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*Between the sacred and the secular: indigenous intellectual property, international markets and the modern African state**

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ABSTRACT

In the modern global economy, transnational corporations have become important sources of technology, market access and capital – all of which states seek in propelling economic growth. States themselves provide territory, and establish the 'rules of the game' by which corporations may operate within that territory. However, with the commodification and commercialisation of indigenous cultural and intellectual property, states are bypassed and negotiations emerge between corporations and *sub-state* actors who claim to represent population segments. May the bypassing of the state further weaken national or state identity among indigenous groups? Such is the case that may be emerging in Africa with groups who claim profits derived from the development and marketing of indigenous cultural and intellectual property. This paper explores the possibility that profit-sharing agreements between transnational corporations and sub-state groups may contribute to the widening of ethnic cleavages in African states by promoting inequalities between groups.

INTRODUCTION

In their seminal work on the changing nature of corporate-government relations, Stopford *et al.* (1991) and Strange (1996) argued that international relations theorists must move beyond the unitary state explanation of

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interstate relations. In part, structural changes in the world economy have led to a shift in international diplomacy; governments are forced to bargain, not only among themselves, but also with corporations, while corporations are forced to negotiate among themselves as well as with governments (Strange 1996: 1). Competition in the international system has changed fundamentally, forcing governments to place economic policy ahead of the traditional areas of foreign policy and diplomacy. Strange (*ibid.*: 2–3) argued that technological advances, capital mobility and improved trans-border communica tions and transportation have changed the nature of competition. Competitive pressures are forcing governments to compete more actively for world market shares while trying to accommodate each other's needs. Technological change has brought new capacity to producers to bring products to market faster. But on the downside, research costs have skyrocketed and product life cycles have dropped with the increase in technological capacity (*ibid.*: 3–4).

As a result of the structural changes in the global economy, the interests of corporations and governments have converged, with both becoming allies in the global race for economic growth. Global corporations offer a source of technology, market access and capital, all of which states seek in propelling economic growth, while states provide territory and establish the 'rules of the game' by which corporations may operate within that territory. But what happens when states are not part of 'the game', and negotiations emerge between corporations and sub-state groups that claim representation of population segments? In other words, what happens in the shadow of weak states when they are bypassed by corporations seeking new products and markets?

The modern African state is in flux; from democratic consolidations to civil wars to military *coups d'état*, the state has been a relatively weak institution on the continent throughout the entire post-colonial period. This problem has contributed to the tendency for scholars to overlook any serious role for the state on issues of indigenous cultural and intellectual property rights, and to treat the subject almost exclusively as an issue of 'group rights'. The main question of concern becomes one of state authority and group identity. Does bypassing the state in matters of indigenous cultural and intellectual property further contribute to the weakening of national or state identity among indigenous ethnic groups? Likewise, is the influx of a cash windfall from the commoditisation or commercialisation of indigenous knowledge to specific sub-state ethnic groups, and not to the general population by way of the state, likely to further destabilise the African state during such a fragile period in Africa's history? The question facing African states is: can they harness their

indigenous cultural and intellectual property to help consolidate state and national identity and to build an economic future to sustain themselves through the twenty-first century?

THE VALUE OF INDIGENOUS CULTURAL AND INTELLECTUAL PROPERTY[1]

Before presenting an overview of the appropriation of Africa's indigenous cultural and intellectual property, it will prove fruitful to discuss the theoretical and practical nature of property, both tangible (physical property) and intangible (intellectual property). Historically, property theory, which referred to tangible forms of property, held that property was not associated exclusively with possession. Rather, property is a relationship between the owner and other individuals relative to some physical item. This relationship is a right against others that can be exercised to protect the owner's property. In the case of intellectual property, or intangible property, the state must guarantee the exclusive ownership of the idea or work, artificially creating the relationship between intellectual property owners and others. Intellectual property differs from simple property in this sense because there is no way to protect it. If plans for a new product, such as a pharmaceutical compound's chemical structure, are disclosed, there is no way to prevent a person from utilising the idea. The only way to protect intellectual property is to keep it secret. In this way, intellectual property is non-exclusive because, without laws and their enforcement, it cannot be protected against others using the property once it is disclosed.

Another distinction between tangible property and intangible property is supply. For instance, all things being equal, no one can use land that has already been appropriated. Furthermore, the supply of land is finite. Contrast this with the chemical structure of a pharmaceutical product. Individuals can use that formula repeatedly and its supply will remain unchanged. People can pass the formula by word of mouth, or by printing it and giving it away; the idea's supply will never dwindle. Moreover, the cost of an additional user of an intellectual object is zero and, as Hettinger (1989) points out, modern technology can instantaneously make an intellectual object available with few limitations. Without civil law, therefore, intellectual property differs fundamentally from simple tangible property. Society establishes laws to protect people's tangible property from others. These laws assign rights to exclude others from using one's property. Similarly, intellectual property right laws give individuals the right to exclude others from using their ideas, works and inventions.

What intellectual property right laws do is give the creator the ability to alter the essential nature of many intellectual objects by eliminating the non-exclusive characteristic. To this end, intellectual property rights grant to individuals exclusive control over some object (whether literary, mechanical or procedural), which allows the possessor to exclude others, to control the output, and to establish a monopoly price within the limits that product demand will allow. People who would otherwise be free to implement another's idea must, at minimum, receive permission from and possibly pay the owner to do so. The supply of the object has thus been artificially limited by the introduction of exclusive control over distribution. Traditional theories of property reflect ideas on the distribution of diminishable, perishable or scarce property – characteristics that do not apply to intellectual objects. These objects are only made scarce by artificially imposed means, namely intellectual property rights (Ostergard 1999). In Africa's case both tangible and intangible forms of indigenous cultural and intellectual property historically have been at the centre of controversy.[2] However, as the historical context shows, and as we show later in the article, the nature and context of tangible and intellectual property appropriation is important in how each problem is addressed from a practical standpoint.

