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Alex Ansong

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IS TRADITIONAL KNOWLEDGE INTELLECTUAL PROPERTY?

Alex Ansong*

Abstract

Traditional knowledge has become one of the areas of increasing interest in national and international fora, and in academia in recent years. Issues of protection of traditional knowledge from extinction and piracy and the possible extension of intellectual property rights (IPRs) to protect it are some of the pivotal issues in current international and domestic discourses. This article presents an exploration of the topic: ‘is traditional knowledge intellectual property? It begins with a very brief analysis of the concept of property. This sets out the general conceptual framework of the idea of property. It establishes the principles of ‘use’ and ‘exclusion’ as foundational in the general concept of property. The discussion builds upon this and undertakes a panoramic historical overview of intellectual property, its scope and some of the justifications that have been adduced in the defence of IPRs. The principles of ‘use’ and ‘exclusion’, are reemphasised in the discourse on Intellectual property to show that it is a subset of the general concept of property. After setting out the foundational arguments on property and intellectual property, the article considers the conceptual framework of traditional knowledge and undertakes a comparative study of traditional knowledge and intellectual property. The import of this comparative study is to ascertain whether there are any common grounds between the two systems that can allow the extension of intellectual property protection to traditional knowledge. The principle of ‘use’ and ‘exclusion’ reverberates again in this segment of the discussion and analysis. Foundational arguments are also presented on the issue of whether proprietary rights can be instituted in traditional knowledge and whether existing intellectual property regimes can be extended to traditional knowledge. These arguments are used in the concluding part of the article to support the position that traditional knowledge is intellectual property.

I. The Concept of Property

The idea of property has engaged the minds of political, legal, economic and social theorists for centuries and different schools of thought have presented different arguments on this subject matter. Ontological questions of whether the nature of property is inherently similar, whether it is conceptually or culturally construed, or whether its conceptual or cultural meaning varies in time and space are but a few of the many questions that assail the concept of property.1

*BA (Cape Coast), Dip. Ed. (Cape Coast), (LLM (Leicester), LLM (Middlesex), PhD (Middlesex), Lecturer, Faculty of Law, Ghana Institute of Management and Public Administration.

There are also explanatory and normative issues of social justice, claims of natural rights, legal constructions of certain policy options, and the form, boundaries and allocation of property.\footnote{Thompson, M. P., *Modern Land Law*, (3rd edn.), Oxford: Oxford University Press, 2006, at 1} These issues of property were pivotal concerns that polarized the political, economic and socio-legal organization of states in the 20th century. Needless to say, these pertinent issues are still pivotal concerns for the ideological foundations and practice of the institutions that organize our lives at the communal, national and international levels.

Thompson sees the idea of property as our relationship with items more than an expression of our ownership of the items.\footnote{Thompson, op cit, footnote 2.} Expressions of ownership summarize the rights we possess in relation to the item owned.\footnote{Ibid.}

Harris on the other hand defines property as “… a legal and social institution governing the use of most things and the allocation of some items of social wealth.”\footnote{Harris, J. W., *Property and Justice*, (Oxford: Oxford University Press), 1996, at 1.} It is “a complex organising idea”,\footnote{Ibid.} constituting a spectrum spanning exclusive use or ownership to rules or rights of common access and use.

Property as an institution has a dual function in that it governs both usage and allocative rights and privileges.\footnote{Ibid.} The right to use a resource like everybody else in society is markedly different from the right to be allocated use of a resource to the exclusion of all others in society. Penner thus contends that the concepts of exclusion and use are all-encompassing enough to be employed in explaining property rights.\footnote{Penner, J. E., *The Idea of Property in Law*, (Oxford: Oxford University Press), 1997, at 68.}

He further argues that:

> “The right to property is grounded by the interest we have in using things in the broader sense. No one has any interest in merely excluding others from things, for any reason or no reason at all. The interest that underpins the right to property is the interest we have in purposefully dealing with things.”\footnote{ibid at 70-71.}

Penner identifies three broad levels of exclusion and use that underlie interests in property rights – non-exclusive right of use, exclusive right of use based on the principle of first come, first served, and unrestricted exclusive use.\footnote{Ibid. at 69.}

With the non-exclusive right of use, everyone has a right to use the resource. Hence my use of a resource does not exclude others from using the same resource. There can thus be multiple, non-exclusive and simultaneous use of a resource without one right of usage encroaching on the rights of others. For
example, my right to fish in a river may not exclude the rights of others to fish in the same river. The river is thus commonly accessible to all and as such no one would be excluded from fishing if they wanted to.

John Locke, in his *Second Treatise of Government* vividly expressed this level of non-exclusive right of use. He argued that:

“God, who has given the world to men in common, has also given them reason to make use of it to the best advantage of life, and convenience. The earth, and all that is therein, is given to men for the support and comfort of their being. And though all the fruits it naturally produces, and beasts it feeds, belong to mankind in common, as they are produced by the spontaneous hand of nature; and nobody has originally a private dominion, exclusive of the rest of mankind, in any of them, as they are thus in their natural state: yet being given for the use of men, there must of necessity be a means to appropriate them some way or other, before they can be of any use, or at all beneficial to any particular man.”

There is undeniably a problem of scarcity of resource that is not fully addressed in the ‘non-exclusive use’ argument. This problem is partially solved in a right of use based on the principle of first come, first served. Here, the right of use is exclusionary but there are limitations based on the nature of use. The one who is the first to start using a scarce resource has a right of use until he/she finishes using it.

Applicants for a public housing scheme, for example, may be considered on a first come, first served basis. When the house is allocated to the first applicant, other applicants are excluded from using the same house till such a time that the occupant vacates the house, either on his own accord or as per the agreement for occupancy. The current occupant of the house may refer to it as ‘my house’, and this, on the face value denotes ownership. This expression of ownership however refers to the right of the current occupant to exclude all others from encroaching on his right of use though the actual owner of the house is the state authority that allocated this resource.

