

Indigenous peoples, corporate power and the knowledge economy: The law and politics of knowledge protection

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1 INTRODUCTION

This article examines the law and politics pertaining to the protection of knowledge systems at the local and international level. The last decade has seen greater moves towards the protection of information and knowledge systems at a global level. The overriding concern is to create a homogenous regime for the protection of knowledge across the globe. The intellectual property (IP) law system is undoubtedly the dominant knowledge protection mechanism in the global system and the dominant legal normative in this area. The IP system has grown in significance with the advent of the Agreement on Trade Related Issues of Intellectual Property (the TRIPS Agreement), established under the auspices of the World Trade Organisation at Marrakesh in April 1994. The TRIPS Agreement has institutionalised minimum standards for the protection of intellectual property rights.

However, this global picture belies the contradictions and conflicts that pervade the issue of knowledge protection in different parts of the world. This article demonstrates that far from being the 'accepted' system, as the TRIPS Agreement might seem to imply, knowledge protection and intellectual property law, in particular, generally continue to be contested terrain. The article explores the politics involved in the protection of knowledge with special reference to indigenous knowledge systems (IKS). The underlying causes of the problems have as much to do with the legal niceties as with the politics and other wider aspects that are all too often lost in the maze. The 'legal niceties' refer to the technical problems of applying IP law in its traditional formulation to knowledge systems that do not meet its requirements. A vast body of literature on the problems of applying IP law to IKS already exists.¹ This article considers the wider issues that can be classified under the rubric of 'the politics of knowledge protection'.

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1 The technical problems of fitting indigenous knowledge systems into the parameters of intellectual property rights protection have been the subject of extensive scholarship.

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The centrality of knowledge in today's global economic set-up has given rise to what has been termed the 'knowledge economy' in which the weight of global economic activity is shifting towards knowledge-oriented services.² Indeed the "economics of knowledge in the emerging global knowledge society has seen some life sciences companies enter into partnerships with indigenous groups".³ This has placed knowledge at the centre of economic conflicts and has exacerbated the old struggles pertaining to the ownership, use and distribution of knowledge that has existed from historic times. The role of corporations in the politics of knowledge protection is also explored in this article.

The article concludes that the politics that are characterised by contests inevitably lead to unnecessary losses of knowledge, time and resources that could otherwise be employed elsewhere. It is therefore necessary to 'democratise' knowledge and knowledge protection mechanisms. This enables us to accept the diversity of knowledge systems and thus to approach and formulate protection mechanisms which recognise difference. Ultimately this conducive environment is important for the development and blossoming of the global store of knowledge. In pursuit of this goal the analysis in this article adopts socio-historical and critical approaches. This entails a historical look at the development and interaction of knowledge systems within the socio-political environment. Law is considered as an instrument of power and as a tool for both legitimating and differentiating. However, it is demonstrated that law can also be an empowering tool in the process of democratising knowledge.

2 DEFINITION OF KEY TERMS

To clarify the context within which the analysis takes place it is necessary to define the significant terms that feature in this article. Two such terms that feature prominently are indigenous knowledge systems and intellectual property law.

2.1 Indigenous knowledge systems

The concept of indigenous knowledge is difficult to capture in a single linear definition. Similar subject matter has been referred to variously as 'local knowledge' or 'traditional knowledge' while in the older days the term 'folklore' was commonly used.⁴ This terminology derives from its identification with the people who hold it, that is, people who are bound by, and can be identified as, a single distinguishable unit within a particular geographical unit with which they have a long historical connection. The

See also Huft 1995, Yano 1993 and Blakeney 1997. Ramani (2001) states: "Indigenous knowledge . . . is vulnerable . . . because it does not fall within the protection of traditional 'Western' intellectual property rights".

² Ryan 1998.

³ Drahos 2000: 245.

⁴ Many scholars in this field have considered this difficulty. Refer to Blakeney 1997: 28. See also Kuruk 1999 and www.wipo.org.

indigenous peoples share traditions in a culture that is of great antiquity, and have a special link to the lands they occupy.⁵ This distinguishes them from the other ways of life and people that have been received at a later stage within that same geographical location. Indigenous knowledge encompasses the indigenous peoples' way of life and their conceptions of the world. It relates to their conceptions of the world as expressed in artistic and oral expressions, as well as the ways in which they harness and communicate with nature to solve their daily problems. As Tuhiwai-Smith states:

Our survival as peoples has come from our knowledge of our contexts, our environment . . . we had to know to survive. We had to work out ways of knowing . . . to learn and reflect . . . we had to have social systems that enabled us to do these things. We still have to do these things.⁶

Indigenous knowledge extends to art forms, oral stories, knowledge of medicinal plants, belief systems, etc., developed and nurtured by indigenous peoples within their environments. This article is concerned with indigenous medical knowledge (IMK) which encompasses medical knowledge that has been developed in close interaction with nature.

