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The Interface between Intellectual Property Rights and Linguistics under the Laws of Tanzania

Saudin J. Mwakaje¹

Abstract

The intellectual property rights (IPR) system transcends many socioeconomic aspects ranging from human creative processes and the manner they are expressed, and thereby, new words are formed for newly created products. Nevertheless, the operational intersections of IPR and linguistics have not been fully explored and elaborated on in the national laws. Under the patent law, generating new technical ideas and products necessitates creating new words or expressions. The contexts for using certain words to indicate the source of products and services have a regulatory effect on trademark law. Equally important are the translation rights under copyright law, which contribute to the development of new terminologies. This article explores the linkages of IPR and language development using a qualitative assessment model to examine the interplay of IPR and language development in the context of the laws of Tanzania. It addresses the inherent linguistic mischiefs and controversies arising from a misalignment of the etymological conception of words as they are perceived under the lens of IPR and linguistics. Consequently, it establishes that there is a significant contribution of IPR in language growth and that the operational and regulatory proximity of the two seemingly distant fields requires a reexamination. Ultimately, this article underscores the necessity of including IPR modules in language studies and engaging language experts during the IPR registration process and dispute settlement.

1.0 Introduction

The legal system of IPR deals with promoting and protecting creative ideas in science, technology, useful arts, and commerce (Dreyfuss and Pila, 2018). The branches of IPR include copyright, patents, trade and service marks, and other forms of creative works. The diverse manifestations of IPR in various human endeavours have made it a cross-cutting and multidisciplinary subject. The operation of IPR extensively relies on the proper use of words, expressions, and language interpretation. Although words and expressions function as concentrated

Associate Professor, University of Dar es Salaam School of Law, Tanzania. Email: saudinj@udsm.ac.tz, saudinj@gmail.com ORCID: www.orcid.org/my-orcid?orcid=0000-0001-6181-2801 .

nodes of meanings, in many cases, they are modulated on any occasion of use by factors such as the surrounding words (co-text), previous instances of use of the same word, the situation in which they are used, and the background knowledge likely to be drawn on by an interpreter. Thus, to properly understand how meanings of words are derived and contested in legal settings, it is necessary to situate interpretive disputes in both the legislative text around the word and the contextual information (Durant and Leung, 2016). This article, therefore, explores the conceptual and operational connections of IPR and language development in the context of the laws of Tanzania. From the outset, it is pertinent to concede the difficulties associated with addressing two distinct audiences, i.e., IPR lawyers and professional foundation, whose orientation, and fundamentally differ, which may affect their perception of the position proffered by their counterparts on the other side of the professional divide or affiliation (Shuy, 2002).

Moreover, matters of language recognition and development have invariably attracted legal and etymological inquiries. National constitutions and policies in some countries contain express provisions that specify a national language (Kenya, 2010: art 7; Rwanda, 2015: art. 8). In human rights discourse, debates abound on how to incorporate language rights within the existing human rights precepts (CSS, 1998). The critical issues in such dialogues revolve around two intriguing dimensions of language: its growth and preservation. This article interrogates the convergence points of IPR and language development with a view to identifying their common territory and inherent controversies in addition to proposing requisite interventions. The scope is confined to copyright, patents, and trade/service marks under Tanzanian law. Given the technical nature of IPR and for setting the framework and clarity regarding the subsequent analysis, presentation, and discussion, it befits to begin with a brief account of the conceptual orientation of IPR and language as socio-economic subjects.

2.0 An Overview of the IPR System

The term "intellectual property" refers to statutory or contractual proprietary rights arising from human ingenuity or intellectual creativity. These rights exist in intangible medium and are in the form of exclusive rights. IPRs are ubiquitous since they cut across all fields of human endeavors resulting from human ingenuity, whether presented as products, processes, or services (Mwakaje, 2022). Conceptually, there are two broad categories of IPR: copyright and industrial property. Copyright law protects artistic and literally works such as books, poetry, novels, movies, songs, computer software, and architectural drawings and designs. Industrial property includes patents, industrial designs, trademarks, know-how, confidential information, geographical indications, new plant varieties, and integrated circuits (WIPO, 2016). The scope and qualification conditions for IPR depend on respective national laws. However, the international legal instruments on

IPR have set the minimum national compliance standards for creating a harmonious regulatory framework across jurisdictions. Overall, the protection and promotion of IPR has significantly contributed to cultural, economic, scientific, and technological development at national and global levels (Wong, 2011; WIPO, 2012; EPO & EIPO, 2022).

