From gold to rosewood : Agrarian change, high-value resources, and the flexible frontier-makers of the twenty-first century

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From gold to rosewood

Agrarian change, high-value resources, and the flexible frontier-makers of the twenty-first century

Annah Zhu and Nancy Lee Peluso

Introduction

The promise of gold brought tens of thousands of migrant laborers from China to the forested and marshy shores of western Borneo in the mid-eighteenth and early-nineteenth centuries. Settling in for the short or long term, along and inland from the sparsely populated coasts, those early miners created patchworks of small mines and farms—and farms on top of spent mines—as they produced one of the first smallholder-driven gold frontiers in the world. In the province of West Kalimantan (Indonesian Borneo) today, a new kind of gold frontier is being carved, again by small-scale miners, digging out new pits and shafts or working the planted-over sites of those centuries-old mines. Since the early 1990s, men and women struck with gold fever do not focus solely on mining or farming livelihoods; they are operating within a more financialized, and consequently more volatile, global economy than that of centuries prior. They now engage with a broader range of mining, farming, entrepreneurial, and wage labor activities that ebb and flow along with the massive transformations in the landscape as well as in the province's political economy. If returns from the farming or agroforestry commodities flag or fall through the sensitive global price floor, some household members turn to mining gold. If the gold deposits they are working become exhausted, or their bodies are exhausted from the stresses of mining gold, they can turn back to agroforestry, dig elsewhere for gold, engage in wage labor in the city or countryside, travel to other villages by bicycle or motorbike to sell food or clothes, or seek work across Indonesian Borneo's land border with Malaysia. If all else fails, they remain in place, at home, succumbing to what they call "*kuli* labor on their own lands"—wage labor on the oil palm plantations arriving in their neighborhoods in the last decade or two—and wait for commodity prices to rebound. In all cases, miners, farmers, and workers alike have become flexible laboring subjects in order to survive.

On the other side of the Indian Ocean, some 7000 km away, gold miners and other small producers in northeastern Madagascar are creating new resource frontiers of their own. Abandoning their gold panning and cash cropping operations, many have turned to the booming rosewood economy. As with West Kalimantan's gold fever, this new economic opportunity arose suddenly, when demand for rosewood was on the rise in China and a 2009 *coup d'état* left

Madagascar with no formal government to regulate the trade. Rather than mining or farming, villagers entered the region's national parks by the thousands in search of rosewood to log and carry to the coast. The price of the timber rose more than a hundredfold since the early 2000s. By 2013, rosewood logs from Madagascar were worth over USD 60,000 per metric ton in Chinese timber markets, and around USD 26 per metric ton in the forest where they were first cut.¹ By 2014, a market downturn in China had weakened demand and the price for rosewood, while political restructuring in Madagascar and pressure from international conservation organizations incited stronger enforcement of existing logging and trade bans. Newly minted loggers returned to their abandoned mines, fields, and villages. There, like the smallholder miners of West Kalimantan, they struggled to make ends meet before seeking greater fortunes in subsequent opportunities afforded by the vagaries of the global economy.

Indonesian small-scale miner-farmer-workers and Malagasy miners-turned-loggers complicate the categories of “peasant,” “smallholder,” “petty commodity producer,” “industrial laborer,” or “working class” that feature so prominently in classic accounts of agrarian change (Thompson 1963; Scott 1976, 1985; Bernstein and Byres 2001). Although many maintain or adopt a profile of wage-labor work when their own entrepreneurial, cash cropping, or subsistence activities fall short, they challenge forecasts of the peasantry's proletarianization while also failing to do justice to the idea of a persistent peasantry (Roseberry 1976; Johnson 2004).² Most are not seeking to “re-peasantize” their families' livelihoods by a return to subsistence agriculture. Rather, they or other family members maintain an agrarian identity as rural smallholders through a broader portfolio of work as laborers and entrepreneurs, supplementing farming income with off-farm labor outside of agriculture. Developing small-scale mining technologies and exchanging or supplementing farming with other forms of commodity production and labor, the composite worker-farmers of Indonesia, Madagascar, and many rural spaces across the globe are no longer the “peasants,” “proletarians,” or “shifting cultivators” of yore.