Indigenous knowledge has historically been passed on from one generation to another through particular lines in the community. It is not antique as terms like 'traditional' or 'folklore' might imply. Rather, it is continually changing and developing over time.⁷ It can be general in the sense that some aspects are commonly known within and across communities but it is also specialised in that it is restricted to a few members in a community. Traditional medical healers hold special knowledge that is not easily available to the rest of the community.

Indigenous knowledge systems are defined in contrast to Western knowledge systems (WKS), so called because of the perception that they originate from the countries generically referred to as the 'West'. The distinction arises from the fact that the so-called WKS were introduced into the indigenous communities mostly as a consequence of the colonial encounter between Europe and other territories. The WKS claims the title 'scientific', thus assigning the 'primitive' or unscientific tag to IKS. The violent encounter and history of conflict between the WKS and IKS are elaborated on later in this article. It is this conflict that characterises and illustrates the politics of knowledge protection in the global system.

2.2 Intellectual property law

Intellectual property law is a body of law that governs and regulates the ownership, distribution and application of knowledge (or products of knowledge). IP rights define the extent of people's ownership, control of and access to the use of innovations, expressions and commercial marks

5 The term 'indigenous peoples' is itself controversial and many scholars have discussed it extensively. See, for example, Kingsbury 1998 and Date Bah 1998.

6 Tuhiwai-Smith 1999: 12.

7 Chavunduka 1994: 6.

and trade secrets, etc. In essence it is a knowledge protection regime developed in response to the demands of a particular knowledge system – a Euro-centric/WKS. Although the system's origins date back to the 18th century, it grew in stature in the 19th century and, as this article shows, has acquired a greater prominence in the last few years.⁸ The common forms of IP protection include patents, copyright, trademarks, designs and trade secrets. This article focuses on patents, as they appear to bear more relation to issues involved in the protection of IMK. It becomes clear that IP is by no means the only knowledge protection mechanism. It is, however, the most dominant, and is the one that appears to be acquiring a hegemonic influence over all knowledge systems.

This brief summary of knowledge protection mechanisms and knowledge systems sets the platform for deeper analysis of the politics of knowledge protection in the global set up. At this point we may state that there is an apparent conflict between the IP system and IKS. Accordingly, Drahos states that:

... existing IP regimes will not perform this task [protection] because they are based on cultural presuppositions that do not fit the needs of indigenous and local groups.

In light of that apparent incompatibility, the global spread of IP at the expense of other legal normative regimes gives hints of the politics that pervade knowledge protection at the international level.

3 CONFLICTS AND STRUGGLES: THE 'STRUGGLE' ANALYSIS OF THE POLITICS OF KNOWLEDGE

The predominant theme of this article is that knowledge has always been, and remains, a site of struggle between different people. To substantiate this theme a brief trip back in time is necessary to get an historical perspective of the origins of the problems and the politics of knowledge protection. We explore the hegemonic tendencies that characterise the relationship between knowledge systems and knowledge protection regimes and the struggles against this domination. After this socio-historical analysis the article concludes that there is a dire need to appreciate difference and to celebrate it by formulating knowledge protection mechanisms that are sympathetic to the diversity that characterises knowledge systems.

The politics of knowledge protection are characterised by power, manipulation and struggles over the validity, use, distribution of and access to knowledge. In particular the debate over the application of IP to knowledge at a general level is rooted in historical contests over knowledge. Knowledge differs in time and space. It is a reflection of how people at a given time and place perceive and construct (or deconstruct) the world around them. How people value knowledge and therefore protect or preserve it varies according to each society. In light of this IP is just a local

⁸ Drahos 1996.

⁹ Drahos 2000: 246.

mechanism designed with a particular local knowledge system in mind – in this case, the WKS. The hegemonic spread of this otherwise local protection mechanism therefore fails to take into account the fact that knowledge systems are heterogeneous. The introduction of the IP system is an imposition upon different and potentially incompatible systems of knowledge.

