The London School of Economics and Political Science

Gold attraction

An ethnography of gold valuation from the UK to Colombia

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DECLARATION

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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Abstract

Drawing on 20 months of ethnographic fieldwork among bureaucrats, technocrats, and entrepreneurs working on a mineral traceability project in Colombia and financiers and consultants working on projects of responsible gold sourcing in London, Switzerland, and Paris, this dissertation examines the practices and narratives involved in making gold—and people along its valuation chain—attractive for investment. The valuation of gold is profoundly paradoxical. In financial markets, gold is valuable for being a risk-free asset. Gold bullion stored in banks is used to hedge the risk of investment portfolios and preserve wealth in times of economic crisis. But gold is not risk-free; in fact, it creates risks for racialised ASM miners and wider communities subjected to the intense resource extraction necessary to sustain the gold market. Therefore, for gold to become a valuable financial asset that literally enables the accumulation of capital and wealth, it needs to be physically and morally purified from the 'dirtiness' of its extraction.

This thesis is an ethnographic exploration of how the value of gold is purified, stabilised and sustained through advertisement campaigns, training courses, market reforms, responsible sourcing standards, narratives around transparency, sustainability and development, certification schemes, traceability initiatives and sovereignty aspirations. I argue that the creation of gold's financialised value is the result of the labour of attraction of actors along a racially hierarchised valuation chain. Actors may have different motivations to do this work, yet their labour of attraction is arguably always intended to make gold more *morally pure*. Gold attraction is underpinned by a racialisation of gold desire that was born in the colonial encounter—the desire of the wealthy to accumulate gold is celebrated while the desire of miners to extract the mineral is condemned.

The research primarily draws on anthropological work on the connection between financial markets and resource extraction, and on critical analyses of the material consequences of financial practices in exacerbating racial and geographical inequalities. This thesis proposes shifting the focus away from resource extraction to develop a new framework for analysing resource attraction, contributing to a broader understanding of how material substances are transformed into resources with financial value.

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LIST OF ILLUSTRATIONS[1]

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LIST OF ACRONYMS

ARM	ALLIANCE FOR RESPONSIBLE MINING
ASM	ARTISANAL AND SMALL-SCALE MINING
BACRIM	BANDAS CRIMINALES
BAN REP	BANCO DE LA REPÚBLICA DE COLOMBIA
BOE	BANK OF ENGLAND
CAHRA	CONFLICT-AFFECTED AND HIGH-RISK AREAS
CRAFT	CODE OF RISK-MITIGATION FOR ARTISANAL AND SMALL-SCALE MINING ENGAGING IN FORMAL TRADE
DIAN	DIRECCIÓN DE IMPUESTOS Y ADUANAS NACIONALES
DMCC	DUBAI MULTI-COMMODITIES CENTRE
DRC	DEMOCRATIC REPUBLIC OF CONGO
ELN	EJÉRCITO DE LIBERACIÓN NACIONAL DE COLOMBIA
FARC	FUERZAS ARMADAS REVOLUCIONARIAS DE COLOMBIA
GCC	GLOBAL COMMODITY CHAIN
GDL	GOOD DELIVERY LIST
GPMC	GLOBAL PRECIOUS METALS CONFERENCE
GOE	GROUP OF EXPERTS
GPN	GLOBAL PRODUCTION NETWORK
GVC	GLOBAL VALUE CHAIN
HQLA	HIGH-QUALITY LIQUID ASSET
IDB	INTER-AMERICAN DEVELOPMENT BANK
ISO	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
LBMA	LONDON BULLION MARKET ASSOCIATION
LMN	LONDON MINING NETWORK
LSM	LARGE-SCALE MINING
MME	MINISTRY OF MINES AND ENERGY
NMA	NATIONAL MINING AGENCY
OECD	ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
OEI	ORGANIZATION DE ESTADOS IBEROAMERICANOS

OTC	OVER THE COUNTER
PMIF	PRECIOUS METALS IMPACT FORUM
RGG	RESPONSIBLE GOLD GUIDANCE
RJC	RESPONSIBLE JEWELLERY COUNCIL
RMI	RESPONSIBLE MINERALS INITIATIVE
SBGA	SWISS BETTER GOLD ASSOCIATION
SBGI	SWISS BETTER GOLD INITIATIVE
UAE	UNITED ARAB EMIRATES
WGC	WORLD GOLD COUNCIL

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INTRODUCTION

FIGURE 1. GOLD BULLION AT THE GPMC. SOURCE: PHOTOGRAPH BY THE AUTHOR.

Right beside the registration desks, two 99.99% pure gold bars of different sizes were displayed for the conference delegates to appreciate at the Global Precious Metals Conference (GPMC) in Barcelona (Figure 1). One was a London Good Delivery Bar—a 400 oz bullion bar certified by the London Bullion Market Association (LBMA) to be traded in London's gold financial market. The other was a kilobar—the most common gold bar traded n New York's stock exchange, the second largest financial market for gold after London's. I approached the stand and joined the queue, where people were waiting to touch and lift the bars. From the queue, I could see a man of Asian descent handling the bars and speaking to a woman's smartphone as she recorded him. Although I could not understand what he was saying, I could feel his excitement in the way he looked, lifted, and pointed to specific parts of the bar. After him, three Indian men approached the bars and started taking pictures with them. Despite the cultural significance of gold in India (Mehrotra 2004; Raha 2024; Truitt 2018), they were thrilled by the gold bars. Everybody –including myself when my turn came– was impressed by the high weight of the bars; all of us made a similar gesture of getting arms and hands ready to lift the bar, along with a little nervous laughter. This nervous excitement was reinforced by the fact that a security guard was standing just a few meters away from us, with his eyes fixed on the gold bars.

The Global Precious Metals Conference (GPMC) is the most important event of the year for the gold industry. The event gathers representatives of most actors along the gold supply chain[2] in luxury venues to discuss relevant issues for the industry. One would assume that conference attendees have certain familiarity with gold bars; however, they seemed to be as excited as I was, who was seeing gold in this form for the first time in 20 months of fieldwork on the topic. Later that night, at the Conference gala dinner, members of the LBMA Marketing and Communications team at my table were speculating about the price of the big bar. A young man–and indeed one of the very few men working in the LBMA— said he told his family he had just held in his hands a 200,000 USD worth gold bullion bar in the morning. Right away, the more experienced one corrected him and said the big bar was worth around 700,000 USD. Immediately, the conversation turned to the awkward presence of the security guards. Many of them agreed that it felt a bit scary. 'Oh, at least he was not carrying a gun, he was just carrying a taser', one of them said. I asked her whether this was a common practice at all GPMCs. She confirmed that it was and explained that the security guards vary depending on the country where the event is held: 'In the US, for example, the guards carry large guns.'

The other sole time in my fieldwork that I held pure gold in my hands had been a year earlier on a visit to a *compraventa* (gold shop) in Caucasia, a small mining town in Colombia. On this occasion, however, the pure gold appeared as tiny nuggets forming a perfectly round ball, and as a small ingot, perhaps created by melting a few of these balls together (Figure 2). I was accompanying a team from the National Mining Agency (NMA) that was leading a traceability project. Surprisingly, this was also their first time holding gold in this form. Like the people at the GPMC, the NMA team was equally impressed by the density and brightness of the metal. Adrian, the group leader, quickly took out his phone to take pictures of it. He immediately asked for its price and was astonished to hear that such a small amount of gold could be worth so much.

[2] (Large-scale) Mining companies, refineries, logistics companies, financial institutions, consultancy firms, standard-setters, among others.

FIGURE 2. MINED GOLD IN A COLOMBIAN MINING TOWN. SOURCE: PHOTOGRAPH BY THE AUTHOR.

From my previous research experience with artisanal mining communities, I knew such a perfect ball could only take that form when amalgamated with mercury—a highly toxic substance used by artisanal and small-scale gold miners (ASM) to separate gold from other metals or minerals. I whispered that to Adrian, and he didn't seem to know about it. We both turned to Gonzalo—our local guide and owner of a software development company participating in the NMA traceability project—and asked him whether the gold had been amalgamated with mercury. Gonzalo nodded and quickly changed the topic: 'Do you want to check out the lab? They can show you how they smelt and purify the gold over there!'. In the lab, another gold-mercury amalgam gets purified and turned into a small ingot. Adrian holds both pieces in his hand, and we all look at them with a nervous excitement. We all feel some kind of attraction for it. However, we may never feel completely comfortable with the social relations behind its extraction/production that the substance seems to conceal.

In terms of its physicochemical properties, alluvial gold extracted from the Cauca River in Colombia can be as pure as bullion bars exhibited in the GPMC in Barcelona. However, gold nuggets from Caucasia have a totally different value than gold bullion bars. The latter are valued as solid, safe, and risk-free financial assets, whilst the former are perceived to be risky, dirty, and suspicious. This thesis is about how the value of gold is purified, stabilised and sustained through the work of a wide range of actors from bureaucrats and entrepreneurs in Colombia, to refiners, policy makers, and authorities of the gold financial market in London.

Traditionally, anthropological analyses of natural resources have focused on the study of issues related to the extraction or exploitation of resources, like evolving conflicts, practices of dispossession, displacements, the emergence of new forms of sociality, and practices of meaning-making (Ferguson 1999; Kirsch 2002; Nash 1979; Taussig 1980). More recently, scholars inspired by post-humanist and new materialist approaches have noted that natural resources are not 'out there' ready to be seized upon and utilised, but are instead 'made' (Ferry & Limbert, 2008; Zimmermann, 1933) or 'become' as 'resource materialities' through the 'arrangements of substances, technologies, discourses and practices deployed by different kinds of actors' (Richardson & Weszkalnys 2014). Resource-making frameworks have inspired analyses that extend beyond sites of extraction, inviting us to consider the roles of ontological conflicts, knowledge production, and infrastructures in the making of resources. However, they have only tangentially considered the role of financial markets in transforming material substances into resources with financialised value. In this dissertation, I contribute to discussions on resource making with an analysis of a resource with a financial value that arguably underpins the global economy: gold.

This thesis is particularly relevant these days. Uncertainty in the Trump era has driven gold prices to record highs week after week. Since Donald Trump took office in January 2025, prices have already risen by 34%. In response to rising prices and global demand for bullion, ASM miners have increasingly abandoned traditional extraction techniques—such as using bateas and ancestral plants used to separate gold from other minerals—in favour of dredges, backhoes, and toxic chemicals like mercury and cyanide. Gold rushes have now become the baseline reality, and the environmental toll is severe: gold mining accelerates deforestation, turns forests into contaminated ponds, and releases mercury into rivers. Once in the environment, mercury causes lasting neurological damage to both humans and wildlife. Understanding how the value of gold is created and sustained is, therefore, crucial for exploring alternatives to this unsustainable dynamic.

The material properties of gold—density, malleability, and indestructibility—combined with the world's monetary and geopolitical dynamics, have contributed to establishing gold's particular role in contemporary finance (Ferry, 2020b). The apparent stability of gold has been sustained by international agreements such as the gold standard, which needed 'continual adjustments and coordinated action between countries to maintain its efficacy in times of crisis' (Ferry 2020a: 5; see also Eichengreen 2019: 32–37). Still, in global financial markets, gold is believed to be a safe-haven asset worth accumulating to preserve investors' wealth in times of crisis. Mainstream risk theory in economics suggests that investors should allocate at least 10% of their investments in gold to hedge the risk of their portfolios (Markowitz 1959; Michaud & Michaud 2008). In 1971, when Richard Nixon ended the convertibility of gold with the dollar at a rate of $35/ounce, an active—and sometimes volatile—market rapidly took shape. The emergence of financial derivatives tied to gold encouraged speculative practices, but this was always underpinned by the notion that gold is risk-free. More recently, although central banks are no longer required to back up nation-states' currencies with gold, there has been a resurgence of central bank gold buying (World Gold Council 2024). Notably, these are mostly non-Western central banks, wanting to get independence from the dollar as a reserve currency. Paradoxically, financial actors still praise gold for being a *politically neutral asset* and for having no counterparty risk, meaning its value is not reliant on any bank, company, or government.

At the sites of extraction, however, gold is recognised for being an unstable, fluid, and risky substance. Large-scale, small-scale and artisanal miners alike face life-threatening risks daily when handling explosives in tunnels, sometimes kilometres deep underground or, in the case of artisanal miners, when using toxic chemicals such as mercury and cyanide. Additionally, no matter the scale, gold extraction always involves some kind of environmental risk, from water pollution to deforestation. The circulation of gold before it is transformed into bullion is also a dangerous activity. Its unique characteristics, including anonymity and high liquidity, make it a perfect tool for money laundering, let alone an object of theft and extortion. In recent years, both the US[3] and EU[4] regulations have labelled gold as a 'conflict mineral', acknowledging that its trade can be used to finance armed groups, fuel forced labour and other human rights abuses, and support corruption.

The 'supply chain risks' described above are constantly threatening the reputation of actors along the chain and the financial value of gold as 'risk-free.' Therefore, as I argue in this dissertation, for gold to become a valuable financial asset that literally enables the accumulation of capital and wealth, it needs to be physically and morally purified from the 'dirtiness' of its extraction. My ethnographic material reveals that this process of *valuation through purification* occurs with the implementation of responsible sourcing initiatives

[3] Section 1502 of the Dodd-Frank Act of 2010.
[4] EU Conflict Minerals Regulation implemented in 2021.

(Chapter 3), industry standards, and certification schemes (Chapter 4) and traceability promises (Chapter 5) designed to sieve 'good gold' from 'dirty gold' to avoid 'supply chain contamination,' and 'squeeze out illegality.'

