

PRIMITIVE TECHNIQUES: FROM ‘CUSTOMARY’ TO ‘ARTISANAL’ MINING IN FRENCH WEST AFRICA *

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Abstract

Since the commodity boom of the early 2000s, the visibility of ‘artisanal’ or ‘small-scale’ mining has grown in media coverage and development policies focused on Africa. This article argues that the regulatory category of ‘artisanal’ mining in Africa originated during the colonial period as ‘customary mining’. I build this case through a regional case study of mining policies in the colonial federation of French West Africa, where a single decree accorded African subjects ‘customary rights’ to seasonally mine gold and rock salt in restricted areas. By contrast, colonial citizens, mostly Europeans, accessed stable mining titles. Customary mining rights never codified actual African mining ‘customs’, as colonial officials argued. Rather, this law marked the boundary between the technological status of French subjects and citizens. Core elements of this colonial legal framework have been incorporated into postcolonial policies governing the rights of citizens to mineral resources in Africa.

Key Words

Guinea, Mali, Senegal, West Africa, colonial administration, law, technology, mining, race.

Since the commodity boom of the early 2000s, the visibility of so-called ‘artisanal’ and ‘small-scale’ mining has grown in both media coverage and development policies focused on Africa. In 2017, an estimated nine million people on the continent – operating with or without a licence – used handpicks and mortar-pickers to exploit gold, coltan, diamonds, and cassiterite.¹ Over the past twenty years, corporations listed on the stock exchanges of Toronto, Johannesburg, and London have also expanded mining operations in Africa to unprecedented scales. Attracted by high hard metal prices, pro-market mining codes, and the depletion of accessible deposits ‘back home’, mining outfits have cut hundreds of truck-and-shovel open-pit gold mines into the forests and savannah plains of Senegal,

* This article is based on research funded by the Social Science Research Council, the Wenner-Gren Foundation, the National Science Foundation, and the University of Michigan. I thank the editors and anonymous reviewers of *The Journal of African History*. Earlier versions of this article benefited from conversations at the University of Michigan with Gabrielle Hecht, Stuart Kirsch, Mike McGovern, Davide Orsini, Derek Peterson, Rudolph Ware III, and Nana Quarshie. My deepest gratitude is to Linda d’Avignon, Falaye Danfakha, and to the village of Togué. Author’s email: robyn.davignon@nyu.edu

1 International Forum on Mining, Minerals, Metals, and Sustainable Development, *Global Trends in Artisanal and Small-Scale Mining: A Review of Key Numbers and Issues* (Winnipeg, 2017).

Burkina Faso, Tanzania, Guinea, the Democratic Republic of Congo, and Mali. Increasingly, mining corporations enter into direct competition and conflict with ‘artisanal’ miners.² In response to growing tensions on Africa’s extractive frontiers, human rights and development agencies have reported on rural land dispossession to mining companies; the ecological impacts of unregulated gold amalgamation; and the role of illegally trafficked minerals in warfare.³ Recognizing the importance of artisanal mining to rural economies, the World Bank and the United Nations have pledged millions of dollars to ‘formalizing’ the sector.⁴

But what exactly is ‘artisanal’ mining? States, international agencies, and mining firms define the term according to different characteristics: techniques (‘low tech’), labor requirements (‘no mechanization’ or ‘labor intensive’), or legal status (‘absence of formalization’, ‘illegal’, or ‘lack of adequate regulatory framework’).⁵ An oft-cited definition, formulated by the World Bank in 1996, describes it as ‘the most primitive type of informal, small-scale mining, characterized by individuals or groups of individuals exploiting deposits – usually illegally – with the simplest equipment’.⁶ The language of ‘primitive’ and ‘simple’ evokes a tired colonialist trope of technological primitivism. This is not coincidental; nor is the fact that artisanal mining remains concentrated in formerly colonized regions of Africa, Asia, Oceania, and Latin America.⁷ The central argument of this article is that the regulatory category of ‘artisanal mining’ originated in the colonial period as ‘customary mining’.⁸ By its very definition, customary mining referred to the extractive practices of ‘natives’ or *indigènes*. As a category, it marked the boundary between the technological status of subjects and citizens.

In colonial Africa, customary mining rights sat on a spectrum of policies towards indigenous miners. Some states outlawed mining by Africans altogether, others accorded traditional authorities the right to broker land and mineral concessions. In exceptional cases, African chiefs acquired titles to putatively communal ‘tribal’ land with mineral rights attached. While customary land laws in colonial Africa are the subject of a vast literature,

2 S. Geenen and K. Classens, ‘Disputed access to the gold sites in Luhwindja, Eastern Democratic Republic of Congo’, *Journal of Modern African Studies*, 51:1 (2013), 85–108; G. Hilson and N. Yakovleva, ‘Strained relations: a critical analysis of the mining conflict in Prestea, Ghana’, *Political Geography*, 26:1 (2007), 98–119; S. Luning, ‘Processing promises of gold: a minefield of company-community relations in Burkina Faso’, *Africa Today*, 58:3 (2012), 22–39.

3 Human Rights Watch, *Precious Metals, Cheap Labor: Child Labor and Corporate Social Responsibility in Ghana’s Artisanal Gold Mines* (2015); Amnesty International, *This is What we Die for: Human Rights Abuses in the Democratic Republic of Congo Power the Global Trade in Cobalt* (London, 2016).

4 UN Economic Commission for Africa, *Recommendations from Artisanal Mining Workshop: Drive the Sector Forward* (Addis-Ababa, 2016); UN Environmental Programme, *Final Report: Second Global Forum on Artisanal and Small-Scale Gold Mining, 3–5 September 2013* (Lima, 2013); *The World Bank, Mining Together: Large-Scale Mining meets Artisanal Mining* (Washington, DC, 2009).

5 UN Economic Commission for Africa, *Artisanal and Small-Scale Mining and Technology Challenges in Africa* (Addis Ababa, 2003); World Bank, *The Millennium Development Goals and Small-Scale Mining* (Washington, 2005); G. Hilson and J. McQuilken, ‘Four decades of support for artisanal and small-scale mining in sub-Saharan Africa’, *Extractive Industries and Society*, 1 (2014), 104–18.

6 M. Barry (ed.), *Regularizing Informal Mining: A Summary of the Proceedings of the International Roundtable on Artisanal Mining* (Washington, DC, 1996), 1.

7 World Bank, *The Millennium Development Goals*.

8 Scare quotes around the terms ‘artisanal’, ‘customary’, and ‘traditional’ are hereafter implied.

customary mining regimes remain underexplored.⁹ By contrast, there is a rich and growing scholarship on artisanal mining in Africa. Combatting negative media and policy depictions of artisanal mining, development studies scholars emphasize the sector's capacity to increase food security and reduce rural poverty.¹⁰ Anthropologists explore the 'improvisational' economies, experimental gender relations, and notions of 'ill gotten' or 'quick' wealth common in unregulated mining sites as privileged windows into the lived experience of Africa's neoliberal economy.¹¹ Scholars acknowledge the antiquity of mining in many regions of Africa. Yet few have explored the state regulation of indigenous mining prior to the structural adjustment reforms of the 1980s.¹² Similar to poaching and wood theft, customary and artisanal mining are categories of practice produced through power struggles among states, agrarian residents, and private capital to legitimize certain uses of nature and to criminalize or restrict others.¹³ As Janet Roitman once argued, the 'informal market' in Africa does not exist independently of the 'formal market' as it is defined by the state's licensing practices and property regimes.¹⁴ In this vein, the legal history of artisanal or customary mining must be studied in relationship to the evolution of policies designed to encourage, regulate, and codify its counterpart: 'industrial' mining.