This phenomenon is nowhere clearer than in the relationship between IP systems and the IKS. As alluded to in the introduction, the technical legal problems involved in the application of IP to IKS have been the subject of much commentary. This analysis goes beyond these technical problems and considers the factors that lie behind the broader and underlying contradictions. We argue that the genesis of the problem lies at the point where knowledge systems or forms of knowledge meet. As between WKS and IKS, the meeting was characterised by violence and rupture where often the IKS was subordinated while the WKS took a dominant position. This helps to answer in part the question of how and why IP appears to have taken the hegemonic approach in the present global legal architecture.

3.1 Colonialism and knowledge: Encounter between WKS and IKS

The current problematic position can be traced to the days of the encounter between the WKS and the IKS. The WKS assumed a domineering stance and sought to subordinate local systems/IKS. Tuhiwai-Smith points out that science has always been hostile to indigenous ways of knowing.¹⁰ Western science and industry treat the living knowledge of existing indigenous knowledge and local communities as conservative, backward and primitive.¹¹ This might be clearly understood as part of the wider imperial and colonial project that ushered in and saw the blossoming of WKS. Colonialism required the complete subjugation of the colonised and that meant the annihilation of local ways of knowing and belief systems. The WKS was also politically manipulated as part of the colonial project in order to advance the broader political and economic agenda of the colonising force. According to Gordon the colonial state tried to “transfer the responsibility for healing from the rebellious and powerful African healers called *amaqqirha* to a corps of European or European trained doctors loyal to imperial authority”.¹² The dominant WKS displaced local alternatives by eliminating space for them. According to Shiva the local knowledge systems were annihilated through the “politics of disappearance”.¹³ There was no debate and dialogue.

The colonial project sought not only to destroy the local ways but also to replace them with the ‘new knowledge’ from the western academe. The

10 Tuhiwai-Smith 1999: 11.

11 Cunningham & Andrews 1998: 13.

12 Gordon 2001: 165.

13 Shiva 2001.

local systems were not recognised as 'knowledge' and according to Ngugi it was clear that the most important area of domination was the mental universe of the colonised.¹⁴ The cultural control of how people perceived themselves and their relationship to the wider world was an important aspect of the colonial project. This had the effect of subordinating the local knowledge systems.

The crucial link is that when the domination of the WKS was achieved there was a gradual extension of all attendant aspects, including protection mechanisms. The extension of power and domination of the WKS over the IKS is not a single event but a continuing process. As Tuhiwai-Smith aptly points out:

The globalization of knowledge and western culture constantly reaffirms the West's view of itself as the centre of legitimate knowledge, the arbiter of what counts as knowledge and the source of 'civilised' knowledge.¹⁵

In short the politics of knowledge protection begin with the contests over what counts as knowledge because what is not considered as 'knowledge' does not count for purposes of protection. If it is not 'knowledge' in the accepted sense, it cannot lay a claim for protection. This partly explains why there is no global framework for the protection of IKS. IKS has not been recognized as a legitimate body of knowledge deserving of protection. It is only in recent times that more recognition of it as a genuine 'knowledge' system is being extended. The UN agency, the World Intellectual Property Organization (WIPO), carried out fact-finding missions among some indigenous communities in 1998–1999 to inquire about the protection mechanisms in indigenous communities. This demonstrates the gradual recognition of indigenous knowledge as a *legitimate* knowledge system probably deserving of protection. This did not come naturally but is a result of struggles by indigenous peoples to gain recognition in various facets of global life.

At the international level protection mechanisms have much to do with the valuation of knowledge. It follows that if the local knowledge systems were being consigned to the margins, no real value could be placed on them, which in turn meant no protection mechanism could be formulated for them. Therefore, when the WKS advanced in indigenous territories, it brought along the knowledge protection mechanisms that were calculated to meet its needs. These systems were not necessarily suited to local knowledge systems, which probably explains why IP is more suited to western ways of knowing and is ill-suited to IKS.

The advent of IP systems also had implications for local knowledge protection mechanisms. Field research has demonstrated that mechanisms existed that were formulated to meet the requirements of each society. As Drahos demonstrates:

All societies have had to devise norms for regulating the ownership and use of different kinds of information . . . One can thus identify customary equivalents of intellectual property.¹⁶

14 Ngugi 1986.

15 Tuhiwai-Smith 1999: 63.

16 Drahos 2000: 246.

However, in the same way that the substantive IKS were marginalised, these local mechanisms were ignored; hence the hegemonic push of IP as the legitimate and dominant knowledge protection system. However, the fact that the local protection mechanisms have been less visible officially does not imply that they no longer exist. On the contrary, they have remained alive and still apply with varying force in the local communities.¹⁷ In fact, WIPO's recent efforts to carry out fact-finding missions on indigenous knowledge systems and customary protection mechanisms reflect the emerging challenges to the hegemony of the IP system.