Some agrarian change scholars have proposed new hybrid terms. Rather than peasant or proletarian, we (and they) now speak of “smallholder miners” (Peluso 2017), “extractive peasants” (Lahiri-Dutt 2018), and “worker-smallholders” (Barral 2018). As has been true for centuries, these actors assemble their daily livelihoods through a complex bricolage based on the opportunities of the moment (Scoones 2009). What have changed, however, are the diversity and locations of opportunities, the rates at which work may emerge or vanish, the sources of work—in terms of regional or local investors—and the increasingly speculative nature of the local and global political economies within which these flexible agrarian subjects operate. The “reach” of China's speculative demand for rare timbers and rare earths, other forest products, and gold, for example, has penetrated Madagascar's forests halfway across the world, inspiring a new wave of trade and extraction and transforming Malagasy rural lives in ways resonant of China's enduring interactions in Southeast Asia. These sites illustrate how worker-smallholders of the Global South navigate long-standing and emergent global connections, moving back and forth among extraction, subsistence, cash cropping, and wage labor with dexterity.

Beyond peasantry and proletariat, resource territories have become fragmented in new ways as well. Global commodity markets have splintered, with pioneers and wealthy investors from China, India, Malaysia, Saudi Arabia, and other emerging economies vying for resources and territory alongside well-established networks leading to the Global North (North America, EU, Australia, Japan). Along with these new global actors, new resources, new ways of accessing them, and new ideas about how they should be valued have emerged as well. Operating amidst these tensions, rural subjects find themselves at the edges of multiple, sometimes recursive commodity frontiers, cyclically recurring in postcolonial settings

(Middleton 2019)—or, we suggest, reappearing in new spaces more sensitive to rapidly changing global dynamics. Smallholders also create new resource territories, as laborers, claimants, and challengers of their larger competitors.

This chapter builds on the hybrid concepts of “extractive peasants” and “smallholder miner-farmers” in order to rethink agrarian environments and rural producers in this highly speculative, late capitalist global economy. We use the examples of gold and rosewood booms to argue that the global geographies of late capitalism are generating flexible agrarian subjects who increasingly navigate, often out of necessity, volatile price dynamics, emergent export opportunities, and multiple, overlapping, and recursive resource frontiers. These flexible subjects provide an agrarian parallel to the flexible late capitalist subjects of the Global North; they comprise a new class of flexible frontier-makers that will be a defining feature of the rural twenty-first century moving forward.

The fragmentation of rural agrarian livelihoods and the flexibility of rural subjects in the Global South bear strong parallels with the flexible knowledge and service workers that define our current era of late capitalism (Mandel 1975; Jameson 1991) and post-Fordist “flexible accumulation” (Harvey 1989). Yet, late capitalism and the subjective flexibility it requires is typically theorized within the urban and suburban contexts of the postindustrial Global North—not their rural counterparts in the Global South. As much as late capitalism depends on labor regimes in the Global South and new forms of global production connecting the North and South, theories of the late capitalist subject are still predominantly associated with the context of the Global North.

Yet, as our cases show, rural subjects in the Global South experience the speculative dynamics and ephemeral consumer desires of late capitalism just as keenly as those in the North, if not more. Materially, they may live in industrial or even preindustrial landscapes, but in terms of economic volatility and the flexible subjectivities required to respond to such volatility, the hybrid worker-farmer-entrepreneurs of the Global South are quite advanced. The increasingly rapid oscillations in prices of gold, rosewood, rubber, palm oil, and vanilla, and the increasing need to navigate between these volatile global economies, all provide prime examples coming from Indonesia and Madagascar. Southern agrarian subjects, such as those described here, experience these unpredictable and capricious trajectories in the form of land, jobs, and other resources won or lost; exploitative wage arrangements; clever credit schemes (speculation on failures); and influxes of capital that might come in rapid succession, pull away quickly, or never arrive. Their everyday work and the rhythms of their lives have been altered dramatically. Rural laboring subjects *must* be flexible, or they founder.