The exclusionary implications of the ‘first come, first served’ argument may have varying ramifications ranging from temporary exclusion of use to permanent exclusion. Some resources are not only scarce, but they are also transient, non-renewable or destructible. For example, if a government grants gold mining concessions on a first come first served basis, the gold that is mined cannot be ‘re-mined’ by any other person because gold is not a renewable resource. Thus once owned, that ownership permanently excludes all

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12 Penner, op cit, footnote 8, at 69.
others. However, the scenario of the government housing scheme given above may not have the same effect of permanent exclusion. This is because, when one tenant vacates the premises, the same house can be allocated to another tenant. The exclusion here is thus temporary.

The third right of use identified by Penner is the unrestricted exclusive right. This is the right to use a thing or a resource whenever one wants and to the exclusion of all others. A freehold ownership of land for example excludes others from unauthorised use of that land. Whether movable or immovable, property privately owned to the exclusion of all others vests in the owner ‘absolute’ rights that are not feasible under the two previous rights discussed above.

II. Locke’s Labour Theory and the Tragedy of the Commons

One of the most popular justifications of private property rights is the ‘labour theory’ expounded by John Locke in his Second Treatise of Government. In the labour theory, resources freely provided by nature are not privately owned by any individual or collective of people. Nature provides resources for non-exclusive common use. Locke however argued that every individual ‘has a property in his own person’ and as such when the individual applies, through labour, the abilities owned in his/her person to the resources commonly provided by nature, the individual appropriates for his/her exclusive use, that which was commonly available to all in nature. My labour thus appropriates resources from the commons and transforms it into my private property. Fish in the sea is not owned by any individual. However, if I apply my labour to catch the fish, it becomes my property because the ‘caught fish’ is the result of my labour. The major problems with the labour theory are scarcity, over appropriation, and depletion of natural resources. Locke proposes the use of the rule of reason to deal with the problem of over appropriation of resources in the commons. But without a normative benchmark of what is reasonable, the rule of reason becomes an individualised subjective rule. Common use of common resources thus has the tendency of resulting in overuse – i.e. the tragedy of the commons.

Sympathetic feelings for one another in the commons are also not an antidote to the tragedy of the commons. Demsetz thus argues that:

“Economic systems organized to rely on sympathetic feelings cannot succeed in coping with day-to-day resource allocation tasks. This is not to say that these types of economic systems cannot exist, that they

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13 Locke, op cit, footnote 11.
14 Ibid, at section 27.
15 Ibid.
16 Ibid, at section 28.
17 Ibid, at section 31.
cannot persist, or that they cannot alter the distribution of wealth. It is to say that they cannot resolve resource usage problems as efficiently as can systems that rely to a greater extent on prices that reflect facts known to and actions taken by dispersed private owners. It is delusion to think that a socialist organization dealing with modern economies will make allocation decisions on the basis of kinship emotions, although in times of national emergency, such emotions do exhibit strength for relatively short periods.”

To Demsetz, one way of solving problems of externalities (i.e. the tragedy of the commons) in the common use of resources is through the medium of private property rights.

It would however be stretching the argument too far to hold that an actual or perceived tragedy of the commons always results in or justifies the individualization of resource allocation. Collective regulatory interventions can sometimes serve a better management paradigm of resource allocation than individualization of rights to resources. It can also, in some circumstances, serve a better practical role of allocative justice by ensuring equity in the distribution of the resource.

In the customary law of the Akans of Ghana for instance, land is conceived of as an ‘ancestral trust’ administered by political and social authorities for the benefit of the living (including the authorities themselves) and the yet-to-be-born generations. Individualization is thus precluded in this traditional concept of ownership as land is supposed to be administered in the communal interest and the authorities who administer them are mere fiduciaries, albeit with their own legitimate interests in the properties they are administering.

Thus in small, closely knit communities, collective use of some resources may serve a better role of resource allocation than individualization. On the other hand, as Demsetz has posited, in large highly sophisticated economies, individualization of resources may perhaps be a more feasible way to go.

III. Intellectual Property

As established in the discussion above, property embodies rights of use and these rights range on a broad spectrum with exclusionary and non-exclusionary rights at the opposite ends of the spectrum. According property rights to the creative endeavours of the human intellect falls within the broader set of rights of use and exclusion discussed above. Thus, building on the earlier discussion on what constitutes property, intellectual property (IP) may simply be said to be property rights granted over the use of the products of the intellect. These

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20 Ibid.
22 Ibid.
23 Demsetz, H., op cit., footnote 19, at 662.
rights are protected and enforced by law – i.e. “… the legal protections given to persons over their creative endeavours and usually give the creator an exclusive right over the use of his/her creation or discovery for a certain period of time.” 24

III.1 Intellectual Property: A Historical Analysis
The concept that an idea or knowledge can be owned as property is said to have been birthed by the European Enlightenment. 25 The European Enlightenment saw a significant shift from the view of divine revelation and reliance on ancient classical texts as the sources of knowledge, to a focus on the human being as a creator of knowledge. 26 Prior to the Enlightenment, it was thought that humans were mere transmitters of knowledge and not creators of knowledge. In Europe, the influence of Christianity was the basis of the notion of divine origin of knowledge. The medieval canon law doctrine “Scientia Donum Dei Est, Unde Vendi Non Potest” (i.e. knowledge is a gift from God, consequently it cannot be sold) - sums up this conception. 27

The conception that the individual cannot only create knowledge but also own the knowledge created and the advent of printing in Europe projected the author to a high level of importance. The development of intellectual property rights (IPRs), especially copyright, is thus intimately linked to the European Enlightenment and the development of the printing industry which created the ability for the mass production of books. Prior to the invention of printing, reproduction of books in Europe was tediously done through hand copying mostly by monks for their religious orders, the royalty and the aristocracy. 28 The printing industry precipitated a move from intensive reading to extensive reading, created commerce in books and in the process helped to create a new middle-class reading public. 29

The commercialisation of books brought with it the attendant threats of piracy. The need to protect the interests of stakeholders in the book industry (i.e. authors and publishers) thus saw the emergence of the rudiments of copyright regimes in England 30 and its other variations in other European countries (for example the droit d’auteur in France). Geller thus proposes the hypothesis that: ‘Only when media technology and market conditions made piracy profitable could copyright arise’. 31

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24 UNCTAD-ICTSD Capacity Project on IPRs, Resource Book on TRIPS and Development, November 27 2006, at 92
26 Ibid.
27 Ibid.
29 Hesse, C., op cit. footnote 25, at 31
30 http://www.intellectual-property.gov.uk/resources/copyright/history.htm (viewed on 25/10/06)
31 Geller, P. E., ‘Copyright History And The Future: What’s Culture Got To Do With It’,
The invention of the paper and mass printing in Imperial China for instance, saw a semblance of proto-copyright regime being instituted by imperial authorities to control publishing of some works for the purpose of censorship, and private entities registering their works with imperial authorities and as such laying claims to the registered works.\(^\text{32}\) The commercial viability of authored works can thus be linked to the emergence of regimes that instituted forms of proprietary rights in those works.