Crucially, the purification of gold's value is pivotal in the process of making gold *attractive* for financial markets. Such value purification is an outcome of the labour of actors along the chain—miners, traders, refiners and mining and market authorities—whose work consists of making gold attractive, but also in making *themselves* attractive for more powerful actors up in the chain. I call this affective, performative, and speculative work *the labour of attraction*, as it allows an understanding of the kind of work that enables the movement (attraction) of commodities towards financial centres of power, or in other words, the creation of demand (desire) for financialised natural resources.

This process of valuation through purification can only occur because it takes place in a deeply *racially hierarchised valuation chain*. Actors at the lowest nodes of the chain, such as ASM miners, local traders, and governments of mostly post-colonial nations, are cast as 'dirty' and 'risky' actors that need to be disciplined or kept away to avoid 'supply chain contamination' and enable the attraction of gold towards the vaults in financial centres of power like the UK and the US. In fact, the labour of attraction of the actors below in the chain is not so much to make gold an attractive object but to make themselves and their labour attractive for those up in the chain. I call this a 'valuation chain' to foreground the fact that not only is the substance valued in the process; people and their labour are unevenly valued according to colonial histories and racial and class hierarchies. The moral purification of gold is inextricably linked to an 'intimate relationship between colonialism, capitalism, and white supremacy', which is not incidental but central to racial wealth, development, and accumulation (Speed 2020: 78; see also Beliso-De Jesús et al. 2023: 425). In a nutshell, gold's moral purification legitimises practices of accumulation and speculation in mostly white financial markets at the expense of the social and environmental stability of mostly non-white gold-producing countries.

As a Colombian anthropologist, I have been intrigued for years by the human ambition driving the gold rushes that have caused so much destruction in my country. Like many other social scientists, I began researching the livelihoods of informalised miners in a small mining town, aiming to understand the motivations behind their intense gold extraction. But soon I realised that if I wanted to understand the driving force, I should investigate not those who extracted the gold, but those who were demanding it by the tonnes and, by extension, the actors that were making this desire legitimate. Researchers from various disciplines have extensively studied the issue of ASM gold mining (Côte 2023; Ferry et al. 2020; High 2017; Hilson et al. 2017; Jaramillo 2020; Jonkman 2022; Kaufmann & Côte 2021; Marston 2024; Rojas et al. 2025; Smith et al. 2023; Tubb 2020). Similarly, governments, NGOs and international organisations have developed policies and initiatives aiming to control the unbridled extraction of gold and its well-known environmental impacts. Everyone is trying to come up with a solution that puts a halt to miners' allegedly irresponsible, careless, and greedy actions. But only a few people have examined banks and investors' motivations driving such a significant demand for gold, just to accumulate them in vaults (For an exception, see Ferry 2016a, 2016b, 2020a, 2020b).

This gap in the literature on the construction of the financialised value of gold points out a wider concern this dissertation aims to explore—it seems that the world's desire for gold is deeply racialised. The desire to extract gold is generally perceived as less legitimate than the desire to accumulate gold. Investing in and accumulating gold is perceived as prestigious and rational, but extracting it is seen as greedy and emotional. It seems that social scientists have also been caught up in this racialisation of gold desire. The extensive literature on resource extraction cited above contrasts with the very little literature on gold demand (Ferry 2016a, 2020a; Luning & de Theije 2020; Truitt 2018). This dissertation contributes to linking anthropological studies of resource extraction to the expanding field of the anthropology of financialisation. Importantly, the decision to study the construction of financialised resource value is also a politically motivated shift that attempts to alter the racialisation of gold desire. In other words, my work is not only an analysis of how weaker actors have been marginalised and racialised, but also an attempt to contribute to the understanding of financial markets as part of a wider structure of white supremacy (Beliso-De Jesús et al. 2023), racial capitalism (Robinson 2000), financial colonialism (Gilbert et al. 2023) and geo-racial regimes (Zeiderman 2025).

Thus, this dissertation is not about gold miners. It is about the diverse actors along the valuation chain of gold who work to make gold and themselves attractive, to create and sustain gold's financialised value as pure and risk-free. The field site for this research was the valuation chain of gold from Colombia, a gold-producing country historically associated with the colonial legend of El Dorado, to the UK, the fulcrum of the global gold financial market.

Critical sites in the valuation of gold

In this section, I introduce the ethnographic and historical context of my main field sites: Colombian mining authorities and participants of the 'mining ecosystem' (i.e. gold exporters, and traceability entrepreneurs), gold market authorities such as the London Bullion Market Association (LBMA) and the World Gold Council (WGC), and key intermediaries such as refiners, NGO representatives, consultants, and supply chain regulators.

Gold in the land of bloody beauty

I come from a land of bloody beauty.

My country is not only beautiful, it is also violent.

How can beauty be conjugated with death? How can the biodiversity of life erupt with the dances of death and horror? Who is guilty of breaking the enchantment with terror? Who or what is responsible for drowning life in the routine decisions of wealth and vested interest? Who is leading us to destruction as a nation and as a people?

Gustavo Petro, Colombian President

UN Assembly, 2022

Gold has played a very ambiguous role in the history of Colombia. It has been an essential part of the identity of the nation, but it has also been a driver of violence and environmental destruction. Gold is one of the reasons why President Gustavo Petro refers to Colombia as the 'land of bloody beauty.' Pre-Columbian indigenous peoples valued gold and other shiny substances as part of a pan-Amerindian 'aesthetic of brilliance' [5] (Saunders 1999 in Field 2020: 172). Although jade was always far more precious than gold, they designed and shaped gold ornaments rich in iconography that can be interpreted as offerings to their deities or as shamanic objects reproducing a wide variety of possibilities in human-animal relationships such as alliance, predation, or mimetic identification (Langebaek 2024). However, during the conquest of America, the Spanish sought desperately for El Dorado, a mythical city of gold mentioned in a Muisca legend. The obsession for El Dorado sparked centuries of bloody expeditions by European explorers. Although this mythical city was never found, the

[5] When the Spanish arrived, indigenous peoples accommodated shiny objects brought by the newcomers, such as mirrors and unfamiliar metals, within this existing system of sacred brilliance (Field 2020).

Spaniards and then other Europeans built an entire mining enterprise with indigenous and African slaves that became the engine of the colonial project. The bloody extraction of gold—and silver—was what primed the pump of the capitalist take off in Europe (Taussig 2004).

In the present, a legend about gold ambition—instead of pre-Columbian indigenous valuations of gold—lies at the very core of the identity of the nation. Bogotá's international airport is called El Dorado, the main avenue that connects the airport with the city centre is called El Dorado Avenue, and the Museo del Oro (Gold Museum) is one of the main tourist attractions of the capital city. The Museum exhibits more than 38,000 gold figures elaborated by pre-Columbian indigenous peoples, including the *Muisca Raft*, a piece of goldsmithing strongly associated with the legend of El Dorado. The Gold Museum is a deeply ambivalent institution which embraces Colombia's Indigenous history concerning gold as national heritage, but it does not reflect on the post-conquest relationship between gold and gold mining, and the legacies of slavery on contemporary racism in Colombia (Field 2012, 2020; Gaitan 2006; Taussig 2004).

In contemporary Colombia, gold mining is a very controversial issue. The country is the third-largest gold producer in Latin America and the 17th largest in the world, with estimated gold production of 60-80 tonnes a year. Since 2012, the value of the country's gold exports has exceeded that of its coffee exports, with the metal becoming the third largest traded commodity from Colombia after oil and coal (OECD 2018a: 5). Crucially, most of Colombia's gold is produced informally, on a small scale and from sites without a mining title. Mining title holders are responsible for only 17% of the total production, whilst the informalised ASM sector extracts the remaining 83% (Ministry of Mines and Energy 2011).

In 2001, as part of a global trend in the refashioning of mining codes, a new and 'modern' Mining Code was introduced with the support of Canadian cooperation[6]. This Mining Code, designed to attract foreign investment for large-scale mining (LSM), relegated ASM communities to an informal or illegal status. The marginalisation of the ASM sector made these mining regions particularly vulnerable to violent conflicts. By the end of the 2000s, Colombia's gold territories overlapped significantly with the map of the country's internal armed conflict (Massé & Le Billon 2018). The informal nature of ASM has made the sector particularly vulnerable to exploitation by organised crime groups often referred to as BACRIM (Bandas Criminales) and insurgent groups such as National Liberation Army – ELN,

[6] Canada is a global centre for the financing of mineral exploration and extraction. It is home to over 40% of the world's publicly listed mining and exploration companies.

the dissidents of the demobilised Revolutionary Armed Forces of Colombia – FARC, and the Clan del Golfo, one of the current dominant criminal groups in Colombia (OECD 2018a). The participation of criminal actors in the gold business takes a wide range of forms and extends throughout the entire supply chain. They get involved in the business either directly, by allocating capital and labour to mining operations conducted by them or their partners (Massé & Camargo 2012; Rettberg & Ortiz-Riomalo 2016) or indirectly, through the extorting of small, medium or large-scale miners (Giraldo Ramírez & Carlos 2012; Gómez Buendía et al. 2003; Rettberg et al. 2014; Rettberg & Ortiz-Riomalo 2016). While gold mining in Colombia reflects historical processes of colonisation, exclusion and conflict (Álvarez 2016), artisanal gold mining also sustains traditional livelihoods among Indigenous, Afro-Colombian, and Campesino communities who shift between gold mining and agricultural activities – including coca growing – according to fluctuations in commodity prices and seasonal agricultural production (Tubb 2020). In fact, the increase in international gold prices after the 2008 financial crisis caused a surge in ASM activities, making it even more profitable than coca growing, and more attractive for illegal armed groups—gold was becoming 'the new cocaine' (OECD 2018a).

Conflict is also present in gold's commercialisation. Only 15% of gold is exported by transnational mining corporations, while the rest is exported by refineries located in free trade zones in the cities of Cali and Medellín (OECD 2018a). These refineries are a crucial node in the valuation chain of gold because they are where legal and illegal gold are melted together to be exported as gold *doré.* In 2019, the Attorney General's Office undertook an extensive investigation called *Leyenda El Dorado* (El Dorado legend) which dismantled an illegal commercialisation scheme to export illegal gold and launder money from narcotrafficking.

At the end of 2011, 'to seek greater efficiency in the administration of mining resources' (Decree 4134 of 2011), the National Mining Agency (NMA) was created to oversee processes of titling, technical assistance, development, promotion and monitoring of the obligations of the country's mining sector. Located in a building right on El Dorado Avenue, and with a few regional offices, the NMA is in charge of implementing national mining policies over the national territory. As a mining authority, the NMA has a twofold purpose—it oversees mining activities throughout the national territory and represents the interests of the Colombian state in international instances. Its decisions regarding the regulation of mining activities and mineral trade have significant implications for the stability of gold mining regions. But the NMA must also maintain good relationships with large-scale exploration and mining companies as one of its primary purposes—at least until the arrival of Gustavo Petro's left-wing presidency in 2022— was to attract foreign investment. Its role as a national authority is therefore crucial in making Colombia an attractive place for investment.

The NMA's work is to control the exploitation and circulation of gold within the national territory, but once the metal is exported, it enters a different jurisdiction indirectly controlled by the global gold market authority—the London Bullion Market Association (LBMA), which I discuss in more detail below. Colombian gold then flows in two different directions: it can be purchased by LBMA-certified refiners (A.K.A. Good Delivery List refiners) or by non-LBMA refiners. However, after many 'detours' (Chapter 4), both paths eventually rejoin in the London bullion market as the labour and the structure of the market will primarily tend to attract gold towards financial centres of power.

Switzerland and the Good Delivery List (GDL) refineries

'Gold is as much a part of Switzerland as the Alps and skiing'—said Timothy Green (1973: 139) at the beginning of his account of Switzerland's role in the gold market. In one of his highly renowned books on gold published in 1973, Green described the Swiss pitying the 'American and the Englishman' who were forbidden by law to hold gold. In Switzerland, gold was tax-free and buying it was like 'going to the baker to buy bread' (139). This close relationship with gold, reflected in the Swiss large watch and jewellery industry, combined with Switzerland's long-standing tradition of bank secrecy, made the country one of the most relevant gold players in the world. Today, Switzerland is home to the world's largest GDL refineries[7]. The Good Delivery List (GDL) is an internationally recognised standard maintained by the London Bullion Market Association (LBMA) for gold bars that are accepted in the London bullion market. Swiss GDL refiners process 70% of the world's gold every year (Mariani 2012).

The dominant position of Switzerland in the gold sector is due to its history as a financial hub with favourable legislation, alleged political neutrality, strategic geographical location and the fact that the country's biggest banks formerly owned the country's largest refineries (Ummel 2020: 37) Crucially, the work of refineries not only consists of providing a service of industrial gold processing; they have become guarantors of gold's value (Bolay 2021). More recently, however, the gold industry realised it had to 'revise their understanding of "integrity" beyond the physical cohesion of gold products, in order to integrate supply chain

[7] Metalor, Valcambi, Argor-Heraus, PX Precinox, PAMP.

due diligence on human rights, labour conditions, and conflict financing as part of what can be coined the ethical integrity of gold' (Bolay 2021: 85).

Since 2010, GDL refineries and the entire gold industry have seen their reputation at risk as NGOs and investigative journalists accused some of them of processing gold from illegal origins and financing armed conflicts in the Democratic Republic of Congo. That same year, the Dodd-Frank Act, a U.S. law to prevent another financial crisis, included a section (1502) that required companies to disclose their use of conflict minerals (Tin, Tantalum, Tungsten, and Gold) originating from the Democratic Republic of Congo (DRC) or neighbouring countries, which have been linked to human rights abuses and armed conflicts in the region. In 2011, the Organisation for Economic Co-operation and Development (OECD) also published a Guidance for Responsible Mineral Supply Chains (OECD, 2020) to help companies ensure that their supply chains do not contribute to conflict, human rights abuses, or environmental harm, particularly in Conflict-Affected and High-Risk Areas (CAHRAs).