3.0 Background and Issues for Exploration

A chosen theme for the World Intellectual Property Day for 2024 is: 'IPR and Sustainable Development Goals (SDGs) - Building our Common Future with Innovation and Creativity.' Assessing the contribution of IPR to SDGs inevitably attracts a review of a wide spectrum of development-related issues, including those on cultural orientation. Language as an element of culture, its growth, use, and evolution have attracted considerable academic debates, such as those attempting to link the effect of language and the dispensation of justice (Rwezaura, 1993; Keya, 2013; Ismail, 2020). Complementing the ongoing discourse on the interface of language and law, it befits to venture and embark on assessing one of the unchartered research territories in Tanzania: the interface of IPR and linguistics. The aim is to articulate the overreaching effect of IPR on language growth confining to the Tanzanian IPR legal settings, thereby appreciating its broad cultural developmental perspectives, which have been rarely accounted for with a defined presentation.

IPR is one of the most dynamic and evolving fields of legal practice partly because it deals with fast-changing subjects arising from human creativity. IPRs are omnipresent and interrelate with many fields of human activities and professional disciplines, such as linguistics terminology development and usage. As previously pointed out, linguistics has some notable operational linkages with the substantive and enforcement aspects of the IPR system deserving an independent inquiry. Implicitly, the introduction and adoption of new words, signs, and expressions in various languages is closely associated with the development of patented scientific inventions, which is a subset of IPR. In competitive markets, businesses use words, slogans, letters, numbers, or a combination thereof as trade and service trademarks for (1) marketing their products and services, (2) helping consumers to identify the products, and (3) indicating the source of their products (Dreyfuss, 1990). For instance, in the process of using trademarks in commerce, either new words may be created, or existing ones may acquire secondary meaning. To illustrate, over a period of time, the word "Apple" has acquired a secondary meaning besides the exclusive reference to fruit; it is now strongly associated with electronic gadgets. In semiotics, a sign equals the signifier plus the signified (Saussure, 1916). The one-to-one correspondence ceases to apply with the extended or connotative meaning as more meanings get added during usage. Also, some names for inventions, such as

² See WIPO link: https://www.wipo.int/web/ipday/2024-sdgs/index, accessed 10 April 2024.

³ See UNESCO link: https://www.unesco.org/en/articles/culture-heart-sustainable-development-goals, accessed 10 April 2024.

"thermos" for thermos-flasks, which initially served as trademarks, have become generic, and now consumers refer to the product itself, implying they have become integral in ordinary language usage and communication (Horowitz, 2014; Jones IP, 2024). Copyright law also influences linguistic growth in various ways, including protecting indigenous expressions of folklore and translation rights that serve as a platform for translating newly copyrighted works into other languages (UNESCO, 2020). Furthermore, a compelling narrative is gradually crystallizing, supporting the use of linguists as expert witnesses in the Courts of law in determining trademark disputes (Nieto, 2011) and the use of a digitized language database in assessing whether a trademark has become generic or still retains its distinctive character (Lince, 2017).

These interplay between IPR and linguistics notwithstanding, no independent study, national policy; legal and regulatory initiatives have been undertaken in Tanzania to promulgate appropriate strategies through which these interdisciplinary linkages may be addressed to complement each other. Therefore, this article attempts to fill this gap in the context of the Tanzanian IPR legal regime.

4.0 A Theoretical Basis

Given the ubiquity of IPR, its underlying doctrinal justification comes from diverse theoretical prongs ranging from natural rights and social contracts to utilitarian theories (Mennel, 1999). Hence, a proper examination of the interface between IPR and linguistic development necessitates interrogating and assessing the collateral social benefits arising from the conceptual structure and enforcement framework underlying the IPR legal regime. Incidentally, it is only recently that awareness of the importance of language in law enforcement has rapidly grown. Indeed, given that lawyers cannot function without using language as an indispensable major tool of their trade, it is paradoxical that it is only recently that lawyers have called on linguists to assist in describing the intricacies of language application in the court of law (Moeketsi, 2007), hence aptly subscribing to a theory of complementarity of the two disciplines (Shuy, 2002).

From the IPR perspective, this article deploys a utilitarian theoretical orientation. In essence, the utilitarian framework has been particularly pivotal in the development of contemporary IPR laws as it alludes to the net socio-economic effect of the IPR on various societal facets. This outlay is premised on the argument that the protection and enforcement of IPR supports public welfare by inspiring creativity, innovation, and other social benefits. Such a socially beneficial effect of IPR is also evident in the Tanzanian context of this study, whose assessment is based on how IPR features and fares in a burgeoning vocabulary and contextual interpretation of words applicable to patents, copyrights, and trademarks. Moreover, in the assessment of language growth, the analysis is informed by interactionist theories of human language development, which postulate that language exists, grows, and is learned in the context of socio-cultural and environmental interactions

enabling not only its being acquired and learned but also its usage, thus necessitating professional collaboration of IPR lawyers and linguists (Shuy, 2002; Linden, 2007). Informed and guided by these theoretical and doctrinal prescriptions, this article posits that language grows and evolves through, among others, continuous interaction with human creative endeavours protected and promoted through IPR laws.