The rest of this chapter unfolds in four parts. The next section discusses gold as a “made” resource in order to demonstrate the concept of resource-making/world-making. The third section refocuses on gold at its points of extraction, using the contemporary example of small-scale gold mining in West Kalimantan, Indonesia, to demonstrate a new “flexible agrarian subject” or “flexible frontier-maker” that can be understood as the product of late capitalist world-making processes. The fourth section then turns to rosewood, the trade name for a group of timber species that are both globally endangered and highly valued as a luxury timber commodity. In China in particular, some species of rosewood have become more valuable than gold due to speculative demand. This section uses rosewood extraction in Madagascar and its crafting for consumption in China to demonstrate how emerging global dynamics add new high-valued resources to the global milieu, molding ever more flexible agrarian subjects increasingly adept at responding to the demands of the late capitalist moment. The final section concludes with a reflection on what this means for rural life and livelihoods in the twenty-first century.³

Gold made the world and the world made gold

The value attached to all resources is neither inherent nor universal but is a product of social imagination. Gold provides an iconic example. Although gold has been widely valued, not all societies have valued it in the same way. In ancient Egypt and ancient Java, gold was used for beads, jewelry, and elaborate rituals, serving as one of the primary signifiers of social status—only certain people could wear or use it (Miksic 1990, 2011; Schoenberger 2011; Ross 2016). In ancient China, in contrast, gold was commonly known and used but was considered inferior to other substances, such as jade and bronze (Froncek 1969, 275). Similarly, the Aztecs valued a single lump of jade as being worth two loads of gold (Clark 1986, 10). When European ships sailed to the New World in search of gold and other treasure, the Aztecs they encountered were confused by the explorers' acute desire for this particular metal, not quite sure what purpose it might serve (Clark 1986). Even the Incas, famous for their affinity for gold, did not find this metal to be *the most* valuable substance. Rather, it was cloth (though, better yet, gold-lined cloth) that afforded the greatest prestige in the Incan Empire (Murra 1962).

When gold became a global currency, things changed. Gold began to assume a more “universal” value—that is, it was recognized across cultures and places as embodying a similar unit of worth. Beginning in the early-eighteenth century, gold rapidly outpaced silver as the preeminent currency of the British Empire. By the 1870s, an international gold standard was established (Schoenberger 2011, 16). For the first time, gold as a global standard of value connected countries across six continents in a unified international monetary system with few exceptions (Schoenberger 2011). It is no exaggeration to say “the world” as we know it today—networked across all hemispheres—was in fact *made* by the establishment and circulation of gold currency.⁴

Even before the gold standard was adopted, as gold coins flowed freely through global cosmopolitan centers, the search for new deposits across the world was intensified. A growing network of explorers, colonial institutions, small-scale miners, traders, and financiers was required to supply this new global monetary system and keep it running smoothly. Thus, just as gold made the world, miners and minters across the world made gold.

Today, gold is still in high demand, but it no longer serves as *the* universal standard of value. By the end of the twentieth century, no country could keep a stock of gold equivalent to the value of its national economy. Instead, the world has transitioned to a more flexible and dematerialized system of storing, exchanging, and creating value. Speculators the world over invest in gold when currencies are weak, monetary crisis is rampant, or other commodities experience a downturn. The same is true for rosewood. In China, speculators turn to rosewood and other traditional Chinese art forms to diversify their portfolios when returns from housing or the stock market wane (Zhu 2020). When conditions change—over the course of months, days, moments—they abandon these investment avenues just as quickly as they embrace them.⁵