Property appropriation: the historical context

Africa has been at the crossroads of history for thousands of years – in geographic terms, in evolutionary terms and in economic terms. During the pre-colonial period, African peoples themselves were one of the sources of Western development in the form of slave labour. During the colonial period, the colonial powers ransacked African kingdoms and states for their natural resources and cultural property. In the post-colonial period, African states and their indigenous ethnic groups now confront the growing international demand for their indigenous intellectual property. The transformation of international markets has led to a revaluation of the value of Africa's indigenous heritage from such diverse items as art and architecture to indigenous medicinal secrets. Western society has shifted its views of African art and innovation, from originally one of primitivism to now one of pure beauty, grace and scientific ingenuity, bringing with it substantial implications for the African continent and the modern African state.

Historically, the victors in war appropriated cultural property as an accepted and often expected practice, though in varying degrees. During the age of the Roman Empire, the tradition after conquest was to flaunt

prisoners and treasures through the streets of Rome in a fantastic display of victory for the Roman citizens (Akinsha *et al.* 1995: xi). Centuries later, appropriation practices were linked not just to imperial conquest, but also to rising nationalism and perceived cultural superiority. French artists in 1796 signed a petition which argued that only France could provide protection to the great artistic masterpieces because of its strength and the superiority of its artists (Quynn 1945: 439). In his conquests of Europe, imperial tradition and European nationalism merged as Napoleon sought to make Paris the centre of Europe's artistic heritage. Part of French justification was predicated on the doctrine of the spoils of war (to the victor goes the spoils), but as Quynn (*ibid.*) points out, other reasons played a significant role. Napoleon highlighted French 'superiority' when he wrote: 'all men of genius, all those who have attained distinction in the republic of letters, are French no matter in what country they may have been born' (*ibid.*: 439).

In the aftermath of the Napoleonic conquests, European leaders attempted to repatriate stolen art and antiquities, but the tradition of the doctrine of the spoils of war lived on in full force. After defeating Napoleon's army in 1813, the Duke of Wellington captured a large collection of Spanish art from the French. He offered to return it to the Spanish monarchy, but upon making his offer, a representative of the Spanish king replied 'His Majesty, moved by your consideration, does not wish to deprive you of what has come into your possession by such just and honourable means' (ICME 2003). While such images conjure almost romantic images of war, this imagery dissipated in the wake of the colonial conquests of the latter part of the nineteenth century.

Indigenous cultural property and colonial control

During the conquests of the nineteenth century, the colonial powers pursued two forms of appropriation. The most common practice was for the colonial powers to ship antiquities back to the motherland as newly acquired state property. In a less common routine, the colonial powers established national museums to house the property in the colony itself. The former practice had the greatest impact on colonial territories and fuelled the modern cultural property debates about repatriation.[3] Some of the large art and antiquities collections in the British Museum are the product of colonial conquests, but the appropriateness of the British retaining those collections is now at the centre of a larger issue for those seeking repatriation. While the repatriation movement has focused on the inappropriate acquisition of the collections, for many

people the issue extends well beyond just the objects and their acquisition.

Many African rulers were not just leaders who forced their will upon the general populace; rather their credentials often originated, at least partly, in antiquity and legend, making them an integral facet of indigenous culture and identity. Hence, when African rulers were attacked, and their art and artefacts were pillaged, it was not just the removal of objects that was at stake, but also the very essence, the very soul of the people. It was not just the objects that were plundered, so too was the identity of the indigenous people. Two cases of interest, the Benin bronzes, and the Ashanti treasures, illustrate the long-term impact of plundering on cultural identity.

In 1897, the British confiscated the famous Benin bronzes after a 'punitive expedition' against the Kingdom of Benin in Africa.[4] Depending on the version of the story one is reading, the British were responding either to an unjustified killing of British trade envoys to the oba or chief of Benin, or to the forcible removal of disrespectful emissaries who had insisted on seeing the oba of Benin during sacred religious ceremonies. In either case, the British attacked and defeated the kingdom of Benin and subsequently ordered a show trial for the oba of Benin, the execution of Benin's leaders and the burning of the royal palace and surrounding villages. During the process, the British sent thousands of artefacts, including the Benin bronzes, back to England. The government auctioned most of the bronzes to foreign museums in order to recover the costs of the expedition, and placed the remaining bronzes in the British Museum (Igbafe 1979; Oronsaye 1995). The British Museum has refused a number of requests on the part of the governments of both Benin and Nigeria to repatriate those objects.

The British acquisition of treasures from the Ashanti kingdom was similar to the events that later unfolded in Benin. In 1817 British agents of the West Africa Company travelled inland 150 miles from the coast to the Ashanti capital of Kumasi, searching for gold and new trading prospects. The kingdom's leadership centred on the king or the asantehene. According to Ashanti legend, the asantehene's power derived from a Golden Stool that had descended from heaven into the hands of the first asantehene. Around 1867, conflict between the new asantehene and the British erupted over control of the former Dutch coastal fort of Elmina. The British bought the fort from the Dutch, though the asantehene, Kofi Karikari, insisted that the fort was left to him as tribute. Karikari mobilised and led his army against the British, beginning the Sargrenti War.

The British launched a 'punitive expedition' to the city of Kumasi, and plundered the city and the asantehene's palace of their treasures. The individual items, however, were not just the spoils of war, they were the embodiment of the Ashanti people. Rumours persisted that even the Golden Stool itself, which had never been sat upon nor even had touched the earth, was ransacked from Kumasi. However, those rumours proved false. While the British attempted on several occasions during their colonial occupation to find the Golden Stool, the Ashanti leaders and people protected its whereabouts. Nonetheless, the British brought other assets back to the homeland where they either liquidated them to pay for expeditionary force expenses or placed them in museums (Chamberlin 1983).