### III.2 Development of IP: The Western Experience

England offers the point of departure in the western experience of the development of IP. A lot of debate took place in England in the 18th century about proprietary rights in literary works and whether perpetual literary property existed under common law.\(^\text{33}\) The long title of the Statute of Anne, passed in 1710, reads:

> “An Act for the encouragement of learning, by vesting the copies of printed books in the authors or purchasers of such copies, during the time therein mentioned.”

The Act gave authors (and/or their assignees) the sole right to print and reprint their works for a limited period of 14 years, extendable to a further 14 years if the author was still alive. At the expiry of the rights granted by the Statute of Anne in 1738, stakeholders in the book industry who profited from the copyright protection of the Statute began to argue that the expiry of the rights did not negate their perpetual rights under common law.\(^\text{34}\) Two notable cases decided in the English courts over the issue of perpetual literary property rights are worth mentioning.

In 1769, the Court of the King’s Bench decided in *Millar v Taylor*\(^\text{35}\) in favour of perpetual literary property rights. The Court held that the Statute of Anne did not take away the perpetual right of an author over his creation and that common law accords an author this right by the author’s very act of creation. This decision was however overruled by the House of Lords in *Donaldson v Beckett*\(^\text{36}\) in 1774. The House held that copyright was a statutory creation by the Statute of Anne and thus authors did not have perpetual rights. Perpetual common law literary property rights were only confined to unpublished works.

In France and Germany the debate on the right of the author over his creation focused more on personality theories. Literary and artistic creations were viewed as an inalienable extension of the personality of the author. The concept

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\(^{32}\) Ibid at 214.


\(^{34}\) Davies, G., Copyright and the Public Interest, Sweet & Maxwell, 2nd ed., 2002, at 29

\(^{35}\) *Millar v Taylor*, 4 BURR. 2301.

\(^{36}\) *Donaldson v. Beckett*, 4 BURR. 2407
of author’s rights (droit d’auteur) in France focused on the natural rights of the author over his creation and not the rights of the copyright owner as pertained in England.\textsuperscript{37} The author thus “…. has a property right in his work which does not depend on any collective interest in dissemination but solely on the relationship between an individual author and his creation.”\textsuperscript{38} The author’s right was captured in the general elevation of the idea of property after the French Revolution.\textsuperscript{39} The sanctity accorded to the droit d’auteur is captured in the words of Le Chapelier’s, the 18th century French Revolutionary leader who stated that “[T]he most sacred, the most legitimate, the most unassailable ... the most personal of all properties, is the work, the fruit of a writer’s thoughts.”\textsuperscript{40}

Gotthold Lessing, writing in 1772 from the German experience of the literary property debate also argued thus:

“What? The writer is to be blamed for trying to make the offspring of his imagination as profitable as he can? Just because he works with his noblest faculties he isn’t supposed to enjoy the satisfaction that the roughest handyman is able to procure?.... Freely hast thou received, freely thou must give! Thus thought the noble Luther ..... Luther, I answer is an exception in many things.”\textsuperscript{41}

The literary property debate in the 18th century was not confined to Europe. The newly created United States of America (US) had its fair share of this debate. In the US however, the general emphasis of this debate focused on utilitarian principles.\textsuperscript{42} Thus Article 1 s.8 cl.8 of the 1787 US Federal Constitution stated that:

“Congress shall have the power … to promote the progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”

From the very outset, the balance between authorial rights and the public interest was created in the US. The emphasis on utilitarian principles of IP protection however, held sway in the US during the periods when it was a net importer of literary works.\textsuperscript{43} Publishing houses in 19th century US reprinted works of British writers without any authorisation from the copyright owners.\textsuperscript{44} In a response to Congress in 1842, following petitions from both US and
British authors over the issue of unauthorised publishing of their works, the Sherman and Johnson publishing house in Philadelphia for instance argued that:

“All the riches of English literature are ours. English authorship comes to us free as the vital air, untaxed, unhindered, even by the necessity of translation, into the country; and the question is, shall we tax it, and thus impose a barrier to the circulation of intellectual and moral light? Shall we build up a dam to obstruct the flow of the rivers of knowledge?”

US publishers thus made use of utilitarian justifications to pirate British literary works. As Hesse puts it: “Knowledge was there for the taking if the grab could be justified by the public good.”

By the 20th Century as the US increasingly became a net exporter of IP products, the emphasis on utilitarian justifications for IP protection gradually shifted to a more author-centric/personality justification. Justice Holmes, delivering the opinion of the US Supreme Court in Bleistein v. Donaldson, a case of unauthorized reproduction of images, for instance stated that:

“The copy is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man’s alone. That something he may copyright unless there is a restriction in the words of the act.”

From Bleistein v. Donaldson, through its ratification of the Berne Convention, to the Digital Millennium Copyright Act of 1995, the US has steadily shifted from utilitarian justifications to a more natural rights persuasion of IP protection.