I build these arguments through a regional case study of mining regulations, and the debates that inspired them, in the federation of French West Africa (*Afrique Occidentale*

9 On the former, see S. Berry, *No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa* (Madison, WI, 1993); M. Chanock, 'A peculiar sharpness: an essay on property in the history of customary law in colonial Africa', *The Journal of African History*, 32:1 (1991), 65–89; M. Mamdani, *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism* (Cape Town, 1996); F. MacKenzie, *Land, Ecology and Resistance in Kenya, 1880–1952* (Edinburgh, 1998).

10 Out of a vast literature, see G. Hilson, "Once a miner, always a miner": poverty and livelihood diversification in Akwatia, Ghana', *Journal of Rural Studies*, 26 (2010), 296–307; R. Machonachie, 'Re-agrarianising livelihoods in post-conflict Sierra Leone? Mineral wealth and rural challenges in artisanal and small-scale mining communities', *Journal of International Development*, 23 (2011), 1054–67.

11 F. De Boeck, 'Domesticating diamonds and dollars: identity, expenditure and sharing in southwestern Zaire (1984–1997)', *Development and Change*, 29:4 (1998), 777–810; T. Makori, 'Mobilizing the past: creuseurs, precarity, and the colonizing structure in the Congo Copperbelt', *Africa*, 87:4 (2017), 780–805; J. W. Mantz, 'Improvisational economies: coltan production in eastern Congo', *Social Anthropology*, 16:1 (2008), 34–50; J. H. Smith, 'Tantalus in the digital age: coltan ore, temporal dispossession, and "movement" in the Eastern Democratic Republic of the Congo', *American Ethnologist*, 38:1 (2011), 17–35; A. Walsh, "Hot money" and daring consumption in a northern Malagasy sapphire-mining town', *American Ethnologist*, 30:2 (2003), 290–305; K. Werthmann, 'Cowries, gold and "bitter money": gold-mining and notions of ill-gotten wealth in Burkina Faso', *Paideuma*, 49 (2003), 105–24.

12 For a comparison of mining and agricultural policies in interwar *Afrique Occidentale Française*, see S. Luning, J. Jansen, and C. Panella, 'The *mise en valeur* of the gold mines in the Haut-Niger, 1918–39', *French Colonial History*, 15 (2014), 67–86. In this article I take a broader temporal approach to the regulatory history of mining.

13 On the relationship of property enclosure to the categories of wood theft and poaching, see K. Marx, 'Debates on the laws of the theft of wood', in K. Marx and F. Engels (eds.), *The Collected Works of Karl Marx and Frederick Engels, Volume I* (Charlottesville, VA, 2003), 224–63; and E. P. Thompson, *Whigs and Hunters: The Origins of the Black Act* (New York, 1975). On poaching in Africa, see C. Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (Cambridge, MA, 2014); L. White, 'Whigs and hunters: the path not taken', *The Journal of African History*, 58:1 (2017), 51–9.

14 J. Roitman, 'The politics of informal markets in sub-Saharan Africa', *Journal of Modern African Studies*, 28:4 (1990), 671–96, 685.

Française, hereafter AOF).¹⁵ From 1899 until the dissolution of AOF in 1956, the federation was governed by a single mining regime administered from Dakar. The governor-general in Dakar delegated to lieutenant-governors of AOF's constituent colonies the right to issue licences to private companies that demonstrated the technical capacity and financial means for mining, according to French metropolitan law. These capital requirements effectively barred Africans from entry, but the state did accord African subjects 'customary rights' (*droit coutumier*) to mine gold and rock salt in either restricted zones or with the use of customary tools. The very concept of customary mining rights legalized the racial distinctions of French imperialism in West Africa, which governed French citizens and nationals (*citoyens*) by civil codes and African subjects (*indigènes*) by 'native' policies and other exceptional laws, some of which made no pretense to custom.¹⁶

The dream of transforming geographically dispersed indigenous gold mines into European-owned and operated 'industrial' mines motivated generations of French military officers and engineers to explore – and, in the late nineteenth century, to seize by force – the West African 'interior'. But to the disappointment of colonial boosters, French attempts to mine gold in AOF languished, leaving only a handful of poorly financed mining outfits in the federation by the close of the First World War. Rather, at the height of French rule, African miners – referred to as *orpailleurs* in colonial correspondence – produced 95 per cent of AOF's gold exports.¹⁷ The state profited from indigenous mining by authorizing a small number of French and 'Syrien' merchants to buy gold. Merchants profited by selling miners expensive manufactured goods and imported rice against gold dust at prices set artificially low by the colonial state. AOF collected taxes on gold exports by merchant houses.¹⁸ While gold was mined across the federation, production was concentrated in two historic auriferous zones: Bambuk (Senegal and Soudan) and Bouré (French Guinea).¹⁹ *Orpillage* in these regions was dominated by speakers of Manding, a language-dialect continuum in West Africa that stretches from Senegal to Burkina Faso. Men and women mined and panned for gold as a dry season complement to rain-fed agriculture. In Bambuk, men and women largely exploited alluvial deposits, gold disaggregated from parent-rock. Women scooped gold-laden silts from riverbeds with gourds, a technique similar to the gold panning of the California gold rush. Men dug vertical mining shafts into ancient, desiccated waterways with locally forged hand picks. Women remained at the surface, operating pulleys to evacuate sterile rock excavated by men underground. By

15 Established in 1904, AOF consisted of Cote d'Ivoire, Dahomey (Benin), Guinea, Haute Volta (Burkina Faso), Mauritania, Niger, Senegal, and Soudan (Mali).

16 On the latter point, see G. Mann, "What was the *indigénat*? The "empire of law" in French West Africa', *The Journal of African History*, 50 (2009), 331–53 (335). A small number of permanent residents of Senegal's coastal cities were granted the status of colonial citizens, but most Africans in AOF were classified as subjects. M. Diouf, 'Assimilation colonial et identité religieuses de la civilté des originaires des Quatre Communes (Sénégal)', *Canadian Journal of African Studies*, 34 (1999), 565–87.

17 For the sake of clarity and legibility to French language work on this topic, I use the term *orpailleur(s)* to refer to West Africans who mined for gold in kin-based groups in colonial AOF. Statistic cited in C. Robequain, 'Problèmes de l'économie rurale en A.O.F.', *Annales de Géographie*, 46 (1937), 137–63 (146).

18 In AOF the gloss 'Syrien' and 'Libanais' referred to a heterogeneous group of people who migrated to West Africa from the Levant beginning in the late nineteenth century.

19 Other historic goldfields in AOF include Hiré in Cote d'Ivoire and Poura and Gaoua in Haute Volta.

contrast, *orpailleurs* in Bouré (Guinea) mined both alluvial and lode ore deposits, using fire and elongated picks to dislodge the latter from amalgamated crystal formations. Men carved massive underground caverns, supported by rock pillars or wood beams.

Philip Curtin argued that the 'success' of *orpaillage* in AOF exemplifies the capacity of Africans to out-perform Europeans in key technical and economic domains.²⁰ However, this overlooks the fact that European technological 'failures' also motivated colonial policies that worked against African producers in the long term. In AOF, French engineers never stopped planning for a European 'industry' to replace *orpaillage*. When market conditions favored indigenous mining, French officials praised the skill of *orpailleurs*. But when metropolitan mining interests courted the federation, officials argued that the 'primitive techniques' of *orpailleurs* justified restricting their mineral rights. The terminology used for mining practices in AOF was deliberately racial. In France, '*orpailler*' referred to someone who separated gold from soils by hand – a practice glossed as panning in English. In AOF, Europeans were called 'miners' (*mineur*) even if they conducted *orpaillage*. Only Africans were called *orpailler* regardless of whether they panned for gold or dug mining tunnels deep underground.²¹

In the late 1950s and early 1960s, the independent states to emerge from AOF declared the subsoil the exclusive and sovereign property of the state. While the colonial state sanctioned *orpaillage* at certain times and places, the leaders of independent Mali, Guinea, and Senegal initially outlawed *orpaillage* in favor of encouraging farming and state-run mines. However, saddled with debt and declining profits from state-controlled industries in the 1980s, West African states revised their mining codes to encourage private direct investment in mineral resources. Codes passed in the 1980s, 1990s, and 2000s, granted national citizens the right to mine for gold in either traditional mining territories or with the use of traditional tools. These 'artisanal' mining clauses repurposed core features of colonial customary mining laws – a fact that merits further exploration by historians of Africa.

