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# Gemstone mining in Madagascar: transnational networks, criminalisation and global integration

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ABSTRACT

This article examines the ways in which illicit gem mining in Madagascar indicates the highly variable impacts of globalisation in sub-Saharan Africa. It argues that distinct categories such as global/local, legal/illegal and traditional/modern have lost much of their explanatory power. Far from being distinct categories, they are indivisible and constitute a single, complex whole which produces enormous wealth, coupled with high degrees of poverty and marginalisation in precisely the same locations. It is clear that Africa's participation in globalisation has not been just about 'joining' the world economy; instead it has been characterised by highly selective forms of global connection which have been combined with highly visible and very real forms of disconnection.

## INTRODUCTION

This article examines the role of transnational criminalised networks in the gem sector in Madagascar, and shows how the very same processes that produce the exclusion and marginalisation evident in the poorest African states also create new forms of integration, especially the development of non-national economic spaces. Africa's participation in globalisation has

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not been merely about joining the world economy – it has been marked by highly selective and spatially encapsulated forms of global connection which have been combined with highly visible and very real varieties of disconnection and exclusion. As Ferguson (2006: 26) notes, 'when it comes to globalisation, Africa just doesn't fit the story line. It is an inconvenient case.' This article explores one specific way in which Africa has been integrated into the global economy, through an analysis of the inter-related global and local networks involved in informal, or extra-legal, gem trading and extraction in Madagascar. It analyses how the impact of these networks may conform to or contest the notion that exclusion and marginalisation are the *attached twin* (*ibid.*) of more conventional and positive understandings of globalisation.

Since the late 1990s, Madagascar has experienced a boom in gem mining, especially high quality rubies and sapphires. This boom has been largely driven and controlled by illicit mining and transnational gem trafficking. In 1999 a World Bank study found that US$100 million in gems was smuggled out of Madagascar in that year alone (*Focus* 2000; World Bank websites 1, 2). This article examines how such patterns of production and trade are produced by the inter-relationships of a specific locality (Ilakaka, Madagascar) with globalised networks of production and exchange. It then examines the economic, social and environmental impacts of this form of integration into the global economy, especially in mining areas. In sum, it investigates the complex and highly variable dynamics produced by globalisation, and their impacts on Madagascar. In so doing, it provides a more nuanced account of what is meant by global/local, legal/illegal, formal/informal in the context of highly interlinked networks of actors involved in the wide range of exchanges which exist outside the formally recorded economic system.

## GLOBAL NETWORKS AND GLOBAL SHADOWS

It is clear that analysing the so-called illicit economy requires us to rethink what is meant by global/local, legal/extra-legal and formal/informal. In general, these terms are used as binary opposites, but an examination of the gem trade from Madagascar indicates that they are far from being distinct categories; rather they are indivisible and constitute a single, complex whole which produces enormous wealth coupled with high degrees of poverty and marginalisation in precisely the same localities. As Callaghy *et al.* (2001) argue, the study of global politics has been infused with a fashionable framework that defines global and local as binary opposites, but this is not enough to explain new *global formations*.

Instead they argue that the really compelling elements lie silently between global and local, namely the structures and relations that emerge *in* the intersection of social phenomena that vary in range as well as in form (see also Nordstrom 2001). In turn, this means that commonly used terms such as local/global, rural/urban, traditional/modern have lost much of their explanatory strength, because sub-Saharan Africa is characterised by numerous places and processes that produce a very diffuse sense of space (materially and mentally) (De Boeck 1998: 799; 2001). In short, it is important to examine how the global and local impact on and shape each other.

In the context of sub-Saharan Africa, it is important to understand the nature of engagement between the continent and external actors. In particular, the contemporary state in Africa is characterised by alliances between elite cliques and global economic interests, including private business, NGOs, donors and illicit trading networks. Bayart (1993) explains this through an analysis of the ways in which the state-imported system by European colonisers was resisted by African societies, which resulted in a complex mix, where African states resemble a rhizome rather than a root system. As a rhizome, the state is organised along patrimonial lines which stretch through society in a horizontal fashion, and has reappropriated the institutions that originated under colonial rule. State–society relations are then characterised by factional struggles, the rhizomatic nature of the state and patronage politics. Bayart calls this the 'politics of the belly', which refers to the way in which political elites use informal and invisible networks to exercise political and economic power. Leading actors in sub-Saharan Africa have compensated for a lack of autonomy by recourse to *strategies of extraversion*, and so the global economy has been turned into a major resource for political elites in Africa (Bayart 1993; 2000: 219). For Bayart, the external environment is important in the structuration of African societies, and the strategies of extraversion are marked by the creation and capture of a rent generated by external dependency (Bayart 2000: 225; Nordstrom 2001, 2004; see also Clapham 1996).