The debate over literary property rights in Europe brought to the fore the issue of property rights in products from the labour of the mind. A distinction was created between manual labour and mental labour. Locke’s labour theory was employed to argue for the justification of natural proprietary rights in literary works. If property resides in the very person of the individual, and the labour of the individual is his property, then the product of the individual’s mental labour is his intellectual property. The recognition of mental labour and its products as distinct from those of manual labour provided the link through which previously separate areas of law like patent law and trademark law were

45 Cited in Hesse, C., op cit footnote 25
46 Ibid.
47 Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903)
48 Sherman, B., and Bentley, L., op cit. footnote 33, at 15.
49 John Locke, op cit., footnote 11.
later categorized under the umbrella of intellectual property law. It must be stated though, that legal regimes in patents, for instance, preceded copyright in England and author's rights in other parts of Europe. Between 1561 and 1590 for example, Elizabeth I granted about 50 patents. The Statute of Monopolies of 1624 also preceded the rudimentary stages of copyright law – i.e. the Licensing Act of 1662. The 14 year duration granted to copyrights by the Statute of Anne in 1710 evidently took a cue from the Statute of Monopolies of 1624 which first granted “for the term of 14 years or under hereafter to be made of the sole working or making of any manner of new manufactures within this Realm to the true and first inventor”.

The literary property debate in Europe in the 18th century produced two schools of thought with regards to the justification for granting IPRs – the objectivist position and the subjectivist position. Some of the pivotal issues that formed the basis of debate were – whether ideas were discovered or invented and whether ideas emanated from the society or from the individual. These polarities reflected the objectivist and subjectivist positions.

The objectivist position was championed by people like Condorcet, the 18th century French mathematician and philosopher. He asserted that literary property “.... is a property founded in society itself. It is not a true right; it is a privilege.” Legal systems protecting IP must do so to the extent that the public interest is protected. The utilitarian approach of IP protection tows the line of the objectivist school of thought. The public interest is at the heart of the utilitarian approach. It argues for creating a balance between the private rights of the IP right holder and the public interest in benefiting from the creative work of the right holder.

The subjectivist school of thought championed by other 18th century European scholars like Edward Young, Denis Diderot, Gotthold Lessing and Johann Gottlieb Fichte argued that ideas originated from the author and as such he/she had a natural law right of protection. Statutes thus only recognised their universal natural law right. It did not bestow the literary property right on the author.

The natural law argument for the protection of IP thus justifies proprietary rights in intellectual products based on the premise that intellectual creations are expressions of the personality of the creator. The creator has a property in

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50 See Barry Barclay, Mana Tutara: Maori Treasures and Intellectual Property Rights, (Honolulu: University of Hawai`i Press, 2005), at 69.
51 Ibid.
52 Hesse, C., op cit., footnote 25 at 36
53 Ibid.
54 Ibid.
55 Zemer, L., ‘On The Value Of Copyright Theory’, I.P.Q. 2006, 1, at 57-58
himself/herself under natural law as Locke proposed. The labour of the individual is thus a natural property of the individual. The use of the mental faculty to create a work should thus be protected as the property of the creator.\textsuperscript{57}

The need to strike a good balance between the objectivist and subjectivist positions was ably summed up by Lord Mansfield in \textit{Sayre v. Moore}:

“We must take care to guard against two extremes equally prejudicial; the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.”\textsuperscript{58}

\textbf{III.3 The Scope of Intellectual Property}

Article 2(viii) of the World Intellectual Property Organisation (WIPO) Convention 1967 states that intellectual property:

“shall include the rights relating to: - literary, artistic and scientific works, - performances of performing artists, phonograms, and broadcasts, -inventions in all fields of human endeavour, - scientific discoveries, - industrial designs, - trademarks, service marks, and commercial names and designations, - protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.”

There are significant differences in the various forms of IP. For example requirements for gaining copyright protection for a work are different from that of trade marks. Despite the differences in the various forms of IP, the unifying factor is the element of intangibility.\textsuperscript{59} IP protection establishes property rights over intangible things like ideas, inventions, signs and information.\textsuperscript{60} Koumantos thus argues that the element of intangibility:

“… allows for the subsequent enlargement of intellectual property. This enlargement extends the concept to (a) rights which already existed but were not systematically categorized and (b) rights newly recognized as a result of technological development - where the object of a right transcends tangible support, that right is (or should be) included in the concept of intellectual property.”\textsuperscript{61}

\textsuperscript{57} Davies, G., op cit at 14
\textsuperscript{58} Sayre v. Moore (1785) 1 East.361n., 102 E.R. 139n.
\textsuperscript{60} Ibid.
\textsuperscript{61} Ibid, at 3
The recognition in law of intangible property comes with it the question of delimitation of the boundaries or parameters of the intangible property.62 The boundaries of a physical property like land can be easily defined by setting boundary posts. Being intangible, IP lacks the advantage of reference points like boundary posts. Thus to meet the necessity of a definable boundary, IP employs certain parameters within which claims of intellectual property rights should fall.63

In copyright for example, originality is a requirement for gaining protection for a work. In patent law as well, there are requirements of novelty, inventive step, capability of industrial application64 and disclosure requirements.65 Trademarks on the other hand have the requirement of distinctiveness – i.e. the capability of a trademark to distinguish the goods or services of one undertaking from those of other undertakings.66 These requirements thus serve as boundaries within which various forms of intangible property (i.e. intellectual property) can be conceived and the attendant rights bestowed.

III.4 Concluding Remarks on IP

This segment of the discussion has built upon the general idea of property and developed further to explore the definition, historical analysis, justification, and scope for granting property rights in intellectual products. As can be realized, the same concepts of use and exclusion and arguments like the labour theory of Locke, espoused in the discourse on ‘the concept of property’ still reverberates loudly in the discourse on IPRs. Thus property, whether tangible, intangible, manually or intellectually produced or appropriated, the underlying principles of explication are linked by their rudimentary conceptual makeup of ‘use and exclusion’. The crux of the literary property debate presented above, for instance, was all about a person’s right to exclude others from unauthorized use of their intellectual creativity. Thus, the concept of intellectual property, though it has its own peculiar conceptual trappings which are quite distinct from other forms of property rights, it has been presented in a way that makes it a subset of the universal property set.

In the next segment, the discussion centres on traditional knowledge and whether it can be brought under the conceptual and legal framework of intellectual property.