5.0 The Assessment Framework

The analytical terrain is primarily calibrated on a broad theme of IPR and socioeconomic development because language constitutes one of the critical components of culture, commerce, science, and technology. This qualitative assessment mainly deploys the documentary exploratory approach (Braun and Clarke, 2013), complemented by interviews with selected experts in IPR and linguistics. Specifically, it assesses the cause-effect relationship between IPR regulation and enforcement in the development of languages. Thus, the determination of the regulatory impact of IPR on language development and vice versa is based on the outcome of specific types of IPR in developing new words or evolving meanings of existing words. The article is delimited to assess the platform for language development created by the regulatory structure of IPR without quantifying aspects relating to it. This assessment model is appropriate because the problem under investigation is anchored in the causality and correlation of two different subsets and disciplines emanating from IPR statutory prescriptions, anecdotes, and practices whose collateral regulatory effect intuitively influences the growth and development of languages.

The review of the laws and practices is supplemented by interviews held with purposively pre-selected respondents to balance the inquiry on the contributory effect of IPR on linguistic development in the Tanzanian legal context. Exploring the broader scope and the ancillary regulatory effect of IPR allows one to appreciate its convergence or divergence with linguistics, albeit satisfactorily. Subsequently, this analytical model guided the assessment and conclusion of the underlying precepts of IPR laws, whose formulation is primarily rooted in a conceptual orientation that treats the underlying rights as commercial products, thus potentially neglecting its significant social and cultural effect.

The exploratory coverage of the conceptual and operational correlation of the IPR and linguistics in the context of Tanzanian laws in this article is delimited based on various factors. First, the assessment of the study focuses on the doctrinal legal settings of the IPR system without quantifying its exact quantum impact on language growth, a perspective that may attract another independent study. Second, the article examines the growth reciprocity of IPR and linguistics based on the laws and regulatory models of IPR in Tanzania. Third, the study focuses on three subsets of IPR—copyrights, patents, and trademarks.

6.0 Literature Reviews on IPR and Linguistics

A brief overview of the literature on the correlation between IPR and language growth reveals that there is a dearth of publications articulating this issue in the context of Tanzania. Some writings and studies have focused on the general effect of the language of the Court in the dispensation of justice in Tanzania (Walker, 1987; Keya, 2013; Keya, 2016). Other studies are confined to evaluating the contribution of the law in the growth of the Kiswahili language based on the decision to formally allow the use of Kiswahili in writing judgments of the High Court of Tanzania (Rwezaura, 1993; Ismail, 2020). Also, there are studies on language policy development in education in Tanzania in terms of the socio-linguistic framework of bilingual education (Tibategeza & Du Plessis, 2012), the overall effect of IPR on national development, including cultural aspects (Mwakaje, 2022), and technological aspects of language translation and language development in Tanzania (Mwansoko, 2015; Malangwa, 2017). Thus, discussing the potential IPR implications on language development highlights crucial information that could potentially trigger national policy and legislative review.

Examining the interplay of trademarks and linguistics, Hotta (2006) describes the social and commercial parameters of the two conceptual disciplines: Trademark as a proprietary subject and language as a communal or public good. In this regard, language in the trademark context arguably performs a unique function, which constitutes the basis for granting monopoly rights over the usage of certain words that are part of the corporate brands. Regarding the need for the Courts to integrate forensic linguistics in trademark disputes, a pressing necessity for consulting linguistics has emerged, including clearly ascertaining their exact facilitative role in the Courts as expert witnesses to cover language-related matters (Shuy, 2002; Gibbons, 2003; Shuy, 2012a). Other studies have explored how the linguist as an expert witness may smooth the progress of legal decision-making in cases involving a community trademark dispute, emphasizing the potentially pivotal role of linguists if they are called expert witnesses by the courts (Nieto, 2011).

Addressing the subject of language translation and interpretation as an aspect of culture and instrument for language learning, Scarino (2016) has discussed the renewed and contemporary interest in translation as a social and professional practice, and the attendant need for an understanding of the nature of translation as a process of intercultural mediation. Notably, the author has not specifically delved into the realm of IPR and her work is based on the Australian narrative, yet Scarino's work constitutes an important contribution by locating the cultural context of translation rights under copyright law.

Regarding how copyrights embed the right to translate published works into other languages, Park (2019) has assessed whether translated works should have separate copyright protection. Traditionally, copyright law has treated translated works as mere replicas of their respective originals and derivatives. Nevertheless, in some cases, the translation entails significant deviation from the original text and

application of further intellectual creativity and exertion to convey the message in a manner the intended readers can understand the content based on the demands of the socio-linguistic and semantic features of the target vis-à-vis those of the source language. In an attempt to demystify the current copyright regime in the context of an ongoing technological revolution which affects contemporary translation approaches, questions have arisen regarding the validity of the copyright model in the present globalisation context and interactivity of digital technologies (Balasamah and Sadek, 2014).