Bayart's analysis demonstrates how sub-Saharan Africa is inextricably interlinked with the global economy. The way in which Africa is integrated with the global system has resulted in the creation of a patchwork of highly globalised areas and networks, which in turn produce real forms of exclusion and marginalisation. As Ferguson notes (2006; see also Hibou 2004), large tracts of territory and rural populations have been abandoned by African central governments, in favour of linking more closely with the economic benefits and rents made available through international integration with donors, international financial institutions, NGOs and private businesses. This is particularly apparent in the ways that resource extraction (of minerals, especially oil) is organised and carried out by interlinked networks of private companies and elite cliques in African states. The impact of such global networks is particularly important for understanding the specific patterns of globalisation and how they are manifested in material ways in sub-Saharan Africa. As De Boeck (1998) notes in his studies of diamond miners from Zaire/Democratic Republic of Congo (DRC) working within Angolan territory, rural areas can be the sites of clear integration with the global economy (through the export of stones and availability of consumer and luxury goods), while also producing new patterns of marginalisation, exclusion, insecurity and violence. For De Boeck (1998: 803; Bayart 2000), the diamond areas on the borders of DRC and Angola reinvent capitalism in their own terms. This is important for understanding dynamics of gem mining and trading in Madagascar, and how this reinvents or engages with globalisation in its own way. The dynamics of diamond production mean that rural areas which are usually thought of as inhabiting the periphery are brought centre-stage in the global economic system through their engagement with global networks of smugglers, gem dealers and traders.

In examining these forms of globalisation, it is no longer useful to concentrate on visible political and economic systems such as the state and the formal economy; instead it is more important to focus on an emergent set of shadow politico-economic systems (Reno 1998). As Ferguson (2006) argues, a shadow is not a poor copy of the original (in this case the 'formal' neoliberal economies of the industrialised world); instead the shadow is an inter-related and *attached twin* of the original. Reno's examination of the growth of informal markets suggests that that these developed partially in response to the decay of central state authority, especially in Africa's weakest states. He argues that high-ranking politicians and businessmen constitute shadow states. Furthermore, they manage to exercise significant political authority through the private control of resources in informal and illicit markets (Reno 1995, 1998; see also Nordstrom 2001, 2004; Roitman 2001). Academic research has rarely focused on the shadow networks that constitute the illicit economy. As Bayart (2000: 230) argues, it is important to understand African societies have both a *pays legal*, a legal or formal structure which is the focus of attention for donors and Western states, and an informal *pays réel* where real power lies. In examining the illicit economy, we can analyse the complex links between the formal and informal economies, criminalised networks and politics in sub-Saharan Africa (Nordstrom 2001, 2004; see also Bayart *et al.* 1999; Roitman 2001). This article now turns to an exploration of the impact of illicit sapphire mining and trading in Ilakaka, to provide an analysis of the contours and dimensions of globalisation as a process which integrates Africa with the rest of the world economy in very specific ways which can be highly destructive, but which also produce highly beneficial outcomes for some individuals and networks (De Boeck 1998).

## GEMSTONES IN MADAGASCAR

Since the late 1990s, Madagascar has become identified as a site of rich deposits of gemstones and semi-precious stones. It contains a wide variety of minerals including gold, nickel, bauxite, iron, chromite, titanium oxide, beryl and quartz. The major investors in mining in Madagascar include Qit Minerals Madagascar (a division of Rio Tinto), which is engaged in titanium dioxide mining in southern Madagascar (Rio Tinto website), and a Canadian company, Dynatec, which has invested in a nickel mine in Ambatovy (BBC website 2004; Dynatec website). Until 2003 it was thought that Madagascar had no diamonds, but in that year a mining company with an exploration permit for areas in south-central Madagascar found two diamonds of 23 carats and 9 carats each (Rakotoarimanana int.). Since then, a Canadian mining company, Majescor, has been attracted to Madagascar, after diamonds of up to 23 carats were recovered by sapphire miners engaged in artisanal alluvial diggings; Majescor has joined with De Beers to begin diamond exploration in north-western Madagascar (Majescor website). This has sparked investment in exploration by two other Canadian companies, Pan African Mining and Diamond Fields International (Pan African Mining, Diamond Fields & Resource Investor websites). However, so far, Madagascar's sapphires and rubies have been more important as major sources of revenue: the stones have been judged as the highest quality, and as global demand for coloured gemstones increases they could be a growing source of revenue to the government and private mining companies.

The government of Madagascar, with international actors such as the World Bank and USAID, has argued that if gem mining were properly regulated and carried out by international mining companies, the revenue could be used to invest in economic development for the benefit of Madagascar as a whole (Cushman int.; Razafindretsa int; Rakotoarimanana int.). This is in line with notions of 'developmental states', originally applied to East Asian tiger economies, but more recently used to describe the diamond-driven economic development of Botswana (Taylor 2003). However, Madagascar's sapphires and rubies are found in alluvial deposits, which are so accessible that organised and commercial

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mining operations are not necessary to extract them. Given this accessibility, gems in Madagascar may constitute 'lootable' resources, the extraction of which is very difficult to control. Nevertheless, the World Bank, in conjunction with the President of Madagascar, Marc Ravalomanana (elected in 2002), have embarked on an ambitious programme to attempt to gain control over gem mining.