Rural sites of gold and rosewood production in the Global South feel these volatile dynamics. Rural and migrant laborers experience the ups and downs of the virtual economy while still providing the resources and embodying productive forces that anchor the global economy in material worlds. The remainder of this chapter discusses this type of global connection—where the speculative dynamics of a late capitalist, dematerialized economy meet the material productions and flexible producers of the countryside. First, we examine gold rushes in West Kalimantan, where discoveries of gold deposits make new smallholder mining frontiers and flexible territories across the region (Peluso 2017). Then we examine a rosewood boom in Madagascar, where another flexible gold frontier has given way to rosewood's new world-making powers (Zhu 2017, 2018).

Indonesia's small-scale mining and the flexible frontier

Ironically, the gold stores of subterranean Borneo pulled the region's residents (migrants or indigenous) into global capitalist markets earlier than did the island's renowned rain forests. As long ago as 1750, large and small pit mines became classic frontiers of gold production by tens of thousands of Chinese men coming to Borneo and the local people they allied with (Jackson 1970).⁶ These miners and the traders arguably brought early capitalist relations to local social relations in Borneo's forest expanses (Heidhues 2003; Peluso 2018). Worlds changed as well, after their arrival. Many of these miners made their lives in Borneo rather than returning to China with their savings and gold finds. They married local women and continued transforming the forests and peat swamps into working landscapes of gold mines and rice paddies, many traveling eastward into Borneo's interior from the western coast. This early transoceanic gold rush fueled by Chinese laborers bringing water control technologies initiated a pattern of both long-distance labor mobilities and smallholder gold production that would be repeated in California, Australia, and the Yukon in the nineteenth and twentieth centuries as well as Africa's "gold coast" and other parts of the Global South in the twenty-first.

One hundred years after these migrants arrived in Borneo, colonial Dutch territorial aspirations put a violent stop to this older form of gold world-making. Because they had successfully resisted Dutch imperialist aspirations, mining zones that had grown into small but self-governing "Chinese Republics" were thorns in the sides of a different set of world-makers expanding the Netherlands East Indies (de Groot, 1885; Yuan 2000; Heidhues 2003). Waging a four-year war to take control of the territory, the Dutch put an end to the resource world that had constituted northwestern Borneo's small-scale gold-mining and farming territories, forcing about half the resident Chinese population to abandon their mining enterprises (Yuan 2000). Those who remained moved into the commodification of forest products and tree crops, expanding and commodifying other classic rural smallholder productions of Borneo: pepper and later, rubber (Ozinga 1940; Heidhues 2003).

Since the late 1980s, many of Indonesia's Borneo provinces have witnessed the resurgence of small-scale gold mining, albeit within an entirely different global political economic and geopolitical milieu. Small-scale gold mining exploded in the 1990s and 2000s, woken by the efforts of two entrepreneurial industrial gold-mining ventures in the eastern and western reaches of Indonesian Borneo. In East Kalimantan, the Bre-X mine project spectacularly captured the world's imagination, seducing stock marketeers from Wall Street to Toronto and Hong Kong (Tsing 2004) as well as mom-and-pop investors in California before scandalously crashing. Meanwhile in West Kalimantan, with the blessing of President Suharto, a small but internationally funded company began exploring some of the old Chinese mining sites for their industrial mining potential. Their mapping of sites and boring did not go unnoticed by locals living in the region's villages and towns, some of whose families had remained engaged in artisanal mining without fanfare over the years. A pogrom against rural Chinese saw them evicted and replaced by Indonesians of other ethnic heritage in the 1960s and '70s (Peluso 2009). In the late 1980s, gold did not dominate their resource world but served as an occasional, artisanal livelihood option.