In 2012, the LBMA adapted—rather than adopted—the OECD Due Diligence Guidance to create their own responsible sourcing standard—the Responsible Gold Guidance (RGG). Refineries were now expected to comply with this standard as part of their GDL certification. With the emergence of responsible sourcing standards, refineries became the global market's safeguard against flows considered illicit or non-compliant with human rights (Bolay 2021). Refineries are a key node in the valuation chain of gold because they are the choke point between gold production (upstream) and gold demand (downstream). Crucially, with the implementation of the RGG, refineries were not only in charge of undertaking the physical purification of gold for the production of standardised GDL bars, but also of overseeing the ethical integrity of the bullion bars. From then on, the work of refineries consisted of translating a naturally occurring substance into a standardised financial artefact (Bolay 2021).

Crucially, the GDL-certified refineries form what is commonly known in the industry as the 'mainstream supply chain of gold.' Non-GDL refiners are therefore perceived to be in a lower position in the hierarchical valuation chain; they can be as good as GDL refiners in producing high-quality gold bars, but these bars would never be as morally pure as GDL bars. And, importantly, non-GDL bars would never be able to enter the London Bullion Market—the largest gold market in the world—at least not without taking a 'detour' to non-Western markets like Dubai's or India's.

The London Bullion Market and the supremacy of the UK

London is the fulcrum of the global gold market, and its preeminence carries imperial legacies of earlier iterations of the racialisation of the gold value chain. Its significance can be traced back to the eighteenth century, when discoveries of Brazilian gold found their way to the London gold market (Green 2007). Then, in the 1880s, the market consolidated as virtually all South African gold—the major gold producer at the time—was shipped to London for marketing (Green 1973). The flow of precious metal to London was primarily because most of the world's gold was mined within the British Empire (Harvey 2008). India and South Africa, two key sources of gold, lacked their own refining facilities. As a result, gold from these countries was sent to London for refining. Shipping routes between London and South Africa were the most established, and the financial needs of the mines could be fully managed in London, the world's leading financial centre (Ally 1994; Harvey 2008). In addition to its colonial ties, London's role as the hub for international transactions, sustained by Britain's status as the world's leading industrial, commercial, and financial power, further reinforced the dominance of its gold market. Even as Britain's position as the top industrial power declined, most global trade and finance continued to be conducted in its gold-backed currency, the pound sterling (Harvey 2008).

Nonetheless, after the end of the First World War, Britain came out weakened as a financial power, and the debts incurred during the war posed a threat to sterling's status as the world's leading currency (Harvey 2008). The United States, and New York in particular, was emerging as a new international financial leader. To prevent the dollar from replacing the pound, the Bank of England (BoE), along with HM Treasury and financiers of the City of London, worked to create the necessary conditions to regain international confidence in the pound, which was based mainly on its convertibility with gold. The BoE realised it could no longer depend on the conditions that had initially brought gold to London before World War I. Britain's weakened economic position required the Bank to 'control and manipulate the international movement of gold' (Ally 1994: 49 in Harvey 2008: 44). Consequently, in 1919, the Bank negotiated an agreement with the world's largest gold producers to guarantee that most of the world's newly mined gold would be marketed in London (Harvey 2008).

N.M. Rothschild & Sons (Rothschilds), a renowned merchant and investment banking firm that ran the Royal Mint Refinery in London, became the agent that represented gold producers in the gold market (Harvey 2008: 45). Sir Brien Cokayne, the governor of the BoE, accepted that arrangement but insisted that the Rothschilds must sell the gold *in* London to the four bullion brokers that had been active in the London market since the 1850s[8]. With this request, the BoE was ensuring that the historical relevance of London and the economic and political power of the market participants were maintained (48).

After agreeing on the leading market participants, the discussion focused on the price-setting mechanism. The BoE also influenced this process to a greater extent. Sir Cokayne told the Rothschilds that he wanted 'an <u>open</u> (sic) market for gold in which not only every seller would know that he would receive the highest price the world could pay but also every buyer would know that he would get his gold cheaply as the world could supply it.' (Cokayne 1919 in Harvey 2008: 49). The price of gold would be decided through an auction process managed and presided over by Rothschilds, in which the four bullion brokers would bid for the gold (Harvey 2008: 58). And thus, it happened. For almost a century, the five members of the London Gold Market Fixing Company (A.K.A the London Fix) would meet first once a day, and then (after a 1968 crisis) twice a day at the Rothschilds' premises, to 'fix' the price of gold[9]. In 2015, amidst accusations of alleged price manipulation, the London Fix was dissolved, and a new electronic and independently administered pricing mechanism was established. This new price, which serves as the benchmark for global trading, however, has an intellectual owner—the London Bullion Market Association (LBMA).

The LBMA was created in 1987 by members of the London bullion market as a trade organisation that 'would help govern the market and liaise with the BoE on regulatory matters' (Harvey 2008: 248). While the BoE remained responsible for setting the market's code of conduct, the LBMA was in charge of handling daily matters like clearing and quality control of the Good Delivery List (GDL). Over the years, the LBMA overtook the BoE as the London bullion market regulator, and so as of today, it is the global gold market authority. The LBMA plays a key role in the regulation and oversight of the bullion market by providing standards, such as the Good Delivery List (GDL), a list of refiners in capacity of producing standardised gold bars that meet specific criteria for weight, purity, and appearance and the Responsible Gold Guidance (RGG), a standard aiming to ensure that gold trading within the global market is done responsibly and ethically. As the global market authority, the LBMA plays a fundamental role in the global valuation chain of gold. It is the most relevant actor in

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[8] Johnson Matthey & Co., Mocatta & Goldsmid, Pixley & Abell, Samuel Montagu, and Sharps & Wilkins

[9] From September 1939 to March 1954, the London Gold Fixing remained dormant. Its prolonged closure was the result of war, domestic policies, agreements like the Bretton Woods and the influence of international institutions like the IMF (Harvey, 2008, chapter 3).

the gold market, as with its two standards—the GDL and the RGG—along with the ownership of the gold price, it has the power to include and exclude (legitimise/delegitimise) actors, practices, and narratives along the global valuation chain of gold.

Alongside the LBMA, another relevant actor in this study is the World Gold Council (WGC)—an organisation established in 1987 by 30 of the world's largest mining companies, which works to stimulate global demand for gold. The WGC uses different strategies, from advertising, standard setting, and institutional lobbying, to promote the contemporary relevance of gold, support the development of the gold market, and advocate for the value of gold as a financial asset.

Theoretical approach

This dissertation draws inspiration from a statement Ferry (2016a) made in one of her very first pieces on the value of gold in the financial sector. In this piece, she argues that despite the increasing role of financial capital in the development of mining projects, 'there has been almost no scholarly analysis of the links between mining and finance' (2016a: 60). The anthropology of extractive industries had focused much more on production than on consumption, perhaps because 'the urge to uncover the exploitation, inequality, and pollution associated with mining seems to make focusing on the glittering final products a mark of false consciousness, a succumbing to the fetishising power of these substances' (60). When I read Ferry's article, I was doing fieldwork in Marmato, a controversial mining town in Colombia. I had spent the entire afternoon with miners and traders, and I was astonished to hear that no one in the town seemed to know why gold was so valuable, let alone where it would end up after leaving the country. In that moment, I knew I wanted my doctoral project to be about those powerful actors making gold a valuable substance extracted and *demanded* by the tonnes.

To critically examine how the value of gold is purified to make it an attractive financialised resource, my theoretical approach draws primarily on anthropological conceptualisations of resource making (Ferry & Limbert, 2008) and resource materialities (Richardson & Weszkalnys 2014), financial markets (Bear 2015a; Ferry 2020a; Gilbert 2015; Ho 2009; Leins 2018; Miyazaki 2013; Riles 2011; Zaloom 2006), financialisation (Bear 2015a; Bear et al. 2015; Christophers 2015; Ho 2015), audit regimes (Bear 2013; Cross 2011; Dolan 2008; De Neve 2009; De Neve et al. 2008), risk management (Appel 2019; Beck 1992; Gilbert 2015, 2020a; LiPuma & Lee 2004), ethical (Barry 2004; Leins 2020), racial (Kelley 2023; Robinson 2000;

Zeiderman 2025) and supply-chain (Tsing 2009) capitalism, affective labour (Anderson 2006; Mazzarella 2012; Navaro-Yashin 2009; Richard and Rudnyckyj 2009; Rutherford 2016; Ugarte 2022; Weszkalnys 2016), labour value (Rofel & Yanagisako 2019) and speculation (Bear 2020a). By conceptually connecting this literature, I aim to propose a new framework for the study of financialised resource value that accounts for the narratives, practices, and technologies involved in making a resource desirable/attractive for financial markets. Crucially, this framework intends to provide analytical tools to understand how global financial institutions and their valuation practices –such as price making, standard setting, and ethical regimes– legitimise practices of accumulation and speculation that have material effects, such as those extensively documented by scholars of resource extraction (Bear 2020a). With this framework, I begin to develop a theory of resource attraction that simultaneously accounts for the affective labour involved in making natural substances, people, and countries attractive, as well as for the attraction of resources towards financial centres of power, thereby giving them financialised resource value.

From extraction to attraction

Attention to 'resources,' defined by Ferry and Limbert (2008: 4) as 'objects and substances extracted from "nature" for human enrichment and use' has gained considerable traction in anthropology in the last 20 years. This interest has primarily materialised in extensive research on resource *extraction*. Resource extraction, and in particular, mineral extraction have examined the emergence of social conflicts (Ballard & Banks 2003; Kirsch 2014) ontological politics (De la Cadena 2015; Li 2015) Corporate Social Responsibility, and corporations (Gardner 2015; Rajak 2011; Welker 2014) temporal dispossessions (Jaramillo & Carmona 2022; Smith 2011) and the challenges and livelihoods of ASM miners (High 2017; Hilson et al. 2017; Jaramillo 2020, 2024; Jonkman 2019, 2025a; Marston 2024; Tubb 2020). This body of literature has produced insightful analyses on the social complexity around sites of extraction (D'Angelo & Pijpers 2022; Gilberthorpe & Rajak 2017; Jacka 2018).

In most social studies of extractive industries, the fluctuation of commodity prices is often mentioned as an influential factor in the emergence of conflicts; however, scholars have rarely explored this relationship ethnographically. With few exceptions (Bolay 2021; Calvão 2013; Ferry 2020a; Gilbert 2015) the anthropology of natural resources has only tangentially examined how resources' demand and markets are developed and sustained. To critically examine how the value of gold is purified to make it an attractive financialised resource, in this thesis I intend to look beyond resource extraction and extend the analysis to other actors stimulating and sustaining the demand for gold. Ultimately, resources are extracted because they are demanded in other places, often far away from the sites of extraction.

Crucially, scholars of resource making have pointed out that resources are not just there to be extracted and consumed, but they are constantly in the making through processes of valuation, human effort, and their own material agency and potentiality (Richardson and Weszkalnys 2014). Specifically, Richardson and Weszkalnys (2014: 16) have proposed the concept of 'resource materialities' to account for 'the arrangements of substances, technologies, discourses, and the practices deployed by different kinds of actors.' The work on resource making (Ferry & Limbert 2008; Richardson & Weszkalnys 2014) is particularly valuable for my research because it provides an analytical framework to examine how specific discourses, knowledges, and practices create the conditions under which substances become valuable resources.

Paul Robert Gilbert (Gilbert 2020b) noted that 'the process of resource-making is inevitably tied up with the process of valuation,' which is often speculative. Indeed, several ethnographic analyses on natural resources have engaged with questions of value and valuation. In her early work, Elizabeth Ferry (2002) described how the value of mineral substances transforms as they move from the extraction site to museums and private collections. Andrew Walsh's (2010) work on sapphires highlights how detailed information about the origin of the gems helps sellers to enhance their value as having a 'natural' pedigree. Filipe Calvão's (2013) work on diamonds explores the qualitative aspects invoked by smugglers and traders in Angola. On the one hand, this scholarly work has only tangentially considered the role of finance in generating financialised value of natural resources (for an exception, see Ferry 2016a, 2016b, 2020a, 2020b; Gilbert 2015, 2020a, 2020b). On the other hand, scholars of finance have paid little attention to the specific commodities that are being traded. In the next section, I show how I aim to integrate analyses of financial markets and financialisation to contribute to the resource-making framework.

Financial markets and the valuation of natural resources

In August 1971, President Nixon was compelled to terminate the US dollar's gold standard system of fixed exchange rates. This shift transformed money into a tradable commodity, opening the way for it to be bought and sold for profit—a change that laid the groundwork for the rise of a new form of financial capitalism (Gregory 2014, 1997). From the 1980s onwards, the increasing role of financial markets required renewed theoretical attention to the creation of value. One of the leading proponents of this new approach is anthropologist Arjun Appadurai, who embarked on a study of the new modern global order (1988) He is interested in investigating the driving 'spirit' of finance capital as opposed to the institutional forms (the 'system'), because the attitude, he says, comes first, and then the institutions are created around it (2013). In his theory, first proposed in 1986 and further developed in 2013, he attributes agency and intentionality to things: 'things could usefully be regarded as having not just itineraries, but also intentionalities, projects, and motives independent of their human handlers' (2013: 257). His theory of value deliberately turns Marx upside down, converting 'Marx's famous theory of the fetishism of commodities into a methodological principle and argues that it is not labor that gives value to things but things that give value to people.' (Gregory 2014: 48).