## THE MINERAL RESOURCES GOVERNANCE PROJECT

Prior to 2002, donors and international financial institutions had little confidence in the then Ratsiraka government in Madagascar. It was regarded as highly corrupt and ineffective, and the post-independence period was marked by the development of what Reno (1998) calls a shadow state Under the Ratsiraka regime, government reluctance to control gem mining and smuggling was considered to be related to the ways that key individuals and their families benefited from the illegal gem trade. This created a perception that decision-making had been moved out of the control of the formal state apparatus and into the domain of an informal and shadow network (see Bayart 2000; Reno 1995, 1998). Madagascar is a former French colony, which gained independence in 1960, but retained close relations with its former colonial power. However, in 2002 President Ravalomanana was elected, and made it clear that he was interested in turning towards the English-speaking world, especially the USA and South Africa, as a source of economic and political support. Furthermore, his election promises included a commitment to greater economic liberalisation, constituting a significant break with past presidents who had a closer relationship with France and state-centric economic policies (IRIN website). Donors and international financial institutions (IFIs) regarded the election of Ravalomanana as a fundamental shift away from the patterns of the past, especially since he indicated a much greater willingness to deal with IFIs. However, despite the claims to increase transparency and reduce corruption, the informal networks that flourished in this period have remained important since the new government took over in 2002. These networks have been sustained by their integration with global networks, which in turn present a challenge to newly established forms of governance, such as the Mineral Resources Governance Project (MRGP).

Since the new government made fighting corruption a major theme of its administration, the World Bank responded by re-engaging with Madagascar, after suspending its support during the 2002 presidential crisis (*FT* 18.8.2001; BBC website 2005). In 2003 it provided a US$32 million loan to help the country manage its minerals more effectively, through the MRGP (administered through the Ministry of Energy and Mines). This is a five-year project which runs from 2003 to 2008 and is funded primarily by the World Bank, with further financial support from USAID, and the South African and French governments. According to the World Bank the main objective of the project is to assist the government of Madagascar in implementing its strategy to accelerate sustainable development and reduce poverty in Madagascar, through the strengthening of governance and transparency in the management of mineral resources, with special emphasis on small-scale and artisanal mining. The project has four components: strengthening transparency and governance in mining; key institutional reforms for the decentralised management of mineral resources; promoting private investment and value-added in the sector; and project co-ordination and management (World Bank website 3). This is a key shift in donor attitudes towards Madagascar; donors had been reluctant to provide much capital in the form of loans and aid to the pre-2002 Ratsiraka regime, but have been more confident about the capacities and transparency of the post-2002 government under Ravalomanana (Cushman int.; BBC website 2005). However, given that the MRGP provides the framework under which a newly installed network of elites can gain control over revenues from a potentially lucrative gem sector, it remains to be seen whether government control over the gem sector leads to genuine investment in national economic development, or if it will merely be used to provide resources to secure support from a specific and narrow set of patronage networks. It is, as yet, difficult to determine whether this constitutes a genuine and long-term shift in the government's position and policy actions.

One aim of the MRGP is to establish a clear legal framework to regulate the application procedures for exploration licences. The Project aims to set up a 'user friendly' legal framework so that Malagasy and foreign investors are encouraged to invest in mineral exploration in Madagascar; as a result the government of Madagascar has established *Socmin* as a 'one stop shop' for potential investors, where they can obtain relevant information on gem deposits and apply for exploration and mining licences. To facilitate this, the Ministry of Mines and Geology has produced a CD-Rom which contains relevant information for foreign and Malagasy businesses interested in mining; the CD-Rom provides advice on how to apply for mining exploration licences in areas outside national parks and forest reserves. The Governance Project is intended to produce transparency and accountability in the gem sector to ensure that new exploration licences are not given on a corrupt basis (Rakotoarimanana int.).

The project has also supported the creation of an Institute of Gemmology linked to the Gemmological Institute of America. The Institute provides training for Malagasy graduates who are interested in working in the mining sector; the aim is to develop a lapidary arts sector in Madagascar to ensure that the country can capture the full value of polished stones for sale to the global gem market (Cushman int.; Razafindretsa int.; Rakotoarimanana int.; IRIN 18.9.2003). The Malagasy state, in conjunction with the World Bank and other donors, has also begun to turn its attention to identifying new gem mining areas, and trying to obtain control over the extraction of mineral resources in those areas from the outset (Cushman int.; Rakotoarimanana int.). Tom Cushman (int.) from the Institute of Gemmology in Madagascar suggested that the new Malagasy government was attempting to 'get ahead of the curve' on future gem rushes, indicating an acceptance that areas where gem rushes have already occurred will remain beyond the boundaries of control.

As part of this, the major portion of the World Bank funding has gone into developing a geological survey of Madagascar, carried out by USAID. In addition, in 2004 USAID produced a map of the country's potentially rich gem areas, which was intended to show which areas would be suitable for the sale of government-controlled prospecting permits to international gem mining companies (Crowley int.; Razafindretsa int.). As a result, some areas have been designated as 'reserved', where companies and individuals can apply for permits to explore under the MRGP (Razafindretsa int.). The aim is to ensure that mining is regulated so that it provides revenue to the government as well as to private mining companies. For a standard exploration permit the company or individual must undertake an environmental impact assessment, and only once this is approved will they be given an exploration licence. For larger-scale mining, the company also has to refer to the Poverty Alleviation Strategy for Madagascar, and provide a plan for how their mining operation will contribute to poverty reduction within the country (Rakotoarimanana int.). The creation of this new legal framework is intended to provide the Malagasy government and private sector with the means to gain control over the gem sector so that they can capture the value of gemstones.

