal and Torres Strait Islander products. Working with non-profit organizations Desart and The Copyright Agency, the Department of Communications and the Arts plans to launch the pilot program in early 2019. The Global Heritage Fund, cites another nonprofit, For All Moonkind[23], whose goal is to map lunar heritage sites through blockchain. Unlike similar sites on Earth that are protected under the UNESCO World Heritage Convention, sites on the Moon, which bear witness to unparalleled technological accomplishments, are not protected or even recognized by international law. Creating an accountable registry of human cultural artifacts and sites on the Moon is the first step toward documenting, protecting, and celebrating our history before it is erased[24].

Geographical Indications

Cultural heritage may also be protected under another IP right, Geographical Indications. A Geographical Indication (GI) identifies goods as originating from a particular country, region or locality where a given quality, reputation or other characteristic of the goods is essentially attributable to its geographic origin[25]. GI enables those who have the right to use the indication to prevent its use by a third party whose product does not conform to the applicable standards. Examples of GI's include,

champagne from France and Scotch whiskey from Scotland. Uganda is currently exploring GI registration for its Bark Cloth from the central region of Uganda, Buganda and products from the Ankole cow that originates from the Ankole region[26].

Contextualising the Importance of Preserving Cultural Heritage

The destruction of physical or intangible artifacts that embody the ideas, beliefs, and characteristics of past societies is a well-tested means of control and power. This destruction is often fueled by colonialism, racism, xenophobia and ethnocentric nationalism present centuries ago and even today, in very recent times. French philosopher, scholar and writer Joseph Ernest Renan in *La Reforme intellectuelle et morale* (1871), through IP that is, copyright, and one of the most eminent forms of technology at the time, that is, the printing press, managed to perpetuate his own misconstruction of African culture.

Many of his critics argued that through a misapprehension of energetic African dance customs, vibrant and strangely melodic African choral music, criticism of African dressing along with other such cultural misconstructions, he determined that Africans were therefore "barbaric," "uncivilised" and "backward. He surmised thus:

> The regeneration of the inferior or degenerate races, by the superior races is part of the providential order of things for humanity; […] a race of tillers of the soil, the Negro; treat him with kindness and humanity, and all will be as it should; Let each do what he is made for, and all will be well.

The effects of such writings at the time , for many, justified the cultural oppression of Africans and other civilisations during the existence of slavery and colonialism. Communities extricated from the initial environments in which their cultures were formed and passed down, were shipped to foreign lands across the world that suppressed the expression of their values, customs, ideas, music and other intangible aspects of their cultural heritage. Africa in particular has suffered greatly with the irreverent appropriation of its cultural heritage. Fables that were only passed down to the next generation at the proverbial fireplace have either been adulterated or completely lost to time. Artifacts that documented the history of its original makers/owners and their societies, have been appropriated over the years; mostly because of slavery and colonialism.

In the early 1950s, the recording of *Mbube* released by Gallo Records, already a good seller in South Africa, found its way to America and came to the attention of Pete Seeger, the folksinger. He liked what he heard and transcribed the music from the record to make his own song, which he called *Wimoweh* (a corruption of the Zulu lyrics, *Uyimbube,* or "he is the lion"). *Wimoweh* was successful in the United States in the 1950s, and was later reworked into another version in the 1960s by song writers George Weiss, Hugo Peretti and Luigi Creatore, as *The Lion Sleeps Tonight*. In this form the song became a major hit and has remained popular for more than 40 years. Then in the mid-1990s it was incorporated into the Disney musical *The Lion King* but neither the origins of the song, in *Mbube,* nor the role played by Solomon Linda was acknowledged, and the song was presented as being of American origin[27].