SUBTERRANEAN PROPERTY REGIMES IN COLONIAL AFRICA

Diverse factors shaped mining regulations in colonial Africa, including metropolitan legal regimes, indigenous mining traditions within different regions, and the continent's diverse geological formations and mineral distributions. Colonial states designed mining laws with an eye to maximizing revenue while making minimal investments in infrastructure. Colonial officials also wanted to avoid political uprisings in the countryside. These competing concerns produced two general tendencies in mining legislation in colonial Africa. On one end of the spectrum, the federation of French Equatorial Africa and much of Belgian Congo outlawed mining by Africans altogether, according exclusive mining rights to European concessionaries. On the other hand, AOF, Nigeria, and Sierra Leone (after 1956) adopted mining regimes that recognized customary mining rights.²² Varied in

20 P. Curtin, 'The lure of Bambuk gold', *The Journal of African History*, 14:4 (1973), 623–31.

21 *Le Dictionnaire de l'Académie française* (8th edn, Paris, 1932), s.v. 'orpailler'.

22 On mining policies in colonial Sierra Leone, see P. Greenhalgh, *West African Diamonds, 1919–83: An Economic History* (Manchester, 1985), 152–5. On French Equatorial Africa, Belgian Congo, and Nigeria, see Hailey, *An African Survey*, 1508–17.

scope and duration, these laws sanctioned colonial subjects to mine select substances. These policies diverged from customary land laws, which typically vested traditional authorities with the right to allocate putatively ‘communal’ lands held in the name of the ‘tribe’ or village. By contrast, the colonial state determined when, where, and with what tools African subjects could exercise their customary rights to mine. Customary mining rights suited mercantile colonial economies in which states accorded select metropolitan firms a monopoly on purchasing cash crops or minerals from African producers. As is well documented for agriculture, state-appointed chiefs played a key role in organizing labor to produce cocoa, peanuts, or cotton for purchase by merchants. Officials in AOF also deferred to Maninka ‘chief of the mines’ (*diourakuntigi*) to police indigenous gold mining.²³ French officials did not register *diourakuntigi* or fix the geographic boundaries of their jurisdiction, as they did for chiefs of villages. The authority of *diourakuntigi* remained informal.

Customary mining rights were not the sole mechanism by which Africans accessed rights to (or revenue from) minerals under colonial rule. South Africa and the Gold Coast offer intriguing counterpoints. An early market in mineralized land titles developed in South Africa following the discovery of diamonds in Kimberly in the 1870s and the Witwatersrand gold rush of 1886. Inspired in part by Dutch-Roman law, the early laws of the Transvaal Republic recognized the rights of land title holders to the subsurface.²⁴ In the late nineteenth century, the gold industry, comprised largely of British capital, was able to acquire private rights to mineralized farms.²⁵ The Natives Land Acts of 1913 and 1936 criminalized African landownership and tenancy outside of tribal reserves, intensifying a process of land alienation that began much earlier in Cape Colony and Natal. As Gavin Capps argues, some chiefs acquired formal titles to land with mineral rights attached, and registered the land to a recognized chief in trust to his ‘tribe’.²⁶ Africans could not legally mine for diamonds or gold on reserve land. But when platinum was discovered in Rustenberg and Bafokeng reserves in the 1960s, chiefs began to transform ‘tribal-landed property’ acquired in the late nineteenth and early twentieth centuries into mineral royalties.²⁷ Though somewhat exceptional, this case demonstrates that African ‘collectives’ did gain legal titles to minerals under certain circumstances in colonial Africa.

African authorities in the Gold Coast colony also retained some control over mineral rights, but through different mechanisms than in South Africa. The British Crown reserved mining rights in the Northern Territories, as in Sierra Leone and Nigeria. But in the Gold Coast and in Ashanti, the Crown declared land inalienable ‘communal’ property held in

23 Ritual specialists oversaw mining because gold was considered the property of land spirits. *Diourakuntigi* were tied to clans whose ancestors purportedly created the initial human bonds with these spirits, cemented by blood sacrifices. See R. d’Avignon, ‘Subterranean histories: making “artisanal” miners in West Africa’ (unpublished PhD thesis, University of Michigan, 2016), esp. chs. 1 and 6.

24 My analysis of South African mining laws draws heavily on G. Capps, ‘Tribal-landed property: the value of the chieftaincy in contemporary Africa’, *Journal of Agrarian Change*, 16:3 (2016), 452–77 (464–66).

25 *Ibid.* 469.

26 *Ibid.* 470.

27 The colonial state did have legal trusteeship over ‘tribal trust’ land, which included the power to veto concessions or to appropriate a portion of land rents. *Ibid.* 468.

trust by local authorities. Chiefs could not sell 'stool' land, but they could lease usufruct rights to migrant cocoa farmers or accord leases to European mining and timber outfits.²⁸ During a gold rush from 1875–95, indigenous authorities leased more than 25,000 square miles of land to mining concessionaries.²⁹ The Crown passed a Concessions Ordinance in 1900 to validate individual concessions made by stool authorities and to limit the duration and scope of these titles. This policy recognized the rights of traditional authorities over stool lands, while reinforcing the role of the state as the trustee of land with powers to appropriate land for the 'public good'. The Concessions Ordinance also produced a panoply of mining rights in the Gold Coast: some concessionary agreements accorded local residents the right to mine gold, others reserved exclusive prospecting and mining rights to European or Afro-European mining outfits.³⁰

Perhaps the most significant divergence in legal orientations towards indigenous mining in colonial Africa emerged between regimes that separated land from mineral rights (AOF, Belgian Congo, Sierra Leone, and Nigeria) and states that attached rights to the subsurface to rights in land. The latter was more common in regions of intensive European settlement, mineral speculation, or cash cropping (such as the Gold Coast, South Africa, Kenya).³¹ The demands placed by Africans on access to subsoil rights also shaped colonial mining policies. The French were forced to recognize the importance of indigenous mining in the territory that became AOF – home to one of the continent's oldest indigenous mining traditions. With this broad comparative framework in place, we now turn to the vicissitudes of the federation's mining regime.

CUSTOMARY CONFLICT IN FRENCH WEST AFRICA

Competition for access to natural resources, both real and imagined, was one of the main drivers of colonial partition in Africa, and the French case was no exception. French conquest of the fabled auriferous provinces of Bambuk and Bouré – which had furnished the trans-Saharan trade in gold for over a millennium – rekindled an old French dream of exploiting these goldfields. It was in search of these gold-producing regions that Portuguese ships first traveled down the West African coast in the fifteenth century. The French came to dominate trade along the Senegal River for the next three centuries. While focused on the export of slaves and acacia gum, French officials from the coastal colony of Senegal continued to speculate about controlling 'native' gold mining and trade.³² French military leaders of West African conquest campaigns wrote popular accounts for audiences in France that described 'native's mining gold a little bit everywhere'.³³ Colonial boosters

28 R. R. Dumett, *El Dorado in West Africa: The Gold-Mining Frontier, African Labor, and Colonial Capitalism in the Gold Coast, 1875–1900* (Athens, OH, 1998), 272–77.

29 *Ibid.* 89.

30 *Ibid.* 273–7; Greenhalgh, *West African Diamonds*, 149.

31 On the impact of metropolitan legal traditions on mining laws in the colonies, see L. Hailey, *An African Survey: A Study of Problems Arising in Africa South of the Sahara* (London, 1957), esp. 1520–27.