This focus on the bond between religiosity and commercial life gave rise to the new school of thought known as cultural economy (Gregory 2014). Cultural economy marks a paradigm shift by centring the analysis on the markets, rather than on the spheres of production or consumption. Michael Callon, in particular, has been one of the most prominent theorists of this market-centred analysis. For Callon and his collaborators, the qualification of goods plays a central role in the dynamic organisation of markets (Callon et al. 2002). The qualities of a product are not properties which already exist but need to be defined by networks of humans and non-humans, or what he calls calculative devices (Callon & Muniesa 2005). Thus, the 'economy of qualities,' as they term it, involves the establishment of forms of organisation or 'distributed cognition devices' that facilitate the collaboration between supply and demand and often tend to blur the distinction between production, distribution, and consumption (Callon, Méadel, and Rabeharisoa 2002, p. 212). Thus, according to Callon, the process of valuation implies collaboration and coordination between market participants.

Cultural economy's key contribution lies in recognising that the historical transformations in the global economy demand a fundamental rethinking of anthropological approaches. In doing this, cultural economy, primarily led by Callon (1998) has drawn attention to the need not to dismiss mainstream economics outright—as proposed by classic economic anthropologists (Malinowski 1922; Polanyi 1944; Sahlins 1972) but to recognise that 'the *homo economicus* really does exist', and that this acknowledgement opens up new horizons for anthropological analysis:

> It is not a matter of giving a soul back to a dehumanized agent, nor of rejecting the very idea of his existence. The objective may be to explore the diversity of calculative agencies forms and distributions, and hence of organized markets. The market is no longer that cold, implacable and impersonal monster which imposes its laws and procedures while extending them ever further. It is a many-sided, diversified, evolving device which the social sciences as well as actors themselves contribute to reconfigure (Callon 1998, p. 51).

A growing body of ethnographic work on finance has emerged in response to these developments (Ho 2009; Miyazaki 2013; Riles 2011; Zaloom 2006). From Caitlin Zaloom's analysis of traders and technologies in Chicago and London, we learned about the material and the embodied aspects of financial markets, the affects involved in traders' everyday practices and the formation of certain kinds of masculinities. The work of Karen Ho's (2009) was pivotal in showing how the culture of smartness, hard work, and job insecurity promoted by the introduction of the shareholder value narrative in Wall Street produced job insecurity, instability, and further inequality. Annalise Riles (2011) introduced us to the legal aspect of financial markets' formation, and specifically to the role of a wide range of secondary actors, including legal technicians, retail investors, financiers, academics, and even algorithmic trading systems. Furthermore, Hiro Miyazaki (2013: 6) showed us that traders are subjects with dreams and hopes that often 'reflect on and debate the complexity of the markets they seek to interpret and navigate; the inadequacy of the models, theories, and strategies they deploy in their work.' He developed a theory of the financial trader as a 'thinking subject' rather than a 'decision maker.'

In aiming to study 'the culture of finance,' this first wave of anthropologists of finance ended up studying the financial sector as a bounded field site and, with some exceptions (Ho 2009), did not show the 'concrete linkages between the mechanism of finance and the effects of financialisation' (Ho 2015: 172). Although most of them were aiming to investigate global processes, their rich observations were not able to relate local investigations to the global politics of financial flows (Hart and Ortiz 2014). The post-humanist approach underpinning these ethnographies of finance has given too much attention to the agency (or the spirit) of the non-human things animating financial capitalism. As anthropologist Chris Gregory has claimed, 'this is an assumption that no humanist, whatever his or her colors, can accept'

(Gregory 2014: 62). In this dissertation, I aligned more with a humanist approach that privileges an analysis of 'the social relations between people rather than the agency of things' (Gregory 2014: 64). I follow David Graeber's anarchist-inspired theory of value (2001, 2009, 2013) that enables an analysis of contemporary financial capitalism while distancing from Callon's and Appadurai's theories of value in which ultimately 'value comes down to exchange value, and all the regimes are really just degrees of exchangeability or commoditization' (pers. comm., David Graeber, September 2017). Importantly, Graeber's approach rejects the analysis of the twenty-first-century financial marketplace as a harmonious relationship between human and nonhuman calculative agency, focusing instead on the conflictive and extractive human relationship between the plutonomy and the precariat (Gregory 2014). Moreover, I draw on recent scholarship who have critiqued Callonian approaches as it does not consider that valuation processes always take place in a politically and ethically contested field (Bear 2020a; Butler 2010; Gilbert 2020a; Leins 2020; Miller 2002) and that economic theories and discourses such as the resource curse cannot be simply applied to different contexts but rather collide with historical and cultural meanings, resulting in complex 'articulations' (Weszkalnys 2011).

One way to overcome this impasse is to move beyond finance as a bounded field site to study not only the institutional culture of financial actors but also how their narratives and practices influence companies, business sectors, countries and regions in profound ways, and importantly, legitimise practices of speculation and accumulation of natural resources. An Economy and Society special issue on Speculation (Bear 2020a) aims to overcome the limitations of Foucauldian and Callonian approaches by providing an alternative framework for studying financial markets that directly addresses questions of accumulation, inequality, and legitimation. Speculation is a valuable concept because it foregrounds 'that the economy is always a field of moral debate founded on ethical claims, rather than a project of "economization"' (Bear 2020a: 6). Speculation is hence defined as a 'future-oriented affective, physical and intellectual labour that aims to accumulate capital for various ends' (2). A critical analysis of the political economy of technologies of imagination (i.e. promotional brochures, branding strategies, risk analyses, rankings, international standards) is a key way to understand the different forms through which speculative labour unfolds, because these technologies construct ethical certainties based on racialised, gendered, and national imagination of social differences (Bear 2020a; Ferry 2020b; Gilbert 2020a; Leins 2020)

In his multi-sited ethnography between London and Dhaka, Paul Robert Gilbert (2015) explores the connections between speculative activities in financial markets and large-scale mining operations in an 'extractive frontier.' This broader conception of how extractive capitalism is formed allows him to move beyond the bounded field sites of previous ethnographies of extraction and finance. Importantly, he shows that 'the calculative capacities exercised by financial analysts and fund managers have material consequences far beyond those normally considered by scholars in the social studies of finance' (12). Moreover, by analysing political risk rankings as technologies of imagination—instead of calculative devices—he demonstrates that valuation instruments developed in the financial sector reproduce racialised imaginaries of extractive frontiers and undermine the sovereignty of post-colonial nations (2020a).

Interestingly, he can establish these concrete linkages between finance and the effects of financialisation because he focuses on a specific kind of market (i.e. coal mining in Bangladesh), rather than a specific kind of financial actor, as most ethnographies of the culture of finance had previously done. Focusing on specific kinds of commodity markets is a crucial part of an approach aiming to make visible the socio-environmental conflicts produced by financial actors, because if we ignore the connections between financial practices and its related assets, we may be reinforcing the notion of abstraction in financial markets, which has ultimately given them its power. Indeed, in her ethnography of traders in Chicago and London, Zaloom briefly mentions that the connection between commodity production and futures trading has become more abstract, and that trader's relationship to physical commodities is so distant that they even joked about forgetting to sell the contracts they own and a truck showing up in front of their homes with a container load of corn (2006: 97).

More recently, Ferry (2016a, 2016b, 2020a, 2020b) has explored the value of gold in finance. In an opinion piece published in 2016, Ferry underscored the need to understand prices not merely as a reflection of value, but as material-social actors (2016b). According to her, seeing prices as embedded material-social actors allows for an examination of 'how prices are composed and decomposed, how they act, and with what consequences' (2016b: 82). Specifically, she has explored the history of the gold price and the politics behind the implementation of a new electronic and allegedly more transparent pricing mechanism for gold. Although Ferry's work locates within the anthropological and sociological literature of 'cultures of finance' in which scholars draw attention to the material embeddedness of financial markets and the pragmatics of market technologies (Beunza & Stark 2004; Çalışkan

& Callon 2009; MacKenzie et al. 2012; Muniesa 2007; Zaloom 2006) she has successfully managed to connect her analysis of the gold financial market to the material contexts of the mining sites. Overall, Ferry has inclined for an analysis of specific disputes within financial spheres about the value of physical gold in finance—e.g. questionings about the gold that the Bank of England holds on behalf of other central banks (2020b), controversies around investors' preferences of 'paper gold' over of physical gold (2020b), the valuation of gold through a dialectic of sequestration and display across financial markets and mining sites (2020a), and financiers' defence of gold's value against Bitcoin's (2016a).

My ethnography of gold attraction from Colombia to the UK aims to contribute to this body of literature by examining the narratives and practices of valuation involved in the creation of the financial value of gold. It is a study motivated by the questions of the anthropology of natural resources but addressed through a critical ethnographic engagement with international and national elites, and, importantly, with actors along the valuation chain (a concept I will explain below). This extended analysis of the production of value along the chain aims to underscore the influence of the 'culture of finance' over other actors beyond the financial sphere, including refineries, NGOs, consultants, gold exporters, technological entrepreneurs, and government officials. In the next section, I explain my conceptual approach to the creation of financialised resource value along gold's valuation chain and my contribution to the literature on commodity, supply, and global value chains.

The production of value in a racially hierarchised valuation chain

The term 'commodity chain' was first coined by world-system theorists, and it referred to 'a network of labor and production processes whose end result is a finished commodity' (Hopkins & Wallerstein 1986: 157). This first approach was fundamentally interested in 'how commodity chains structure and reproduce a stratified and hierarchical world-system' (Bair 2005: 156). A second approach, namely the global commodity chain (GCC) turned the attention to the governance dimension and the distribution of power between producers and buyers (Gereffi & Korzeniewicz 1994). What was relevant for world-system theorists was the reproduction of the unequal capitalist economy. In contrast, the GCC theorists were concerned with the question of how participation in commodity chains could help developing countries to 'upgrade' their position in the chain. A third approach, that of Global Value Chains (GVC), emerged in the early 2000s with the aim of consolidating a research community within a proposed common terminology (Gereffi 2001). The proponents of GVCs argued that value chain analysis could be helpful to investigate empirically high-value-added and low-value-added activities in global industries.

The GVCs literature, deeply influenced by the international business literature, distanced from the much critical perspective of world-system scholars which did not see commodity chains as a set of sequential value-adding activities but as a scheme enhancing the 'capability of a state to appropriate the benefits of the world-division of labor [which is] determined primarily by its position, not in a network of exchanges, but in a hierarchy of wealth' (Arrighi 1990: 15). The GVC approach has been criticised for its conception of governance as merely coordination, overlooking questions of structural inequalities, exclusion and power (Bair 2005), the conditions under which people are integrated into GVCs (Bolwig et al. 2010) and for depoliticising the discussion around value creation (McGrath 2018). In response to these shortcomings, scholars from economic geography have proposed the global production networks (GPN) approach to highlight the nonlinear nature of global production and to draw attention to the multiple spaces and actors involved. In a nutshell, the GPN approach is an attempt to bring in a critical cultural political economy perspective (Geenen & Verbrugge 2020).

Similarly to the GPN approach, in this dissertation, I am interested in questions of labour, value and power. To some extend I follow Jennifer Bair's (2005) suggestion to 'expand the scope of analysis to encompass the regulatory mechanisms, market institutions and structural properties of contemporary capitalism that affect the configuration and operation of these chains as well as the developmental outcomes associated with them' (171). Nonetheless, throughout the thesis I use the term *valuation chain* because I am more interested in understanding the valuation practices and narratives of my interlocutors rather than in developing a broader analysis of the structural dynamics of global production systems. I incline for the use of the chain metaphor because it is an ethnographic term that my interlocutors used to refer to the set of actors involved in the extraction, circulation, and accumulation of gold (they would interchangeably use the terms supply chain, value chain and mineral chain); and second, because my analysis is inspired by Anna Tsing's conceptualisation of supply *chain* capitalism as a 'model for understanding both the continent-crossing scale and the constitutive diversity of contemporary global capitalism' (Tsing 2009: 148).

My approach also draws on anthropological analyses of audit practices in global value chains. Crucially, scholars have noted that these practices do not always generate a normalisation of economic activities (cf. Gibbon & Ponte 2008) Instead, audit instruments can produce new hierarchies of value and devolve the risk to weaker partners in the chain, create opacity, and promote an ethic of detachment (Bear 2013; Cross 2011; De Neve 2009). According to Jamie Cross (2011), codes of practice and audit regimes emerge as unique material technologies to establish limits and endpoints between supply chain capitalists and their suppliers. Audit regimes and standardisation practices are based on an 'ethic of detachment': a disconnection –but still a form of relationship—that must be continuously performed in everyday operations (Cross 2011). Similarly, for De Neve (2009), codes and standards are not merely technical tools to regulate labour regimes but technologies that generate new social regimes of power and inequality. Notably, the politics of compliance devolves the responsibility — and, therefore, the risk— to subcontractors and creates a hierarchy of value as corporate ethical sourcing policies cast 'western companies and consumers as knowledgeable, caring and disciplined, and their non-western suppliers as backward, uncaring and lacking self-control.' (De Neve 2009: 64). Likewise, for Laura Bear (2013: 376), 'audit creates opacity, disorders routines of production and is supported by diverse forms of charisma and racial distinction.' These audit practices ultimately aim to transform objects that had been made by shipyard workers or harvested by foragers into international commodities (e.g. Bear 2013; Tsing 2015). Thus, the valuation of a commodity implies an unequal valuation of people and their labour. In other words, audit regimes reproduce the ideological construct that immaterial labour adds more value than material labour (Bear 2013; Bear et al. 2015; Yanagisako 2012).