IV. Traditional Knowledge

WIPO defines traditional knowledge as “… tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-

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62 Sherman, B., and Bently, L., op cit. footnote 33
63 Ibid.
64 Article 27(1) of the Agreement on Trade Related Aspects of Intellectual Property Rights
65 Article 29(1) of the Agreement on Trade Related Aspects of Intellectual Property Rights
66 Article 15(1) of the Agreement on Trade Related Aspects of Intellectual Property Rights
based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields.\textsuperscript{67}

Other terms like “indigenous cultural and intellectual property”, “indigenous heritage” and “customary heritage rights” are used to denote the same notion of traditional knowledge.\textsuperscript{75} The term ‘traditional knowledge’ is however the preferred choice of use in this article. Posey and Dutfield have identified and summarised 13 categories and embodiments of traditional knowledge.\textsuperscript{68} These include the following: knowledge of use of plant and animal species including planting and breeding techniques; forms of preparation, processing and storage of these species; knowledge of traditional classifications of useful plant and animal species; handicrafts, works of art and performances; ecosystem conservation and traditional landscaping including sacred sites; and important material culture deemed sacred and/or non-commodifiable.\textsuperscript{69} It can thus be argued that traditional knowledge embodies the stock of tradition-based information systems held and used by communities to ensure their sustenance and livelihood in a given environment.

\textbf{IV.1 Synopsis of Concepts}

Some concepts arise in the use of the term ‘traditional knowledge’, and synopses of these concepts are given below.

\textit{a. ‘Traditional’}

‘Traditional’, as used in the term ‘traditional knowledge’ does not denote antiquity or the lack of technical basis.\textsuperscript{70} It is used to reflect the custom-based nature of knowledge creation, preservation and dissemination that is peculiar to the culture of a given community or communities.\textsuperscript{71}

\textit{b. Traditional Societies/Communities}

Some see traditional societies/communities as “tribal populations that are outside the cultural mainstream of the country in which these people live and whose material cultures are assumed to have changed relatively little over centuries or even millennia.”\textsuperscript{72} This view is narrower than the more inclusive view that also sees societies whose traditional knowledge has not been


\textsuperscript{69} Ibid.


\textsuperscript{71} Ibid.

\textsuperscript{72} Dutfield, G., Protecting Traditional Knowledge and Folklore, ICTSD, June 2003, http://www.ictsd.org/downloads/2008/06/cs_dutfield.pdf, at 21, (viewed on 25/11/14)
eradicated by the process of urbanisation and westernisation as traditional societies/communities.73

c. Traditional Knowledge and Folklore
Prior to the use of the term ‘traditional knowledge’, ‘folklore’ was the term used to represent the creations of traditional societies. In 1985, WIPO and UNESCO convened a meeting of a Group of Experts on the Protection of Expressions of Folklore by Intellectual Property. They defined folklore as:

“... 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.”74

The use of the term ‘folklore’, however, generated a lot of debate bordering on its appropriateness. Some objections to the use of the term focused on its narrowness in defining the creations of traditional societies.75 The focus on artistic, literary and performing works in the definition of folklore, did not reflect the conception of folklore as an all-encompassing cultural heritage in places like Africa.76 There was also the view that ‘folklore’ was used to refer to the intellectual creations of indigenous peoples perceived (especially in the western world) as culturally inferior and as such the term was not an appropriate one to represent their intellectual creativity. The term ‘traditional knowledge’ which has gained wide currency of usage and acceptance addresses, inter alia, the concerns of narrowness in the definition of folklore. While embracing artistic, literary and performing works, traditional knowledge goes further to embrace the knowledge of traditional societies in other areas like medicine, agriculture and ecology.77 This makes it a more ‘holistic’ term.

d. Traditional Knowledge and Indigenous Knowledge
Indigenous knowledge is a descriptive term for knowledge held and used by indigenous communities, people and nations.78 Indigenous peoples are at present non-dominant members of the society, who have a historical continuity that predates later habitation by ‘pre-invasion’ and pre-colonial societies and who identify themselves as distinct from the other more recent habitants.79 As

73 Ibid.
75 Ibid.
76 Ibid.
77 Ibid.
79 Ibid.
people whose presence in a territory predates more recently arrived populations
with their own distinct dominant cultures, the knowledge held by indigenous
people is also distinct from that of the more recent populations. Knowledge
held by indigenous peoples is indigenous knowledge. However, knowledge
held by indigenous people and other recent populations can together be termed
as traditional knowledge. Thus indigenous knowledge may be traditional
knowledge depending on the configuration of the knowledge holders but
traditional knowledge is not necessarily indigenous knowledge.81

e. Traditional Knowledge Holder

Traditional knowledge holders are those who hold and/or use traditional
knowledge and the community that has a stake in the knowledge.82 The
knowledge may be held by an individual or group of individuals who are
creators and/or custodians of such knowledge. Access to the knowledge may
also be either restricted to an individual or groups of individuals or it may be
accessible to the entire community. Traditional knowledge holders are
originators, creators and practitioners of the knowledge they hold.83 Examples
of some traditional knowledge holders are medicine men and women, healers,
priests or priestesses, chiefs, family heads, secret societies and breeders.

Secret societies for trades like farming and hunting in Nigeria for instance,
were bound by oaths of secrecy and thus, access to information was restricted
to only members of such guilds.84 The very influential Obgoni secret society of
Nigeria operated in similar fashion and apart from its political, economic and
social authority, it also possessed medicinal knowledge that was restricted to
only members of the society.85

In instances where the traditional knowledge is in the community’s public
domain, the knowledge holder is the community in general. It is important to
establish the various forms of custody of traditional knowledge, as they are
crucial in establishing claims of knowledge creation, ownership and protection.
The fact that knowledge is in a community’s public domain does not
necessarily denote a general public domain as perceived in western conceptions
of IP.86 Other outside communities may be restricted from access to a
community’s traditional knowledge that is in its public domain.87