32 Curtin, 'The lure of Bambuk gold'.

33 J. Gallieni, L. Archinard, and L. Faidherbe wrote about their military campaigns in West Africa in popular press publications in France. Similarly, a series of gold rushes in the Gold Coast was sparked by stories of

argued that French mining outfits could turn easy profits from replacing ‘native mines’ with ‘scientific techniques’.³⁴ The Colonial Ministry in Paris also promoted gold mining in AOF. In 1873 the franc was repegged to the gold standard, but France controlled only a fraction of global gold production and the treasury was eager to increase its reserves. West African military leaders maneuvered to control goldfields in the face of French encroachment in the second half of the nineteenth century. In 1857, the Muslim cleric and political leader al-Ḥājj Umar Taal lost control of Bambuk to Louis Faidherbe, then governor of Senegal. In 1892, the French military seized Bouré from the Maninka state builder, Samori Touré. Upon capturing Bouré the French military reportedly promised to uphold the ‘right’ of its residents to mine gold; a concession intended to distinguish the French from Touré, who requisitioned gold from Bouré by force.³⁵

In 1895, the Colonial Ministry in Paris commissioned an engineer, Maurice Barrat, to draft a mineral regime for West Africa that respected the ‘native rights and customs’ for mining gold, as promised by the French military to the residents of Bouré. At the same time, Barrat was instructed to carve out a legal jurisdiction for European mining operations that would, officials hoped, create more profits ‘for public wealth’.³⁶ South Africa’s gold mining revolution was well underway, with some operations excavating reef gold hundreds of meters underground. Barrat, who knew little about West Africa’s geology, expected French firms to discover gold at similar depths in West Africa. Surmising that *orpailleurs* were limited to mining ‘superficial’ deposits with the use of locally forged iron hand tools, Barrat proposed to protect the ‘customary rights’ of *orpailleurs* by allowing them to mine ‘to the depth they can reach with their current procedures’. Europeans would mine ore that ‘escaped the reach of the primitive techniques of the natives’.³⁷ In 1896 this vertical segregation of mining rights was codified in a mining decree applicable to Senegal and Soudan, and extended to the entire federation of AOF in 1899.

Barrat’s mining code soon came under critique, sparking a debate among colonial officials, geologists, *orpailleurs*, and merchants over how to define customary rights. Over the next five decades of French rule, modifications to AOF’s mining regime revolved around two objectifications of African mining custom: limiting the rights of *orpailleurs* based on the supposed limits to which Africans could dig with their ‘traditional procedures’ and the limit of Africans geographically (mining gold in supposedly ‘traditional’ mining territories). Similar to other colonial codifications of custom, AOF’s customary mining

the colony’s indigenous gold mines as recounted by British officers and soldiers returning from the Asante War of 1873–4. Dumett, *El Dorado in West Africa*, 89.

- 34 L. L. Barbier, ‘Comment les Noirs extraient l’or a la Cote d’Ivoire’, *Le Tour du Monde*, 25 (1903), 98–9; J. Gallieni, *Mission d’exploration du Haut-Niger: Voyage au Soudan français (Haut-Niger et pays de Ségou), 1879–1881* (Paris, 1885), 305–06, 512–13; E. Serrant, *Les mines et gisements d’or de l’Afrique occidentale* (Paris, 1889). Examples of this discourse in the 1850s, when governor Louis Faidherbe launched a failed French mining project in Bambuk, include: L. Flize, ‘Le Bambouk’, *Le Moniteur*, 51 (1857), 3; and A. Raffanel, *Nouveau voyage dans le pays des nègres* (Paris, 1856), 134–9.
- 35 Samori evaded French capture until 1898. Archives Nationales du Sénégal, Dakar (hereafter ANS) P/464, Barrat, ‘Note sur les mines du Soudan’, 21 Oct. 1895.
- 36 AOF’s mining laws were detailed in a ‘mineral regime’ (*régime minière*) and implemented by decree (*décret*). Centre d’Archives d’Outre-Mer, Aix-en-Provence, France (hereafter COAM), AOF/XIII/2/4, ‘Régime Minière’; ANS P/464, Barrat, ‘Note sur les mines du Soudan’, 21 Oct. 1895.
- 37 *Ibid.*

rights clauses reflected a selective hybrid of actual African techniques and administrative efforts to shape those practices to particular ends.³⁸ Within a federation covering 4.6 million square kilometers, there was not one kind of African mining 'custom' – there were many. *Orpailleurs* also innovated new methods of mining during the colonial period: their techniques were dynamic, not static.

West Africans had largely abandoned dry-season *orpillage* during the turbulence of French conquest in the late nineteenth century. The so-called *pax colonia* of colonialism ushered in new forms of violence, but it did make travel more secure. In the late 1890s, households in Soudan, Guinea, and Senegal re-engaged with *orpillage*; using gold to pay colonial taxes and to secure bridal dowries. By 1900, the historic mining province of Bouré, now incorporated into the circle of Siguiiri in Guinea, emerged as the epicenter of *orpillage*. By 1910, the governor of Guinea had granted 390 exploration permits to European firms, most of which were French speculators. The few French mining ventures that ventured into AOF had limited funds and even less knowledge of regional geology. Rather than prospecting for deep lode ore, these firms requested permits transposing directly on mines already 'dug by the natives'.³⁹ *Orpailleurs* complained to circle administrators (*commandants*) that local populations (not Europeans) had discovered these deposits. The most publicized of these conflicts took place on 'Fatoya', a mountain near Siguiiri that residents had mined intermittently for decades.⁴⁰

In 1908, a French enterprise by the name of 'Compagnie des Mines de Siguiiri' installed rock-crushing machines and a short railway track on the southern edge of Fatoya mountain. The release of carbon monoxide typically limited African mining shafts to roughly thirty feet, but the porous geology of Fatoya mountain created natural aeration, enabling *orpailleurs* to dig far deeper into the core of the hillside. In other words, on Fatoya mountain, *orpailleurs* extracted gold at depths that Maurice Barrat, author of AOF's first mining code of 1899, believed were beyond 'the reach of their primitive techniques'.⁴¹ For several dry seasons, *orpailleurs* labored on the northern half of the mountain, while the Compagnie remained to the south. By 1914, *orpailleurs* attacked the central 'corridor of the company's concession with their picks and shovels'.⁴² The Compagnie appealed to the *commandant* of the circle of Siguiiri, Bidiane, to intervene. But as Bidiane reported, local chiefs refused to cede their 'customary rights' to exploit superficial deposits to the Compagnie.⁴³ The governor-general supported the claims of local residents and forced the Compagnie to close in 1914.⁴⁴ As revealed by the Fatoya conflict, the rationale for

38 Berry, *No Condition is Permanent*; K. Mann and R. Roberts, 'Law in colonial Africa', in K. Mann and R. Roberts (eds.), *Law in Colonial Africa* (Portsmouth, NH, 1991); T. Spear, 'Neo-traditionalism and the limits of invention in British Colonial Africa', *The Journal of African History*, 44 (2003), 3–27 (3).

39 Archives Nationales de la Guinée, Conakry (hereafter ANG) 3/Q/10, 'Rapport du contrôleur des mines to the Lieutenant-Gouverneur de la Guinée Française' (hereafter GGF), 25 Apr. 1909.

40 ANS P/468, 'William Atherton Report, Province of Bouré', 18 Dec. 1902.

41 ANS P/464, Barrat, 'Note sur les mines du Soudan', 21 Oct. 1895.

42 Archives de la Direction des Mines et de la Géologie du Sénégal, Dakar (hereafter ADMGS), Orpillage en Guinée (OG), Letter from Bidiane, Commandant de Cercle (CdC) Siguiiri, to the GGF, Siguiiri, 6 Sept. 1913; ADMGS OG, 'Procès-verbal d'une palabre tenue a Fatoya', 27 Jan. 1914.