When the colonial powers took cultural property from their colonial territory, curators and the public generally considered them to be grotesque, primitive works of little value. Even when they did find value or splendour in African art and architecture, Western elites could not overcome prevailing racist tendencies. For instance, German and later British archaeologists attributed the building of Great Zimbabwe, a major trading centre and capital of the medieval Zimbabwe state, to foreign white builders, under the belief that the art and artefacts could only have been produced by a 'civilised' nation (Garlake 1982; McIntosh 1998). Such claims also gave Social Darwinists of the nineteenth century ammunition to justify their appalling claims that the colonial people were primitive, placing them on the lower rungs of the social evolutionary scale.

Into the early twentieth century, opinion slowly changed, particularly after World War II. African art had a substantial influence on Western artists such as Pablo Picasso and Henri Matisse during the early parts of the century (Willett 2003). Collectors and scholars reclassified indigenous African cultural property as masterpieces of equal value to European art. That change of opinion created an increasingly high demand for African art and antiquities, particularly during economic booms when prices tended to spike most dramatically. Hence, while the initial opinion of the Benin Bronzes was that the works were primitive and valueless, today they are considered to be among the world's finest examples of bronze and copper workings. Market prices for individual works of African art now routinely exceed several million dollars. Consequently, museums and private collectors have seen substantial increases in collection values. But the revaluation of these treasures has been a double-edged sword for African countries. On the one hand, it has placed the cultural heritage of many African countries on par with Europe's in

terms of artistic importance. On the other, that same revaluation has increased Western museum, auction house and private collector demands for antiquities from African countries, creating an environment that encourages pilfering and looting not just from archaeological sites, but also from museums and galleries in the developing countries, which we will discuss later.

Indigenous intellectual property

In much the same way that Western demand and reassessment increased values for cultural property, the same type of revaluation has increased the attention given to indigenous intellectual property from the developing world. This phenomenon, like the appropriation of cultural property, is not new. Since the age of exploration, researchers and travellers have transported plant species and acquired indigenous knowledge in using those species back to their own countries for new foods, plant breeding and other purposes. During the subjugation of the developing world, explorers often screened agricultural materials for new and useful purposes. For instance, as a result of the exploration of the New World, tomatoes found their way into Italian cuisine, and potatoes ultimately ended up as a staple Irish food. However, the opinion of Western experts in medicine and other scientific fields was that indigenous healing methods and customs were nothing more than primitive 'witch doctor' approaches to treating illness and injury. That opinion has changed in recent years, particularly in light of advances in new evaluative technology, a growing Western market for natural approaches to health, and the potential contributions that indigenous and traditional medicines can make to Western medicine. Thus the shaman is no longer the derogatory 'witch doctor' casting spells to ward off the evil spirits, but rather a healer with knowledge of traditional remedies worthy of Western respect.

Corporations and universities have long practised procuring new product opportunities by tapping traditional knowledge and practices in developing countries. But in the face of increasingly intense competition in international markets, research into untapped indigenous knowledge has grown stronger in recent years. Such research is intended to appropriate indigenous intellectual property, and to present 'new' discoveries for markets. After making the 'new' discovery, researchers obtain monopoly rights over the derivative products through patent protection. The patenting of indigenous intellectual property has occurred in many industries, but it has been most prominent in the biotechnology industry. In trying to secure sources of revenue in this competitive industry,

researchers have made bioprospecting a standard practice, raising new questions related to the appropriate ownership and distribution of benefits derived from the exploitation of indigenous intellectual property.[5] The biotechnology industry's extractions have focused on Africa's rich ethno-chemical natural resources, the knowledge of those resources, and particular African populations who possess biologically beneficial genetic characteristics. In recent years, examples of the exploitation of indigenous African knowledge and resources have included attempts to combat such wide-ranging maladies as obesity, cancer and malaria.

Western consumers' usage of artificial sweeteners to combat obesity has become commonplace, but companies are constantly attempting to develop natural and profitable sweetening agents that may be used in everything from soft drinks to bubble gum. In one high profile example, the United States government granted a patent to the Japanese Lucky Biotech Corporation and the University of California on a compound called Thaumatin, a chemical derived from two African plants, katempfe and the serendipity berry. Known and used for years by west African peoples for its sweetening characteristics, the katempfe plant provides a derivative that is much sweeter than sugar, but with no calories. Despite their prior knowledge, no profit or benefits-sharing initiatives were ever created for the indigenous people (Roht-Arriaza 1996: 919–65). According to Odek (2003: 141–81), the Thaumatin market may be worth at least $900 million annually.

Similarly, another compound called brazzein – a protein found in the *j'oublie* fruit known to the people of Gabon for years – has also drawn attention as a sugar substitute. The United States government issued the first of several patents on brazzein in 1994 to the University of Wisconsin, Madison (Wu 1998: 389). The Texas based firm ProdiGene has since engaged in research to develop genetically modified corn capable of producing brazzein on a large scale. As a result, researchers expect the corn-derived compound to be commercially available by 2007 (*Beverage Industry* 2002: 62–4). To date, the indigenous people of Gabon have received no compensation for the use of their knowledge, as Prodigene and the University of Wisconsin do not recognise any claim that the Gabonese people have to the knowledge related to brazzein.

The fight against cancer is an increasingly important area of pharmacological research, and a sector of medicine with the potential both to relieve great human suffering and to raise extensive revenue for corporations. Researchers discovered that the rosy periwinkle plant, found in its best quality in Madagascar, contains properties that combat certain types of cancer. The pharmaceutical firm Eli Lily derived two drugs

from the rosy periwinkle: vinblastine, used in the treatment of Hodgkin's' disease, and vincristine, used in the treatment of leukaemia (Hunter 1997: 129; WRI 2001). Sales of the two drugs have exceeded $100 million with none of the money destined for Madagascar. Recent scholarship, however, has called into question whether Madagascar is entitled to any of the profits, due to the alleged wide availability of the rosy periwinkle elsewhere, and that original indigenous knowledge of the plant was relative to treatments of diabetes, not cancer (Brown 2003).