The socio-historical analysis demonstrates the deep background from which the dominance of the IP system arises. The thesis is that there is a link between the growth, expansion and domination of WKS and the global expansion and hegemony of IP. Although it tends to emphasise the colonial project in political terms, in fact, the economic aspect of the IP system is even more significant in the current environment. The dominance of IP is also a demonstration of corporate power and the ever-expanding corporate hegemony in global affairs. It is an illustration of the crucial role of corporations in contemporary global politics. The protection of inventors, authors and performers has more to do with commercial rationale than with the mere recognition and rewarding of merit. The clear demonstration of this line of thought is the crucial link established between IP rights and trade under the umbrella of the WTO. The TRIPS Agreement was a culmination of intense lobbying by corporate associations, mostly originating from the USA.¹⁸ The pharmaceutical industry, in particular, was quite instrumental in the formulation of the Agreement. The corporations argued that knowledge-intensive industries need protection because of the huge amounts of money that they invest in research and development. Further, they pointed out that the only way to recover those costs was by granting limited periods of exclusive rights for the use and manufacture of their products. They were joined by the film and software industry, both of which are knowledge-intensive industries. As much as land is vital in an agrarian community, so is the ownership and distribution of knowledge in a knowledge-based economy. The increase in struggles over knowledge in the last decade might be explained by the centrality of knowledge in today's global economy. Questions around who owns or who can access knowledge have become very crucial.

3.2 Conflicts over indigenous medical knowledge

The 'scramble for knowledge' is aptly demonstrated by conflicts over medical knowledge in indigenous communities. These conflicts arise between the scientific research community and their corporate backers, on one hand, and the holders of IMK on the other. IMK has become the

17 The writer carried out fieldwork research in Zimbabwe between July and October 2001 and found that there exists a set of protection mechanisms within the local communities, which include secrecy, evasion, transfer of knowledge along strict family or clan lines, taboos, and others.

18 Sell 1998; Ryan 1999.

focus of attention between the explorers and its holders. After some years of research in the synthetic drugs arena, scientists have begun to return to Mother Nature to discover what she has in store for humankind. This involves foraging into remote and unfamiliar terrain inhabited by many indigenous peoples to search for the biological and chemical compounds that can be used to make medicinal drugs. Indigenous peoples have remained in constant touch with Mother Nature and hold many of her secrets relating to cures and treatments for many human and animal ailments. Their knowledge of the plants, animals and other organisms has become a vast pool in which scientists seek to swim and 'discover' the secrets of nature. Many times indigenous peoples have given such secrets away for nothing, while sometimes they have received token payments to placate them. As Tuhiwai-Smith points out about the Maori in New Zealand:

European conceptions of knowledge and of research have meant that while being considered 'primitive' Maori society has provided fertile ground for research.¹⁹

However, the current regime shows that indigenous peoples have lost out financially as the scientists have gone on to reap huge financial rewards from the exploitation of this knowledge. Western-trained scientists have taken plant samples and compounds acquired from or through indigenous peoples to laboratories and made drugs that are then patented as 'inventions' within the WKS.

Here again, the clash between WKS and IKS is clear and the exploitative character of WKS is evident. In essence Western-trained scientists package the medical knowledge of the indigenous communities into the form that is recognised by the patent system. The contributions of the indigenous peoples are not acknowledged or recognised. As a reflection of the wider global political struggles over knowledge, Tuhiwai-Smith adds that:

other researchers gather traditional herbs and medicinal remedies and remove them for analysis in laboratories around the world . . . The global hunt for new knowledges, new materials, new cures, supported by international agreements such as GATT, brings new threats to indigenous communities.²⁰

The President of the Zimbabwe National Traditional Healers Association, Professor Gordon Chavhunduka, has also said that:

A lot of overseas companies that have influence over some people here are flocking to Zimbabwe to bribe some traditional healers. Some of them, after being given hefty offers, will in the end give their medicines. In the end, the healer's knowledge would have been stolen.²¹

Of late there have been campaigns by indigenous peoples to protect their knowledge and for equitable sharing of the proceeds arising from their use. There have been various campaigns that increased in the 1970s and many declarations have been made at various forums. In a declaration in 1993 the United Nations dedicated a Decade for Indigenous Peoples, and the Draft Declaration on Indigenous Peoples' Rights has also been produced.