43 ADMGS OG, 'Procès-verbal d'une palabre tenue a Fatoya', 27 Jan. 1914

44 *Ibid.*

AOF's 1899 mineral regime – based on supposed divergences in the technical capacity of West African and European miners – did not correspond to the actual practices of either group who competed to exploit the same deposits.⁴⁵ While Bidiane described European techniques as 'more refined' than local ones, French miners had clearly profited from the discovery of Fatoya by *orpailleurs*.

On the heels of the Fatoya conflict, mining engineers working in the Colonial Ministry in Paris and in Dakar lobbied to abolish customary rights altogether. They argued that the customary rights clause left Europeans vulnerable to the 'invasions of native miners' and 'robbed the state of revenue' by preventing the 'rational exploitation of the subsoil' by French outfits.⁴⁶ *Commandants*, who were more concerned with political stability in auriferous circles located far from coastal European enclaves, viewed competition between *orpailleurs* and French mines as politically volatile. AOF's powerful merchant lobby also endorsed the customary mining regime, which they profited from as the sole state-authorized gold merchants. One view was shared across the political spectrum: customary mining was seen as a mere stepping-stone in the technological evolution of African subjects. Engineers, in particular, voiced their hope that one day customary rights would be 'erased to the point that the natives could integrate into common law'.⁴⁷ But there was no consensus over how this would unfold. Would Africans continue to mine in extended kin groups or become wage laborers on European-run mines?

Eager to eliminate direct competition between *orpailleurs* and French mining firms, the governor-general, William Ponty, asked circle administrators to re-examine the legal basis for customary mining rights.⁴⁸ Bidiane, the *commandant* of Siguiri, consulted the circle's archives and interviewed male elders about regional mining traditions. Bidiane concluded that when Barrat first drafted the federation's mining decree, Siguiri was emerging from the 'foreign rule' of Samori Touré. Touré forced people from far-flung regions to mine in Bouré. But prior to Touré's rule, 'strangers' from other regions were not permitted to mine. Bidiane concluded that the customary rights of *orpailleurs* should not be defined by their technical capacities, but according to geography. It was customary, Bidiane argued, for Africans to mine in certain territories.⁴⁹

Ponty embraced Bidiane's thesis and proposed modifying the federal mining decree to regulate *orpaillage* with a system of 'native reserves' (*réserves indigènes*) from which both Europeans and 'stranger' African migrants would be excluded. The 'native reserves', which were codified in AOF's 1924 mineral decree, materialized a political compromise among divergent French imperial interests.⁵⁰ The lieutenant-governors of each colony would determine the location and expanse of 'native' gold mining reserves prior to each

45 ANG 3/Q/10, 'Rapport du contrôleur des mines àGGF', 25 Apr. 1909.

46 ANG 3/Q/10, Letter from David, ingénieur des mines, to the GGF, Conakry, 25 Oct. 1913.

47 ADMGS OG, Eduard Julian, 'Rapport sur l'exercice du droit coutumier et l'amélioration des exploitations aurifères indigènes', 21 Aug. 1929.

48 ANG 3/Q/10, Letter from the GGAOF to the GGF, Conakry, 2 Dec. 1913.

49 ADMGS OG, Letter from Bidiane to the GGF, 6 Sept. 1913.

50 'Décret du 22 Oct. 1924, fixant le régime des mines en A.O.F.', *Journal Officiel de l'A.O.F.*, 6 Dec. 1924, 735. The system 'native reserves' was implemented federation wide by 'decree' (*décret*). Lieutenant-governors of each colony determined the location of reserves by 'ordonnance' (*arrêté*).

dry season. Within the reserves, *orpailleurs* were encouraged to 'evolve' and 'modernize' their mining techniques. *Orpailleurs* could continue to prospect for gold outside of reserves, but they could only mine these regions with their 'ancient methods' – iron hand-picks and gourds.⁵¹ This policy benefited AOF's geological service. Grossly underfunded compared to their counterparts in British Africa, French geologists relied on tracking *orpailleurs* to locate gold deposits and to develop schematic mineral maps of the federation. Limiting the ability of *orpailleurs* to exploit new discoveries outside of the reserves meant that the federation's mining engineers could advertise major discoveries made by *orpailleurs* to French firms for 'industrial' exploitation. Within the reserves, geologists could even collaborate with indigenous miners to 'improve' their techniques to generate more taxable gold dust. The decree's spatial demarcation of technological evolution (modern tools inside of reserves, traditional ones outside) revealed that the state's codification of customary mining rights did not align with the actual extractive practices of *orpailleurs*. There was nothing customary about the reserve system. Rather, the geographic demarcation of mining rights codified in AOF's 1924 mineral decree was explicitly designed to eliminate competition between *orpailleurs* and French miners.

PRIMITIVES, EXPERTS, AND THE 'NATIVE' GOLD BOOM BETWEEN THE WARS

By the First World War only a handful of French mining outfits operated in AOF, but African *orpaillage* continued to expand. When prices for peanuts, cocoa, and coffee plummeted with the onset of the global financial crisis in the 1920s, gold garnered stable market prices. French administrators dubbed the fluorescence of African mining between the wars the 'native gold boom'. By 1928 some of the larger indigenous mines in Siguiiri boasted between 5,000 to 15,000 miners. In 1937, it was estimated that 150,000 Africans mined in the circle of Siguiiri alone.⁵² With *orpaillage* the only 'viable mining industry' in AOF, the Service of Mines and Geology shifted their mission from encouraging European mining to 'improving' the 'irrational work methods of natives' within mining reserves.⁵³ A geologist by the name of Eduard Julian led these efforts. As Guinea's sole mining engineer, in 1931 Julian proposed to establish a 'model mine' (*exploitation modèle*) to modernize African mining practices through 'technically improved procedures'.⁵⁴ The governor-general approved the project, arguing that as long as '*orpaillage* substitutes for modern industry, we are morally obligated to improve the process of exploitation'.⁵⁵ Julian aimed to substitute 'their [African] methods with simple tools, inexpensive, all while respecting their ancestral customs' and not disturbing 'traditional social structures'.⁵⁶ Julian's vision resonated with the pro-peasant and anti-industrial sentiments of AOF's administrators, who feared that mechanization would radicalize the countryside and

51 ADMGS OG, Bardin, 'Etude sur la viabilité des exploitations modelés', 14 Nov. 1931.

52 Robequain, 'Problèmes de l'économie rurale en A.O.F.', 143.

53 ADMGS OG, Letter from the Minister of Colonies, Travaux Publics, to the GGAOF, 7 Aug. 1932.

54 ADMGS OG, Julian, 'Rapport sur l'exercice', 21 Aug. 1929.

55 ADMGS OG, J. Malavoy, 'Note sur l'amélioration de l'orpaillage indigène', 24 Mar. 1931.

56 *Ibid.*

undercut the monopoly of French merchants on purchasing commodities produced by West African peasants.

In 1933 Julian opened the model mine in the heart of Siguiri's native mining reserves. According to Julian's calculations, *orpailleurs* extracted a mere half the quantity of gold possible with European techniques. Julian designed two methods to reduce this 'waste of natural wealth': wooden pillars to reinforce mining shafts and wooden sluices to facilitate gold washing.⁵⁷ A string of high-ranking officials visited the model mine, but early optimism waned after a flood rotted the subterranean wood supports. 'Julian is very attached to his work', wrote the inspector of Administrative Affairs, but 'his various failures have not given confidence to *orpailleurs* who, during this time . . . extract gold in abundance'.⁵⁸ By 1936, the Service of Mines closed the mine and recentered efforts on supporting *orpailleurs*: transporting rice to the goldfields and commissioning roads to newly opened mines. *Orpailleurs* proved capable of innovating new extractive techniques on their own terms. For example, a new category of young male miners, called the *soughoumbali*, developed a method of capturing the profits 'wasted' in auriferous pillars used to support subterranean caverns. Traveling by bicycle to recently abandoned mines, they descended into mining tunnels and dismantled the pillars of auriferous rock with elongated picks. Risking suffocation under a collapsed mining shaft, their extraordinary returns earned *soughoumbali* fame and wealth. Officials recognized *soughoumbali* by their richly embroidered clothes, bicycles, and gramophones.⁵⁹ During the interwar gold boom, migrants from Sierra Leone, who had formerly worked with British diamond prospectors, introduced European methods of damning waterways to expose previously inundated auriferous plains to the goldfields of Siguiri.⁶⁰ These techniques intensified gold mining in Guinea, Soudan, and Senegal. French and 'Syrien' merchant houses expanded their presence on AOF's goldfields, in turn, working with African merchants (*dioula*) who purchased gold dust directly from *orpailleurs*.