## THE DEVELOPMENT OF GEMSTONE MINING IN MADAGASCAR

Despite these recent attempts to gain control, the way in which the gem sector has developed in Madagascar since the late 1990s makes the implementation of formal and transparent governance systems extremely difficult. Even though the new government has backed the MRGP, the major gem deposits are still extracted by miners who work in the extra-legal sector. These miners are interlinked with globalised networks of international dealers and elite cliques who ensure that the stones can be illegally exported for personal financial gain. Such networks engage in *strategies of extraversion* which produce the shadow economy which integrates Ilakaka in Madagascar with the global economy (Bayart 2000; Ferguson 2006; Reno 1998).

The Director of Mines and Geology under the new Ravalomanana government suggested that under the previous regime the allocation of mining licences and exploration permits was done on a corrupt basis which depended on the 'mood' of the minister. He claimed that prior to 2002 approximately 80% of licences were allocated to the highest bidder, and that licences would be given to one individual or company, and then another licence would be issued to mine the same location because the applicant had paid the minister more money (Rakotoarimanana int.). He also suggested that partly because of the ways that the sector had developed under the previous government, in 2004 about 80% of gems were still being exported as rough stones, and only 20% as cut stones; the MRGP set an export target of 80% cut stones and 20% rough stones, which should be exported through legal and transparent channels (Rakotoarimanana int.). Though it is understandable that the current minister should criticise the practices of the previous regime, the patterns of corruption associated with the Ratsiraka years still structure the way the gem industry operates. The major benefits from gem extraction still accrue to those who benefited from it under Ratsiraka (especially his political supporters and family members). It has proved difficult for the new government to gain control over existing patterns of gem mining and trading, leading the Ravalomanana government to concentrate on gaining control over new gem areas. The allocation of licences lay with the *pays réel* rather than the *pays legal*, and since Ravalomanana has only been in power for three years, it has not been possible to completely change the personnel operating within the bureaucratic structures of government. Once the new government took over, it still relied on many of the same people who served under Ratsiraka. The networks and dynamics developed in the years preceding 2002 could not be expected to disappear overnight. In fact one ambassador to Madagascar (anonymous int. 6) complained that opposition groups were attempting to undermine the government by placing stories in national newspapers claiming that civil servants still loyal to the Ratisaraka regime were engaged in undermining the new government 'from within'.

It is therefore important to examine the logic of 'gem rushes', and how the gem sector developed into its current form. In this regard the case of Ilakaka is instructive. It echoes the arguments made by Bayart (1993; 2000), Reno (1998), Hibou (2004) and Ferguson (2006), because Ilakaka as a 'locality' is a highly globalised place and thereby disrupts strict definitions of local and global, formal and informal, legal and illegal (De Boeck 1998). Ilakaka town rapidly developed in the late 1990s, after the discovery of high-quality sapphires. It was estimated that its population increased from 30 to 100,000 between 1998 and 2000 (*FT* 18.2.2000; Laurs 2003). By 2004 the gem mining areas covered 4,000 square kilometres (Cushman int.). More recently, as Ilakaka has become a very large mining centre, new areas have been subject to exploration by more recent migrants to the area, especially around Sakahara and the WWF-funded Zombitse-Mahafaly National Park, just south of Ilakaka (Durbin int.).[1] In addition, the staff of Catholic Relief Services working in the area have reported an increase in the use of what they referred to as 'sorcery', where diggers request the services of spiritual leaders to identify sites that are *fady* (taboo), and areas that might contain rich deposits of stones; as a result there are a numerous stories, myths and legends about curses on individuals and suspicions surrounding the reasons why some diggers discover rich gemstone deposits, while others do not (Randrianarison int.).

The sapphires are considered to be amongst the highest quality in the world, and sapphire mining promises opportunities of instant wealth to Malagasy people living in poverty. Serge Rajaobelina (int.), director of a Malagasy NGO, Fanamby, suggested that many of the 3,000 artisanal gold miners from northern Madagascar migrated to the Ilakaka and Sakahara area when news of the gem fields reached them. Since the gemstones can be extracted by individuals and teams of diggers using nothing more complex than a spade, the poorest sections of Malagasy society have been migrating to Ilakaka because of the promise, or hope, of instant riches. However, the money made by diggers is minor compared to the profits made by international gem dealers in Ilakaka town and global gem dealers in Europe and Asia. A World Bank Study in 1999 found that US$100 million in gems was smuggled out of Madagascar in that year alone (*Focus* 2000; World Bank websites 2, 3). One interviewee involved in the gem mining sector estimated that the value of illegal gemstone exports had remained at about the same level since then, but that this was a small amount compared with the profits that might be available to the government from regulating the extraction of industrial minerals such as titanium dioxide by Qit Minerals Madagascar/Rio Tinto (anon. int. 1; Rio Tinto website).