80 Mugabe, J., ‘Intellectual Property Protection and Traditional Knowledge: An Exploration in
(accessed on 24/11/14)
81 Ibid.
82 Hansen, S. A. and Van Fleet, J. W., op cit, footnote 70, at 44.
83 WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge,
op cit, footnote 67, at 26
84 Dennett, R. E., ‘The Ogoni and Other Secret Societies in Nigeria’, Journal of the Royal
85 Ibid.
86 Dutfield, G., op cit., footnote 72, at 24
87 Ibid.
IV.2 Nature of Traditional Knowledge
Traditional knowledge has its own forms of peculiarities that are innate to it because it reflects the specific traditions that create it. In exploring the nature of traditional knowledge one does so advisedly and with caution so as not to present generalizations that may not be consistent with different traditional creations of knowledge by different traditional societies. Thus, it may not be unequivocally said that the innate constituents of traditional knowledge are the same in every traditional society. However, some common innate threads can be woven through traditional knowledge no matter how diverse the societies that create it.

a. Collective and Individual Authorship/Creation
As established earlier, individuals, groups or the community as a whole may have custody of traditional knowledge. There is a lot of emphasis on collective authorship, creation, custodianship and dissemination of traditional knowledge. This collective nature of traditional knowledge does not however preclude any notions of individualized authorship, creation or custodianship of knowledge. Notions of individualization of knowledge in traditional societies are however different from the western commercially motivated individualization of knowledge.88 Barsh thus argues that:

“Indigenous peoples generally think in terms of the freedom of individuals to be what they were created to be…. Along with this highly individualized notion of ‘rights’ is a sense of unique personal responsibilities to kin, clan and nation. Each individual’s ‘rights’, then, consists of freedom to exercise responsibilities towards others, as she or he understands them, without interference.”89

A very practical example that illustrates the individual’s obligation to the community in their intellectual creativity is the Australian case - Yumbulul v. Reserve Bank of Australia.90 In this case, representatives of the Galpu clan argued in the Australian Federal Court, though unsuccessfully, against the reproduction of the design of a clan’s man on a commemorative banknote. The design depicted a Morning Star pole, which according to the clan representatives, the artist obtained authority and knowledge to create through initiation and revelatory ceremonies. The artist thus had an obligation to the clan not to use the design in a culturally offensive way or to allow others to do the same. In this particular case, though the artist created the design, and under Australian copyright law, he could dispose of it any way he saw fit as his intellectual property, in the customary law of the clan, he was bound by an obligation to the clan as to how to use and dispose of his artistic designs.

88 Ibid.
89 Cited by Dutfield, G., op cit., footnote 72, at 24
90 Yumbulul v. Reserve Bank of Australia (1991) 2 I.P.R. 481
In a lot traditional societies whether authorship or creativity is collective or individual, the obligatory focus of that authorship or creativity remains communal in nature. There is a strong emphasis on fiduciary principles that make alienation and commodification relatively proscribed.

b. **Development and Transmission of Traditional Knowledge**

Traditional knowledge is developed and transmitted from generation to generation in traditional societies. A lot of traditional societies do not have an indigenous literate culture and as such the knowledge created in such societies is developed and transmitted in an oral form. This however does not mean that traditional knowledge is necessarily unwritten as some societies that create it developed a literate culture and as such their traditional knowledge may have been codified. Traditional Chinese society for example developed a strong literate culture and it would be inconceivable to think that its very strong traditional medicinal knowledge was never codified. Also, oral forms of traditional knowledge can be codified. Traditional knowledge of plants and their uses for example, can be codified in ethno-botanical databanks.\(^{91}\)

Having established the fact that traditional knowledge may be in written or unwritten form, it is important to stress that it cannot be reduced to mere possession of information by the traditional knowledge holder. As Mugabe argues:

\[\ldots\] one who possesses knowledge usually has skill and experience in the particular problem domain but one may possess information without experience and skill. Knowledge (whether indigenous or non-indigenous) is associated with practical experience and skill in solving a particular problem while holding information (for example, about indigenous activities) does not necessarily endow one with skill and experience in solving a problem.\(^{92}\)

Though traditional knowledge is normally knowledge handed down from one generation to the other, it is however not static. It undergoes change and modification as each successive generation of traditional knowledge holders have to use the knowledge received to meet their needs in their given time and space. Knowledge is thus received, modified and recreated and all these processes together form the corpus of traditional knowledge.

c. **Traditional Knowledge - Just One Segment of a Holistic Worldview in Traditional Societies**

In a lot of traditional societies, traditional knowledge is inseparable from religious practices. Some traditional healers for instance perform religious practices as part of the healing process while administering herbs that possess curative properties. For the western observer who may view medicinal

\(^{91}\) Mugabe, J., op cit. footnote 80

\(^{92}\) Ibid.
knowledge as secular, religious practices bound up in the administering of curative herbs by traditional healers may seem a meaningless hocus-pocus. Some may even see these religious protocols as just a way of instilling a placebo effect. William T. Jarvis, a former president of the National Council Against Health Fraud based in the US observes that:

“A culturally significant setting can also produce a potent effect, as folk healers know well. Effective settings can be as divergent as the trappings of an oriental herb shop to Asians, a circle of witchcraft paraphernalia to a primitive tribesman…” 93

To Jarvis, the religious protocols practised by a traditional healer constitute ‘witchcraft paraphernalia’ and the traditional healer (‘folk healer’) is characterised as ‘a primitive tribesman’. Much as consumers must be made aware of quacks claiming to possess cure-all medicines, the very depiction of ‘folk healers’ by Jarvis is just one example of how some western observers view the medicinal practices of traditional communities. Such views, however, fail to recognise the fact that in a lot of traditional societies, their worldview is not compartmentalised into the secular world on one hand and the spiritual on the other. 94 The physical world and the spiritual world form a whole. Thus what might seem a mere mundane undertaking like farming or medicine is bound up in observance of religious practices. 95

Ecosystem conservation practices in traditional societies for instance also reflect the holistic nature of traditional knowledge. Conservation of certain plants and animals were ensured through limitation of access to sacred grooves and forests. 96 The use of ‘taboo days’ for fishing and hunting in traditional Ghanaian communities is an example of how traditional societies promoted ecosystem conservation by guarding against over-exploitation of resources. 97 The ‘taboo day’ practice fits perfectly within a regulatory paradigm of resource use to prevent the tragedy of the commons scenario. Notions of rights based on the principles of use and exclusion thus persisted in traditional societies albeit in their own culturally specific forms.