19 Tuhiwai-Smith 1999: 170.

20 *Ibid* 25.

21 *Zimbabwe Standard* 2000.

More recently, indigenous peoples' groups were well represented at the Seattle Ministerial Meeting of the WTO in 1999 and their concerns around indigenous knowledge were highlighted.²²

Indigenous peoples have also responded by withholding information or by deliberately distorting their knowledge in order to deceive and confuse the knowledge seekers. Indeed, some explorers have returned to their bases disillusioned, under the impression that indigenous medical knowledge is useless, without realising that they have fallen into a trap. This re-awakening derives from NGOs, who have:

... assessed the probity of corporate conduct concerning the utilisation of Indigenous Knowledge drawing on a moral framework of human rights and a notion of customary entitlement of indigenous groups to that knowledge.²³

Draho also indicates that the growth of distrust that has developed between indigenous peoples and corporations arises from the practice of biopiracy, whereby corporations clandestinely take and utilise the knowledge and products of indigenous peoples without reward. This distrust is indeed part of, and a manifestation of, the politics of conflict in the area of indigenous knowledge.

The power of corporations is manifested by their vast economic wealth. They are able to meet the costs of the IP system. On the other hand, indigenous peoples are not in a position to do that even if it were to be argued that technically the IP system is compatible with IKS. In order to obtain a patent, a complicated and expensive process is mandatory. A patent is a right that is created by statute and in order to obtain it the applicant must follow the procedures prescribed by the law. To get worldwide protection, which is more realistic in the field of indigenous knowledge, the procedures are more complex and expensive, particularly for people living in indigenous communities. Many people are therefore unable to apply for patent rights. Thus, besides the difficulties of meeting the criteria for the creation of the patent right, the high cost of applying for it is a huge barrier. Such a system that packages and commodifies knowledge privileges those with economic might, thus allowing them to have control over knowledge at a global level. Those without economic power lose control over knowledge and ultimately remain at the mercy of the economically powerful.

Another feature that distinguishes IP rights is the need to maintain mechanisms for enforcement. Unlike real property that can be physically held by an individual to the exclusion of others, intellectual property is easy and cheap to reproduce by various means. While it is essential to harness enforcement mechanisms, the investment in the enforcement of these rights is quite high. Maintaining a watch over the activities of other actors around the globe and pursuing judicial and administrative actions to stop infringement are not only expensive, but can be a virtually impossible task for people living in indigenous communities. IP law was not

22 Wilder 2001: 516.

23 Draho 2000: 245.

designed with them and their circumstances in mind.²⁴ The costs of applying for and enforcing IP rights are prohibitive – which, in economic analysis makes it an inefficient system for indigenous peoples. However, since corporations are economically powerful and able to bear the cost, the IP system is preferable for them as it maintains their hegemony in the knowledge battles.

In connection with the above, IP is charged with actually facilitating the expropriation of IKS. According to Tuhiwai-Smith:

Researchers enter communities armed with goodwill in their front pockets and patents in their back pockets, they bring medicine into villages and extract blood for genetic analysis.²⁵

The power theory is based on the premise that the dominant knowledge system feeds on the other knowledge systems. In a situation in which the knowledge protection mechanism is suited to a particular knowledge system, it tends to ignore developments in other knowledge systems. As a result it will honour the claims of one knowledge system and not those of others. In the present scenario the achievements of the Western scientist in the laboratory will gain the recognition and protection of the IP system, yet an indigenous practitioner's achievements, in his own way, will not get official recognition. Rather, they become a resource that can be exploited by the scientist to advance his own knowledge system and consequently, his claims. This is either because the level of achievement in an indigenous knowledge system does not fit the intellectual property system's requirements, or because the indigenous practitioner does not have the means to advance his claims through the IP system. In that sense, IP law becomes a means by which indigenous knowledge is expropriated, repackaged and commodified to meet the demands of the market.²⁶ The corporations forget that the knowledge of the indigenous peoples also played a part in reducing the costs of research and development.²⁷ It is one thing to get into a forest to search for suitable plant samples; to find the correct sample is another, much harder task. That is where the contributions of the indigenous peoples, whose communication with nature stretches back in time, come in. In economic parlance this is a reduction of search costs. The economically powerful are able to accomplish their mission with ease.