In general, migrant sapphire miners have little ability to judge the quality of the stones they bring into Ilakaka town to sell. This puts the foreign gem dealers into a very powerful position; they are able, for instance, to claim that a stone has imperfections that will make it hard to cut. In general, the diggers get a very low price for the stones they find, but because they are cash-poor even a small amount of money is worth working for (Ramamaonjisoa int.). Since the mining and trade in gems are largely illegal, they have no recourse to appeal if they believe they are getting an unfair price for their stones (Randrianarison int.; *FT* 3.2.2001). The buyers can make large profits from working in Ilakaka because they set the price for stones, and the buyers tend to co-operate to ensure that the prices paid to diggers are low, while the final polished version will sell at the highest price once it has been taken out of Madagascar. The Director of Conservation for WWF-Madagascar, which works in an area adjacent to the Ilakaka gem fields, Isalo National Park, suggested that the buyers co-operate over setting prices to ensure that diggers cannot go from buyer to buyer looking for a good price; instead, he claimed, any buyer who 'broke ranks' and started to offer higher prices to diggers would be in personal danger (Ramamaonjisoa int.). The networks involved in gem extraction in Madagascar have thus gained control over the local economy, and are able to use symbolic or actual violence to enforce that control (Nordstrom 2004; Reno 1998). This process is not disorganised and haphazard. Rather, the mining undertaken by seemingly disorganised and unconnected individuals is structured by the alliances between key members of the Malagasy elite and the international gem dealers who have established gem buying centres and stalls in the Ilakaka area.

## GLOBAL NETWORKS AND PARALLEL ECONOMIES

It is useful to use Bayart's (2000) notion of *pays réel* to examine the workings of illicit mining and gem trafficking. Although this may seem anarchic and chaotic, it clearly has a logic and organisational form that operates through networks of miners, gem traders, state officials and international business; these networks move the rough stones from diggers in Ilakaka to jewellers in Europe, Asia and North America, where they reappear as polished stones. During the journey from rough to polished stone the gemstones move in and out of the informal and formal economy, and move from being illicit goods to being 'legitimised' commodities. Furthermore, an analysis of the nature of these networks indicates that it is not useful to think of Ilakaka as a bounded 'locality': it is at once a local site and a global site, characterised by a high degree of integration into the global economy (see De Boeck 1998). It provides an excellent site for studying extra-legal sapphire mining, and its relationship to clandestine networks of international business and local politicians is especially illuminating. The continued ability to mine sapphires around Ilakaka is directly dependent on global networks of foreign gem dealers who traffic the stones out of southern Madagascar (with the assistance of Malagasy individuals) and into the international trade.

The organisation of illicit sapphire mining is complex, and mixes global and local networks. One interviewee who preferred to remain anonymous suggested that under the previous government the Ratsiraka family had organised groups of impoverished diggers as cheap labour to dig big holes searching for rubies in Vatomandry in eastern Madagascar and sapphires in south-central Madagascar, and then sold the gems on the international market for personal profit (anon. int. 2). Another anonymous interviewee claimed that especially under the Ratsiraka government, prominent members of the ruling elite and the president's family were able to exploit ruby deposits with the knowledge and co-operation of foreign companies that were willing to exploit corruption and lack of regulation in the gem sector (anon. int. 3). Economically impoverished Malagasy men travel to the gem areas to seek employment; they either work alone or are organised through clandestine networks headed by individuals within the Malagasy elite. The diggers then sell their unpolished stones to gem dealers (usually Thai, Sri Lankan or Indian, but also African, European and North American), who have established gem buying businesses in the sapphire areas. Finally, the buyers traffic the stones out of Madagascar through airports or by sea, with assistance from key individuals within relevant customs departments, government agencies and local businesses. At this point the gemstones become part of the 'recorded' international economy and obtain legitimacy as a commodity.

Illicit sapphire mining is thus highly dependent on complex clandestine networks that include international actors and Malagasy individuals from all sections of society. However, despite the illegal export of the stones, there were individuals and sections of society within Madagascar which did (and still do) profit from the trade. One anonymous interviewee who worked in the mining sector claimed that 500,000 people were making money in some way from the extra-legal mining industry, which made it the second largest employer in the country behind agriculture. That revenue had an impact on the direction and pace of other developments in Madagascar, particularly in urban areas where new found wealth from the parallel economy in gems was funnelled into purchasing luxury imported goods and property development, including the establishment of new casinos and hotels (anon. int. 1). These networks have proved to be highly resilient, flexible and adaptable, and remain in place despite the change in government in 2002. They have managed to evade attempts at control under the MRGP, partly because they are embedded within globalised networks that cross-cut and challenge the agendas of the formal state apparatus, donors, NGOs and international financial institutions. Sapphire mining in Ilakaka is linked to global networks of gem dealers and smugglers that stretch into sub-Saharan Africa (Rwanda, Mauritania, South Africa and DRC), Asia (Sri Lanka, Laos, Thailand and Burma) (Gem Scoop website; Duffy 2005), and on to Europe. These global networks rely heavily on invisible economic and political networks of elites within Madagascar that intersect with, and are almost indistinguishable from, the formal economy and visible apparatus of the state (Bayart 2000; Bayart *et al.* 1999; Hibou 2004; Reno 1998).