Other authors have canvassed diverse issues ranging from language translation as a fundamental right and its centrality in socio-cultural development (Madonsela, 2012); the framework for allocating rights in words and the connection between words and communication (Dreyfuss, 1990); language translation as an agenda for inclusive development to offset the social exclusionary effect (Botha, 2019); and trademarks as a hybrid addressing both market principles, on the one hand, and as a semiotic doctrine elaborating the principles of sign systems of the language of commodities (Beebe, 2004).

This review of selected literature signals a significant conceptual connection between various aspects of IPR and linguistic development, either at the level of contextual use of words, the translation process, or the creation of new words. However, the discourse on exact regulatory and enforcement intersections of IPR and linguistics in the context of Tanzanian laws, particularly in the growth of Kiswahili vocabularies and the importance of using linguists in intellectual property regulation and dispute settlement, is yet to be explored and expounded. Thus, this assessment of the conceptual and operation correlation between the two disciplines: IPR laws and linguistics in the context of Tanzanian law, is both a timely and relevant intervention for potentially shaping the future policy and regulatory landscape.

7.0 The Findings and Analysis

Guided by a qualitative assessment model, the findings are primarily drawn from a review of literature, IPR statutes, interviews, and judgments of the Courts. Analysis of the interplay of IPR and linguistic growth is informed by the fact that the subject of IPR is both multidisciplinary and cross-cutting, and its convergence with linguistics is on the rise. Laws in many jurisdictions have expressly provided the appropriate language for use in copyright protection and patent filings (Tanzania, 1994: r. 4; Obhan and Chandrashekaran, 2019). Thus, it is fitting to articulate specific angles of convergencies between IPR and linguistics by situating the discourse in the context of Tanzania.

7.1 Human Creativity and Language Growth

Creativity is at the core of IPR protection. From a linguistic perspective, how the IPR system and principles are structured and function directly affects the

preservation and growth of languages in diverse ways. Evidently, a number of Kiswahili terminologies emerged as a response to technological growth (Mwansoko, et al., 2015). For instance, Kiputiputi (2011) has also developed a rich reservoir of new Kiswahili words drawn from the development of computer technologies.

Table 1: Examples of New Kiswahili Words for New Technological

Developments and Innovations

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"kiungokivo" a	"kurunzi"	"televisheni"	"mubashara" a	"kishikwambi"
hyperlink	a torch	a television	live event	an electronic
		screen	coverage	smart pad
"teleksi" a telex	"kompyuta"	"maunzilaini	"kompyutakatiti"	"kompyuta
	computer	tumizi" an	a microcomputer	pajani" a laptop
		application		computer
		software		
"ufumbaji data"	"datameta"	"Tovuti" a	"msimbo" a	"nywila" a
data encryption	a metadata	website	programme code	password
"sanikisha"	"kidijitali"	"kanzi data"	"adapta" an	"kiendeshi
installation	existing in	a database	adapter	mtandao" a
	digital form			network drive

Source: Kiputiputi (2011)

Notably, the Kiswahili words listed in *Table 1* emerged in response to inventions in information technology communication. New products or processes were introduced, necessitating the development of new Kiswahili words to cover the vocabulary gaps (Kiputiputi, 2011). Since almost all scientific innovations qualify as protectable subject matter of IPR, a few sampled examples of newly introduced words as a result of new discoveries serve to showcase the growing role of IPR in language growth.

7.2 Copyright Law and Linguistic Growth

The intersection of copyright law and linguistic growth can be traceable from various provisions and principles underlying the copyright legal regime. This paper explores three pertinent areas of convergence to illustrate the existing interface.

7.2.1 Interface between Copyright and Linguistics

The exclusive rights authors enjoy under the copyright law include the right to translate, adapt, or modify a copyrighted work. Thus, translating a poem into a new language or converting a book into a play without the express permission of the author of the original works, amounts to without the express permission of the author of the original work amounts to copyright infringement (United Nations, 2015). In the context of this study, we refer to two crucial copyright edges that connect with

linguistic development, namely, the translation rights and the protection of folklore expressions (Tanzania, 1999: ss. 9, 24).

7.2.2 The Right of Translation

In copyright law terms, copyright owners are vested with exclusive rights broadly classified as economic and moral rights. The right of translation is a subset of economic rights (Tanzania, 1999: s. 9[1] [e]). Translation refers to the expression of a work in a language other than that of its original version or the process of translating something from one language to another (Hatim and Munday, 2004). The resulting translation is a derivative work with independent copyright protection akin to the original work (Tanzania, 1999: s. 6[1]). The translation process facilitates language growth by expanding its vocabulary as part of legal jargon and everyday usage (Mwansoko et al., 2015). Also, translation rights are instrumental in disseminating and distributing a work beyond its original language of composition and geographical boundaries. It enables a work to travel beyond its immediate linguistic and cultural provenance, extending its compass to reach a regional or global audience (Lee, 2020). Thus, by providing such a right, arguably, copyright law creates a requisite space for constructing new words or expressions, thereby enriching the vocabulary and contributing to linguistic growth (Malangwa, 2012; Basalamah and Sadek, 2014). In addition, creativity input injected into the target language and culture during the translation process enhances the literary and economic prestige of the original works (Lee, 2020; Venuti, 1995).

