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TRADITIONAL KNOWLEDGE and TRIPS

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Introduction

'Traditional knowledge'; 'indigenous knowledge'; 'folklore' – what is this all about, one might ask? My original interest in this topic sprung from my wider interest in regard to the agreements that are being developed at the World Trade Organisation (WTO) that are likely to have significant implications for libraries and information. These are the General Agreement on Trade in Services (the GATS) and Trade-Related Aspects of Intellectual Property Rights (TRIPS). The essence of both these agreements is to exacerbate trade on a global basis. The GATS is about exacerbating trade in services, whilst the TRIPS Agreement is about exacerbating trade in intellectual property rights. Thus, they are both enthusiastic about creating a global market environment.

The GATS is about the liberalisation of trade in services, and it quickly became apparent to me that, as such, it could threaten the state-funded provision of libraries. The implications of the TRIPS for the library and information profession is not, however, so immediately self-evident. The TRIPS agreement encompasses many different types of intellectual property rights (IPRs) but two of these IPRs are particularly relevant to the library and information profession – namely copyright and patents. However, to the extent that the profession has considered the issue at all, it has focused largely on copyright rather than patents. As the IFLA Committee on Copyright and Other Legal Matters (CLM) in its article *TIPS for TRIPS* says:

Of course, the most important type of intellectual property as far as libraries are concerned is copyright. (CLM, 2002)

This article seeks to redress this balance, and to demonstrate that the patent section of TRIPS is also likely to have significant implications for the library and information profession. This is particularly in regard to the patenting of traditional knowledge in the developing world, and the way in which large corporations are appropriating this knowledge, often without giving due recompense to the indigenous population, thus keeping those in the developing world still further impoverished. Clearly, whilst this knowledge is being patented in this way it is not likely that it will be made freely available in a local library or resource centre either for the benefit of the local indigenous population. Thus, it will lessen the ability of librarians and information professionals in

the developing world to be able to deliver a good and effective library and information service. It also goes against the professions' principles in regard to freedom of information. There are, however, also various other issues in relation to this, such as the reluctance of many indigenous populations to claim that they are the creators of traditional knowledge. Instead, many argue that it comes from God and/or Mother Nature. These topics will all be explored further in this article.

Furthermore, the patenting of traditional knowledge (TK) in the developing world cannot really be considered in separation from copyright. Therefore, this article will consider both patents and copyright in relation to TK in the developing world. It will examine the topic in general, and then consider how TRIPS impacts on the whole scene.

Definition of traditional knowledge

First of all, what exactly is meant by 'traditional knowledge'? Traditional knowledge is usually associated with knowledge that has been gathered over a long period amongst local, indigenous communities in the developing world, although it does not necessarily only apply to these communities. Weeraworawit provides a fairly general definition, whilst also emphasising that there is no internationally accepted definition, saying:

...TK is knowledge that has been developed based on the traditions of a certain community or nation. (Weeraworawit, 2003, p.159)

Meanwhile, Pushpangadan describes TK in the following way, arguing that:

Traditional Knowledge System (TKS) is a community-based system of knowledge that has been developed, preserved and maintained over many generations by the local and indigenous communities through their continuous interactions, observations and experimentations with their surrounding environment. It is unique to a given culture or society and is developed as a result of the co-evolution and co-existence of both the indigenous cultures and their traditional practices of resource use and ecosystem management. (Pushpangadan, 2002, p.1)

Martin Khor, the Director of the Third World Network makes the point that TK also sometimes has a place in modern societies, emphasising that:

Traditional knowledge is now widely recognised as having played and as still playing crucial roles in economic, social and cultural life and development, not only in traditional societies, but also in modern societies. (Khor, 2002, p.15)

Often the traditional knowledge in the developing world has been accumulated over hundreds of years. It has existed for centuries in India, for example, and has been the mainstay of India's existence in many ways, especially in regard to food and health. According to RAFI (1997, p.4), (referenced in Khor's book *Intellectual property, biodiversity and sustainable development*, 2002, p.17), 80% of the population in the world relies on food provided through indigenous knowledge of plants, animals, insects, microbes and farming systems.