In the context of corporations, WKS, indigenous peoples and IKS, some of the questions that illustrate the struggles over knowledge include:

24 This view was echoed by Chavhunduka: "We think that intellectual property was developed for Western forms of knowing and did not contemplate our own peculiar situation". Author's interview with Professor Chavhunduka in September 2001 during fieldwork in Zimbabwe. Professor Chavhunduka is the president of the Zimbabwe National Traditional Healers Association, which represents a large body of indigenous knowledge holders in Zimbabwe.

25 Tuhiwai-Smith 1999: 24.

26 Laurie (1997) argues that intellectual property law endangers and exploits the indigenous peoples.

27 Quinn 2001. www.westlaw.com.

- Whose knowledge is being extended?
- Is there an extension of one knowledge system at the expense of the other?
- Who is entitled to the rights emanating from the extension of the knowledge?

These crucial questions form the crux of the struggles over knowledge. Presently it would appear that despite using knowledge from IKS, WKSs extend their own boundaries and deny recognition of IKS's worth. Those in control of WKS ultimately get the credit for knowledge creation and the rewards that follow.

The dominance of the IP system is connected to the issues of market requirements and economic globalisation. In the west ern-style free market economy, knowledge seeks to satisfy the requirements of the market and while this has been the case in the past, it is clearly an issue of increasing significance nowadays. Similarly, the accompanying knowledge protection mechanism must adhere to the dictates of the market. In this context the pharmaceutical industry is at the center of the growth and expansion of the western scientific knowledge system and consequently its domination over other systems. The colonial state promoted the western medical system not only to manipulate it in its colonial project, but also to increase dependence on it. This required the reduction of dependence on other local systems of medicine. Similarly, the pharmaceutical industry has a huge interest in pursuing this project, through which the generality of the population becomes more and more dependent on its products and less so on alternatives. An analogous example is that of the forestry industry, which promoted the growth of the eucalyptus tree to the detriment of indigenous varieties of trees in Africa and Asia. It was touted as a fast growing and high yielding tree compared to the indigenous varieties, but in fact the expansion of its use was more a response to the requirements of the pulp and paper industry.

The dominant knowledge system (WKS) has strong connections with the goals of economic wealth creation and in some way, this distances it from the actual human needs and brings it closer to the dictates of the market.²⁸ It is promoted because it sustains the needs of powerful corporations, unlike the other knowledge systems. In fact, the other systems become resources from which the dominant system can draw 'raw materials' for its expansion. Hence the dominance of the knowledge system is enhanced not just by the state intervention but by the aid of corporate power.

4 Politics of knowledge at the international level

The global politics of knowledge are clearly amplified by the role of countries and multilateral organisations and the development of the multilateral legal framework for knowledge protection. The Paris Convention for

28 Ramani 2001. www.westlaw.com.

the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886) were negotiated in Western capitals and the original members were Western countries. They were devised in response to the prevailing industrial and economic changes in that part of the world and therefore represented the ideals and values of those societies. The establishment of WIPO as a United Nations agency was aimed at promoting the protection of IP rights throughout the world. Developing countries tried to flex their muscles through WIPO because decisions were based on a one-nation, one-vote system.²⁹ They used their numerical advantage to counter the hegemonic effects of the IP system and its proponents. This was much to the disappointment and anger of the developed countries, such as the USA, that had a growing interest in IP. The US corporations were pushing for greater IP protection. They sought to move away from the confines of WIPO and thus, over the years, there was an encroachment into WIPO's domain in IP matters.³⁰ Although WIPO has survived this hostile environment much legal power in IP matters now lies in the WTO forum.

When the Uruguay Round of the GATT talks began in 1986, the USA introduced the subject of IP and attempted to link it to trade issues.³¹ There was simmering opposition but ultimately the USA won the day. Ultimately, the TRIPS Agreement was part of the WTO bundle of agreements concluded at Marrakesh in 1994. The inclusion of IP issues within the WTO system meant that each member of the WTO is bound by the rules to adopt the minimum standards of intellectual property protection, thus almost completing the global hegemony of IP law as a knowledge protection system. This major shift from WIPO to the WTO arena portrays the wider politics of knowledge protection between developed and developing countries.