As a final example, in the fight against malaria, Africa possesses two resources of interest. The first is the historical means by which African peoples treated the disease, using a variety of natural techniques. South Africa's Council for Scientific and Industrial Research (CSIR) has identified a plant used by traditional healers in Mpumalanga and Northern Provinces that works as an effective mosquito repellent (CSIR 2002). According the CSIR, profits from the patents of the mosquito repellent will be channelled through a trust fund to support the indigenous people who possessed the knowledge of it. The second is the very essence of some African people themselves: their genetic composition. Researchers have discovered that in certain African populations, hemoglobin C provides resistance to malaria, though these findings are preliminary (Pennisi 2001: 1439). Both methods to fight malaria may leave local South African populations in the same situation as those in Gabon and *possibly* Madagascar – their knowledge and resources benefiting others, while they receive no compensation.

STATES, CULTURES AND INTERNATIONAL MARKETS

The changing nature of international markets based on the revaluation of the potential value of indigenous cultural and intellectual property from developing countries has raised significant questions of both ownership and benefits for many people and states. In some cases, cultural property is a significant missing component of peoples' heritage and history, contributing to recent attempts to repatriate the property back to its land of origin. For indigenous intellectual property, the issue of bioprospecting has brought with it a two-fold problem. The first is compensation for those who developed the knowledge originally. The second is the issue of who is entitled to control the proceeds from the commercialisation of that knowledge, given the complications that the modern state and international markets have added to the ownership issue. Specifically, indigenous groups often have few, if any, rights in domestic or international markets, making their claims on benefits and profits somewhat tenuous.

For Africa, the legacy of indigenous cultural and intellectual property issues has additional dimensions and problems, given the context of both its colonial past and its current instability. New African states are in a battle to recapture the identity and heritage embodied in their cultural property. Often, the appropriation of cultural property under colonial retributive measures struck at Africa's unique sense of identity, as the appropriations were meant to sever the link between the leadership and its divine origins. Europeans plundered Africa's art and artefacts in an effort to secularise the sacred, and to destroy the legitimacy of the divine basis for Africa's kingdoms. In the modern era, external forces are again affecting Africa's identity, as the continent's indigenous intellectual property and its natural resources are now targeted as a focal point in a new global technological revolution. While those resources may be a base for economic and political rejuvenation in the wake of colonialism and the Cold War, Africans are slowly losing control of those resources in an increasingly liberalised global market in which they have little competitive leverage.

Identity and property

A major obstacle in forging a new path toward development is one that Africa has confronted for its entire post-colonial period: ethnic or group identity versus state identity. Perhaps the most persistent problem for African states has been their attempt to create a 'state identity' that supersedes the commanding strength of the group identity among Africa's peoples. Africa's indigenous groups often identify more with their ethnic or clan affiliation than with their own state; conversely, the African state has struggled to identify with all the ethnic groups or clans that it is supposed to represent. Such a problem has the potential to undermine solutions to the indigenous cultural and intellectual property problems that African states confront in international trade negotiations. The issue is particularly relevant in Africa's attempts to recapture its past. Can a state that is representative of the 'people' in name only be a voice for the repatriation of cultural property and the protection of indigenous intellectual property? Can Nigeria or Benin, for instance, be a voice for the repatriation of the Benin Bronzes when there is no 'Nigerian people' or 'Beninese people', even today in the midst of the movement towards democratic consolidation? Such representation is at best weak, given the lack of a strong national identity within these states. Furthermore, Benin's claim for the repatriation of the Benin Bronzes is even more tenuous, given that the modern day Republic of Benin occupies none of the

territory and governs none of the people which formed part of the pre-colonial Kingdom of Benin.

Western political theory and philosophy has been concerned with the problem of pluralism in society for centuries. The political philosopher Edmund Burke (1987) detailed the importance of a people's tradition when he provided a scathing critique of the French Revolution of 1789. For Burke, the idea of a state did not start with simple geography; rather it began with its people, the nation, and had a history to be built upon rather than destroyed when people confronted difficulties with their rulers. The revolutionaries in France had disowned the culture and traditions that had been established prior to 1789, which for Burke was a tragic discarding of the French forefathers. But Burke's imperative takes on an interesting twist in the case of Africa. As African groups try to recapture their past, the notion of the African state has changed dramatically from when the pillaging occurred during the colonial period. Prior to the colonial period, Africa was organised into kingdoms, states and a great variety of other political arrangements that broadly represented people or nations with a common heritage. The division of Africa into 'modern' states also divided many of those peoples or nations across different territorial states. In essence, the modern state in Africa began antithetical to Burke's logic, with geography or territory being the primary basis for the state, rather than the people or nation and its culture and heritage. When colonial powers created states in Africa, they erected boundaries that often arbitrarily divided ethnic groups and grouped many of them together though they had little or no common culture or heritage. That problem contributed to political instability in Africa, but it is also reflected in contemporary attempts to protect Africa's indigenous cultural and intellectual property.

Burke's conception of the nation is highly dependent upon time and history. It is, as he claims, '[not an] individual momentary aggregation, but it is an idea of continuity' (Burke 1782). For African states, this continuity is the component lacking in modern times. From the beginning of the post-colonial period, states in Africa had to confront the idea that they governed people who had little in common culturally or historically. The basis for 'continuity' did not exist. Mazrui (1963: 121–33) highlighted this problem when he challenged the prevailing wisdom that newly independent African states had acquired a consensus that provided the basis for the modern nation-state. In doing so, he pointed to the missing element of Burke's 'common agreement' amongst the members of the states that would subordinate some interests to a common aim. Individual groups needed to be a collective 'people'. Hence, in discussing the revolution

in the former Belgian Congo, he argued that the population had yet to be converted into 'a people', because there was a lack of 'common agreement'. It made little sense then, and even now, to speak of the Congolese 'people', when ethnic identity still trumped a common state identity.