The confused and unregulated situation in and around Ilakaka provides perfect conditions for the development of such globalised networks. The pre-2002 Ratsiraka government failed to determine how many sapphires were in the area, what their value was, or how they were being mined. This allowed for wildcat illegal mining to develop and for Malagasy networks to link up with transnational networks (see *FT* 18.8.2001). Tom Cushman (int.) of the Institute of Gemmology in Madagascar stated that Thai and Sri Lankan buyers have a very clear presence in Ilakaka, but that traders were drawn from all over the world (Gem Scoop website). This is evident from the physical characteristics of Ilakaka town itself: shops in Ilakaka town have names such as Thai-Mada Cooperation, Congo Gems, Colombo Gems and Sri Lanka Saphir. The names of the shops bear witness to Ilakaka's close links with transnational trading routes and broader processes of globalisation. Furthermore, Thailand and Sri Lanka have developed a global reputation for specific expertise in grading, polishing and selling rubies and sapphires in particular (Macfarlane *et al.* 2003: 58–71).

It is impossible to place a precise value on the stones that are traded in Ilakaka each day, but one rough estimate was that US$4 million worth of stones changed hands daily in 2001, when trading in Ilakaka was at its height (Cushman int.; Razafindretsa int.). Despite this massive cash flow in southern Madagascar, the value of the Malagasy franc continued to fall against the US dollar. Rather than feeding into the formal economy, the income generated from the gem sector remains locked in an informal and illegal economy which is populated by gem dealers, criminal organisations, protection racketeers, miners and individuals in the Malagasy elite. While the biggest traders are foreigners, rumours have abounded that top Malagasy officials and members of Ratsiraka's family have been able to siphon off large profits from the illegal gem sector before and after the change in government (anon. int. 4; see also *FT* 18.8.2001). In sum, the illicit economy surrounding Ilakaka is so intimately linked with the global economy as to be indistinguishable from more recognisable forms of globalisation (De Boeck 1998, 2001; Ferguson 2006).

## GLOBALISATION, MARGINALISATION AND EXCLUSION

As Ferguson (2006) notes, globalisation in Africa produces benefits for some networks and groups, but its attached twin is characterised by marginalisation, violence and exclusion within specific locations. These forms of globalisation produce locally specific problems in Ilakaka in particular, and in Madagascar more generally. The current structure of the gem mining and trading sectors has created numerous economic and social problems. Ilakaka is not an area that global capital skips over or ignores; nor does it conform to the enclave model that characterises mineral extraction (especially oil) in other parts of sub-Saharan Africa. As such it does not quite fit the models put forward by Ferguson (2006), where there are spatially separated areas of marginalisation (marginal and poverty stricken areas) and integration (extractive enclaves). Instead, the impact of globalisation is highly uneven and variable, so that for certain individuals and networks it means integration in the global economy, plus significant wealth. In contrast, for other individuals and networks, the way that Ilakaka is drawn into the global economy leads to a greater degree of poverty, marginalisation and exclusion. The case of Ilakaka indicates that such zones may not be spatially segregated, but may inhabit precisely the same geographical locations. For example, when miners get a good price for their finds, sale of the stones gives them instant access to cash, which even in small amounts makes a big difference to individuals. Beatrice Olga Randrianarison (int.) of Catholic Relief Services (which has worked in Ilakaka since it experienced its first gem rushes) suggested that the culture surrounding the mining areas means that few people really value money because one day they have nothing and after a good sale they suddenly feel rich and spend the money very quickly. Rumours of sapphires the size of footballs and of fortunes made in a single day have made Ilakaka irresistible. This is also evident in Ilakaka, because the income tends to go on conspicuous consumption: prostitutes, alcohol and gambling (see Walsh 2002, 2003). In Ilakaka this is referred to as *mepoka*, which denotes a desire to get rich quickly (Randrianarison int.).

The growing number of male diggers and dealers with large amounts of disposable income has created a demand for prostitutes. While many of the women working in the Ilakaka brothels and bars have migrated there from elsewhere in Madagascar, because of the promise of easy earnings, local Bara women and girls have begun to be drawn into the town. The discovery of sapphires has thus disrupted and transformed social relations in the area; in line with De Boeck's (1998) findings in diamond areas, rural places have been changed in ways that are detrimental to some and beneficial to others. This has created serious social problems within the Bara communities, as girls leave school in order to become prostitutes. Rates of HIV/AIDS and other sexually transmitted diseases are increasing. Consequently, in 2002 the Ministry of Health designated Ilakaka a 'red zone', a term reserved for 'emergency areas' (Randrianarison int.; Catholic Relief website). Since Ilakaka is located on the main Route Nationale 7, there were fears that truck drivers could become infected with HIV/AIDs and spread it throughout Madagascar.[2] The only visible social welfare organisation in Ilakaka, Catholic Relief Services (CRS), originally became involved in the area to run a project aimed at preventing cholera. However, by 2001 cholera was under control, even if not eradicated. Spurred on by this success, CRS has now turned its attention to curbing sexually transmitted diseases, including HIV/AIDS (Catholic Relief website).