Translation rights are protected under copyright law because the underlying translation process involves the creative and thoughtful integration of new ideas and the realignment of words into other languages and cultures without distorting the original meaning. However, given the lack of a pronounced statutory and regulatory model of engagement between IPR and linguistics, it appears that in constructing translation rights, framers of the copyright law had no iota of consideration for its social and cultural ramifications and contribution to linguistic growth. Consequently, the net contribution of copyright in societal development has been miscued, underrated, and largely confined to artistic and literary works, while actually, there is more to it. Expert opinion gathered during face-to-face interviews strongly supports the assertion that in the translation process, normally, new words are formed, particularly when a new product or technological development is introduced.⁴ Resonating the nexus between translation rights and linguistic growth, we argue that national policies and laws ought to be reframed to appreciate such linkages in order to provide clear regulatory options and demarcations with such broader societal cultural benefits in mind (Hemmungs, 2011).

⁴ Interview with Prof. Pendo Malangwa, Institute of Kiswahili Studies, University of Dar es Salaam on 10 April 2023.

7.2.3 Protection of Folklore Expressions

Folklore expressions are a form of IPR protected in many countries under copyright laws and, in some jurisdictions, under *sui generis*⁵ legislation. In Tanzania, the protection of expressions of folklore falls under section 30(2) of the Copyright and Neighbouring Rights Act, 1999, Cap. 218. However, some aspects of the folklore expressions are protected under the Antiquities Act, Chapter 333 of the Laws of Tanzania, as amended by the Written Laws (Miscellaneous Amendments) (No. 3) Act of 2022. In essence, folklore deals with traditional cultural expressions such as folktales, folk poetry, riddles, and folk songs. In such a context, issues surrounding promoting and preserving indigenous languages and expressions become an integral part of folklore expressions or traditional cultural expressions, TCE in short (Madonsela, 2012).

At the international level, protecting folklore expression under copyright law surfaced for the first time in 1967 at the Stockholm Diplomatic Conference during the revision of the Berne Convention. The argument was that folklore expressions constitute an important element of the cultural heritage as a means for self-expression and social identity for many indigenous communities. In the Tanzanian context, where there are more than 120 ethnic groups with dozens of indigenous languages and expressions of folklore, there is a strong case for such legal protection for promoting and preserving indigenous languages and expressions. There are still unresolved legal intricacies regarding protecting folklore expressions (whose conception is essentially based on communal rights) in the realm of IPR, whose rights system is individualistic (Frankel, 2018). Unsurprisingly, sections 25 and 26 of the Copyright legislation prescribe that certain uses of folklore expressions require prior authorisation from a competent representative authority, i.e. National Arts Council (Tanzania, 1999: s. 29). Thus, the protection and right of control are not vested to an individual, rather to a representative organ or authority.

Regardless of the relative success of using copyright law as a tool to protect TCE at the national level, several inbuilt structural and regulatory limitations persist in Tanzania. First, the notion of authorship of TCE is still conceptually problematic as TCE is generally viewed as communal property. Furthermore, while copyright law usually requires an identifiable author, the authorization mandate is vested to the National Arts Council – presenting a clear regulatory dilemma regarding ownership and use authorization mandates. Second, many TCEs are not affixed in any medium; rather, they are passed orally from generation to generation, while the requirement under copyright law, as prescribed under section 3(3) of the Tanzania copyright statute, normally requires such works to be affixed in the perceivable medium. Third, as part of people's cultural identity, TCE attracts perpetual protection, whereas copyright protection is for a prescribed duration (WIPO, 2003).

⁵ Sui generis is a Latin expression that can be translated to mean: "of its own kind." It refers to anything that is peculiar to itself; of its own kind or class.

These conceptual and regulatory challenges indicate that protecting TCE under copyright law does not necessarily provide an exhaustive solution. Apparently, there is a need to strengthen the protection of TCE using other statutory frameworks and human rights approaches as part of the broad agenda for protecting and promoting indigenous languages (Carpenter and Tsykarev, 2020). This is particularly the case in the Tanzanian context, where most of the indigenous languages are neither documented nor traceable from a single source.