Complicating this matter is the distribution of benefits and profits from the exploitation of indigenous cultural and intellectual property. The colonial legacy created a problem where ethnic groups may reside across more than one modern state. Hence, the groups claiming benefits from indigenous cultural and intellectual property may reside in multiple states, complicating the question of which states are entitled to compensation and which states should represent the ethnic groups involved in the ownership of the property. Domestically, African states face additional problems because they usually comprise more than one ethnic group. Can problems arise if the benefits of indigenous cultural and intellectual property are allocated to only one group within the modern African state, particularly when all groups may be in need of assistance? Additionally, should the state receive the benefits from indigenous cultural and intellectual property, excluding the creators and innovators from the commercialisation process, or sharing the benefits with them while excluding other ethnic groups that reside within the state?

Repatriation of indigenous cultural property

The art world, from museums to private collectors, has been struck by the recent torrent of litigation surrounding the Third Reich's plundering of Europe's art collections during its rampage across the continent in World War II. Ongoing research and litigation has focused on the proper ownership of the cultural property the Nazis plundered, which is further complicated by the systematic post-war re-plundering by Soviet troops and even sporadic re-plundering by other allied armies. The result has been a scattering of wartime cultural property that stretches from Russia to the United States and all points in between. Legal issues arise typically when honest buyers find out that the works they purchased were taken originally by the Nazis, and that the real owners prior to the war want the items back. European museums and even the great auction houses of Europe have been brought into disputes with private collectors over such issues.

While collectors, museums and auction houses have been receptive to the repatriation of plundered art and treasure to the victims of Nazi Germany, the same cannot be said for cultural property taken from

former colonial possessions. Many reasons abound for the reluctance to do so. Certainly one of the primary reasons is the increasing value of the objects, which we noted earlier. Another reason that officials often cite for the refusal to repatriate cultural property is the proclaimed social duty to educate citizens and preserve world culture. In fact, one strong argument against repatriation has been that many of the developing countries do not have the appropriate resources to care for repatriated art and antiquities. This matter is not just a problem of available resources, but also indicates the inequality between developed and developing states, and the clientele for cultural property that originates in the developed world versus that which originates in the developing world.

Few art experts are able to clearly identify work from the developing world, which contributes to the ease of looting that occurs in many states. The lack of records and sufficient tracking for antiquities also hampers efforts to control the problem. The issue has grown to be an international problem for many states. In Mali, the looting of archaeological sites resulted in the loss of millions of dollars worth of terracotta statutes, and at the same time historical information about its past that these objects can reveal through proper study. Despite the incredible amounts that collectors paid for these artefacts at art auctions, Mali's individual citizens have been able to sell ancient terracotta pieces for only around £60UK (Smith 2001: 16). The vast sums of money exchanged between collectors in the developed states for Mali's cultural property never trickle down to its highly impoverished people. The problem has prompted special agreements between Mali and the United States to prohibit the import of Mali's antiquities into the United States, in an attempt to cut the supply and demand for the objects (Ross 1995: 1).

Other differences between developed and developing states exist, particularly with the security and clientele associated with cultural property. Museum theft and robberies have multiplied in recent years as values in Western art markets increased. The distinguishing feature between art theft in the developed world's museums and those in the developing world has been the way in which they have been conducted. For instance, compare two art thefts that occurred: the looting of the National Museum in Jos, Nigeria in 1987, and the theft at the Ashmolean Museum in Oxford, England on New Year's day 2000. Thieves looted the National Museum in Jos of over 200 art and antiquities pieces after they offered the guards at the museum an evening dinner laced with drugs, rendering them unconscious. The items shortly afterwards appeared for sale on European and American art markets. The Ashmolean Museum was the target of a 'made to order' theft of a Cézanne painting valued

at $4.8 million. It was the only painting removed from a single room that adjoined others containing pieces by Rodin, Renoir and Toulouse-Lautrec. When museums in the developing world are robbed, it is often to take a large quantity of property, but often when thieves target museums in the developed world, they take a particular work. Again, because few experts are familiar with antiquities from the developing world, the objects from the National Museum in Jos appeared quickly on the markets unnoticed. The recognisable Cézanne painting could not be sold without drawing attention, and is therefore probably in a private collection, not to be seen for decades, if ever.

While the question of whether museums in the developed states have a social duty to preserve and to educate people about other cultures is debatable, as museums in developing countries can and do perform the same valuable service, other issues are present in the debate about the repatriation of cultural property back to the developing countries. Certainly, whether the state has the capacity to preserve and to protect the property is of interest. However, our concern is in dealing with the question of ownership of the cultural property. When the British took the Benin Bronzes back to England, the Kingdom of Benin clearly owned them. In contemporary times, is it Nigeria or the descendants of the Edo or Bini people (the original founders of the Kingdom of Benin) who have claim to the bronzes? The recent call for the repatriation of the bronzes also brings with it questions of legitimate ownership. Governments in both Benin and Nigeria have requested the repatriation of the bronzes without success. But should the requests have been honoured, the repatriation of the property would certainly raise significant problems between the two countries, if not with the Edo people. In the case of cultural property, unless groups or states plan to sell the property, the matter is one of ownership and the reclaiming of peoples' heritage. Other complications emerge with indigenous intellectual property.