The negative impact of the sapphire boom is clearly illustrated by its impact on public health, and especially water pollution. Prior to the discovery of sapphires the river in the areas was a key resource for the local community as a source of drinking water and irrigation, and for washing (*ibid.*). The impact on the water supply is an example of the social and health problems produced in a context of massive flows of capital through the town; it indicates the ways that the profits made from gem mining and extraction are not used for the benefit of local communities. In Ilakaka, the already poverty stricken miners have to bear the social and environmental costs of mining where profits are extracted for the benefit of elite cliques. Since the area is one of porous sandstone, the local water supply has become polluted with the chemicals that the miners use to wash their stones, in preparation for selling them to the gem dealers. The sandstone had ensured that Ilakaka had very pure water, because it acted as a filter, but since the discovery of sapphires people in Ilakaka have started to buy water from the next village, Ranohira. Water trucks come into the town to sell drinking water to those who can afford it (Randriamampianina int.; *FT* 18.8.2001). Mining has also impacted on the water supply for agricultural areas. The diggers have diverted the river to areas where they wash the stones, significantly reducing the amount of water running downstream to rice-growing areas, so that large volumes of sand are washed downstream onto the rice fields. As a result, people in Ilakaka must buy in rice at inflated prices (Randriamampianina int.; *Focus* 2000). The problems associated with water pollution indicate the ways in which globalised networks produce particular dynamics and impacts in specific localities. These networks can generate massive wealth alongside forms of marginalisation, exclusion, violence and poverty.

As a result of the lack of formal controls over Ilakaka, miners have faced significant hazards and threats to their safety and health. Numerous diggers have been buried as the holes and tunnels they were working in have collapsed; since the digging is unregulated, most deaths among miners go unrecorded and unnoticed (Randriamampianina int.; *FT* 18.8.2001; *Focus* 2000). According to Dominique Rakotomanga (int.) of the International Programme for Elimination of Child Labour, children are often used to mine narrow tunnels where there are regular accidents, and are killed by landslides or collapsing tunnels; the programme has collected some data from ruby mining areas in Antsiranana and Vatomandry in northern and eastern Madagascar, but not as yet on children working in the Ilakaka area.

In line with this, Ferguson (2006) suggests that Africa as characterised by global shadows is also reliant on the symbolic value and actual value of violence (see also Reno 1998). The illegal nature of gem mining and trading has created an industry centred on protection and extortion: it is common for dealers to hire armed protection. The brothels and bars are sites of violence, and are extremely dangerous at night, and the violence can easily erupt into shoot-outs between rival gem dealers and their bodyguards (Jose int.; Randriamampianina int.; Randrianarison int.; *FT* 3.2.2001). One local police officer claimed that during 2000 there were numerous incidences of violence in Ilakaka, and the skirmishes had resulted in more police being deployed to the area and the need to ask the army to intervene. He said 'it is like this every day, shooting, like Texas' (anon. int. 5).[3] This confirms Reno's (1998) argument that players within shadow networks organise their own forms of private protection; a key feature of the shadow state is the development of privatised security as an alternative to the formal security systems, which are generally understood as being the preserve of the state apparatus (see also Ferguson 2006; Nordstrom 2004).

Apart from the political, economic and social impacts of globalised networks in the gem sector, there are also environmental consequences. The Wildlife Conservation Society has become concerned at the potential impact of gemstone mining on biodiverse forested areas. As a result they have been part of a lobbying campaign directed at the Government of Madagascar, to identify and designate 'no-go' areas for mining. The campaign has been articulated in terms of the economic value of forested areas as potential sites of ecotourism development. Helen Crowley of the Wildlife Conservation Society (Madagascar) stated that it was important to demonstrate that the forests could be more economically valuable to the people and government of Madagascar in the long term through their development as protected areas that could become major sources of revenue from tourism. Environmental NGOs in Madagascar have decided that it was best to talk in terms that the mining companies understood, and since they understood the language of the market, the best way to persuade the private sector and the Government of Madagascar to conserve biodiverse forest areas is to argue that the forests will be more profitable in the long term if they are conserved (Razafindretsa int; Conservation International & World Conservation Society websites).

Conservation International and Wildlife Conservation Society both have extremely important 'local chapters' of their organisation based in Madagascar. Both NGOs hold seats on the 'Donor Consortium' that includes the World Bank, the government of Madagascar, World Wide Fund for Nature (WWF), and bilateral donors including Coopération Suisse, Coopération Française, the German development agency GTZ and the Japanese government (see Duffy 2006). This means that they can exercise a great deal of political power within the Donor Consortium, especially when the three international environmental NGOs within the Consortium are able to act in concert. This has induced the Ministries of Water and Forests, Environment and Mining to collaborate to tackle the problem of unregulated gemstone mining (*ibid.*).

The map of potential gemstone areas produced by USAID in 2004 has been a serious cause for concern amongst the conservation community in Madagascar, because it shows that gem areas are contiguous with protected areas and tropical rainforests with high levels of biodiversity. For many conservation NGOs the challenge is to demonstrate to the Malagasy government, donors and private business that ecotourism and the creation of more national parks is financially more sustainable in the long term than exploiting the areas for gems (Crowley int.; Razafindretsa int.; *FT* 15.5.2001; BBC website 2002). Furthermore, since new gemstone areas have been identified in key sites of tropical forest in Madagascar, USAID has lobbied hard for the creation of a Joint Committee on Forests and Mining to guide and determine policy towards potential mining areas (Razafindretsa int.).