Allied to this is the use of unilateral powers by the USA to ensure compliance with the minimum standards of IP protection. The USA used its economic and political might to promote IP protection, using the infamous section 301 of the United States Trade Act of 1974 to threaten countries that failed to respect IP rights with trade sanctions, thus coercing weaker states to comply with its demands. Interestingly, even in the new global regime characterised by TRIPS, the USA has retained its powers under section 301.³² Some commentators have referred to this process as a spread of IP by coercive diplomacy. The extension of IP is quite clearly a move to secure the economic interests of the USA with the type of knowledge that is compatible with the IP system.

The North-South politics of knowledge protection is also exemplified by the Convention on Biological Diversity's (CBD's) apparent inconsistency with the powerful TRIPS Agreement when it comes to issues pertaining to IKS. The CBD was adopted at the Rio Summit in 1993 in the interests of

29 Ryan 1998: 91.

30 *Ibid* 125.

31 Wilder 2001: 516.

32 Sell 1999; Ryan 1998.

protecting biological diversity. It was recognised that IKS were vital for the preservation of biological diversity. This is because indigenous peoples' knowledge relies heavily on the existence of biological matter and therefore they have an incentive to conserve plants and animals. If, however, indigenous knowledge is appropriated and it eventually ceases to be useful, there will be little need to protect biological diversity: an eventuality that will spell doom for the environment. Thus article 8(j) of the CBD expressly provided for the protection and preservation of traditional/local knowledge systems by member states. However, the USA refused to ratify the CBD. This effectively means that the country with the greatest interests in protecting IP rights has been unwilling to recognise protection of traditional ways of knowing. Interestingly, at the same time the USA was pushing TRIPS through the GATT talks, to protect iP which largely caters for the WKS. Clearly, TRIPS enjoys the greater force of the law than the CBD and has more global influence. The Workshop of Traditional Knowledge and Biological Diversity held in Madrid, Spain in 1997 conceded that the CBD's article 8(j) failed to provide adequate legal basis for protecting the knowledge of indigenous peoples. The relationship between TRIPS and CBD has been the subject of debate in WIPO, the WTO Secretariat and other forums.

The link between the IP system and trade shows the centrality of knowledge in the global economy. It also reflects the politics of knowledge protection between developing and developed countries. Trade is characterised by globalisation. Globalisation has been met with alarm and rejection in many quarters. The link between IP and trade brings the conflicts over knowledge within the broader realm of global struggles over economics and politics. Developing countries tend to see IP as a tool for developed countries to extend and reinforce their power and dominance. They want knowledge to help them in development, while developed countries claim that without IP, knowledge formation would decrease. Developing countries in turn claim equal protection for their own IKS. These knowledge systems have not received legal protection at national and international levels.

Pharmaceutical companies claim that they can use the IKS to develop new drugs for the good of humanity. Yet the evidence seems to show that these corporations respond more to markets than human requirements. *Medicens sans frontiers* (MSF) has shown that:

as it now stands a lucrative market for life-saving drugs simply does not exist in the developing world despite the fact that more than 90% of all deaths and suffering from infectious diseases occur there. Out of 1233 new drugs brought into the market world-wide between 1975 and 1997, only 13 were for tropical diseases.³³

These statistics clearly support the view that the quest for knowledge is determined more by market requirements. Indeed, the pharmaceutical giants are not as benign as they might wish to portray themselves. They want knowledge for profit and the cheaper it is to acquire, the better.

33 Wilder 2001: 525.

Hence the disputes over knowledge persist between countries and between people and powerful companies. It is all part of the politics of knowledge protection.

5 CONCLUSION

Knowledge remains contested territory. The contests are perhaps clearest over the medical knowledge of indigenous peoples. The struggles over mechanisms for knowledge protection stem from the historical contests between knowledge systems. In the current global environment the controllers of knowledge have power; hence the struggles that characterise IKS. The global hegemony of IP continues, with little pockets of resistance in its way. It is aided by multilateral organisations like WIPO, WTO and by powerful countries such as the USA. On the other side are the developing countries, which acquiesced reluctantly to the globalisation of minimum standards of IP protection.

The problem is that there are other forms of knowledge that the emergent IP law rejected, neglected and ostracised. IP law was never intended to protect IKS. At the very beginning, the whole system of WKS and IP law treated and rejected IKS as non-existent. However, WIPO appears to have taken heed of the problem, as indicated by their fact-finding missions on traditional knowledge systems and protection mechanisms in 1998–1999. More effort will be needed at more powerful levels, akin to TRIPS, if the efforts of WIPO are to bear better fruit.