Some 300 km upriver from the west coast, villagers continued to engage in small-scale mining in forests and on the banks of the river's tributaries while industrial-scale state and corporate projects for logging, plantation establishment, and resettlement projects were clearing forest and unwittingly revealing new sources of gold. Observing some of the dredging operations and equipment used by foreign firms, one local mechanic worked with his miner friends to perfect a portable dredge that could efficiently suck up the heavy peat soils in

Figure 29.1 “Digging” a mine hydraulically. West Kalimantan, Indonesia. Photo by Nancy Peluso.

which the region’s gold was often hidden (Peluso 2018). They field-tested prototypes of the dredging technology under the rivers and in swamps, fields, and forests, eventually birthing a homegrown, flexible mining technology (Peluso 2018).⁷ Small- and medium-sized dredges imported from China followed later. By then, these upriver miners had already brought their dredges to the many sites between their interior home and work spaces and the Borneo coast, partnering with local people willing to mine.

For a decade before the world gold price began to rise more steeply than ever before, informal gold-mining ventures provided capital and work for thousands of miners, diggers, buyers, and financiers. Pioneers from these historic gold-mining districts in northwest Borneo, in turn, created new mining territories in the still vast forests of the southern part of the province. Gold production once again dominated this Bornean resource-world. Tens of thousands of mining laborers, crews, traders, investors, shopkeepers, bar maids, water and oil delivery men, itinerant medicine salesmen, and every kind of frontier market trader imaginable endured the grueling 24-hour trip by land and sea from the northwest corner of the island to these new southern sites, attracted by friends’ and competitors’ bragging of pulling up clumps of grass with shallow roots adorned with golden nuggets. Crews mined gold under rivers or moved the rivers to extract gold from beneath. Gold prices rose during the 2008 global economic downturn; they peaked in the summer of 2012. Crew bosses had unprecedented access to credit- or cash-driven techno-organizational options, ranging from single-operator 1.5-horsepower dredges to much larger dredges powered by truck engines and worked by crews of 12–15 men. One mining boss described his excitement at watching used truck engines traversing the South China Sea between Singapore and West Kalimantan on huge rafts. Landing on Borneo’s southwest coast, they helped construct flexible, adaptive, and opportunistic resource worlds. Miners’ varied niches were created by their capacity to

take advantage of laboring and small or large investment opportunities made possible by capitalist crisis and opportunity alike.

Besides technologically, how different are these recent gold-mining territories from those of the eighteenth century? Then, simple reproduction depended on miners' abilities to subsist from crops they had to grow themselves, to make alliances with previous and new settlers, and to produce this highly coveted global commodity (Yuan 2000). Chinese pioneers brought capitalist relations, cooperative organization, and direct connections to global markets, moving into the interior of early-nineteenth century Borneo from its coasts and rivers. They brought waterwheels and other technologies (Jackson 1970), often working with indigenous talent to transform iconic, forested Bornean landscapes by creating resource worlds below and above ground (Yuan 2000).

Indonesian gold miners in West Kalimantan today are of more varied ethnic heritages and have initiated their own resource frontiers and territories. "Small-scale mining" has produced larger mines and varied labor and extraction practices through the deployment of local and imported technologies and mobility. Large crews using heavy equipment work alongside smaller crews and independent miners and gleaners. Not only have new and competing land uses emerged in these extraction frontiers and mining spaces, but also miners have created new modes of claiming land and resources as property. Notwithstanding the presence of state actors in the regulation of formal claims or the cloaking of informal ones, a myriad of mechanisms for negotiating informal access to these subterranean sites of enrichment and tragedy abound.

For agrarian subjects in Indonesia today, participation in gold production is one livelihood option alongside other agrarian commodity productions and entrepreneurial activities open to people with high-valued resources in their subterranean lands. Some miners—many of whom are also farmers—turn their profits from mining into agrarian capital, financing production of staple foods that are also commodities, such as rice and corn. With their mining returns, miner-farmers of many ethnicities buy land, rubber, fruit tree, or oil palm seedlings, reproducing at a broader scale not only vast mines and their tailings, but also extending and changing garden and agroforested landscapes. At the same time, when commodity growers suffer from wavering world market prices, they supplement or replace tapping with mining, construction labor, or other wage work abroad (Peluso 2009, 2017, 2018). Flexibility, mobility, and luck—three characteristics that are not usually considered in "classic" agrarian and resource analyses—have helped many smallholder-worker families maintain diverse livelihood portfolios. Though not always capable of preventing household economic crises, these diversifications help them exploit the booms, weather the busts, and weave together flexible territories in the process.