Outside Africa, In 70 CE the Roman army plundered and destroyed the Second Temple in Jerusalem during the First Jewish-Roman War. During Mao Zedong's Cultural Revolution, thousands of Chinese historical sites were destroyed to rid the country of capitalist and traditionalist influences. In 2001, the Taliban destroyed the two Buddhas of Bamiyan, declaring that the massive statues were false idols. In the digital age, the appropriation and destruction of culture is facilitated inter-alia by technology such as the internet, advanced weapon technology, drones and Improvised Explosive Device (IED) technology.

Since colonialist times where cultural heritage was seized, confiscated and displayed elsewhere, the debate and argument now surrounding the repatriation of cultural property subsists, some of the very obstructions to its progress being perpetuated by the neutral tools that are IP and technology in misapplied purposes. The Natural History Museum in London has in the recent past, seen an increase in repatriation requests for prominent specimens such as Neanderthal skulls (unearthed in 1848 by the British) claimed by Gibraltar and preserved skin, fur, and bones from a 12,000-year-old giant ground sloth (*Mylodon darwinii*) claimed by Chile. Zambia has also submitted a request for the Broken Hill skull, a famous early hominin about 300,000 years old that's usually classified as *Homo heidelbergensis*. The Chilean museum has successfully retrieved other fossils such as the *Pelagornis chilensis*—an extinct bird that is the largest known, with a wingspan of more than 5 meters[28].

Resultantly, the emphasis should be on sensitizing the global community about the ways IP and Technology can be used to document and preserve cultural heritage. In this way, since heritage and history are central component of culture[29], it is important for policymakers to contextualize cultural heritage in the modern/post-modern world of consumerism and multinational capitalism. The few examples above express the point that

while cultural heritage can and should be preserved and documented through IP and technology, it is not all to be considered in this endeavor.

There remains a disparity between international law and the actual protection of cultural diversity that in turn affects the protection of cultural heritage, in the ambiguities of ownership of cultural property. This is illustrated through recent attacks on religious and cultural sites that include the World heritage site of Dubrovnik, the Neretva Bridge in Mostar, the Jasenovac memorial complex in Croatia and the library of Sarajevo[30]. This disparity extends from the subjective understandings of culture, the existence of dominant cultures with dominant cultural wills in the international community, to the forces of "cultural progression" and development. These causes of disparity are nuanced in the globally cultural contentions concerning indigenous peoples[31], protection of cultural heritage and sites but also to protection of ownership of cultural property and its repatriation. This in turn affects the preservation of cultural heritage.

Conclusion

IP and technology are by their ethos, neutral tools. However, in recent years, IP and technology have been used to skew and dilute the true symbolism of cultural heritage, as the argument is not just for the documentation and/or digitalisation of cultural heritage, but also for the necessity of its true and honest depiction, as regards its content, nature and background. It is the role of IP and technology therefore not just to be applied in preservation and documentation which is necessary, but also to identify the surrounding issues in their deployment. A lifestyle that uses IP and technology to preserve and document cultural heritage needs to be embraced by the global community. In the age of the Fourth Industrial revolution characterised by 3D, Virtual Reality (VR), Internet of Things (IOT), blockchain, drones, data and cloud computing among other emerging and existent technology, governments and other concerned parties are still ignorant about their uses and reluctant to embracing them, even as concerns cultural heritage. The point and essence of cultural heritage testifies to the identity and ingenuity of a group of people and to their unique capacities, especially in a world that is constantly changing.

In 2009, Nigerian Author, Chimamanda Ngonzi Adichie, eloquently made a case for the importance of preservation of culture. She opined that our lives and our cultures are composed of many overlapping stories and warned that if we hear only a single story about another person or country, we risk a critical misunderstanding[32]. Such stereo-typing according to

Adichie, cannot be blamed on an individual but rather on the information that individual has been exposed to. Adichie believes that the more you document, the more that something becomes a reality. Consequently, the brusqueness of the digital age has more than ever exacerbated the need for story-telling and documentation; to ensure the continuity of cultural identity in the digital era, technology and IP will be key. IP and Technology can therefore be useful in offsetting the dissatisfactions of communities that form the bases for cultural repatriation arguments.