7.3 Patents and Language Growth

The patent legal system deals with the protection and promotion of inventions. The term "invention" refers to a solution to a technical problem in any field of technology and may relate to a product or process (Tanzania, 1987: s. 7[1]). A closer scrutiny of the patent system suggests that patents can contribute to linguistic growth, at least in two key contexts. First, patents deal with inventions that support the advancement of new scientific and technological solutions; as such, the names and words for expressing creative products and processes generated through the patent system are likely not to be in the existing repertoire of a given language describing that invention, hence necessitating the coinage of new words and expressions as *Table 1* above illustrates. Second, given the specialty of the field of patents, certain words may apply in specific technical contexts or generate special or context-tied meanings to satisfy the invention description. Moreover, under patent law, an invention can qualify for protection once it meets the patentability criteria, which require the invention to be novel, involve an inventive step, and be industrially applicable (Burk, 2018). A further review of the novelty as a patentability criterion and the latitude given to inventors in coining new words or ascribing new meanings to existing ones helps in appreciating the exact contours linking patents with linguistic usage and growth.

7.3.1 Novelty Requirement

Patent law is designed to encourage and stimulate innovation by protecting new technical solutions presented as products or processes. One of the criteria requires the patent applicant to demonstrate the newness of the invention. The term new or novelty in patent parlance requires the invention to contain new features or characteristics not generally known by persons skilled in the relevant field of technology. Fundamentally, there must be some exponential progression in technical ideas or frontiers for a patent application to be successful. These new features in patent applications must be named or expressed for reference and usage purposes. In doing so, inventors are either forced to create and supply new words for integration into the existing pool of linguistic vocabulary or generate additive secondary meanings to the existing words in the language used for patent application purposes (see examples in *Table 1*).

By encouraging innovation and development of new technical solutions and products, which in turn necessitate the coinage of new words, patents contribute to the growth of technology vocabulary, hence the growth of language. Etymological traces of various commonly-used English words attest to this assertion. For instance, the word "computer" is traceable to the Latin word "pure," which means both to think and to prune, whose origin dates back to 1660. However, its contemporary usage, which refers to an electronic device, is closely associated with the invented electronic device by Atanasoff Berry Computer at Iowa State University in the US between 1939 and 1942 (BBC, 2016). This causal connection between inventiveness and the introduction of new vocabularies validates the contention that inventions or patent systems generally have the effect of creating new words and phrases, thereby contributing to linguistic growth.

7.3.2 Lexicography in Patent Drafting

Language usage is one of the critical components in patent drafting because the scope of patent protection is based on the interpretation of the words used in the patent application document (Cook and Liu, 2016). In Pfizer Canada Inc. v. Canada (Minister of Health) 2005 FC 1725, the Court restated the principle that patent interpretation is a legal, not a factual process. It is the duty of the Court, not the expert witness, to construe the patent document. However, expert witnesses may assist the Court in understanding the context of the words useable for the invention and the particular meaning of the terms used in the patent document (Harms, 2018; Tanzania, 1987: s. 37). Even though the general rule is that claims in patents documents must be construed in its ordinary meaning (WIPO, 2022), inventors are allowed to formulate new words and provide contextual meaning to certain words used in patent documents (Lin and Hsieh, 2010). In patent terms, lexicography is the principle and practice of allowing the inventor to define certain words to suit the patent description (Shuy, 2012b). The "lexicographer" rule allows inventors to define words used in patent specifications suitable for the context of the invention, including defining terms that are at odds with the ordinary denotative meaning associated with the referent. When an inventor clearly and unambiguously defines a term as a lexicographer does, that special definition, and not the ordinary meaning of the term, becomes the operative term, which controls the meaning and future interpretation of the patent (Rozenblat et al., 2013). In doing so, new words may emerge, or existing words may acquire secondary contextual meaning to support new processes, devices, or inventions. Therefore, inventors and, sometimes, the Courts, through judicial patent interpretation, help to enrich the vocabulary available in the language of the patent application.

7.4 Trade/Service Marks and Linguistics

Over the years, trade and service marks have generally served as a business monopolistic tool by facilitating proprietors' market controls through exclusive rights granted under the trademark law. Trademark protection and enforcement is characterized by the extensive use and interpretation of words, particularly during trademark examination and dispute resolution (Shuy, 2002; Shuy, 2012a). Consequently, some words with common dictionary meanings have acquired secondary meanings within the realm of trademark usage and regulation. On the other hand, excessive promotion and market monopoly of certain trademarks has resulted in the genericising of such words and transformed such trademarks into words used to identify the products instead of identifying the source or manufacturer of such products (Heilpern et al., 2024). To illustrate, the word "Sheli" is informally used in Kiswahili in Tanzania to refer to a fuel/gas station because of the previous excessive market domination of the brand 'Shell' in Tanzania. Consumers no longer view 'Shell' as a brand; rather, they associate it with any gas station, irrespective of its operating brand. In addition, many other words such as apple, taser, jacuzzi, tarmac, thermos, realtor, and escalator have been adopted in the English language after acquiring secondary and contextual meanings. To appreciate trademarks' convergence with language development, one must inevitably examine at least three important phases of trademark regulation; application, examination of the application, and enforcement.