More valuable than gold: rosewood in a contested twenty-first century

As new actors emerge in the global arena, new and often conflicting resource values emerge as well. China's unprecedented growth, for example, has introduced new resource demands—some of which directly conflict with well-established demands from the Global North. Rosewood provides a clear illustration. Chinese demand for many endangered species such as rosewood directly conflicts with demands deriving from the United States and Europe to conserve these species. This is not simply a question of divvying up resources so that new actors get a share of global supply, but rather it reveals how resources can be valued—and even defined—differently by different actors across the globe in sometimes irreconcilable ways.

Much like gold, rosewood has been valued, extracted, traded, and produced around the world for centuries. China has the longest history of rosewood production, with demand for rosewood

Figure 29.2 A Ming-Dynasty styled rosewood bed on display at the offices of a rosewood furniture factory in Shenzhen, China, March 2018. Photo by Annah Zhu.

dating back to the Ming and Qing Dynasties (1368–1911), when the wood was used to craft an elaborate style of furniture made for emperors and the Chinese social elite (Figure 29.2). Since 2000, this furniture style—deeply associated with the wood with which it is made—has been revived as a cultural icon (Zhu 2017, 2020). Having exhausted supplies from Asia, China has been soliciting new imports from across the tropics.

Europe and the United States have a long history of rosewood consumption as well for furniture, instruments, and decorations. Since the late 1990s, however, in the face of dwindling species, Europe and the United States have promulgated domestic laws prohibiting imports of endangered rosewood. In 2013, international trade in many rosewood species became restricted under the Convention on International Trade in Endangered Species of Flora and Fauna, and in 2016, all rosewood in the genus *Dalbergia* was officially restricted.

At the same time that the United States and Europe began restricting the trade in precious hardwoods, demand in China began to pick up. Rosewood has since become the most trafficked group of endangered species in the world (UNODC [United National Office on Drugs and Crime] 2016). As China embraces capitalism and seeks to redefine its modernity with strong reference to its cultural past, classical rosewood furniture is experiencing a commercial

renaissance. The same increase in consumer demand has occurred for ivory, rhino horn, and products of other iconic endangered species that have deep cultural associations in China.

Within the context of a late capitalist economy, however, Chinese investors have begun to embrace these markets not only for their cultural value but also for their potential for financial appreciation (Zhu 2020). Far from a simple marketplace for consumers, rosewood has become a type of stock exchange—“a playground for investors” (China Daily 2011). Since around 2005, rosewood in China has transformed into a speculative cultural currency. Similar to gold, rosewood is now purchased for pure speculation—in both its raw form as logs and finished as furniture. With speculative investment driving the price of this endangered timber to unprecedented highs, conservationists find it difficult to keep up. In moments of intensive speculation, the rarest raw timbers can be worth their weight in gold (Sina Collection 2010). As finished antique furniture, these woods can sell for more than their weight in gold (SICA 2011).