The TRIPS Agreement and Traditional Knowledge

The TRIPS Agreement does not refer to traditional knowledge directly at all. However, it is clear that the TRIPS Agreement is likely to impact on TK. Drahos and Braithwaite refer to patent law and TRIPS, for example, saying that:

Patent law...has become one of the main mechanisms by which public knowledge assets have been privatized. TRIPS itself is an outcome of this process of privatization of the intellectual commons. (Drahos and Braithwaite, 2002, p.150)

Thus, the ‘intellectual commons’, which includes TK, is being patented and privatised, and then traded through TRIPS. The TRIPS Agreement is fundamentally about the trading of intellectual property rights. So, the aim is to encapsulate knowledge, information, ideas, creative works, brain-power, inventions etc (through intellectual labour) into intellectual property rights that can be traded in the market place. The interest in TRIPS is in regard to the trading of these IPRs, rather than with moral issues. The TRIPS Agreement, I am arguing, is about transforming intellectual property rights into international tradable commodities. Within this general scenario, traditional knowledge for the benefit of the local, indigenous population is under threat.

Traditional knowledge, patents and copyright in the developing world

Traditional knowledge and folklore cannot be covered under copyright, unless it is in a tangible form. This is the big problem. This means that local indigenous communities are very vulnerable. Many would not have the skills and capabilities to be able to write down what they know, and to transform it into a tangible form. Many people in these communities are illiterate. This makes it easy for large companies to come along and appropriate this knowledge and then patent it, and turn it into an intellectual property right. This is the problem that the developing world is up against. As Utkarsh says, with globalisation:

...knowledge and other public goods are rapidly being appropriated, transformed and marketed by commercial concerns, without any benefit being shared with the original producers. (Utkarsh, 2003, p.190)

Furthermore, Pushpangadan notes that:

Many traditional communities...fear that they are losing control on their knowledge systems and that outsiders are appropriating their knowledge and resources without their consent and approval. (Pushpangadan, 2002, p.2)

Denise Nicholson (2002) also emphasises how rural people are often at the mercy of large international corporations in regard to their TK, as these large corporations recognise the potential to be gained from traditional remedies, craftwork and other cultural traditions.

On the other hand, if the knowledge could be transferred into a tangible format, then it could then be protected by copyright and the creators of TK could then be recompensed. This is gradually starting to happen more. As Weeraworawit says:

In the world of information technology, satellite broadcasting and the internet, expressions of folklore have gained more economic value due to their very own creativity being preserved and refined by the indigenous or local communities.
(Weeraworawit, 2003, p. 162)

Furthermore, as Sahai says:

Copyright can be used to protect the artistic manifestations of the holders of indigenous knowledge, especially artists who belong to indigenous and native communities, against unauthorised reproduction and exploitation of those manifestations. (Sahai, 2003, p.169)

Weeraworawit argues that more continuous and balanced consultation and negotiation in general, in regard to intellectual property rights and traditional knowledge is needed, in order to improve the IPR situation for the developing world.

Apart from the fact that the west often appropriates this knowledge, and often transforms it and captures it in patents without compensating the original creators, Western law also often treats intellectual property law as part of the public domain, and thus freely available to everyone. This is, no doubt, partly because of the culture embedded within the indigenous communities themselves, with their emphasis on sharing and the community spirit. Indeed, many people in the developing world see the indigenous, traditional knowledge as being part of Nature itself, and there are many strong affinities with religion as well. Thus, many would be against any notion of people owning any of this knowledge, or turning it into any form of intellectual property right. In July 1999, 114 indigenous peoples' organisations from various countries around the world and 68 indigenous peoples' support groups, issued a joint indigenous peoples' statement on TRIPS (Tebtebba Foundation, 1999). One of their statements said, for example, that nobody:

...can own what exists in nature except nature herself...Humankind is part of Mother Nature, we have created nothing and so we can in no way claim to be owners of what does not belong to us...Western legal property regimes have been imposed on us, contradicting our own cosmologies and values.