However, the plans to designate no-go areas for mining companies still fail to cover areas where illicit mining is carried out in areas of high biodiversity and mining in the vicinity of national parks. Illicit gem mining continues to benefit a narrow section of society in Madagascar, mostly clustered around sections of the political and economic elite. While a few individual gem diggers may derive some economic benefit from the sale of stones within Ilakaka itself, the main beneficiaries are the political and economic elite linked to global networks that trade gems in the international system.

In environmental terms, Ilakaka is significant because it is close to Isalo National Park, a key protected area in Madagascar's conservation sector. The park covers 81,000 hectares and is the country's most important in terms of tourism revenue. It contains numerous different species of lemurs, but a particular attraction is Verreaux's Sifaka, endemic to southern Madagascar. The Parks Department (ANGAP)[4] and other donors involved in the area became concerned about the damage that might be inflicted by illegal, unregulated mining and its rapid expansion into the park. ANGAP park managers are worried that once the gems are exhausted, the landscape will be left with highly visible and unappealing scars from the mining, which could adversely affect the development of tourism in the park and surrounding area (Ravelonandro int.).

The confusion and the rumours surrounding the size and quality of the sapphire deposits also indicate the dynamics produced by globalised networks in Ilakaka. Indeed the rumours – which are almost impossible to control at either global or national level, or through initiatives from international financial institutions – have an important impact. They reveal the ways in which different groups in Ilakaka make sense of and understand the global dynamics that structure and shape their immediate surroundings, especially in terms of understanding what kinds of stones are in high demand. As a result of rumours, the belief spread that the best sapphires had been exhausted in the area immediately around Ilakaka, and that the National Park itself contained bigger stones of even higher quality. Parfait Randriamampianina (int.), former director of Isalo National Park, suggested that the diggers and gem dealers believed that the government knew this, and that was why the area had been gazetted as a National Park in the first place. The illegal miners also believed that he, as the Park Director, knew the location of the biggest and best sapphire deposits. Consequently, his life had been threatened on a number of occasions, and he was transferred to the ANGAP office in the capital as a precaution. Nor were the Malagasy sapphire miners the only problem: as rumours of big deposits spread, foreign tourists were also entering the park with spades and starting to dig for gems. ANGAP responded with a stipulation that all visitors to the park had to be accompanied by a licensed ANGAP guide. This indicates the power of invisible networks, or global shadows, that resist and evade attempts to control their activities: the threats and intimidation directed at ANGAP staff demonstrate the confidence with which these shadow networks regard their own power and influence in the local area and even beyond.

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This article shows that globalisation has had very specific kinds of impacts in sub-Saharan Africa, and produces integration and wealth in precisely the same locations as it produces exclusion, marginalisation, violence and poverty. This suggests a further refinement of Ferguson's discussion of the impact of globalisation on sub-Saharan Africa: that capital hops and skips across Africa to produce sites of exclusion (poverty and marginalisation) and sites of inclusion (extractive enclaves). Ilakaka clearly blends both of these dynamics in a single and specific locality. An analysis of the gem sector in Madagascar shows that Africa's participation in globalisation has not just been about 'joining' the world economy; instead it has been characterised by highly selective forms of global connection which have been combined with highly visible and very real forms of disconnection.

Despite attempts by the central government, supported by global institutions such as the World Bank and USAID, to gain control of the gem sector in Madagascar, it has so far proved impossible to regulate existing illicit mining areas. The Ravalomanana government claimed a commitment to reducing such forms of corruption, but is itself deeply embedded in and indistinguishable from formal structures of the economy and political networks which intersect with the Malagasy state. This in turn is partly due to the strategies of extraversion exercised by elite cliques within Madagascar who had benefited under Ratsiraka because of his patronage and protection, but which continue to flourish because the new government has been so far unable to wrest control from them. The networks in Madagascar that are engaged in the illicit gem trade are reliant on global networks of traffickers and traders. Criminalisation provides substantial benefits for interest groups and networks that stretch across the formal and informal sectors, and in turn support its continuance. The dependence on strategies of extraversion thus deeply subverts projects of regulation, such as the Mineral Resources Governance Project. Furthermore, such strategies are highly dependent on global trading networks. It is therefore not helpful to think of corruption, criminalisation or the shadow state as bounded by the territories and structures of specific developing states like Madagascar. Rather, it is important to recognise the complex connections between global networks and specific localities. When it comes to globalisation, Africa is indeed an inconvenient case.

## NOTES

1. Joanna Durbin previously worked for WWF-Madagascar in the Zombitse-Mahafaly Park.

2. Currently Madagascar has a very low rate of infection, UNAIDs estimates that 0·2–1·2% of the population are living with HIV. See UN AIDS website.

3. On my fieldwork visit to Ilakaka in 2004, I witnessed a violent clash involving hundreds of people on the main road; the single police officer sent to deal with it flagged down our vehicle, and asked us to take him back to his police station because he could not cope and was afraid.

4. Association Nationale pour la Gestion des Aires Protégées (ANGAP).

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