In contrast to Cross's diamonds (2011), De Neve's t-shirts (2009) or Bear's ships (2013), gold is an indestructible object that can take many forms, it can easily be smelted and mixed up with gold from different origins and will never lose its value. Importantly, its valuation rests on both its geochemical properties and moral claims as a conflict-free and risk-free asset. In this thesis, I examine the design and implementation of responsible sourcing standards and traceability initiatives, which, combined with ethical narratives around sustainability and local economic development, aim to create and sustain the financial value of gold by disconnecting it from the supply chain risks associated with racialised ASM populations.

In his study of the traceability initiative of 'bag and tag' in Congo, James Smith (2021) contends that supply chain auditing is implemented as a project of purification. He notices that:

> traceability seemed like a church, not so much in the sense of being overtly "religious," but in the sense of excluding those deemed unclean and enacting a kind of cosmology of transparency and enclosure (295).

The aim to separate people from their livelihoods and things from the social relations that made their extraction worthwhile evokes deeply rooted racial hierarchies and notions of impurity (2021: 295). His ethnography of the ASM sector in eastern Congo offers an insightful analysis of the implementation of a traceability as a project of purification that 'sacrali[sed] the separateness of commodities […] over people's need to live and move.' (296). In my ethnography, I trace how this process of valuation through purification occurs and constantly fails. The financialised value of resources traded in financial markets should be cleansed from the 'messiness' of its production process (i.e. to be turned into fetishes), but what I show is that this 'messiness,' which in reality are just complex social relations, keeps haunting, disrupting, and threatening the process of financial valuation (see Appel, 2019). Actors along the valuation chain try to address the problem of 'supply chain contamination' through the implementation of transparency initiatives, such as responsible sourcing and traceability. Thus, in my analysis of the moral purification of gold, I examine unfulfilled promises of traceability as technologies of imagination that reinforce racial and national imaginaries (Bear 2015; 2020a; 2020b) to control resource extraction whilst legitimising gold attraction (Chapter 5).

Transparency and traceability initiatives may look like processes of defetishisation (De Neve et al. 2008; Luning 2013)—the imperative to disclose the social relations behind the production of a commodity. However, defetishisation often fails, either because it ends up creating new fetishes in the form of labels, or because it is never intended to be a process of simple disclosure, but of controlling and curtailing complex social relations. Paradoxically, if it were truly possible to separate 'clean gold' from 'dirty gold', the global production would not be sufficient to meet the demands of financial markets. In other words, the gold financial market depends on illegal and exploitative social relations in the countries of the Global South in order to sustain itself. Therefore, as long as global markets continue to demand gold by the tonnes, responsible sourcing and traceability initiatives will remain essential instruments for the moral purification of the gold industry.

Importantly, risk management is a fundamental part of the process of moral purification. In financial markets, investors are encouraged to buy gold to diversify their investment portfolio and diminish the risk of losing their wealth in times of crisis. In mining countries, mineworkers deal with life-threatening risks related to the imminent danger of their working environments, the toxic substances needed for gold extraction and the socio-environmental conflicts that surround gold mining in general. The transformation of gold from an unstable, risky substance into a risk-free and stable financial asset is possible only because financial risks and supply chain risks are disconnected and presented as incommensurable (Espeland & Stevens 1998; Jaramillo 2018; Povinelli 2001).

Caitlin Zaloom (2004) was a pioneer in providing a rich ethnographic account of risk perception in financial markets. She showed 'how risk operates to shape the social and physical space of the financial exchange and forms the fulcrum of traders' self-definition.' (2004: 384). Nonetheless, she did not further analyse the material effects of these risk-taking practices beyond the pits themselves. In the same year, LiPuma and Lee published an influential book called *Financial Derivatives and the Globalisation of Risk* (2004) in which they argued that financial derivatives result from the 'commodification' and 'objectification' of risk which led to the impoverishment of developing nations. The process through which risk is objectified, abstracted and commodified implies that 'the financial community first envisions a situation as risky and then abstracts the element of risk from the intertwined social, economic and political circumstances that gave rise to that risk, removing the risk to a conceptual space in which it may be considered independently of these circumstances' (LiPuma & Lee 2004: 121).

Lipuma and Lee's (2004) conceptualisation of risk has been essential for the development of a critical approach to risk, which has highlighted that profitable risk is dependent on exploitative risk (Appel 2019; Bryan & Rafferty 2011; Gilbert 2020a; Guyer 2004, 2009; Peterson 2014; Poon 2009; Simone 2004). Karen Ho (2009) has pointed out that in the 2008 financial crisis, Wall Street's professional risk-takers relied on the risk taken by working-class homeowners. In her study of oil in Equatorial Guinea, Hannah Appel has argued that 'the grounded practices to control risk—both financial and industrial—are primarily indexed to shareholder value, secondarily indexed to human safety, and not at all to labour rights.' (2019: 70). And Paul Robert Gilbert (2020a) has analysed how political risk rankings developed in the City of London are technologies of imagination that enable practices of speculation from images of 'politically risky' territories.

Indeed, the work of my interlocutors along the valuation chain consists in purifying gold from its supply chain risks in order to sustain its value as risk-free in the financial sector. In other words, I conceive the transformation of gold from an unstable, risky substance into a risk-free and stable financial asset as the outcome of affective, performative and speculative *labour*. In the next section, I explain the conceptual grounds for the development of a key concept for this thesis: the labour of attraction.

The labour of attraction: ethics, affects and the management of desire

A focus on the practices and narratives of valuation along the chain highlights the fact that the value of natural resources must be continuously created, stabilised, and sustained. This work of continuous persuasion about the value of gold as ethical, sustainable, and risk-free is what I call the labour of attraction. The labour of attraction is the work involved in the management of ethics and affects along the valuation chain for the creation of financialised resource value. This labour can take many forms according to the position of the actors along the chain. It can be as diverse as giving a speech at a sustainability conference, drafting a responsible sourcing standard, or branding a country as an attractive investment destination. Importantly, this labour has unintended (and sometimes intended) material consequences such as legitimising the accumulation and desire for gold bullion by the tonnes while increasing control over racialised mining populations whose desire to extract gold is cast as 'excessive' (see Weszkalnys 2016). Through the lens of the labour of attraction, I attempt to combine literature on ethical capitalism (Barry 2004; Besky 2014; Dolan 2008; Gardner 2015; Rajak 2011) with literature on affective and speculative labour (Mazzarella 2003, 2012, 2019; Rofel and Yanagisako 2019; Ugarte 2022; Weszkalnys 2016) and recent analyses on labour value (Yanagisako and Rofel 2019), geo-racial regimes (Zeiderman 2025), racial capitalism (Robinson 2000) and financial colonialism (Paul Robert. Gilbert et al. 2023)

In 2004, ethics were already a growing concern in the world of global business. Concepts such as corporate social responsibility, ethical consumption, and environmental sustainability became commonplace (Barry 2004). In this context, Andrew Barry has proposed the concept of 'ethical capitalism' not to describe the current capitalist system as being more ethical than in the past, but rather as an analytical lens through which one can examine the practices, processes, and techniques by which the private sector presents itself as ethical. This ethical concern has become increasingly relevant for financial markets in the post-2008 financial crisis era, as regulators and public opinion demand that they behave more responsibly. Building on the statement that 'the economy is always a field of moral debate' (Bear 2020a), Stefan Leins (2018, 2020) shows that financial analysts of a Swiss bank integrate ethical discourses such as Environmental, Social, and Governance (ESG) into new speculative practices of valuation, which allows them to give legitimacy to financial transactions through the commodification of ethics. As a market response to the 2008 financial crisis, ESG helped to establish what Leins termed a 'new ethical form of valuation' (2020: 4). Crucially, in this 'post-crisis ethical order' criticism about capitalism's social and environmental impacts has been absorbed by capitalist enterprises 'into a renewal of accumulation and legitimacy' (Bear 2020a: 2; see also Leins 2020).

Indeed, extractive industries have absorbed such criticisms, and we are now experiencing what Seagle (2012) describes as an emergent 'new political economy of mineral extraction' based on claims of sustainability, conservation, and transparency (Kirsch 2014). Critical scholarship on resource extraction sustains that contemporary narratives of sustainability and transparency are based on a principle of inclusion that paradoxically generates further exclusions and does not really challenge 'systems of domination, dispossession, and violence that remain essentially intact beneath the veneer of inclusivity' (Postar & Elodie 2022: 3). Raising awareness about this paradox is a very timely contribution now that the power of the extractive sector is being achieved and stabilised through 'quieter registers of power' (Allen 2011), as opposed to dramatic and violent acts of accumulation by dispossession (Harvey, 2003). In this dissertation, I analyse the practices and narratives involved in the project of gold's ethicalisation (Barry 2004), which entails a process of moral purification from the 'dirtiness' of a racialised ASM sector.

Crucially, I see the construction of ethical narratives around extractive and financial capitalism as a type of affective labour. As work involving emotional or relational effort, affective labour entails the capacity to influence, manage, or govern the sentiments of subjects (see Mazzarella 2003; Rudnyckyj 2011). This work can be done by care workers (Constable 2009; Gutiérrez Garza 2019; Rudnyckyj 2011) companies (Rudnyckyj 2011), citizens, or state actors (Mazzarella 2013, 2017; Muehlebach 2019; Navaro-Yashin 2009; Stoler 2010). A growing number of anthropologists are increasingly interested in underscoring the affective grounds of economic and political action (Anderson 2006; Bear 2015b; Berlant 2011a; Jaramillo 2024; Miyazaki 2013; Muehlebach 2019; Navaro-Yashin 2009; Richard & Rudnyckyj 2009; Tsing 2005; Weszkalnys 2016; Yanagisako 2012; Zaloom 2004). In this literature, affect 'is seen not as an anti-economic response but as one force among many that give economies their specific shape, while also being shaped by them' (Weszkalnys 2016: 128).

My analysis of the labour of attraction along the valuation chain of gold builds on William Mazzarella's (2003, 2011, 2013, 2017, 2019) conception of affect as an essential part of any institutional practice with aspirations to public efficacy. In his words, 'any social project that is not imposed through force alone must be affective in order to be effective' (Mazzarella 2011: 299) Mazzarella's conceptualisation of affect draws on Durkheim's notion of 'collective effervescence' (1912) to understand how 'the energy generated by proximate bodies in motion, each mirroring the other's excitation, operates as a principle of solidarity and commitment' (2011: 296). In this sense, affect is economical as it does not reside in a given subject or object (Ahmed 2004). Its circulation between signifiers is what activates its power in creating relations. The circulation of affects is crucial to the delineation of the bodies of individual subjects, but also to the definition of collective bodies such as the nation (117).

In his work on commodity branding (2003) and political branding (2019), Mazzarella explores affect as something that can be managed. He conceives the production of desire in political and advertising campaigns as a matter of 'affect management.' He contends that the production of desire 'depends on maintaining an ongoing and irresolvable tension between concretely situated, affect-intensive materials and their would-be authoritative discursive elaboration in the form of brand narratives […]. It is precisely in the tension between the two levels that desire is harnessed to meaning and value' (2003:46).

In a similar vein, Gisa Weszkalnys (2016) proposes the concept of 'resource affect' to theorise the various forms in which affect is articulated within contemporary resource economies. She builds on works that conceptualise affect as constituted in relations of power and difference (Anderson 2006; Navaro-Yashin 2009) to show how the affective responses of Santomeans are problematised as excessive and become an object of thought and action for corporate, state, non-state institutions. Importantly, this problematisation of excess affect is itself a technology of power (Weszkalnys 2016). In this thesis, I combine Mazzarella's and Weszkalnys's approaches to affect to examine the labour of attraction of my interlocutors as a process of affect management that reproduces a racial hierarchy of gold desire: the desire to extract gold is problematised as 'excessive' (see Weszkalnys 2016) whilst the desire to invest and accumulate gold is celebrated and stimulated.

Importantly, this racial hierarchy implies that the labour value of the actors along the chain is constantly negotiated (Rofel & Yanagisako 2019). It is perceived to add more or less moral value to the resource itself (gold) according to the positionality of the actors involved (Global North vs. Global South, public vs. private institutions, for-profit vs. non-profit businesses, the rich vs. the poor, white vs. non-white, male vs. female, among other variables). For example, the labour of attraction of the actors at the top of the hierarchy (financial markets) has the purpose of making gold an attractive investment asset; thus, they work to persuade regulators and market participants that gold is a stable, risk-free, and ethical asset. However, the labour of attraction of the actors below in the chain is not so much to make gold an attractive object but to make themselves attractive for the investment of actors up in the valuation chain. In sum, the process of creating financialised resource value is always a field of moral debate, which entails not only the valuation of substances but the valuation of people.

Thesis outline

My fieldwork was conducted in a way that followed the work of those enabling the circulation of gold from the mines to the vaults. However, the thesis is written in the very opposite order—from the vaults to the mines—to reflect the power of gold attraction: the narratives and practices I encountered had the purpose of making gold and people themselves attractive to those up in the hierarchy. Thus, the dissertation is structured in a way that resembles the hierarchical valuation chain and underscores the power of resource attraction. In each chapter, I examine the valuation practices and narratives of my interlocutors at a specific position in the chain and in the immediately following chapter, I examine the labour of attraction of people at the lower node as they attempt to make gold and themselves more attractive for the actors up in the chain.

Chapter 1 reflects on the challenges of embarking on a study of resource attraction. It tells the story of how I became interested in studying gold beyond the extraction sites and describes the methodological approach of the thesis. The chapter also reflects on the challenges and opportunities of conducting a multisited ethnographic research with authorities and elites in a post-COVID era.