The rapid expansion of indigenous gold mining independent of French technical assistance in the 1930s led colonial officials to reassess received wisdom about the sector. Geologists who previously denigrated the techniques of women *orpailleurs* as primitive began to describe their washing methods as 'expert' and 'efficient'.⁶¹ In 1934, the governor of Guinea applauded the 'ingenuity' of native miners and the 'incontestable rapidity and productivity' of their tools.⁶² The assistant director of the Service of Mines even concluded that 'the natives, drawing on an ancient experience, practice an excellent method adapted to the conditions of the gold deposits, to their conditions of life, and to their customs'.⁶³ At the height of the boom, these 'expert' *orpailleurs* extracted several tons of gold from Siguiri

57 ADMGS OG, Julian 'Rapport sur l'exercice', 21 Aug. 1929.

58 ADMGS OG, Aubert, Inspecteur des Affaires Administratives, 'Rapport sur la situation du commerce de l'or et sur l'exploitation des mines d'or de Siguiri par les indigènes', 29 May 1934.

59 J. Siossat, 'Les coutumes des orpailleurs indigènes du Maramandougou', *Bulletin du Comité d'Etudes Historiques et Scientifiques de l'A.O.F.*, Tome XXI (1938), 336–49, 346.

60 ADMGS OG, Nickles, 'Observation sur l'or dans le Houré-Kaba et le Fitaba', Labé, 2 June 1939.

61 ADMGS OG, Goloubinow, 'Prospection aurifère en Guinée', 9 Aug. 1935.

62 ADMGS OG, Letter from GGF to the General Inspection of Public Works, 4 July 1934.

63 ANG 3/Q/10, Letter from Pierre Legoux to Fernand Blondel, Ingénieur en Chef des Mines, 29 Feb. 1934.

and an additional ton from the goldfields of Senegal and Soudan combined.⁶⁴ The searing 'failure' of French mining and Julian's model mine experiment troubled the notion that *orpillage* was less efficient or profitable than French mining techniques – an argument formerly used by officials to justify restricting the rights of *orpailleurs*. During the native gold boom, administrators voiced few concerns over how to define or codify customary mining rights. This complacency changed, however, after the Second World War with the rise in global demand for industrial and strategic metals. With the renewed possibility of French and other expatriate 'industrial' mining investments in AOF, colonial officials began to advocate for restricting the customary rights of *orpailleurs*.

DEBATING NATURAL PATRIMONY IN POSTWAR AOF

The Second World War exposed the fragility of French power and sharpened African demands for greater parity with metropolitan citizens. With the formation of the French Union of the Fourth Republic in 1946, colonial subjects became citizens of overseas France with rights to elect representatives to territorial assemblies. Elected African officials could now deliberate directly with colonial governors and the governor-general over diverse matters, including the granting of exploration permits and mining concessions. France also began to systematically invest in the development of its overseas territories, shifting away from an older model of self-sufficiency in the colonies. These funds prioritized mineral exploration, particularly of gold, bauxite, phosphates, and uranium.

Gilbert Arnaud, the first postwar Director of the Service of Mines, aimed to reinvigorate geological exploration in AOF in order to attract 'serious' mining investments in the federation. Arnaud hoped to finally supplant African *orpillage* with French *industrie*, but he imagined *orpailleurs* playing a role in this transition. Formalizing a longstanding practice in the geological service, Arnaud instructed geologists to track the movements of *orpailleurs* across the federation. This 'mass of specialists', he argued, would lead geologists to gold deposits that could be exploited on an industrial scale.⁶⁵ But collaboration between geologists and *orpailleurs* raised thorny questions about mineral rights. If *orpailleurs* discovered a new gold deposit, would the state confer them the right to exploitation? Or would *orpailleurs* risk losing their customary rights to a European enterprise? As geologists debated these questions, Arnaud lobbied the administration to substitute the 'current geographic definition of customary rights' based on native reserves for a 'technical definition' of African mining custom.⁶⁶ This 'technical definition' returned to the premise of the federation's first mining decree of 1899, which restricted *orpailleurs* to mining 'surface' deposits. The definition of 'surface' was poorly defined: some geologists argued it should refer to alluvial deposits; others argued it applied to depth. According to Arnaud, this plan would supposedly 'free' *orpailleurs* to prospect for gold without geographic constraints, while giving the state the power to evict *orpailleurs* 'to the profit of an

64 Robequain, 'Problèmes de l'économie', 146.

65 ANG 3/Q/10, Arnaud, Directeur des Mines de l'AOF, 'Rapport sur l'organisation administrative, technique, et coopérative d'orpillage', Dakar, 11 Sept. 1944.

66 *Ibid.* 'Secondary' refers to deposits derived from the weathering of primary deposits.

industrial enterprise' if the 'rational exploitation of these deposits exceeds their technical capacities'.⁶⁷

The Grand Council of AOF debated Arnaud's suggested modifications, but the creation of a new Bureau of Overseas Mining in 1948 slowed the adoption of reforms. At the same time, Guinean politicians – serving in the French Parliament and in the territorial assemblies of West Africa – entered the debate over customary mining rights. Members of the Union du Mandé, a Manding ethnic party from northern Guinea, criticized AOF's policies towards *orpailleurs* and the African *dioula* who purchased gold from *orpailleurs* on behalf of French and 'Syrien' merchants. In 1948, Framoi Béréte, a founding member of the Union and the first elected African representative of Siguiri, campaigned to liberalize AOF's gold market.⁶⁸ Béréte argued before Guinea's Territorial Assembly and the Grand Council in Dakar that the official price of gold in AOF, which was set artificially low by the administration during the war, was half the price on offer in British colonies. Mambo Sano, a Guinean politician who served on the French National Assembly in Paris, simultaneously mobilized a political coalition in Paris to 'free' AOF's gold commerce.⁶⁹

Under mounting political pressure, the administration lifted price restrictions on gold in AOF in 1950. However, the timing of this policy coincided poorly with the launching of a new scheme to 'improve' African mining techniques in Siguiri. In spring of 1950, the Mining Bureau of Overseas France sent an engineer by the name of Blouin to Kentinian, the site of Eduard Julian's model mine. Blouin's mission was to demonstrate techniques for evacuating water from pits dug by *orpailleurs*. Just prior to Blouin's trip, a French financier submitted a request to Guinea's General Council in Conakry for a gold exploration permit extending across Guinea's native reserves. Within a few weeks, mining chiefs from across Siguiri signed a petition to expel Blouin from the circle.⁷⁰ They suspected Blouin's intentions were not to help improve 'native' mining techniques, but to scope out productive gold deposits that could be exploited by French firms. Fresh from the gold commerce campaign, Framoi Béréte wrote a searing editorial in the bi-weekly, *Voix de la Guinée*. 'For several months, the engineer is sent to study, interview, and observe in the circle. "Is it really to improve our methods of exploiting gold?" the natives ask with suspicion. "Or is it to delineate new gold mining areas for capitalists?"'⁷¹ Béréte was particularly troubled to discover that the technical advisor behind the permit request was none other than Eduard Julian, a former employee of the Service of Geology. Once tasked with improving African mining techniques, Julian was now involved in a permit request that would dispossess *orpailleurs* from Siguiri's goldfields, converting the native

67 *Ibid.*

68 Béréte began his political career in Guinea's Chamber of Commerce and later served as the President of the Territorial Assembly of Guinea from 1954–6.