V. Exploring Similarities and Divergences between Traditional Knowledge and Intellectual Property

Dutfield posits that traditional societies have their own ‘intellectual property’ systems and their customary rules that govern access to, and use of knowledge have a lot of similarities with western-based intellectual property systems though there are major differences as well. 98 The main thrust of this segment of

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95 Ibid.
96 Ibid.
97 Ibid.
the article is to explore these similarities and differences between traditional knowledge and intellectual property.

V.1 Authorship/Inventive Step - Individual Creativity vs. Communal Cumulative Creation

Western conceptions of intellectual property place a lot of emphasis on individual authorship and creativity as against communal authorship and creativity in traditional societies. As such, there is a great deal of emphasis on the individual’s rights over his/her works and not that of the community’s. In traditional societies however, knowledge creation is communal and cumulative in nature because knowledge is developed and handed down from one generation to the other. Each generation contributes to the corpus of knowledge by addition or reformation. A difference between traditional knowledge and western conceptions of intellectual property is thus noticeable from the outset. A closer look however reveals that this seeming difference may just be superficial. Boyle for instance argues that:

“The romantic vision of authorship emphasizes creativity and originality and de-emphasizes the importance of sources, genre, and conventions of language and plot. Thus when economists and legal scholars come to do their analysis, most of them see the issue as the extent of property necessary to motivate and reward the creative spirit, rather than the extent of the public domain necessary to give the magpie genius raw material she needs.”

The emphasis on individual creativity and originality in the western conception of intellectual property thus overlooks the cumulative communal knowledge that the individual draws from. Individual creativity is thus a product of communal creativity. Zemer thus argues for “the need to evaluate authorship in a social context”.

As presented earlier, the emphasis on the social context of knowledge was one of the foundational persuasions of the objectivist/utilitarian school of thought, hence Condorcet’s assertion that literary property “...is a property founded in society itself. It is not a true right; it is a privilege.” The arguments in favour of individual authorship and creativity draw their philosophical underpinnings from Locke’s labour theory which places emphasis on private ownership of property through labour instead of communal ownership. Thus, communal knowledge or creativity is akin to Locke’s ‘commons’ and alienation of that knowledge through individual labour then legitimizes the western intellectual property conception of individual authorship or creativity.

98 Dutfield, G., op cit., footnote 72, at 24
100 Zemer, L., op cit, footnote 55, at 69
101 Cited by Hesse, C., op cit, footnote 25 at 36
It must be noted, however, that individual authorship is not alien to traditional societies. There is, however, a strong emphasis on communal responsibility even in individual creativity as depicted in the *Yumbulul* case cited above. Thus, western intellectual property conceptions and traditional knowledge in traditional societies both have individualist and communalist components. It appears that the differences have more to do with the choice of emphasis – i.e. individual or communal – which may be a reflection of culture, policy choices of knowledge resource allocation or historical contingencies of economics, politics and technological development.

Perhaps one of the marked differences between western intellectual property forms and traditional knowledge has to do with the secularization of knowledge. Some forms of traditional knowledge ascribe authorship or creativity to spirit beings and not humans. This presents a sharp distinction between the two, in that, intellectual property owes its very existence to a departure from the notion of divine source of knowledge, to the notion that humans are creators of knowledge. The Kimberly Aboriginal people of Australia for instance could not prevent the use of the Wandjina spirit logo by a surf company under Australian copyright law, because the art work used in the logo is believed by the Kimberly people to have been created by their creator ancestors. Since human authorship could not be established, protection from culturally offensive use could also not be prevented since no law in Australia prevents the commercial use of the art work of a spirit being.

**V.2 Ownership - Individual vs. Communal**

Closely related to the concept of authorship, is the concept of ownership. In section one of this article, it was established that expressions of ownership denote rights of use and exclusion. Individual/private proprietary rights in western IP norms thus denote rights of the individual to exclude all others in society from unauthorized use of his/her intellectual property. Conversely, the emphasis on communal ownership of knowledge in traditional societies, denotes rights of the community to prevent the access to and use of knowledge resource by the individual to the exclusion of the rest of society.

Consequently, in traditional societies, the “... individualized notion of ‘rights’ is a sense of unique personal responsibilities to kin, clan and nation” instead of the right to exclude society from access to and use of knowledge. Communal ownership does not however denote common access and use, as traditional societies maintain rules that govern access to and use of knowledge. Communal/collective ownership is nonetheless, not alien to western intellectual property formulations. Collective marks and geographical

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102 Hesse, C., op cit, footnote 25 at 26
104 Cited by Dutfield, G., op cit., footnote 72, at 24
105 Ibid.
indications of origin are examples of collective forms of ownership. Any producer of sparkling wine in the Champagne region of France for instance, has the right to use the name ‘Champagne’ in the marketing of their product. The trade name ‘Champagne’ could thus be said to be collectively owned by the wine producers of that region because of the specific geographical quality of their sparkling wine.

V.3 Traditional Knowledge and Intellectual Property as Knowledge Goods
Cottier and Panizzon have argued that intellectual property law in general “…assigns exclusive rights to the use of information for economic gain in order to solve problems of appropriability and to avoid market failure.” Knowledge goods thus have commercial and social importance and ensure that both the society and the knowledge creators obtain mutual benefits. This justifies the passing of laws to protect knowledge goods from piracy. Traditional knowledge is of great commercial and societal importance. Various forms of traditional knowledge have been pirated for commercial purposes because of their value as knowledge goods.

In the area of copyrights, as presented earlier, Geller proposed the hypothesis that: ‘Only when media technology and market conditions made piracy profitable could copyright arise’. Thus piracy is intimately linked to the commercial viability of the pirated good. There is no benefit to the pirate if what he/she pirates is of no commercial value. The commercial viability of the pirated product also signifies that it is of societal value. Thus the piracy of traditional knowledge is enough proof that it is knowledge good and as such not very different from other forms of knowledge goods protected under intellectual property law.