In Chapter 2, I dive deep into the world of the global gold financial market. I examine the labour of attraction of the two major industry authorities: the World Gold Council (WGC) and the London Bullion Market Association (LBMA), as they work to mainstream the value of gold as a financial asset, make gold and themselves attractive for investors and regulators and reinforce a *racialised desire for gold*. Through marketing strategies and policy influencing, the WGC persuades financiers to invest in gold as a risk-free, safe, and solid asset that should be accumulated in times of crisis and by means of training courses and market reforms, the LBMA imparts a financial pedagogy to teach new market participants the key mechanisms for trading gold in a risk-free manner.

In Chapter 3, I examine key practices and narratives involved in the ethicalisation of gold. More specifically, I explore how responsible sourcing standards help to morally purify the gold coming from the artisanal and small-scale mining sector. While once ASM was viewed as a risk, now it is seen as an opportunity. Actors of the valuation chain have realised that engaging with the ASM sector could be more beneficial for their reputation than excluding it. I focus on two central nodes of the chain that are often overlooked as part of a value chain: industry conferences and industry task forces. Through an ethnographic engagement with actors in these spaces, I suggest that responsible sourcing is not only a logistical labour, but a highly affective labour involving the practice of *ethical value sourcing,* which seeks to source moral value from actors deemed to be more responsible/ethical. Paradoxically, efforts to enhance the attractiveness of ASM gold unintentionally reinforce the racialisation of ASM miners. This occurs through the use of technologies of imagination that construct an affective narrative portraying miners as vulnerable subjects in need of development assistance.

Chapter 4 is a hinge between the labour of attraction of financiers (chapters 2 and 3) and that of actors and institutions in gold-producing countries (chapters 5 and 6). It analyses the work of *transparency intermediaries* as they navigate the controversy of recycled gold, which further reveals the radical uncertainty around the origin of gold. Drawing on reports, interviews, and participant observation of discussions around recycled gold in industry conferences, multistakeholder groups, and social media, I examine the labour of attraction of intermediaries striving to be recognised as legitimate actors of the gold valuation chain. I argue that demands for more transparency in the global value chains do not intend to reduce the number of intermediaries but to rank their labour value under a hierarchy of mediation. Thus, the practices of Global North mediators like standard-setters, and audit companies go generally unquestioned, and only come to look opaque when Global South mediators—like refiners in Dubai and grassroots certification schemes—get in the way. Thus, local processing plants, aggregators, exporters, and even local NGOs must strive for recognition as legitimate and trustworthy actors in the pursuit of transparency.

In Chapter 5, I analyse how the uncertainty regarding the origin of gold was attempted to be resolved with the *promise of traceability.* I delve into the labour of attraction of Colombian mining authorities, bureaucrats, engineers, and entrepreneurs as they strive to bring to life a mineral traceability platform, aiming to separate gold from exploitative social relations and give it financialised value. I argue that traceability is a speculative tool that uses technologies of imagination (Bear 2020a) to support practices of legitimation and accumulation along gold's valuation chain. Arguably, in such a complex social context full of conflicts and legal ambiguities, the possibility of segregating 'clean' from 'dirty' gold in Colombia is utopian. However, as utopian as it might be, I demonstrate that the promise of traceability has material consequences, including enabling private and multilateral organisations to speculate and accumulate capital from state projects, the financialisation of the ASM sector, and a racialised relationship between actors in Colombia and the UK gold bullion market. The promise of traceability creates the illusion of defetishisation, it attempts to foreground the social relations behind gold extraction and circulation, but it ends up devaluing and undermining the relations that enabled gold extraction in the first place.

Chapter 6 examines the significance of the political in the creation of financialised resource value. I analyse the sovereignty aspirations of the first left-wing government in the history of Colombia and its consequences for the derealisation of the traceability promise. More concretely, I explore to what extent responsible sourcing (Chapter 3) and traceability (Chapter 5) initiatives represented a threat to the new government's mining policy, *Minería para la vida* (mining for sustaining life), which sought to regain *soberanía de los minerales* (mineral sovereignty). My analysis contributes to understanding the challenges faced by a new wave of left-wing governments in the Global South, particularly in Latin America, as they strive to overcome extractivist development models by reorienting their policies to address climate change challenges. However, in this endeavour, the government is caught up in what I call *the gold sovereignty trap*—strictly speaking, gold has no place in the mineral sovereignty discourse because it does not contribute to any energy, food, or infrastructural sovereignty; still, gold extraction needs to be justified as it will continue to be demanded by financial centres of power. Nevertheless, this moment of political experimentation also opens space to imagine alternative valuations of minerals, particularly gold, that move beyond financial logics. The inclusion of gold in the strategic mineral list—not for its financial value but for its potential to foster associative practices and support small-scale miners—and the valuation of gold as part of a politics of life can be a strategic move in imagining ways to alter gold attraction.

Chapter 1. Challenges in the study of resource attraction

In July 2018, my fiancé and I travelled to Marmato, a mining town in Colombia, to make our wedding rings. At a gold-processing plant, we purchased a bucket of *concho*—the tailings left behind by one of the town's many informal mines. Using a *batea*, a traditional wooden pan, we washed the mineral dust in water before taking it to a nearby workshop run by Javier, one of Marmato's few jewellers. There, he showed us how to turn the dull grey sediment into two polished gold rings that would come to symbolise our union.

As romantic as that might sound, the jewellery workshop, like the neighbouring mines, was crumbling. Marmato, located on top of a mountain full of gold, felt like a place out of a dystopian novel. Exhausted workers laboured among piles of rubble, open flames, and contaminated water, producing gold destined for mass export—visible traces of the environmental damage wrought by centuries of extraction. Javier's workshop felt oddly displaced in a town where people extracted gold only to see it slip from their grasp.

As a Colombian anthropologist, I have long been intrigued by the human ambition fuelling successive gold rushes that have brought so much destruction to my country. In the years leading up to our marriage, my partner, also a Colombian anthropologist, and I were researching a mining boom in Marmato triggered by soaring gold prices following the 2008 financial crisis. However, I soon realised that if I wanted to understand the gold rush, I needed to look beyond Marmato, toward those who were demanding the metal by the tonnes and driving its price higher and higher. This realisation led me to examine the gold value chain and the dynamics of the global gold financial market (Figueroa de la Ossa, 2025).

While doing my Master's in London, a Colombian friend and activist introduced me to the work of the London Mining Network (LMN), an organisation that raises awareness about the wrongdoing of London-based mining companies and works closely with mining-affected communities. I started attending the LMN meetings and demonstrations because it struck me how clearly they saw the link between finance and the socio-environmental conflicts in mining sites. Their strategy consisted of buying shares of mining corporations, based in or financed from London, to get access to their Annual General Meetings (AGM), where they then raised attention to the issues affecting communities and sometimes even brought social and environmental leaders from these communities to talk face to face with shareholders. Yet, after a few months of following the movement, I realised that they still saw mining as a problem of extraction and dispossession and not of attraction and accumulation. They were only targeting the investors of mining projects and not the investors who store, accumulate and speculate with the extracted resources.

My experience with the LMN made me aware of the link between finance and mining, but studying them would not have given me the answers I was looking for. The LMN was taking for granted the demand and desire for minerals, while I was more interested in understanding the narratives and practices that were legitimising the creation of this desire and demand, which were causing the dispossession and devastation denounced by the LMN. In other words, I wanted to study the processes of resource attraction—i.e., the affective and communicative labour involved in making natural substances, people, and countries attractive —to attract resources towards the financial centres of power, thereby giving them financialised resource value.

Gold is an exemplary substance from which to start an ethnographic theory of resource attraction because its unique role in global monetary history fuelled the colonial project and the continuous exploitation and domination of the American continent. Notably, in contrast to other industrial minerals, the justification for the extraction of around 3,700 metric tonnes of gold each year is that gold has an intrinsic value: 'it does not stand for value, it is value' (Ferry 2016a: 59). In this thesis, I refute this assumption by showing that gold's value is constantly under threat and it needs to be sustained and stabilised by the labour of attraction of actors along the supply chain.

How did I study gold attraction?

As a multifaceted concept (attraction as desirability and attraction as movement), gold attraction is necessarily constructed along a supply chain, but not from the mines to the vaults, as supply chains and stories of extraction are generally narrated, but in the opposite direction. The requirements for gold's desirability are set by the most powerful actors of the chain (in financial centres of power) and extended to the nodes and actors below, who not only need to meet those requirements but also work to make themselves attractive for investment. In this sense, the most appropriate way to study the construction of gold attraction seemed to be through a multi-sited ethnography that followed the narratives, practices, and requirements extended from the vaults to the mines. However, when designing my fieldwork, I took the strategic decision to start in the mines (of Colombia) because the probabilities to gain access to the Colombian bureaucracy were higher than to get access to the gold financial market (in London) and, importantly, because the experience and knowledge I was going to gain in Colombia may in turn facilitate access for the second part of my fieldwork in the UK. Fortunately, this change did not have significant implications for answering my research questions, because I never planned to conduct a multi-sited ethnography as a process of 'following the thing' (Marcus 1995). Instead, more than understanding how gold circulated along the supply chain—which in fact happened to be the obsession of most of my interlocutors—I was interested in how it came to have value through the labour of attraction.

Rofel and Yanagisako (2019) have proposed 'collaborative ethnography' as an innovative methodology to study 'the transnational capitalist processes that are shaping people's lives' (2019: 3). They argue that almost all anthropological research on transnationalism has been conducted by one ethnographer, who focuses 'primarily on one of the parties in the encounter, thus overlooking (or even misconstruing) the goals, commitments, and historical legacies of the other parties' (2019: 5). Resource attraction is a fundamental part of 'transnational capitalism,' defined by Rofel and Yanagisako (2019) as a 'historically situated form of unequal social interdependence in which people produce forms of labor, value, inequality, and identities, along with commodities' (5). Although I did not conduct a collaborative ethnography, Rofel and Yanagisako's methodology inspired me to explore the 'unequal social interdependence' between Colombia, the UK, and the intermediary actors of the valuation chain. During my fieldwork, I made an effort not to overlook or misrepresent the goals, aspirations, and moral frameworks of any party. I hope 20 months of uninterrupted fieldwork were sufficient to cover all the different parts of the process. Fortunately, my linguistic skills and previous research experience in Colombian mining (right after finishing my undergrad) and in the gold market (as a master's student at a British university) helped me engage in dialogue and participant observation with people in Colombia, in the UK, and in key nodes that were enabling transnational encounters between them.

Friction (2005), Anna Tsing's ethnography of *global connection,* was of great inspiration to embark on a project that sometimes felt too big for one person to conduct alone. Indeed, Tsing herself has suggested that 'the bigness of capitalism is an imaginative project for all its participants' (2009: 153). In the 1970s and 1980s, General Motors' model of bigness was used to think about corporate globalisation critically. In 1990, McDonald's franchises were imagined as the new model of the bigness of global capitalism. More recently, however, supply chain capitalism is offering a different image of bigness. This is a model that, in the words of Tsing 'reopen[s] the question of contingent articulations' (2009: 155). This approach to studying supply chains draws from her previous work (2005), where she proposed to study global connections by focusing on the 'frictions' of global processes, on those 'zones of awkward engagement,' which 'arise out of encounters and interactions' (2005: xi).

In a similar vein, I conducted my multi-sited ethnography by following the trouble—the main concerns of my informants, and how they engaged in awkward encounters and interactions, intending to resolve the friction that constantly obstructs gold attraction. In doing so, I did not approach the gold supply chain as an unbounded 'imagined totality of cultural formation' (Candea 2007: 180). Instead, I followed Candea's suggestion to 'reconsider the value of self-imposed limitations, of boundedness as a methodological tool' and value 'arbitrary locations' as an 'explicitly "partial" and incomplete window onto complexity' (2007: 167). Although my interlocutors would often speak of 'the mainstream supply chain,' the term 'mainstream' refers only to the part of the chain that connects the Good Delivery List refineries to the London bullion market (Figure 3). Prior to the node of the GDL refineries, there are endless routes that gold can take, and therefore, endless supply chains. In this sense, the decision to study the Colombian case can be described as 'arbitrary,' because I could have found and analysed similar connections between a country in Africa and the London bullion market. However, following Günel et al., (2020), fieldwork decisions should not only respond to new realities, like the emergence of the world-system (Marcus 1995) but also to researchers' own lives. I chose to study the Colombian case because the country has played a significant role in the intermingled history of gold extraction and colonialism, but also because it is the country where I was born, and where my family lives.

FIGURE 3. GOLD BULLION ATTRACTION. SOURCE: AUTHOR.

Following Veret Amit's (2000) claim that the field does not simply exists, awaiting discovery but it has to be constructed by the ethnographer, I constructed my fieldwork in the space between the authorities at the two ends of the supply chain: the National Mining Agency (NMA), Colombia's national mining authority, and the London Bullion Market Association (LBMA), the global gold market authority. Studying the production of gold attraction from the vantage point of authorities at both ends of the chain was fundamental to understanding the narratives and practices intended to make gold attractive for investment, but also the hierarchical labour regime that was connecting these two sites. The role of mining and market authorities is crucial in the process of gold attraction, as their work involves precisely setting the rules for supply chain actors and influencing, directly or indirectly, the practices and narratives that should be considered legitimate. In the case of the NMA, legitimation occurs through state regulation, whereas in the case of the LBMA, it takes the form of industry standards.