69 ANG 3/Q/23, Letter from Union du Mandé to the GGF, Conakry, 18 Mar. 1947. Mamba Sano served in the French National Assembly from 1946–58.

70 ANG 3/Q/23, Blouin, ingénieur au Bureau Minier de la France d'Outre-Mer (hereafter BMFOM), 'Mission orpillage de Siguiri' to Massoulard, CdC, Siguiri, 22 June 1950.

71 Framoi Béréte, 'L'Octroi à des sociétés privées des permis de recherches et d'exploitation d'or dans le cercle de Siguiri signifie la suppression pure et simple de l'orpillage des autochtones', *Voix de la Guinée*, 20 (June 1950), 3.

reserves for customary mining into the exploration or mining permit of a single French enterprise.⁷²

In the 1950s two visions of mining rights in AOF, centered on developments in French Guinea, competed for sanction by the colonial state. For the Service of Mines and Geology, the 'industrialization' of Guinea's goldfields by European-controlled firms, in which Africans would work as wage laborers, was finally within view. For Béréte and other Guinean politicians, Siguiiri's gold constituted a 'natural patrimony' that the Bureau of Mines was obligated to protect for the future benefit of 'thousands of Africans coming from Senegal, Guinea, Soudan, and Cote d'Ivoire'.⁷³ While engineers argued that industrial mining would not dispossess Africans of their customary right to mine, Béréte questioned the viability of this promise. As Béréte argued, the proposition to divide subsurface rights based on supposed divergences in the technical capacities of Africans and Europeans ran counter to the core principles of French republicanism. 'If we are really French', he wrote, 'we have the right to believe that our sons and grandsons could become engineers, trained at the Polytechnique, and capable of unearthing gold wherever it is found.'⁷⁴ For Béréte, part of the promise of membership in the French Union was the obliteration of political and technical disparities between France and its overseas territories. Africans could aspire to the same technological training as those in the metropole.

Béréte's arguments embodied contradictions that African politicians across the continent encountered in the 1950s, as Africans were gaining political rights in some territories and long-held desires for greater representation in colonial affairs gained traction.⁷⁵ Access to natural resources was central to these debates. By defending Siguiiri's gold as a communal right, accessible to all West Africans, Béréte deployed an argument made by politicians elsewhere in Africa to defend against land expropriation by white settlers and miners.⁷⁶ When West Africans became citizens of overseas France in 1956, for the first time it became possible for black Africans to apply for exploration permits and mining concessions. The high capital requirements for these concessions effectively excluded Africans, making customary mining the sole option to defend. On the other hand, Béréte envisioned 'modernizing' Siguiiri's goldfields, creating industrial mines run by Africans rather than European-controlled mining firms. This latter vision was widely embraced by the African politicians of Béréte's generation.

Guinea's governor and General Council ultimately rejected the permit request of the French financier. While this decision appeared to side with the interests of *orpailleurs*, French officials were more motivated by 'political concerns' than by Béréte's more radical vision of technological modernity on Siguiiri's goldfields, pioneered by Africans. Roland Pre, then governor of Guinea, wrote to the governor-general in Dakar that there 'were

72 *Ibid.*

73 ANG 3/Q/23, Letter from Framoi Béréte, President de la Commission Permanente, to the GGAOF and the President of BMFOM, 23 May 1950.

74 *Ibid.*

75 For a discussion of debates by African politicians in Sierra Leone's Legislative Council over mining rights, see Greenhalgh, *West African Diamonds*, 135–6.

76 Chanock, 'Paradigms, policies, and property: a review of the customary law of land tenure', in Mann and Roberts (eds.), *Law in Colonial Africa*, 61–84; Berry, *No Condition is Permanent*.

more than 100,000 *orpailleur* in Siguirí' and we 'do not want recriminations from political parties there'.⁷⁷ In 1954, the Ministry of Overseas France elaborated a single 'modern' mining decree, applicable to all overseas territories.⁷⁸ However, the law included one clause applicable exclusively to AOF. It granted residents of AOF the right 'to exploit by traditional procedures' deposits of gold and other mineral substances in zones as defined by lieutenant-governors of individual colonies since 1924.⁷⁹ The inclusion of AOF's customary mining rights in this code is a testament to the success of *orpailleurs*, and the African politicians who represented them, in retaining some legal access to the subsoil. *Orpailleurs* were a political force the colonial state could not ignore.

FROM 'CUSTOMARY' TO 'ARTISANAL' MINING

While AOF's customary mining policies sanctioned *orpaillage*, the independent states to emerge from the federation in the late 1950s initially criminalized indigenous mining. This section briefly considers the trajectories of these policies in the three African states that came to govern the historic gold producing zones of Bambuk and Bouré: Senegal, Mali, and Guinea. Guinea was the first African colony to gain independence from France in 1958; Mali and Senegal followed in 1960. Sekou Touré, Modibo Keita, and Léopold Sédar Senghor embraced divergent ideologies of African socialism, but they all aimed to diversify AOF's narrow mercantile emphasis on exporting tropical commodities to create more diversified economies. All three leaders nationalized key industries, emphasized a state-coordinated economy, and valorized agriculture as the moral and economic future of rural Africa.⁸⁰ By 1964, all three states had declared land and the subsoil the exclusive property of the state. Nationalization policies were designed to disrupt the uneven accumulation of resources by elites favored under colonialism and to redistribute (at least in theory) natural resources to all citizens.

International developments also influenced the natural resource policies of decolonizing states. Participants in the Bandung Conference of 1955 first elaborated the concept of 'resource sovereignty', which was later recognized by the United Nations (UN) General Assembly. The UN encouraged decolonizing states to restrict the access of private (ex-imperial) firms to natural resources and guided African states to adopt policies that encouraged state-run mining industries.⁸¹ *Orpaillage* had no place in the development vision elaborated by the decolonizing states of French West Africa and by emergent transnational regulatory agencies, such as the UN. By the mid-1960s, Sékou Touré and Modibo

77 ANG 3/Q/23, Letter from Roland Pre, GGF, to the GGAOF, Conakry, 25 Apr. 1950.

78 'Décret n° 54-1110 du 13 novembre 1954 portant réforme du régime des substances minérales dans les territoires d'outre-mer, au Togo et au Cameroun', *Journal Officiel de la République Française* (hereafter *JORF*), 14:11 (1954), 10713-18.

79 'Décret n° 57-242 du 24 février 1957 relatif au régime des substances minérales dans les territoires d'outre-mer', *JORF*, 28:2 (1957), 2300-02.

80 While all three countries nationalized key industries, expatriate firms continued to play a role in resource extraction in key sectors in Guinea and Senegal. R. Morgenthau, 'The developing states of Africa', *The Annals of the American Academy of Social Science*, 432:1 (1977), 80-95 (89).

81 UN Department of Economic and Social Affairs (DESA) *Mineral Resources Development with Particular Reference to the Developing Countries* (New York, 1970).

Keïta had explicitly outlawed *orpaillage*. Senghor did not criminalize *orpaillage* outright, but none of the mining codes ratified during his presidency mentioned the practice. As a form of individual accumulation and exploitation of state-owned property (minerals), *orpaillage* was ideologically problematic. From the perspective of newly formed states, it was also difficult to control and tax – the opposite of a ‘nationally’ coordinated economic system. Moreover, *orpailleurs* were neither industrial workers on state-run industries nor year-round agriculturalists, celebrated as the ‘natural’ vocation of rural Africans by many leaders of African socialism. Touré and Keïta, in particular, decried *orpaillage* as a parasitic form of capitalism that materialized the exploitative mercantilism of colonialism.