ETHNICITY, THE STATE AND BIOPROSPECTING

Knowledge of plants or animals and their medicinal use or the possession of certain genetic characteristics can translate into significant gains for those in the position to capitalise on the commercial markets for them. Again, the primary question that we arrive at is: who should the beneficiary be? Industries based on intellectual property provide a mountain of examples of indigenous groups and their experiences with their knowledge or innovations. The examples are inconsistent with some groups receiving compensation for their intellectual property, while others

have not been so fortunate. The issues that such cases raise are complex, as they address problems of common and indigenous knowledge, state ownership and corporate responsibility. The primary players in these complex questions tend to be the indigenous groups, the state, transnational corporations and universities.

As noted earlier, bioprospecting plays a central role in the production process for new marketable products in the Western world. Corporations and universities invest significant resources in uncovering a potential cure for the maladies that plague Western consumers. The conflict that emerges originates when bioprospectors utilise local knowledge to 'discover' those new products. Whether the product is derived from a plant or animal, or is based in the genetic characteristics of a local population, the complexity associated with ownership of the knowledge or product immediately appears. One can easily see the problem: the corporation or university has entered the state's territory to acquire the resources or knowledge of an indigenous population. The lines of ownership have been blurred both diachronically and geographically. The indigenous people may have used the knowledge well before the advent of the modern state, but they are now citizens of that state. The corporation or university has added labour and capital to develop the product for market, but certainly could not have developed the product without the initial knowledge or resources from the indigenous group that resides in the state. The recent case of the San people illustrates some of these issues.

The San people of southern Africa over years developed a way to stave off their hunger pains for days when they hunted in the desert heat. To do so, they chewed on bits of the Hoodia cactus, which functioned actively as an appetite suppressant. In 1997, the South African government funded CSIR isolated the suppressant agent, P57, and patented it. Subsequently, CSIR licensed the patent to British biotechnology firm Phytofarm. Phytofarm then sub-licensed the patent to US pharmaceutical manufacturer Pfizer for $32 million, but maintained a direct role in the product's development (*Time International* 2001: 30). The rights to the anti-obesity drug have the potential to make Pfizer, Phytofarm and CSIR substantial profits, but initially, no one spoke of providing the San people with any royalty revenues for their knowledge of the Hoodia cactus. Indeed, Phytofarm executives claimed that the group was extinct, citing information provided by CSIR (Barnett 2001).

The San people took legal action, and within two years of the original patent announcement secured a contractual arrangement with the firms and CSIR. The agreement provides the San people with 8% of all milestone payments received from Phytofarm, and 6% of the royalties

that the South African government receives once the appetite suppressant is commercially available. Providing clinical trials are successful, annual sales of P57 are expected to top US$3 billion (*Africa News Service* 2003). Phytofarm will continue to grow Hoodia plants for purposes of P57 extraction in South Africa, with the selling rights in South Africa reserved for the government (Firn 2001: 1). The San populations of South Africa, Botswana, Namibia and Angola, numbering approximately 100,000 people, have only received $30,000 collectively so far, but expect three more payments during the drug testing period (Thompson 2003: A4).

While some of the parties in the agreement have hailed it as a major triumph for the protection of indigenous intellectual property and the rights of indigenous populations, the issues that the agreement raises may be more problematic than those solved. While in the short term the agreement appears to satisfy the claims of the indigenous population, the San people, the long-term ramifications to the San people could present problems at three different levels: (1) inter-ethnic rivalry; (2) inter-state rivalry; (3) intra-state instability.

The internationalisation of Africa's indigenous intellectual property brings with it a potential 'golden parachute' out of poverty for some indigenous groups. The underlying problem in dealing with indigenous intellectual property is that there is often no clear lineage of ownership to the idea or resource. In the case of the Hoodia plant, it is conceivable that other indigenous groups may have claim over the knowledge that the plant possesses appetite suppressant properties. As Stephenson (2003: 49) has argued, some non-San indigenous peoples could assert a claim over the knowledge of the Hoodia's properties. Such claims may create a myriad of political and ethnic alliances among non-governmental organisations, indigenous groups, corporations and the governments that will determine how those claims ultimately are exercised. The end result could pit the San people against other indigenous groups, resulting in extensive legal battles and competition for the right to claim ownership over the intellectual property associated with the plant. Such rivalries, of course, may cross international borders on two fronts. First, the Hoodia plant and other related species are not confined to South Africa, but are found in other parts of southern Africa. Second, potential rival indigenous groups with knowledge of these plants are also located outside South Africa. Hence, the ownership of such knowledge may not be isolated to a single group, and is certainly not confined to a single African state.

The issue of indigenous intellectual property ownership is further complicated when the indigenous group's population spans multiple state boundaries. As mentioned earlier, group identity in African states

TABLE 1
Population of San people in southern African states

State	San population	% of the San population
Botswana	49,000	48·85
Namibia	38,000	37·89
Angola	6,000	5·98
South Africa	4,500	4·49
Zambia	1,600	1·60
Zimbabwe	1,200	1·20
Total	100,300	100·00*

* Percentage has been rounded.
Source: WGIMSA 2003.

is often stronger than state identity amongst its people. Hence, it is conceivable that the San people do not necessarily identify with a particular African state. In fact, as Table 1 illustrates, their demographic data sustain this proposition. This shows that most of the San people reside outside South Africa, the only state that is party to the benefits sharing agreement with the San. Botswana and Namibia, which have the highest proportions of the population at 48·85 % and 37·89 % respectively, are not represented in the agreement, though their respective San populations are. Clearly, if the San people had a strong identity with their respective states, the states with the majority San populations would probably be more active at protecting both the San's and the state's interests. As it is, South Africa, which represents less than 5 % of the entire San population, negotiated the benefits agreement amongst the parties, while also securing its own interest in the matter.

In the case of the San people and South Africa, the benefits-sharing agreement excludes direct benefits to the states of Botswana and Namibia, both of which have substantial San populations and access to the Hoodia plant. The South African government, through CSIR, holds exclusive rights to the P57 compound and any derivative products that Phytofarm and Pfizer may develop. The potential windfall is in the billions of dollars, none of which will accrue to the governments of Botswana and Namibia. While the CSIR has engaged in research on the Hoodia plant since the 1960s, the claim to an exclusive right to the compound and derivative products is tenuous.