There could be the counter argument that traditional knowledge is knowledge in the public domain and as such its appropriation is not piracy. However, the WIPO Fact Finding Mission on Intellectual Property and Traditional Knowledge observed that, “…numerous indigenous and local communities have protocols for protection of TK and TK-based innovations under customary law”.

Thus in traditional societies, if knowledge is not in the public domain then its unauthorised appropriation is tantamount to piracy.

VI. Conclusion: Is Traditional Knowledge Intellectual Property?
The main thrust of all claims to property, whether tangible or intangible, has to do with rights of use and exclusion. Expressions of ownership are proxies that denote our rights to use a resource and our rights to exclude others from using a

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107 Geller, P. E., *op cit.*, footnote 31, at 210
108 *i.e.* traditional knowledge
109 WIPO Roundtable on Intellectual Property and Traditional Knowledge, *op cit.*, footnote 74, at para. 8
resource. These same principles are foundational in the conception of IP and are extendable to the arguments for the protection of traditional knowledge. Traditional knowledge is a knowledge good owned by traditional societies. Customary laws and taboos as stated earlier, are used to either include or exclude others from using this knowledge resource. Thus the same principles of ‘use and exclusion’ employed in the explanation of property rights and more importantly IPRs, are also applicable to traditional knowledge.

The concept and the fact that knowledge can be owned as property, is perhaps the most important issue, and such concepts are not lacking in traditional societies. Dutfield for instance argues that:

“... concepts as ‘ownership’ and ‘property’ - or at least close equivalents to them – also exist in most, if not all, traditional societies. In fact, many traditional societies have their own custom-based ‘intellectual property systems, which are sometimes very complex. Customary rules governing access to and use of knowledge do not necessarily differ all that widely from western intellectual property formulations, but in the vast majority of cases they almost certainly do.”

The variations that exist between western IP systems and traditional society IP systems (i.e. traditional knowledge) have their roots in the different cultures that have created these IP systems. Fundamental issues like “who owns or creates knowledge”, are policy choices that individual societies will have to make (or have made) based on the needs and world views of their societies. Individual/private ownership in western conceptions of IP as against collective ownership in traditional societies for example, is a matter of policy option of allocative rights that serve the particular needs and persuasions of each society. They are also a result of historical developments that have taken place in different times, cultures and spaces. The historical contingencies that impacted upon the development of IP in western societies are not the same as those that have impacted on that of other societies. As such, the policy options as regards information management and rights of use, access and exclusion would be significantly different.

For instance, in Demsetz’s defence of private ownership of property as a way of solving problems of externalities (presented above), he argues that sympathetic feelings and attachments to kinship cannot effectively and efficiently deal with resource allocation in modern sophisticated economies. He however attests to the fact that resource allocation based on sympathetic feelings and kinship can, and do exist. Resource allocation in traditional societies is more organised along the lines of sympathetic feelings and

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110 Dutfield, G., op cit., footnote 72, at 24
111 Demsetz, H., op cit., footnote 19
112 Ibid.
attachment to kinship, clan and community. This system of knowledge resource allocation served the peculiar needs of traditional societies. However, if the knowledge of traditional societies has become commercially viable goods in a sophisticated, westernised global economy, then there should be commensurate regimes (be they IP law or *sui generis*) at the national and international levels, to ensure that differences in information resource management do not result in the piracy of the intellectual property of traditional societies.

Also, the boundaries of IP have not been static and its extension to traditional knowledge will not be a conceptual anathema. As Koumantos argued, the element of intangibility in the conception of IP, enlarges it to embrace “… rights which already existed but were not systematically categorized”. Within traditional societies, rights of ownership exist in traditional knowledge. These rights have not been systematically categorized under IP regimes, and being intangible, their categorization under IP regimes cannot be conceptually or practically proscribed.

Ironically, while the debate rages on the issue of whether traditional knowledge is intellectual property, knowledge pirated wholesale from traditional societies is being patented in some western countries under IP regimes. The question then is: if traditional knowledge does not fit within the concept of intellectual property, how come when it is pirated it can be protected under intellectual property law?

The issue of piracy was at the heart of the literary property debate that precipitated the recognition and development of proprietary rights in intellectual products in 18th century Europe. Piracy of traditional knowledge, *inter alia*, is now at the heart of the debate on its protection. What was good for the European goose must surely be good for the traditional society gander. As Naomi Roht-Arriaza has observed:

“[T]he appropriation of the scientific and technical knowledge of indigenous and local peoples, of the products of that knowledge, and even of the genetic characteristics of the people themselves has become both notorious and contested. It forms the heart of current debates about conservation of biological diversity, indigenous rights, and genetic resources in agriculture.”

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113 Koumantos, G., op cit, footnote 59, at 3
It must be noted however that, there are some aspects of traditional knowledge whose protection may not fit into the conceptual boundaries of IP no matter how far these boundaries are pushed. Claims of divine or spiritual source of knowledge or creativity in some traditional societies may make such knowledge or creative forms quite difficult to fit into IP conceptions. IP laws protect against unauthorized use of the intellectual creativity of humans and not that of ‘other worldly’ beings or the divine. As presented in the historical analysis of IP, it owes its very genesis to a departure from the conception that humans are mere transmitters of divine knowledge. Thus, to fit some of these conceptions of other worldly sources of knowledge and creativity into IP would be tantamount to rewinding IP into its primordial existence. This however does not detract from the fact that other sue generis proprietary systems can be created to protect forms of traditional knowledge that may not fit well within the boundaries of IP. As argued earlier, IP can be viewed as a subset of the universal property set. Consequently, sue generis systems can still draw from the universal property principles of ‘use and exclusion’, and can thus become ‘co-subsets’ with IP in a universal property set.

From the various discussions and arguments posited above, the position advanced in the conclusion of this article is that traditional knowledge is intellectual property. Traditional knowledge may not be definable in all its forms under western conceptions of IP, but this does not diminish the fact that it is the intellectual property of traditional societies.