7.4.1 Trademark Application Phase

As a rule, at the application stage, the subject matter of the trademark must be clearly defined. Under trademark law in Tanzania, the term "trade or service mark" refers to any visible sign used or proposed for use in relation to goods or services to distinguish goods or services of different traders. The visible signs can include any sign capable of graphically reproducing, such as a *word*, *name*, *brand*, device, *heading*, *label*, ticket, *signature*, *letter*, *number*, *or combination thereof* (Tanzania, 1986: s. 2). Implicitly, several aspects of linguistic nature stand out in the definition, such as reference to words, headings, and letters, which are all subject components of a language.

Besides, language meaning plays a crucial role in regulating other important aspects of trademarks, such as the trademarks' goodwill, reputation, and the scope of protection (Butters, 2010). The language used in a mark can convey a significant amount of useful information about the wares or services associated with it. Thus, the rights to use particular words, slogans or linguistic expressions are centripetal to disputes in a number of trademark infringement cases (Hotta, 2006; Shuy, 2012a). This trend can be appreciated in several judgements delivered by the High Court of Tanzania in cases such as *Tanzania Cigarette Company Limited v. Mastermind Tobacco (T) Limited*, Commercial Case No. 11 of 2005; *Agro-Processing & Allied Products Ltd v, Said Salim Bhakresa & Co Ltd & Another*, Commercial Case No. 31 of 2004; and *Double Diamond Holdings Limited v. East African Spirits (T) Limited and Gaki Investment Limited*, Commercial Case No. 8 of 2018. In all these cases, the Court was called upon to interpret the meanings of words used in the disputed trade and service marks when assessing the likelihood of market confusion.

7.4.2 Trademark Examination

Trademark examination refers to an internal process at the Office of Registrar of Trademarks (BRELA for Tanzania) for assessing trade or service marks' registrability, particularly its distinctiveness. A fundamental statutory requirement for registering a trademark is that it must be distinctive (Tanzania, 1986: s. 16). The role of language is evident in that respect. The determination of a trademark's distinctiveness is both a factual and a legal matter. It refers to a mark's ability to differentiate itself from other registered marks based on several benchmarks, including its dictionary meaning, visual outlook, or overall resemblances. As such, trademarks represent a "language of commodities" (Dreyfuss, 1990), whether in an arbitrary, suggestive, or descriptive sense as was extensively analogised by the Court in the United States of America in the case of Abercrombie & Fitch v. Hunting World, 537 F. 2d 4 (2d Cir. 1976) when establishing the four spectrum of trademark distinctiveness: 1) arbitrary or fanciful; 2) suggestive; 3) descriptive; and 4) generic (Hu, 2014: 4). These categorisations of the marks have significant bearing on the linguistic meaning ascribed to the words or symbols used in a particular trade or service trade mark. Arbitrary trademarks are those in which the proprietor uses a word with a dictionary meaning, yet in a completely different contextual usage, such as the word 'Apple' for electronic gadgets, thus giving it a secondary meaning. Fanciful marks are composed of a coined word, which, based on continuous and consistent use, acquire distinctiveness by designating the source of a product; an example is a trademark such as 'KODAK'. In contracts, suggestive marks are those marks which, with a stretch of interpretative imagination, may be associated with the contents of the product it represents as it somehow suggests its contents. A generic trademark is a word or phrase that becomes the common term for an entire class of goods or services over time; they are not protectable under trademark law (Phillip, 2024: 205).

Notably, the interviews with officers at the trademark registry and trademark attorneys, ⁶ pointed out the imperative of consulting language experts in certain cases where the particular usage and dictionary meaning of a contested word/mark is under consideration.

7.4.3 Enforcement Phase

At the enforcement stage, the meaning of words or language deployed in a trademark plays a crucial role in assessing the likelihood of market confusion stemming from contestable trademarks. In this regard, the Courts have thus far maintained the need

⁶ Interviews with Mr. Seka Kasera (IPR Department at BRELA), Ms. Elizabeth Mlemeta (Advocate at NexLaw Advocates), and Dr. Antony Kakooza, an Advocate and a renowned IP expert based in Uganda/Senior Lecturer at the School of Law, Makerere University on 14 June 2023, 20 June 2023, and 13 November 2024, respectively.