But West African officials would be forced to reconsider their policies towards *orpaillage* when drought struck the Sahel in the early 1980s. During this decade, thousands of men and women in some of the poorest regions of Senegal and Mali turned to *orpaillage* in order to barter gold for grain.⁸² At the time, African states also faced mounting debts. The World Bank and the International Monetary Institute pressured African states to cut back on education, health, and infrastructural services through the adoption of structural adjustment reforms. As part of a broader policy effort to dismantle state-run industries, liberalize markets, and encourage direct foreign investment in the 1980s–2000s, Senegal, Mali, and Guinea adopted pro-market mining codes that gave foreign investors considerable tax breaks on duties, sales taxes, and imports.⁸³ For the first time since independence, this generation of mining codes recognized artisanal mining rights. In part, this was a post-hoc response to the fluorescence of informal mining activities in the region. Global demand for hard metals was recovering after years of low prices as these states were dismantling agricultural services and lifting subsidies for fertilizers as part of their SAP agreements. Coupled with increasingly unpredictable rainfall and fluctuating global market prices for tropical commodities, many rural households turned to mining to subsidize poor agricultural returns.⁸⁴

The artisanal mining clauses elaborated in the mining codes of Guinea, Mali, and Senegal in the 1980s and 1990s reinvigorated the core features of colonial customary mining rights. In these codes, state officials reserved the right to issue ordinances specifying zones in which citizens could mine – a return, albeit with slightly modified language, to the ‘native reserve’ system elaborated in colonial AOF in the 1920s. Within these zones, citizens could mine ‘superficial deposits’ of gold using ‘traditional methods’ or ‘artisanal techniques’.⁸⁵ As in the colonial period, these rights were usufruct and effectively

82 For the case of Senegal alone, see M-T de Lestrangé, M. Gessain, D. Fouchier, and G. Crépy-Montal, ‘Stratégies de lutte contre la disette au Sénégal oriental’, *Journal des Africanistes*, 56:1 (1986), 35–50.

83 The World Bank’s strategy for pro-market mining reform in Africa is outlined in World Bank, *Strategy for African Mining* (Washington, DC, 1992). See also B. Campbell, ‘Revisiting the reform process of African mining regimes’, *Canadian Journal of Development Studies*, 30:1–2 (2010), 197–217.

84 On the complex relationship between farming and artisanal mining in West African contexts, see S. M. Banchirigah and G. Hilson, ‘De-agrarianization, re-agrarianization and local economic development: re-orienting livelihoods in African artisanal mining communities’, *Policy Sciences*, 43:2 (2010), 157–80.

85 Mali did not revise its code until the 1990s. Portant Code Minier de la République de Guinée, Ordonnance 076, 21-3-1986; Code Minier de la République du Sénégal, Loi N 88, 6-8-1988, Décret n 89-907, 5-8-1989; République du Mali, Portant Code Minier, Ordonnance 99-032, 19-9-1999.

communal: any citizen with a state-issued artisanal mining licence could mine within state-designated zones alongside other artisanal miners. The delineation of mining rights based on the use of ‘traditional methods’ is nearly identical to the language of the customary rights clause ratified in the French Overseas mining decree of 1954, which restricted AOF’s residents to mining gold with ‘traditional procedures’ in territories by lieutenant-governors. By definition, ‘traditional procedures’ referred to the tools used by *orpailleurs* when customary rights were first codified in 1899 with the ratification of AOF’s first mining regime. Of course, the various definitions of customary rights elaborated by the colonial state never mapped directly onto the actual techniques of *orpailleurs*. Rather, customary mining was a fiction of ‘custom’ rooted in the legal racism of the colonial state. Despite this, African politicians of the pro-market reform generation paraded artisanal mining rights as a straightforward, technical codification of African mining ‘tradition’.

CONCLUSION

Since the 1980s, the practice of *orpaillage* has re-emerged as a ubiquitous feature of rural life across the states formerly incorporated into the federation of French West Africa. Today, the historic gold producing regions of Bouré and Bambuk are host to a ‘gold rush’. Canadian, Australian, British, and South African firms have opened dozens of new gold mines along the Birimian Greenstone Belt, a geological formation that undergirds much of the former AOF. Artisanal mining continues to expand in this zone, reactivating the exchange of migrant miners, goods, and techniques across this savannah landscape, recalling the fluorescence of *orpaillage* between the two wars. Once marginal to the literature on the agrarian economy, artisanal mining is now central to academic and policy treatments of ‘informal economies’ and ‘rural livelihoods’ across the African continent.⁸⁶ This article contributes to this emergent literature by drawing attention to the roots of artisanal mining policies in colonial-era customary mining policies.

Customary mining laws were one of several legal mechanisms by which colonial states recognized the rights of Africans to the subsurface, when they were recognized at all. In the Gold Coast (Ghana) and South Africa, ‘tribal’ authorities were able to acquire formal land titles with mineral rights attached. Tribal mineral titles are now the norm in South Africa, and some clans and chiefs in Ghana have also translated colonial mineral rights into active mineral titles. These are, however, exceptions to the rule. For most Africans, artisanal and small-scale mining legislation is the only viable pathway to accessing legal rights to the subsoil. These unstable, communal, and often seasonal use-rights are, I have argued, a colonial inheritance.

Artisanal mining rights, like their antecedents in colonial customary rights, vary widely in different independent states and in reference to various mineral substances. If they appear humanistic compared to mining regimes that outlaw indigenous or small-scale mining altogether, they are also fragile. In AOF colonial officials rescinded and ignored customary rights as easily as they protected them. Lieutenant-governors often changed the location of native mining reserves from one dry season to the next. For much of the

⁸⁶ See fns 2–6, 10, 11, 84.

colonial period, there were few material distinctions between the techniques of European miners and *orpailleurs*, and Africans out-produced European mining outfits. By restricting when, where, and with what tools Africans mined for gold, the state worked to make African mining static and rudimentary, while they encouraged European-operated firms to innovate and to 'take over' the discoveries of *orpailleurs*. And yet the regulation of *orpaillage* in AOF was not a simple story of criminalization. At times, administrators encouraged *orpaillage*, building roads and transporting rice to the most popular goldfields. While French officials argued that customary rights could be defined by strict 'technical' parameters, *orpailleurs* and African politicians who represented auriferous zones underscored customary rights as a political problem. They defended their right to mine independently within extended kin groups; their right not to labor on European mines.

While no facile line can be drawn from the colonial period to the present, *orpailleurs* in West Africa today are subject to similar fluctuations in global markets and shifting state agendas concerning private expatriate investments in the subsoil that characterized colonialism. With imported mortar-pickers, gold detectors, and dynamite smuggled across porous interstate borders, *orpailleurs* actively compete with mining companies for the same bodies of ore. Many mining companies strike ad-hoc co-habitation arrangements with *orpailleurs* operating within their permits. At times, mining corporations campaign against 'illegal' miners, claiming they eat into company profits and destroy the environment. State sponsored 'sweeps' of artisanal mining camps – and bulldozer campaigns of *orpaillage* sites – are often spearheaded and financed by companies protecting their 'investments'.⁸⁷ Local NGOs and international environmental protection programs sponsor community garden and farming projects to reorient household labor 'back' to agriculture. These well-intentioned programs ignore that many artisanal miners descend from families who have mined gold for decades, and were even encouraged to do so by the colonial state. Recently, Senegal and Mali have adopted artisanal mining 'corridor' policies that relinquish or reserve a portion of auriferous lands – most of which is leased to private exploration companies – to artisanal extraction. Policies of accommodation and criminalization co-exist, as they did under colonialism. Attempts by the state and corporations to restrict *orpaillage* are contested. *Orpailleurs* constitute a powerful lobby and make sophisticated defenses for their right to minerals, including those based on their customary right to mine. The origins of these arguments are found in the colonial period.

87 Banchirigah and Hilson, 'De-agrarianization, re-agrarianization', 166; Luning, 'Processing promises'.