Speculative dynamics in the world’s rising economies are felt deeply across the agrarian South. China’s speculative demand for rosewood has triggered logging booms in no less than 30 tropical countries, with one of the most controversial sites being Madagascar (see Remy 2017; Zhu 2017; Anonymous 2018). Rosewood from Madagascar is the most highly trafficked species according to United Nations seizure data, accounting for over 60 percent of all global rosewood seizures by volume (UNODC [United Nations Office on Drugs and Crime] 2016). Limited primarily to the spaces now enclosed as national parks, Madagascar’s rosewood grows only in the northeastern corner of the country. Since 2009, thousands of loggers have entered these parks in search of rosewood. Legions of Chinese ships have sailed off the island nation’s coasts to pick up logs brought there directly from the forest. Meanwhile, the World Bank and United Nations have funded a special rosewood “task force” to fight against this trade. Over 1 billion US dollars have been channeled into Madagascar to finance either rosewood conservation or its logging, in a place where most people make less than a dollar a day.⁸

Finding themselves amidst these contradictory world-making processes, Malagasy villagers alternate opportunistically between logging and conservation work depending on the global demands of the moment. Guides for the national parks often engage in rosewood logging when the market is booming, while forest officials try their hand at trading the wood—some even becoming high-level traders. Cash crops provide another volatile opportunity for Malagasy rural dwellers as a consequence of late capitalist financial speculation. As the region’s rosewood boom subsided toward the end of 2014, a vanilla boom replaced it. Global prices for vanilla—the region’s other main export—spiked from lows of around \$5 per kg to more than \$600. Shifting from rosewood to vanilla, loggers returned from the forest to tend their abandoned fields, injecting these gardens with “green” gold (Zhu 2018).

Now, along with the current vanilla boom, a renewed trend for “healing” crystals has swept the United States and Europe. Within the last five years, global crystal prices have surged, sending some former rosewood loggers and vanilla farmers back to mining, often in the same gold mines they abandoned years earlier (McClure 2019). These dynamics make clear the deep connection between late capitalist financial flows and ephemeral consumer desires in the Global North and the flexible rural subjects in the Global South which find themselves at the receiving end of these erratic ups and downs.

Global demands for rosewood, vanilla, and other world-transforming boom and bust commodities make little sense from the perspectives of the rural Malagasy people who experience them most dramatically. In terms of rosewood, villagers marvel as to why Chinese buyers pay so much to take this tree from their shores and why, in contrast, Western donors want so badly to conserve it in place. They are equally confused by the demand for vanilla, laughing in disbelief at the explanation that this commodity that can be worth as much as silver by weight is used for

nothing more than flavor and fragrance. Most avoid examining too closely the global demands that find their way to Madagascar—the mysterious cultural economies and peculiar conservation campaigns—instead hoping only to take advantage of the opportunities of the moment.

Conclusion

Using the examples of gold and rosewood, this chapter has shown how some resources acquire widespread social, economic, and political value and how these values can transform worlds (see also Carton and Edstedt, Chapter 34 in this volume). Gold provides a classic example. Managing to become a common—and as close as we have come to a “universal”—standard of value for more than a century, gold and the circulation of gold currencies have in many ways *made* the world what it is today. It enabled a globally unified monetary system and initiated the unprecedented exchange of goods, services, resources, and people. This is largely attributable not to any intrinsic value of the metal but rather to a set of biophysical properties that make gold both appealing to the eye and practical for a time as a global currency. Gold’s transformation into a speculative commodity on every global stock exchange, and its volatility and daily calculated prices visible on cell-phone applications around the world, have constituted the metal’s postindustrial legacy as a new type of world-maker. Although fetishized as an “already made” commodity, gold in the contemporary era is still dependent on resource makers small and large embedded in contested material extraction processes.

Rosewood, too, has been enrolled in world-making processes for centuries. But more recently, the value of rosewood has been subject to sharp contestation. Since 2005, rosewood furniture crafted in styles from the Ming and Qing Dynasty has been the target of intensive financial speculation. As with speculative demands for gold—arguably even more so—demand for rosewood varies drastically, shifting by orders of magnitude within months, days, even moments. Yet, China’s speculative quest for rosewood, sending timber importers to fetch it from the furthest corners of the world, has been condemned by Western governmental and nongovernmental organizations that have identified the species as an international conservation priority.