The bottom line is that there is need to understand that there are different ways of perceiving the world and there are therefore diverse knowledge systems. The different epistemological foundations of IKS do not mean that they are invalid or less deserving of protection than WKS. It only means that the protection mechanisms might need to be different. Consequently, there is no single protection system that can adequately cater for all of them. Regrettably the dominance of the IP system is evidence of the current international political and economic set up: a world in which the powerful dominate, in which the powerful can ignore the existence of the 'other', indeed, a world in which the dominant seeks to impose its hegemonic influence with scant, if any, regard to the subordinated ones. That, of course, is unsustainable and unfair. The knowledge battles will continue resulting in unnecessary tensions and losses. As *Medicens sans frontières* concluded, the world is best advised that, "Market forces alone are not enough to address the need for affordable medicines or to stimulate research and development for neglected diseases".³⁴ The need to reconstruct the legal architecture of knowledge protection remains. Democracy does not only apply in political circles. When democracy is applied in the realm of knowledge protection, it is easier to notice and acknowledge difference and that way there will be movement towards the equal protection of all forms of knowledge.

³⁴ *Ibid.*

Sources

- Blakeney M "Bioprospecting and the protection of traditional medical knowledge of indigenous peoples: An Australian perspective" 19 *EIPR* 6 298-303 1997
- Chavunduka G *Traditional medicine in Zimbabwe* Harare: University of Zimbabwe Press 1994
- Chinweizu *Decolonising the African mind* Lagos: Pero 1987
- Coombe RJ *The cultural life of intellectual properties - Authorship, appropriation and the law* London: Duke University Press 1998
- Cornish W *Intellectual property: Patents, copyright, trade marks and allied rights* 4ed London: Sweet & Maxwell 1999
- Cunningham A and Andrews B (eds) *Western medicine as contested knowledge* Manchester: Manchester University Press 1997
- Date Bah SK "Rights of indigenous people in relation to natural resources development: An African's perspective" 16 *Journal of Energy & Natural Resources Law* 389 1998
- Drahos P *The philosophy of intellectual property* Dartmouth: Aldershot 1996
- Drahos P "Intellectual Property and Human Rights" 3 *Intellectual Property Quarterly* 349 1999
- Drahos P "Indigenous knowledge, intellectual property and biopiracy: Is a global biocollecting society the answer?" 22(6) *EIPR* 245 2000
- Gordon D "A sword of empire? Medicine and colonialism in Kingwilliam's Town, Xhosaland 1856-1891" 60 *African Studies* 2 2001
- Huft MJ "Indigenous peoples and drug discovery research: A question of intellectual property rights" 89 *NWULR* 1678 1995
- Kingsbury B "Indigenous peoples" in International law: A constructivist approach to the Asian controversy 92 *AJIL* 414 1998
- Kuruk P "Protecting folklore under modern intellectual property regimes: A reappraisal of the tensions between individual and communal rights in Africa and the United States" 48 *AMULR* 769 1999
- Laurie GT "Intellectual property rights and the interests of indigenous peoples" 10 *Lesotho Law Journal* 107 1997
- Ngugi wa Thiong'o *Decolonising the mind: The politics of language in African literature* London: Currey 1986
- Quinn ML "Protection for indigenous knowledge: An international analysis" in *Saint Thomas Law Review* Winter 2001
- Ramani M "Market realities v indigenous equities" *Brooklyn Journal of International Law* 2001 <http://www.westlaw.com> accessed on 26 January 2003
- Ryan MP *Knowledge diplomacy: Global competition and the politics of intellectual property* Washington: The Brookings Institution 1998
- Sell SK *Power and ideas - North-South politics of intellectual property and anti-trust* New York: State University of New York Press 1998

- Shiva V *Protect or plunder? Understanding intellectual property rights*, London: Zed Books 2001
- Tuhiwai-Smith L *Decolonising methodologies – Research and indigenous peoples* London: Zed Books 1999
- Wilder R “Global harmonisation of intellectual property”, in Fletcher IU et al (eds) *Foundations and perspectives of international trade law* London: Sweet & Maxwell 2001
- Yano LI “Protection of the ethnobiological knowledge of indigenous peoples” 41 *UCLALR* 443 1993
- Zimbabwe Standard* “Borongbo is right, says ZINATHA chief” 12 October 2000