The San populations in Botswana and Namibia had knowledge of the plant's properties and access to the plant within those states. Should

South Africa have a monopoly on the knowledge of P57, because it happened to file a patent on knowledge that has been around for centuries? The question that arises is not one of whether South Africa should benefit from the research it has done since the 1960s (it probably should); rather, the more poignant question is whether Botswana and Namibia should be stripped of the ability also to utilise the resources (i.e. the Hoodia plant) within their own boundaries. Would it have been possible for the US government to prevent all other governments of the world from pumping crude oil on their respective territories, because in 1859 E. L. Drake had discovered crude oil in Pennsylvania? Private businesses and the United States government backed efforts to find crude oil and it paid off for them. Taken to its logical conclusion – albeit *reductio ad absurdum* – the United States should then have had the right to patent crude oil and to prevent Saudi Arabia from becoming one of the world's largest producers. The logic here is applicable to South Africa; Botswana, Namibia, and any other state that possesses the natural resource are effectively prevented from exploiting it or from benefiting under the current agreement.

The internationalisation of Africa's indigenous intellectual property can be a double-edged sword, and certainly raises fundamental questions about the benefits to be derived from the commoditisation of indigenous intellectual property. The issues surrounding the use of natural resources and biodiversity appear at one of the most critical times for African states. In the post-Cold War period, African states have been marginalised by states of the former Eastern bloc and the West, reducing foreign aid and leaving African states to solve many of their own domestic economic and political problems. While limiting external influence in Africa is not necessarily detrimental, the contemporary situation means that African states need to utilise their available resources if they are to emerge from this period of significant economic and political transition on the continent. The internationalisation of Africa's indigenous intellectual property can be of tremendous benefit in raising capital to assist states in this transitional stage. The potential is that the targeted resources could either be appropriated by non-African entities or monopolised by a small number of African states. Both scenarios result in an inequitable distribution of resources amongst those who may have legitimate claims to benefits derived from the intellectual property.

Inequality issues associated with the benefits derived from the internationalisation and commercialisation of indigenous intellectual property exist not just between states, but also within them. The rapid influx of

income and wealth to groups receiving benefits from intellectual property agreements could be a socially destabilising force within a state. While investigations have been mixed, scholars have established a relationship between inequality within states and political violence (Huntington 1968; Muller 1985, 1988; Nagel 1974; Rothgeb 1991). Within a few short years, the San people may go from being an extremely impoverished ethnic group to being one of the wealthiest in all of southern Africa. The social impact across the states where the San live may be inconsistent, given the level of wealth present within each country.[6] Moreover, given the level of ethnic diversity in San-populated states, the inequality between the San and other groups may erupt into forms of ethnic resentment or violence, or what may be termed *nouveau riche* violence. Can ethnic tensions rise over sudden disparities in wealth between groups? Part of the answer may lie in the role states play in the benefit agreements for indigenous intellectual property.

The San people entered into their agreement with the South African government, which is the principal beneficiary of the derivative products from P57. Hence, the state is in a position to accumulate billions of dollars that can be used to distribute benefits to all South Africans. Botswana, Namibia and the other San-populated states are not parties to the agreement, and are not entitled to share in the derivative benefits. What this means is that when the San people in these states receive their share of the royalties from P57 sales, it will be they alone who will see their wealth, status and standard of living increase, while other groups will remain comparatively stagnant. These states will not have the capacity or resources to provide similar benefits to the rest of their societies, potentially building resentment between San and non-San groups, and creating development inequalities within the state. In this sense, the state may face greater levels of social instability and a deepening of ethnic cleavages that further hinder the formation of a unified state identity amongst the population.

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The similarities in dealing with the problems associated with indigenous cultural and intellectual property are numerous, but in the case of Africa, they are compounded by questions of ownership, identity and state development. Organisations and intergovernmental groups that have called for the repatriation of cultural property have yet to establish clearly the parameters that determine the ownership of art and antiquities between indigenous ethnic groups and states, particularly when those

groups are divided by international borders. For cases of cultural property, what is at stake is the heritage, history and the very identity of the group and even the state involved. When the case involves indigenous intellectual property, the stakes can be much higher, though they start at the same point of identity.

Indigenous intellectual property has undergone a modern transformation in the eyes of the Western consumer, researcher and executive. Once considered the ramblings of backwardness and ignorance, the knowledge is now considered to be the first step down the path potentially to billions of dollars in revenue from 'new' products or processes. The modern 'scramble for Africa' has been manifested in the scramble for its cultural property and indigenous knowledge. But how are African states to cope with the domestic burdens of political and economic modernisation, and the external demands for access to their resources and markets?

Fundamentally, African states must recognise that natural resources and indigenous intellectual property are their special niche in an increasingly liberalising global market. While international regimes regulate the trade game, it is still power that ultimately provides the best deals for states within that game. As Drahos (1997) argues, a hard law or counter-coercive strategy favourable to developing countries may be a beneficial tool as part of their international trade strategies. Because Western economies have become either reliant or dependent on cultural, social or biological resources from developing states, economic coercion becomes a real possibility.

Several plans have been forwarded to deal with the problems of cultural and indigenous intellectual property at the international level. The most prominent and recent example is the 2003 Convention on the Safeguarding of the Intangible Cultural Heritage, the result of a UNESCO convention agreed to by only twenty-three states as of September 2005.[7] The Convention lacks form and substance. Only two major market economies with considerable international political clout (Japan and South Korea) have accepted it. The lack of participation in the Convention makes it politically weak, while its own provisions offer no viable enforcement mechanism. At best, the UNESCO Convention can be credited with bringing clear legal definitions to this policy area. Most of the technical procedures and guidelines within the Convention focus on the development of domestic state capacity to encourage enforcement. While legal guidelines and procedures are obviously helpful in addressing the problem in territories and populations which are the source of intangible resources, there is no clear language addressing the growing market in Western countries for appropriated knowledge. Further, the problem

is defined in a way that skirts the inadequacy of the Westphalian state system for managing such difficult cross-border, multi-ethnic issues, particularly in Africa.