Notes

[1] Article 4(2) of the Convention on the Protection and Promotion of Diversity of Cultural Expressions.

[2] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; Preamble

[3] Universal Declaration of Human Rights, 1948, 217 A (III); Preamble paragraph 1.

[4] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; Preamble, paragraph 2.

[5] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; Preamble, paragraph 4.

[6] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; Article 4(4).

[7] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; Article 4(2).

[8] F. Francioni, (2011), *"The Human Dimension of International Cultural Heritage Law: An Introduction."* European Journal of International Law Vol. 22 No. 1 pg. 9.

[9] Agreement on Trade-Related Aspects of Intellectual Property Rights, Part 2, Articles 9-21, accessible at https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

[10] Re: Application No. 25 of 2010 for Registration of Copyright by Yoweri Kaguta Museveni in the song "You want another rap" and Re: Objection by Mr. Mwambusya Ndebesa and Dr. Katono Nzarwa Deo.

[11] A.C.K. Kakooza, (2014), *"The Cultural Divide: Traditional Cultural Expression and the Entertainment Industry in Developing Economies"*, p. 8.

[12] S. J Gould,(1981) "The ismeasure of Man." New York, Norton at Page 60.

[13] UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005; preamble, para 4.

[14] UNESCO description of intangible cultural heritage, 'What is Intangible Cultural Heritage', available at, https://ich.unesco.org/en/what-is-intangible-heritage-00003.

[15] Uganda's Copyright and Neighboring Rights Act, 2006; Section 13.

[16] Ambasciata d'Italia Kampala, "Leonardo Opera Omnia- 19 November 2019-05 January 2020- Uganda Museum, 10/18/2019.

[17] K. Rotich, (Oct. 31, 2019), Business Daily, *"Google to digitize and exhibit Kenya's museum collection".*

[18] D. Tapscott, and A. Tapscott, (2016) *"Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world."* at page 6.

[19] W. Zhao, (Jul.13, 2018*), "University Researchers Turn to Blockchain to Preserve Cultural Heritage"*.
[20] M. Mapp, (Jul. 6, 2017), *"Report of the Second-round table Discussion on Cryptocurrency and Blockchain Regulation in Uganda*.".
[21] Y. Redrup, (Jun. 25, 2018), *"Big names sign up for ArtChain as it looks to blockchain to end art forgery."*.
[22] Uganda Data Protection Act, 2019; Interpretation section.
[23] For All Moonkind, (2019), *"Human Heritage in Outer Space"*..
[24] Quote by FAM co-founder, Michelle Hanlon from article by Elliot Olson, Can Blockchain Save Cultural Heritage, available at https://globalheritagefund.org/who-we-are/beyond-monuments/
[25] Uganda's Geographical Indications Act, 2013; Section 2.
[26] New Vision (Apr. 15, 2019), *"Intellectual Property in the digital age."*+.
[27] O. Dean, (April 2006), "*Copyright in the Courts: The return of the Lion*" , (Issue 2/2006) WIPO Magazine.
[28] Getchen Vogel, (Mar., 27, 2019),
article available at https://www.sciencemag.org/news/2019/03/countries-demand-their-fossils-back-forcing-natural-history-museums-confront-their-past
[29] Y. Rajisar, (Jul., 1987), Reviewed Works: *"The Challenge to Our Cultural Heritage by; Past Meets Present: Essays about Historic Interpretation and Public Audiences"* by Jo Blatti Vol. 60, No. 3 , pp. 137-141, DOI: 10.2307/3317633.
[30] H. Abtahi, (2001) *"The protection of Cultural Property in Times of Armed Conflicts: The Practice of the International Criminal Tribunal for the Former Yugoslavia"*, 14 Harv. Hum. RTS. J. 1, 1-2.
[31] United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted by the General Assembly under Resolution 61/295 at preamble at para 7.
[32] TED Global, C.N. Adichie, " The danger of a single story" 2009.

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