So, people in general start to regard traditional knowledge as simply being in the public domain. But once again, this means that those in the developing world can and do suffer. Some argue that no protection should be considered for knowledge that has become part of the public domain. Nevertheless knowledge originally comes from a source, and as Aguilar (2003) says, just because it is the public domain that does not necessarily mean that the source has disappeared. So, there is surely no justification for saying that this knowledge should then be handed over, free of charge, particularly if it materialises that it is largely for the benefit of the rich, at the expense of the poor.

There has been considerable debate and thought given to the systems of protection that can be adopted to provide legal protection for the intellectual property of indigenous populations. Most of this has revolved around patents and copyright. However, as Sahai says, the problem is that there is a mismatch between the protection for finite, inanimate objects and '...flowing, mutable and variable properties of...IK' (Sahai, 2003, p.173)

Meanwhile, Aguilar argues that patents and other intellectual property rights are not really suitable for protecting traditional knowledge for both practical and cultural reasons. Aguilar says that there is a need to look for viable alternatives, otherwise those in the indigenous communities will become the 'victims of knowledge piracy' (Aguilar, 2003, p.181). He argues that a sui generis system tied to the framework that is provided by the Convention on Biological Diversity (CBD) and in Article 27.3(b) of TRIPS is needed urgently. Pushpangadan argues that developing countries should strive to develop policies and legislation that reflects the values and rights of the indigenous communities over their knowledge.

The Convention on Biological Diversity (CBD) makes genetic resources and knowledge available. The CBD came into force in 1993, and it had three main objectives. These were, the conservation of biological diversity, the sustainable use of its components and fair and equitable sharing of benefits that arise from the utilisation of genetic resources. Intellectual property rights are particularly relevant to fair and equitable benefit sharing. However, there has to be 'prior informed consent' (PIC) and mutually agreed terms of benefit sharing. But, as Utkarsh has pointed out, often corporations can easily access the material, and indeed that has happened with items such as neem, turmeric and basmati. Therefore, benefit sharing through PIC is often confined to untapped traditional knowledge or folk innovations that are confined to remote villages. The CBD has been ratified by over 180 countries and has been implemented through national legislation or biodiversity action plans. A number of mechanisms have been proposed to ensure that the acquisition of IPRs complies with the principles and objectives of the CBD. However, the CBD has not really been able to solve the problem in regard to benefit sharing of TK for the indigenous population.

Different projects have been undertaken in order to consider ways in which indigenous knowledge can be protected. Ana Salgar (2003) described a pilot project launched in Colombia by Sustainable Biotrade Programme of the Alexander von Humboldt Institute. The project aimed to devise some mechanisms for protecting knowledge, innovations and traditional practices related to the use of medicinal plants.

A substantial amount of work is being undertaken in India in order to document indigenous knowledge. Once the material is documented, it can then be protected by copyright. One example is the People's Biodiversity Registers (PBRs). To prevent biopiracy, the government of India is developing a digital database of public domain traditional knowledge related to medicinal plants. The plan is to make the database available to patent offices globally. PBRs are village-level documents of people's knowledge of biodiversity, which encompasses conservation and sustainable utilisation. PBRs are often developed by local teachers, students and NGO researchers as well as villagers, although the villagers are not usually educated. PBRs have been recognised by the Indian Biological Diversity Bill, as a means to ensure equitable access and benefit sharing

Utkarsh says that the development of the concept of the People's Biodiversity Registers provides a number of important lessons for South Asian and other countries. Traditional

knowledge can be better protected from erosion and biopiracy, for example. PBRs can also help to sustain local trade. Registration can be followed up with social incentives to preserve and share knowledge, and knowledgeable individuals can be given recognition. Finally, computerised databases can assist in the decision-making process of how to allocate a fair share of financial or other benefits, and this can be generated by using information that is in the PBRs.