Importantly, my ethnography was not only multi-sited but *multi-positioned* (Mosse 2004: 12). As David Mosse (2004) has insightfully reflected, although development and policy organisations are in the habit of dealing with criticism, 'they are less tolerant of research that falls outside design frameworks, that does not appear to be of practical relevance' (12) Therefore, it is nearly impossible to maintain long-term participant observation in these kind of institutions without making a practical contribution (Mosse 2004). Both in Colombia and in London, I conducted 'ethnography from within' (Mosse 2004), which meant that I was not only researching from within but as part of the teams. Similar to Mosse (2004), some of the time I had to be 'an optimist, a positivist, a modernist,' but the insider/outsider position also allowed me to engage in 'participant deconstruction' (Wright & Shore 1997: 16–17 in Mosse

2004). In the following two sections, I reflect on how I navigated such an ambiguous position in my main field sites.

Ethnography within a mining authority

I conducted in-person fieldwork in Colombia from January 2022 until February 2023, when the COVID-19 pandemic was still disrupting our lives. The first couple of months, it was uncertain whether the NMA was going to accept me as an intern, so I observed their work from the outside while exploring other possible paths for my research. I attended the Colombian Gold Symposium in the city of Medellín where the NMA presented their vision and current work. So, for a couple of months, I did 'ethnography by appointment' (Mitchell 2010: 3) which, as Gilbert (2015: 55) has suggested, it is hard work because interviewees often feel disappointed by open-ended conversations. Still, I interviewed representatives of the Colombian Mining Association, consultancy companies of the extractive sector, and gold traders, as I really did not have access to technocrats or bureaucrats in the mining authority. Fortunately, in March 2022, the NMA officially accepted me as an intern with the Grupo de Promoción (Promotion team), the division responsible for promoting Colombia as an attractive investment destination for mining projects. The Promotion team was part of the Vice-Presidency of Promoción y Fomento, which was integrated by two more teams: the Grupo de Fomento (Development team) and the Grupo Socio Ambiental (Socio-environmental team). At first, my role within the Promotion team was very ambiguous because my colleagues did not really know what a PhD student in Anthropology could be useful for. Luckily, my previous research experience with the artisanal and small-scale (ASM) sector made me an 'expert' they used to consult when they needed to understand certain context and history of ASM in a specific region. I started receiving invitations to their (most of the time online) meetings, where I was able to listen to the discussions and start to get a sense of ongoing projects such as Neutral Coal and the Strategic Mining Areas (analysed in Chapter 6). I was grateful to have been given access to the institution; however, in my research project, I had proposed to research a handful of traceability initiatives, intending to make Colombian gold more attractive.

I was aware that another team within the NMA had been working on a traceability platform for the last two years, but the project had been put on hold due to a combination of events, including the COVID-19 pandemic, and limited political interest during an election campaign year. The traceability project had lost momentum and was gradually absorbed by the NMA bureaucratic inefficiency. In fact, in late 2021, when I was first exploring the possibility of getting an internship within the NMA, I had an online meeting/interview with the leader of the traceability project, but at the end of the meeting, he told me that he had just been fired. Later, I learned that he was replaced by a politician from the political party of the NMA president at that time. Eventually, the traceability project resumed, but it was not going to be implemented within the NMA, but through an outsourcing scheme that included the NMA, a multilateral organisation, an intermediary company, and a consultancy company. Carolina, my boss at the Promotion team—perhaps tired of not knowing what to do with a PhD intern in her team—put me in touch with Adrian, the owner of the consultancy company that was going to lead the project. Luckily, Adrian was looking for a person who could take up the role of Articulation and Communications Officer to organise in-person and online meetings with people of the 'mining ecosystem' (miners, traders and technology companies) interested in participating in a Regulatory Sandbox, the next phase of the traceability project. Adrian offered me the job, and my boss at the NMA approved the arrangement quite enthusiastically.

For six months, I was an intern at the NMA as well as the Articulation and Communications Officer at INNOVATION GROUP, the consultancy company at the end of the outsourcing scheme for the implementation of the traceability project. During this time, I worked hand in hand with the engineers, lawyers, and bureaucrats of both the NMA and INNOVATION GROUP. Moreover, I worked closely with key representatives of the 'mining ecosystem,' and in particular with traceability entrepreneurs (see Chapter 5). I observed their participation in the Sandbox, and I also coordinated the online workshops where they were invited to present their business models. Most of them granted me generous interviews about their personal histories and their motivation behind their traceability companies.

Crucially, the first six months of my fieldwork in Colombia were the last six months of the right-wing government of President Iván Duque. This meant that I experienced the government transition, which was indeed a very particular one because the new government was the first left-wing government in the country's history (I reflect on the implications of this transition in Chapters 5 and 6). Most of the NMA projects went on pause during the government transition. This, of course, affected the traceability project, which was, at first, explicitly rejected by the new administration for the little participation of the public entity in the outsourcing scheme. After some months of uncertainty and the legal pressure of some of the traceability entrepreneurs, the traceability project resumed, but with a completely new team. Only three people from the original team remained, two of them were assigned other tasks within the NMA, which left the intern—me—as one of the very few people with the know-how of the project. Consequently, I was offered a full-time contract as a NMA functionary to lead the project, but everything was set up to start my fieldwork in London in the following months. I ended up rejecting the offer, but I was still hired for four months to advise the new team and aid with the transition. The hiring process took a lot of time, so I ended up working half of that time remotely from the UK.

The experience of doing ethnography from within (Mosse 2004) was both a burden in terms of labour time as well as intellectually and emotionally challenging. It was rewarding because people seemed to trust me; they would always speak to me openly, and I was able to bring a critical perspective to the project's implementation. However, it was also challenging because in practical terms, I was doing two (actually three) jobs at the same time. I was working for INNOVATION GROUP and the NMA, I had responsibilities as a PhD researcher, like writing fieldnotes, fieldwork reports, and critiquing my own work at the NMA, and I had a 6-month-old daughter at home.

Ethnography within a global market authority

For the second part of my fieldwork, I conducted in-person research in London, as well as in Paris, Barcelona, and Lausanne, from March to October 2023. During my first two months in the UK, I continued working remotely with the NMA traceability team. I usually worked late hours in online meetings due to the time difference, and during the day, I started reaching out to my LBMA contacts and tuning in to the concerns of my interlocutors on this side of the globe. Around mid-2022, I had sent an email to the LBMA sustainability director introducing myself as a PhD researcher currently working on a traceability project of the Colombian National Mining Agency. I briefly mentioned my interest in working as an intern within the LBMA's Sustainability and Responsible Sourcing team. To my surprise, he replied very positively the next day because they had just started a project intended to increase the flows of ASM gold to the 'mainstream supply chain'—i.e. the LBMA and its certified refineries. The strategy was being led remotely by Gregory, a consultant in South Africa who needed the support of a Spanish speaker with expertise in Latin American gold mining.

During my first week in London, I got invited to the LBMA offices for an interview with one of the chief officers. He explained the project to me, and I explained mine to him. We agreed that I was going to support Gregory with the writing of SWOT (Strengths, Weaknesses, Opportunities, and Threats) reports assessing the contexts of ASM gold mining in Colombia and Peru. This time, I did not get an internship with the LBMA, but I was hired by Gregory's consultancy firm. Still, as Gregory's collaborator, I participated in all the meetings of the LBMA ASM Task Force. These meetings were all online since part of the team was working fully remote. I was also granted free access to two LBMA online training courses, to the Global Precious Metals Conference in Barcelona and to the Sustainability and Responsible Sourcing Summit in London (these meetings and events, and the conversations I had with the attendants, were the base for my ethnographic analysis of chapters 2 and 3, and a significant part of chapter 4).

Importantly, in April 2023, I attended the OECD Forum on Responsible Mineral Supply Chain in Paris, where I could map out the key actors of the mainstream supply chain and their primary concerns. The purpose of the Forum is precisely to 'bridge global discussions with local insights' by gathering key stakeholders to 'reflect on longstanding and emerging priorities in fostering responsible mineral supply chains'(OECD 2025). In 2023, Irene Vélez-Torres, the Minister of Mines of the Colombian left-wing government, was invited as the keynote speaker, and I could not be happier to see the arbitrariness of my self-delimited multi-sited ethnography become not so arbitrary.

In this Forum I met all the people that later became the main interlocutors of the second half of my research (representatives of the World Gold Council, refiners, international traceability initiatives, NGOs, and multi-stakeholder initiatives). Here I met Sabrina, the founder of the Precious Metals Impact Forum (PMIF) and the Sustainability Director of a Swiss refinery at that time. She generously gave me access to the PMIF weekly meetings, where I observed (more than participated) high-level discussions between key actors of the supply chain about recycled gold, the origin of gold, and the measurement of gold's carbon footprint (the material that came out from my participant observation in this space is analysed in Chapter 4). In Paris, I also met people who invited me to a traceability workshop held at the University of Lausanne in Switzerland, where I met academics working on traceability, as well as European traceability entrepreneurs.

Pretty soon, I became aware of the fundamental concerns of the industry, which, as I had anticipated, did not differ much from the concerns of my Colombian interlocutors. The primary concern of all was how to prevent marginalising the ASM sector and how to manage the uncertainty surrounding the origin of ASM gold. The OECD Forum was such an important event because in 2011, the OECD had produced the Due Diligence Guidance, the industry baseline standard for mineral responsible sourcing. The Guidance was the result of a multi-stakeholder work, and, to my surprise, it had been drafted by Gregory, my new boss!

(material from the OECD Forum appears in Chapters 3 and 4). After all, my fieldwork revealed that I was not studying an arbitrary set of connections, but the very lineaments and networks underpinning gold attraction.

Everything, everywhere, all at once? On the possibilities of post-COVID ethnography

A well-known critique of post-modern ethnographies was that of the practical impossibility of the omnipresent anthropologist (Clifford 1983). In other words, ethnographic accounts are necessarily partial, situated and fragmented (Haraway 1988; Strathern 2004). However, in the post-Covid era, the possibilities for ethnographic innovation opened up extensively. My pre-fieldwork anxieties of having to conduct online research proved me wrong when I realised that suddenly most industry events were being turned into free access webinars, and that almost every organisation was creating their own online archive with reports and videos that I could easily access from my computer at home.

This online opening was crucial for ethnographers 'studying up' (Nader 1972) because as Cooper and Packard (1997: 5) have said: '"studying up" anyway involves studying those with the 'power to exclude themselves from the realm of the discussable'. But in the post-Covid era, everyone, including powerful institutions, was producing evidence of their work. In fact, many of my interlocutors would often refer to online archiving as a practice of transparency and traceability—the two terms that were key for the production of gold attraction were playing in my favour. This online 'archive fever' (Derrida 1996; Jaramillo & Tafurt 2025) allowed me, for example, to remotely attend the 2022 LBMA-WGC Sustainability and Responsible Sourcing Summit, which took place in London, while I was doing my internship at the NMA in Bogotá. The videos and power point presentations of this and other LBMA conferences were (and remain) stored in the LBMA website and I could watch them endless times.

In the wake of the Covid-19 pandemic, Günel et al. (2020) proposed the term *patchwork ethnography* to conceptualise a new methodological and theoretical approach to ethnographic work. By *patchwork ethnography*, they refer to:

> Ethnographic processes and protocols designed around short-term field visits, using fragmentary yet rigorous data, and other innovations that resist the fixity, holism, and certainty demanded in the publication process. Patchwork ethnography refers not to one-time, short, instrumental trips and relationships à la consultants, but rather, to research efforts that maintain the long-term commitments, language

> proficiency, contextual knowledge, and slow thinking that characterizes so-called traditional fieldwork (Faubion 2009; Pigg 2013; Adams, Burke, and Whitmarsh 2014), while fully attending to how changing living and working conditions are profoundly and irrevocably changing knowledge production. Patchwork ethnography is not an excuse to be more productive. Instead, it is an effective, but kinder and gentler way to do research because it expands what we consider acceptable materials, tools, and objects of our analyses (np).

Crucially, their proposal builds on 'feminist and decolonial theorizations of the intertwining of the personal and professional, the theoretical and the methodological in research' to acknowledge that methodological innovations should not only respond to changing political and economic contexts, but also to 'researchers' own lives and our multiple professional and personal commitments—from childcare and health concerns, to financial, environmental, political, and temporal constraints, to relationship commitments at "home," to the transience of particular research subjects.' (Günel et al. 2020: np)

My ethnography definitely blurred the boundary between 'home' and 'field.' Much of the time I was working from home (either in Bogotá or in London) attending online meetings, online conferences, navigating the websites of key institutions, reading reports, watching webinars or interviewing someone. Of course, I combined this with classical in-person participant observation and interviews, while juggling with childcare because my family was with me in 'the field.'

Beyond allowing me to see everywhere, everything, all at once, arguably, the industry's online archive fever also enabled me to conduct 'polymorphous engagement' (Gusterson 1997). Anthropologists researching up have noted that 'studying powerful institutions and people requires an expanded methodological repertoire' (Ferry 2020a: 5). Polymorphous engagement refers to interactions with informants across dispersed sites, but also to:

> Collecting data eclectically from a disparate array of sources in many different ways. Polymorphous engagement preserves the pragmatic amateurism that has characterized anthropological research, but displaces it away from a fetishistic obsession with participant observation […] polymorphous engagement also involve[s] an eclectic mix of other research techniques: formal interviews of the kind often done by journalists and political scientists; extensive reading of newspapers and official documents, and careful attention to popular culture, for example (Gusterson 1997: 116 in Ferry 2020a)

For my analysis, I drew on different sorts of published materials. I spent a substantial amount of time attending or watching conferences online and carefully reading and analysing reports, standards, treaties, codes of conduct, laws, and policies. I paid particular attention to the uses of images in videos and reports, and this turned out to be fundamental for my analysis of racialised representations of both miners (supply) and financiers (demand). Inspired by Elizabeth Ferry's work on the role of gold in finance (Ferry 2016a, 2016b, 2020a, 2020b) I practised polymorphous engagement to understand the different dimensions of gold attraction across my field sites. As Ferry (2020b) has said, these images, videos, and reports 'should not be read as the authoritative voice' of the institutions I investigated, 'nor as a definitive characterization of complex gold imaginaries […] but as one semiotic bundle in conversation with others' (Ferry 2020b: 5).