As historic commodities, gold and rosewood have been “making” worlds for centuries; we have shown here that they have also made new, flexible subjects out of rural producers, who embrace their production and experience the effects of speculation through booms and busts. Although the work of those engaged in mining, logging, and other extractive or agrarian endeavors remains highly manual, the global demands to which they must respond, in contrast, have become increasingly volatile and fragmented. These speculative dynamics have compounded the need for even more flexible agrarian subjects that can navigate between conflicting global desires and local livelihood demands (see also Bustos-Gallardo, Chapter 31 in this volume).

This is the survival strategy of flexible frontier-makers in the rural Global South. Amidst the contested world-making of the twenty-first century, they alternate between different extractive, subsistence, and wage labor opportunities through ever more flexible arrangements, poised—and hoping—to respond to the fleeting global demands of the moment. Juggling the volatility of late capitalist financial speculation, fleeting consumer trends, and rapid technological development or stagnation, the composite worker-farmer-extractors of Indonesia and Madagascar whom we have described in this chapter provide a window into the type of flexible frontier-making that we believe will define the rural twenty-first century. They provide an agrarian parallel to the flexible and fragmented subjects so commonly evoked in the Global North.

Notes

- 1 When rosewood prices are at these highs and the government is permitting exports, logging provides better financial returns than gold mining or cash cropping.
- 2 They also differ from the worker-peasants described by Stoler (1995) in Sumatra's early twentieth-century capitalist plantations. Javanese laborers were initially contracted by Dutch-, English-, and American-held private plantations, traveling long distances from their homes on the island of Java to work in Sumatra. Stoler shows how many struggled with the plantation, hoping to get small plots of plantation land to augment their households' subsistence with gardens. This changed, although minimally, their dependence on the plantations for wages. Stoler shows that having the land was critical to their identities. Not happy to be workers alone, they wanted to be peasants, or at least worker-peasants. In contrast, in our research, we are examining how rural smallholders—not subsistence-oriented peasants—maintain a smallholder agrarian identity through other kinds of work and resource extraction as laborers and entrepreneurs. Moreover, these smallholders largely embrace commodity production, rather than eschewing it.
- 3 This chapter is based on ethnographic fieldwork conducted in West Kalimantan, Indonesia; northeastern Madagascar; and Shanghai and Guangzhou, China. The section on gold mining in Indonesia is based on in-depth interviews and observations with over 200 small-scale miners, financiers, landholders, village heads, swidden agroforesters, rubber growers, and other smallholders in Sambas, Bengkayang, Singkawang, Pontianak, Ketapang, and Sekadau, West Kalimantan province over seven months of fieldwork conducted by Nancy Peluso between 2013 and 2017. The section on rosewood logging and new forms of Chinese demand is based on interviews with rosewood loggers and traders conducted in northeastern Madagascar by Annah Zhu during the summers of 2014 and 2015 as well as interviews with timber wholesalers and furniture factory owners in Shanghai and Guangzhou, China, during the winters of 2014, 2015, 2017, and the spring of 2018.
- 4 Silver, in this sense, was the first “gold” (Graulau 2011). Because of its greater availability, silver served as the dominant world-making currency between the fifteenth and seventeenth centuries.
- 5 Yet, consumers of “small” amounts of gold in the form of wedding rings and other jewelry continue to drive demand and extraction. More than 50 percent of the gold “above ground” in the world has been made into jewelry (Statista 2019).
- 6 At first, they came at the behest of a sultan, but later they came through emergent routes independently.
- 7 This happened well before Chinese and Australian models invaded the Indonesian mining scene.
- 8 Most of this money, however, has been spent on rosewood logging, with that figure alone allegedly reaching the equivalent of over a billion US dollars (Randriamalala 2013). Conservation finance, especially that specifically mentioning rosewood or intended to curb rosewood logging, remains in the hundreds of millions. For example, among many other conservation finance packages, the World Bank offered a \$52-million conservation grant with the explicit condition that rosewood logging legislation be enforced.

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