Drahos (1997) suggests that developing countries need to create their own regime for the protection of indigenous intellectual property, which would be defined as broadly as possible. Protection of indigenous intellectual property outside of country would be granted only on a reciprocal basis. Eventually, Drahos argues, some developed countries would agree to such reciprocal protections. The power of such an arrangement comes from the possibility of strategic alliances between influential countries in the intellectual property rights area, such as China, India and Indonesia (*ibid.*: 209–10).

While such a plan has great appeal, particularly as a mechanism towards revising the Trade Related Intellectual Property Rights agreement of the World Trade Organisation, African states also face their own domestic dilemmas that add layers of complexity to the IPR trade issues. Drahos' solution has merit for Africa, but probably on a smaller scale than he has envisioned. Given the fact that some ethnic groups cross state lines, living in multiple states, the notion of regional intellectual property consortia between states to protect the interests of ethnic groups and their claims to their intellectual property should not be ruled out as a viable policy. But fundamental challenges still remain.

The continued problems of the weak state, divided ethnic groups and multiple claims to knowledge and natural resources pose additional hurdles to a continent already ravaged by civil war, natural disasters, corruption and the HIV/AIDS pandemic. The indigenous intellectual property that ethnic groups possess is collectively a comparative advantage for states in international markets. When corporations and universities deal directly with ethnic groups to negotiate royalty deals, the ethnic group can lose a powerful partner that can protect their interests, which should also be the interest of the state. That is, part of building a civic culture is recognising that the interest of the ethnic group should coincide with the interest of the state.[8] However, one inherent problem in African states has been the failure of ethnic groups to identify with their respective states and conversely for those states to identify all ethnic groups as their people. The problem of the nation and the state that Burke highlighted over two centuries ago is the dominant problem that Africans have confronted for over four decades since independence.

The sudden influx of millions or even billions of dollars to a single group within a state establishes the potential for further destabilisation or, at a minimum, exacerbation of the inequality problems that have plagued

African states during the post-colonial period. While the tendency has been to claim that indigenous groups are entitled to compensation for their knowledge, such claims, exclusive of state participation, are detrimental to building state identity and a civic culture that will solidify the place of the state in modern African society. Despite the ill performance of post-colonial states in Africa, the state apparatus is still the key functioning institution that will carry the continent through the twenty-first century.

NOTES

1. As the World Intellectual Property Organisation (WIPO) notes, the terms 'indigenous cultural' and 'intellectual property' are two of many terms broadly used to describe the same thing. Another term is 'traditional knowledge' (TK), defined at WIPO 2001: 25. While the definitions of 'indigenous', 'cultural' and 'traditional', are the subjects of long intellectual debate, we accept the WIPO's definitions and adopt the approach that, while there are subtle distinctions between these terms, indigenous cultural and intellectual property refer to the WIPO's conceptualisation of 'traditional knowledge'. We are also aware that Africa is historically unique in that most people on the continent, with notable exceptions, are 'indigenous' to the continent. Again, debates about the definition of indigenous groups and ethnic groups exist (e.g. Bowen 2000), but the core of these arguments is, at best, tangential to the subject of this article.

2. While this article focuses on the issue of indigenous cultural and intellectual property taken *from* Africa, the authors recognise that African states, in the modern era, have been violators of international intellectual property agreements, particularly in the area of copyright protection. Many African states have inadequate laws or enforcement mechanisms for the protection of software, music and movies, creating a substantial supply of pirated products that can be produced inexpensively in large quantities for domestic and even foreign markets.

3. The classic case in the question of repatriation has been the request by the Greek government for the repatriation of the Elgin Marbles, which reside in the British Museum (Allan 2001: 212; Baker 2003: 10; Bohle 2002; Gurstein 2002: 88; Merryman 1986; Smith 2002: 10). More recently, the United States invasion of Iraq brought world attention to the problem of preserving antiquities during wartime. While many had assumed that the museum would be completely looted, little attention was given to the actual preparations that the curators made to protect the most valuable antiquities in the museum (Farchakh 2003: 14).

4. The Benin Bronzes collectively represent 700 bronze decorative plaques that lined the Oba's royal palace walls.

5. Biodiversity prospecting, or bio-prospecting, refers specifically to the exploration of wild species, genes and their products with the goal of producing commercially valuable genetic and biochemical resources (Ostergard *et al.* 2001; Reid *et al.* 1993: 1; Sittenfeld & Gámez 1993: 69). We extend this definition to include the exploration of human genetics for such product viability.

6. Rothgeb (1991) has argued that in countries that are extremely poor, a sudden influx of foreign investment will have little or no impact on the level of political protest or violence; however, in wealthier countries, social anxiety over the future of entrenched industrial interests may provoke political protests amongst key population sectors.

7. Details of this convention can be found at: http://unesdoc.unesco.org/images/0013/001352/132540e.pdf, accessed 13.1.06.

8. We are aware that this construct overlooks the problem of endemic state corruption in the developing world; however, it should also be noted that many developed countries either still experience problems of corruption or have experienced such periods in their history. Corruption is a problem of political development itself, alleviated or eradicated through the refinement of political institutions. Hence, the building of a corruption-free relationship between state and society cannot be expected of the majority of developing countries during the brief post-colonial period, if such a relationship has not been achieved even in developed countries. See Transparency International 2005 for a survey of corrupt state and industrial practices around the world.

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