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to assess the likelihood of confusion pertaining to the overall impression of the trademark created, including its underlying linguistic/phonetic meaning based on the language of consumers in the relevant market for the products (Harms, 2018). One of the cases that fittingly illustrates the linguistic dilemma in assessing the likelihood of confusion in trademark disputes is *Clover SA(PROPRIETARY) Limited Vs Tropicana Product Inc* (Civil Appeal No 102 of 2022), where the High Court of Tanzania (Commercial Division) was invited to determine the dispute between owners of trademarks TROPIKA and TROPICANA. In its findings, the Court, while citing with approval the decision of the High Court of India in *Stiefel Laboratories*, *Inc & Another vs Ajanta Pharma Ltd*, 211(2014) DLT, was of a clear view that in assessing the likelihood of confusion, it is pertinent also to assess the phonetic differences of the two contested trademarks. The Judge/Court said:

I have analysed the two rival trademarks in line with the rules of the comparison above. I agree that the appellant's trademark "TROPIKA" and the respondent's mark "TROPICANA" are different both visually, structurally, and phonetically and contain no resemblance anyhow. The parties' trademarks are differentiated by the letters "KA" in the appellant's trademark "TROPIKA" and "CANA" from the respondent's trademark "TROPICANA". Though it is true, as submitted by the appellant's counsel, that element C in the respondent's trademark TROPICANA has indeed been used in lieu of element K which phonetically sounds the same, the element ANA added in the respondent's mark TROPICANA creates a very definite transformation of the appellant's mark TROPIKA conveying a visual, physical, and phonetic difference to each other.

Based on the above, it comes out that the interplay of linguistics and law in dealing with trade and service marks implies that phonetic considerations of words used as trademarks are not only relevant and discernible at the registration and examination stages but also inform its underlying interpretation and enforcement modalities in handling disputes related to ownership of trade and service marks. Hence, engaging with linguists as expert witnesses in trademark litigation becomes important and useful for the proper assessment of the similarity of the contested marks (Nieto, 2011).

8.0 Summary of The Findings

The preceding review on the interface of IPR and language development in the context of Tanzania points out several notable findings. First, the regulatory, operational, and enforcement framework of IPR significantly affects language use and growth. As highlighted, this nexus is also discernible in copyright, patents, and trade and service marks. While there is no express statutory admission of the operational linkages of the two disciplines (IPR and linguistics), intuitively and in practice, there is mutual reliance that necessitates the formulation of an appropriate regulatory model so as to appreciate their convergencies (Nieto, 2011). Second,

based on the analysis of the contribution of innovation and patents towards the formulation of new words and vocabularies, several words in the Kiswahili language have arisen and been coined from technical inventions, as presented in Table 1. Thus, as Table 1 and the discussed court cases illustrate, the more the IPR system encourages creativity and innovation, the more it is likely to contribute to language growth. Third, in patent construction and disputes relating to trade and service marks, the courts, in many cases, are drawn in to, among others, consider the phonetic context of the words representing the disputed marks or patents' claims, a fact which suggests and reinforces a need to engage with linguists in matters of such nature. Fourth, from a cultural point of view, language constitutes one of the key variables of culture; henceforth, protecting expressions of folklore becomes pertinent, particularly in protecting indigenous languages under the copyright legal regime. Fifth, while there are interdisciplinary divergences between IPR and linguistics, there are significant convergence points based on the fact that the use and meaning of words are an important element of patents and trademark registration and enforcement processes.

9.0 Conclusion and Recommendations

This article undergirds the existing correlation between some aspects of IPR and linguistic development based on the case laws and statutory provisions governing IPR in Tanzania. The argument is that unless a clear regulatory link between IPR and linguistics is drawn, policies, laws, and institutions dealing with IPR regulation will continue to miss out on important contributions and technical support available from linguists. In turn, IPR plays a pivotal contribution to language growth through (1) the introduction of inventions that necessitate coinage of new words aimed to describe newly-invented items or processes, (2) translation rights, protection of TCEs and indigenous languages under copyright, and (3) the use of words as a "language of commodities" in the marketplace under trademark law. In addition, the enforcement of IPR, in particular, patents and trademarks in many cases, requires technical interpretation of the words used to appreciate their contextual technical usage, hence enjoining the two fields of practice in a mutually supportive manner. Thus, language experts can help understand the words, letters, and expressions used as trademarks (Nieto, 2011), and words applied to describe patent specifications and the scope of claims in the patent documents. However, the current IPR statutory framework in Tanzania is not explicit regarding the operational interconnection and the role of linguistics in protecting and enforcing IPR.

Consequently, the interface between IPR and linguistics requires national intellectual property offices to recognise the important role of language translation and interpretation in discharging their statutory functions and the importance of engaging linguists when contentious interpretational issues arise in trademarks and patents (Durant and Leung, 2016). Equally important and for efficiency and precision's sake, it is recommended that a review of whether a trademark has become

generic should also consider the use of a digital language database, which has been shown to be more accurate by providing a much more rigorous, data-heavy approach to determining generic usage, tracing the etymological and usage history of particular words (Lovatt, 2024; Lince, 2017). Furthermore, as a long-term measure, IPR aspects should be included in the language studies curriculum in Tanzania to broaden the knowledge catchment area. Finally, specific provisions need inclusion in Tanzania's IPR statutes to capture the important contribution for which linguistic principles engender the protection and enforcement of IPR.

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