Conclusion – Traditional knowledge, TRIPS, libraries and information

The TRIPS agreement does not refer to traditional knowledge specifically, but clearly the TRIPS is going to impact on TK. As it stands, large corporations in the west can easily appropriate traditional knowledge in the developing world, transform it into an intellectual property right, (in particular, it is often patented), make money out of it, but not compensate the original creators of this traditional knowledge. One very good example here is how herbs and local remedies have been patented and sold as drugs by large corporations. The TRIPS agreement will make this whole process much easier, as it is designed to encourage the trading of intellectual property rights. Indeed, fundamentally TRIPS is about transforming IPRs into international tradable commodities, whilst the GATS (the General Agreement on Trade in Services) is about transforming services into international tradable commodities. Value that is created and extracted from labour (and largely from intellectual labour) then becomes embedded in these international tradable commodities. These commodities are then sold in the market-place and profits are made – but these profits are derived from value, and value can only ever be created by labour. As Marx said:

...human labour creates value, but is not itself value. It becomes value only in its congealed state, when embedded in the form of some object. (Marx, 1887, p.57)

By this means, capitalism is sustained and perpetuated whilst labour is exploited, alienated and objectified.

Part of the problem in regard to traditional knowledge specifically though is that it is often not preserved in any tangible format, so those in the indigenous communities and the creators of the traditional knowledge are not protected by copyright. Neither are they able to protect their traditional knowledge by encapsulating it into any other intellectual property, such as a patent. This is the case for a number of reasons. Traditionally, this has not been the way in which these cultures and communities operate. And these cultures and practices have been taking place for hundreds of years – so it would involve a great change in their ways of thinking and operating. Secondly, many of these indigenous people are illiterate, so would not be able to transform their traditional knowledge into a tangible format and thus benefit from copyright protection. Thirdly, TK is often seen as just being part of the public domain, so it is not seen as necessary to document it in this way. Also, there is the assumption by many (including those in the west) that the knowledge is just there for everyone, that no-one owns it, and that there were no original creators. But obviously, there must have been some original creators at some point. Fourthly, encapsulating TK into intellectual property rights goes against some of the

ethical and religious principles of these indigenous populations, who do not think that their traditional knowledge really belongs to them (even if they created it) but rather that it belongs to God and Mother Nature. Some argue that there need to be methods, other than copyright and patents, for protecting TK.

However, some in the developing world are starting to document their traditional knowledge. One good example here is the Peoples' Biodiversity Register, which is being developed in India. This is surely an area that librarians and information professionals should be taking a lively interest in, and contributing to. They could, for example, help to play a role in endeavouring to overcome the illiteracy problem and assist with the documentation process in general. They could also seek to demonstrate the benefits that can accrue to the local population by having their TK in a tangible format. This knowledge can then be made available in the local library for the benefit of all the local population, as opposed to the benefits being transferred to rich corporations in the west. The profession should also be exploring other ways to help these indigenous communities to overcome these serious problems.

It is heartening to see that the World Intellectual Property Organisation (WIPO) and the United Nations Environment Programme (UNEP) have undertaken a study on this subject, and in particular have considered how best to recompense the local indigenous populations for the traditional knowledge that they hold. There was a report on the study in the March 2004 issue of *Managing Information*. The news report highlights the fact that:

The study suggests that there is scope for intellectual property rights to be used more effectively to generate and share more equitably both monetary and non-monetary benefits. (News report from WIPO, *Managing Information*, 2004, p.20)

The library and information profession is now, indeed, moving these issues forward. Research on the implications of TRIPS for libraries and information is currently being undertaken by Professor Myra J. Tawfik, at the University of Windsor, Canada. Professor Tawfik has been selected by the Canadian Library Association Trade Treaties Committee, and has been given funding by various library organisations. The study examines the role that TRIPS is playing in shaping domestic copyright policy, and the intention is that it will play a role in influencing the ability of libraries to provide fair and easy access to information. The study will be of interest to various international organisations that are involved with public access to information. It will provide information on the TRIPS and its implications, including the necessary information to be able to engage with trade officials. In this way, it hopes to influence the formulation of national positions on intellectual property in regard to international trade treaties.

If we want to preserve some of the basic principles embedded within our profession, then I suggest that we need to be more aware of and understand these WTO agreements, and the impact that they are likely to have on the library and information profession. Then, we will be better placed to try to do something about it all, and will enable us to go forth and try and change the scene.

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