Lastly, my ethnographic work can also be considered a form of digital ethnography. Specifically, I spent a significant amount of time scrolling through LinkedIn. This professional social network proved to be a significant online space where my European interlocutors shared relevant information (including images, videos, and written reflections), interacted with each other, engaged in lively discussions, and shared their concerns. I realised that LinkedIn is a platform not only to find a job, but to maintain 'weak ties' (Gershon 2024; Granovetter 2023) through an online version of networking. According to Gershon (2024), as workers frequently change jobs, the value of peer-based networks—rather than connections with stable superiors—has become central. Through an online presence on LinkedIn, my interlocutors strategically manage their online personas, calibrating the narratives they want to convey at public events, such as conferences, or more private ones, like task forces (Chapter 3). On the days after the conferences, they would often publish group pictures with captions summarising the key takeaways of the discussions and their collective achievements. People would often comment on these posts, celebrating each other's achievements, and wishing luck when someone announced they would undertake a 'new adventure' (start a new job). My LinkedIn feed was interestingly showing me how the network of gold attraction was being built and sustained through an online version of the labour of attraction.

Engaging with authorities and elites: challenges, opportunities, and ethical concerns

Scholars have noted that traditional ethnographic methods present significant challenges for the study of political and economic elites (Gilbert & Sklair 2018; Kalb 2015; Mosse 2004; Shore 2002). Undoubtedly, the place of critique has been one of the main challenges for those studying up. While some have suggested that ethnography should be opposed to critique (Holmes & Marcus 2008; Latour 1993; Riles 2011), others have defended that ethnographic engagement with elites should necessarily address questions of inequality, accumulation and legitimacy (see also Bear 2020a; Gilbert & Sklair 2018). Mainstream anthropologists have depicted the ethnographer's ideal ethical-epistemological stance as a matter of 'yielding to the preoccupations of others' (Strathern 1999: 6) or as 'imposing interlocutors' concerns and interests upon the ethnographer' (Englund & Leach 2000: 229). More recently, this attitude has been reinforced by scholars of the ontological turn (Kohn 2016; Viveiros de Castro 2015) who have normally conducted research with/about indigenous peoples. This approach has been accompanied by an explicit rejection of critique, understood as a 'claim that the social-scientist/observer has a better access to reality (or the operation of concealed, systemic power) than those among whom they study' (Gilbert & Sklair 2018: 8). Surprisingly, many actor-network theory scholars have applied this ethical and epistemological stance when analysing very different contexts, from scientists in a laboratory to lawyers, bankers, consultants, and traders within powerful financial institutions (Callon & Muniesa 2005; Latour 1993; MacKenzie 2005; Riles 2011). However, as Gilbert (2015) have rightly asked: 'what happens when the anthropologists' duty not only to wider society but to *social inquiry itself* comes into direct conflict with the interests of those with whom they research? (67, emphasis in the original).

As Gilbert and Sklair (2018) have observed, 'with few exceptions (e.g., Ho 2009), contemporary anthropologists of elites do not seem as concerned with the persistent generation and entrenchment of inequalities in wealth, power, and mobility' (2018: 7). Thus, my ethnographic engagement with national and global authorities, and the intermediaries enabling gold attraction, responds to recent calls to include class- and inequality-based analyses of professional and political elites (Bear 2020a; Ferry 2020a; Gilbert 2020a; Gilbert & Sklair 2018; Leins 2020). As Paul Robert Gilbert (2015) has said:

> Anthropology must have something to say about the energies, imagination, ambition, norms and histories which, along with technical equipment, go into performing or generating extractive industry capitalism: but they must also have something to say about the *consequences* of performed or enacted extractive economies, and their often devastating consequences for social and physical bodies (2015: 65, emphasis in the original).

Studying the gold supply chain, from a mining authority in Colombia to the global authority in London, allowed me to reflect on their labour of attraction and its material consequences. In financial markets, gold is valuable for being a 'safe-haven asset.' Managers of pension funds, hedge funds, and commercial and central banks praise gold bars as a 'risk-free' asset to hedge the risk of their investment portfolios and preserve wealth in times of economic crisis. However, my analysis of Colombia reveals that gold is not risk-free; in fact, it creates risks for labourers and broader communities subjected to the intense resource extraction required to sustain the gold market. In other words, the efforts by the gold industry and governments to uphold the metal's status as a 'risk-free' asset have only deepened the dangers faced by those who risk their lives extracting it.

My critical approach to my interlocutor's practices and narratives was not an attempt to 'getting the ethnographic goods' on them but rather to 'pose the ambiguity and messiness of any moral position mapped onto social life across communities of difference' (Marcus 1998: 27–28). In a way, the relationship that I developed with my interlocutors can be defined as 'para-ethnographic' (Holmes & Marcus 2005). Like Chong (2012), I was not as much interested in their personal lives as in 'the modes of analysis that characterise their expertise' (46). Para-ethnography entails working collaboratively with members of an organisation who act not merely as data sources but produce internal reflection and theorising, which, while different from academic theory, can enrich analysis. My interlocutors were constantly reflecting on their work and were surprisingly open to criticism. In fact, a couple of months before finishing this thesis, I published a podcast in which I summed up the main arguments of Chapter 3. I shared it with all my interlocutors and, although the most powerful ones never replied, those with whom I developed close and collaborative relationships—and perhaps the most influential ones—reacted very positively and even humorously.

Significantly, Gilbert (2015) has noted that Marcus and Holmes's proposal of para-ethnography can eventually encourage an anti-critical approach. In promoting collaborative inquiry among 'epistemic partners' (i.e. scientists, central bankers, derivatives traders and the directors of intergovernmental organisations), Marcus' proposal argues for 'the cultivation of *deferential partnerships with elites'* (Gilbert 2015: 44). Indeed, in their para–ethnographic encounters with representatives of the World Trade Organization, they even suggest that anthropologists 'are not needed to add "critique," moral injunction, or higher meaning to these accounts' (Holmes & Marcus 2008: 84 in Gilbert 2015: 45). Although I still see my interlocutors as para-ethnographers and collaborators, I tried my best to engage critically with their work. To achieve that, I constantly made 'explicit the politics involved in doing [my] ethnography,' as suggested by Gilbert and Sklair (2018: 1). From the very design of the project, my research questions addressed matters of inequality, legitimacy, and accumulation.

Anonymising power? A note on pseudonyms

In my research, studying up complicated the common ethical rule of thumb on ethnographic naming practices, which suggests that anyone who is not a public figure should be given a pseudonym. Indeed, I have not anonymised the names of the institutions where I worked, nor the names of their leaders since they can be considered public figures and because, as Gilbert (2015) has observed, 'it is often *precisely* the specific social identity and institutional position of public and elite figures that makes their stories ethnographically valuable' (66). For this same reason, I have chosen not to anonymise either most of my European and UK interlocutors, who might not be public figures but have active and influential roles in the sector. They participated regularly in most of my fieldwork sites, like conferences, online discussions on LinkedIn, and industry working groups. Their work and thinking already appears in reports, videos, and blog posts under their real names. Despite being a *global* value chain, the visible faces and the most influential people were actually very few, and indeed, most of my interlocutors knew each other since they attend the same conferences every year. Therefore, pseudonyms would have offered only a thin veil of anonymity to many of them.

The situation was different for my Colombian interlocutors. I do not anonymise the public institutions nor public figures like the President, the Ministers and the director of the NMA. However, I use pseudonyms for the bureaucrats, lawyers, engineers and the traceability entrepreneurs and their companies because, given the more volatile political context in which they work, I saw the need to protect their identities.

My decision not to anonymise the institutions and influential actors involved in the production of gold attraction responds precisely to a political and ethical commitment to reflect on and make visible the longstanding geographical, class, and racial inequalities that are being (most of the time, unintendedly) reinforced and reproduced through their work. I hope that my analysis of renowned institutions can call the attention of these influential actors and make them aware of a situation they might not have realised.

CHAPTER 2. GOLD'S FINANCIAL VALUE AND THE RACIALISATION OF DESIRE

In one advertising video produced by the World Gold Council in 2021, a middle-aged, white, elegant man impersonates The Economy.[10] We encounter him walking in a concrete brutalist space where he passes by objects symbolising the two major economic crises in recent history: the 1630s tulip mania, and the 2008 global housing market crash. Alongside these images, we hear his voice describing his permanent state of crisis:

Some say this is my greatest challenge ever.
Governments in record debt,
inflation rising, and currencies falling,

But I've seen centuries of rises and falls,
I had a love affair with tulips once,

lived through the crash of '29 and early .com
hype, watched mortgages play the villain
beside a true Greek tragedy.

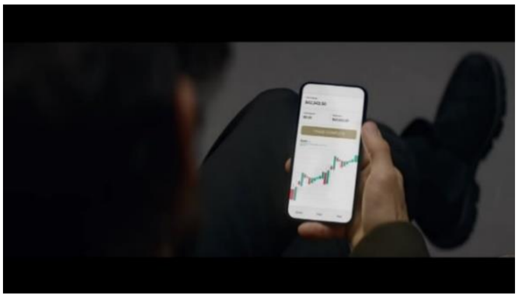
FIGURE 4. SCREENSHOTS OF WGC'S AD 'THE STRATEGIC ADVANTAGES OF GOLD'. SOURCE: WGC.

[10] https://www.youtube.com/watch?v=GrnkY4buucM&list=PLWQlqZ0qu7TapoDhzWF-PDTJuEMsH246s

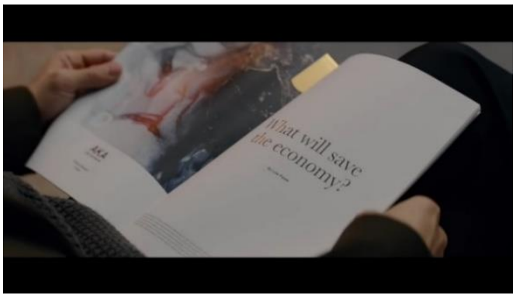
Right away, after making us feel the affective resonance of a world in crisis, we are drawn to gold's affects as a warmth, liquid, and safe asset. We hear The Economy's voice describing gold (without mentioning it) as his most loyal companion, and saviour:

and now here I am
with one companion that's been with me for millennia

hedging the risks you choose,
and those that choose you.



The physical seam of a digital world
traded with a touch,



my strongest ally and my closest asset,
the gold standard so to speak.
People call my future uncertain,
there is one thing I am sure of...

FIGURE 5. SCREENSHOTS OF WGC'S AD 'THE STRATEGIC ADVANTAGES OF GOLD'. SOURCE: WGC.

This advertisement conveys the most common narrative around the contemporary financialised value of gold—that gold is a safe-haven asset, a remedy for speculative excesses of financial actors, and that gold has been The Economy's unequivocal companion for millennia. Gold has had an undeniable central role in Euroamerican history (Eichengreen 1992; Green 2007; Vilar 1969), but the idea of it having an intrinsic value has been historically and culturally constructed. The gold standard as an international system was indeed a very fragile scheme that needed constant adjustments and coordinated efforts between countries to remain effective during times of crisis (Eichengreen 2019; Green 1973; Harvey 2008; Vilar 1969). Gold's status as a reserve currency came to a definitive end in 1971, when Richard Nixon ended the convertibility of gold with the dollar at a rate of $35/ounce. However, rather than loosing importance, gold investment demand has tremendously risen. Gold is now a 'speculative substance' (Ferry 2020a) used by investors to protect their wealth in the face of geopolitical turmoil, inflation and financial crises.

Anthropologist Elizabeth Ferry has studied 'how [gold's] intrinsic value is created and made relevant and powerful' (Ferry 2020b: 2). She argues that 'the particular aptness of gold as a hoardable substance' relies not only on its economic qualities (e.g. lack of counterparty risk and liquidity) or on its physical properties (e.g. malleability, corrosion resistance, and density) but also on how its intrinsic value is performed through an oscillation of sequestration and display. In other words, gold's value is created by the outward performance of a hidden store of wealth, and the display of gold's material qualities in presentations, press releases and publicity events. For Ferry, the centrality of these performances to gold's value as a substance worth accumulating makes its movement from mine to vault not only understandable but almost inevitable (2020a: 15). Crucially, she urges us to attend to the politics of sequestration and stewardship of gold as she sees an evident racialisation of bodies in the circulation of gold from the mines to the vaults (2020a: 15).

Ferry draws on Gustav Peebles' (2014) discussion of gold reserves as 'collectivized hoards' that 'must be kept intact and even inert or "dead" in order to provide the stability needed for other forms of wealth to circulate' (Ferry 2020b: 3). Indeed, the idea that gold is 'kept intact' in the vaults is a widespread affective narrative intended to produce confidence in a market. However, gold actually does circulate and continuously change ownership due to the use of financial derivatives, only that this movement occurs electronically. Importantly, the legitimacy of gold's financial circulation depends on the reproduction of the affective narrative of gold as a safe, solid and risk-free asset, and on the practice itself of gold hoarding.

This chapter argues that gold's financialised value is created by the labour of actors in financial centres of power that 1) produce a coherent affective narrative around the importance of gold accumulation, and 2) generate financial instruments that recreate the illusion of gold's value as risk-free. I build on Ferry's (2020b) theorisation of gold's value creation and Peebles' (2014) argument regarding the function of collectivized hoards to develop an ethnographic analysis of the *labour of attraction* that makes gold a *desirable* financial asset by reinforcing a narrative of stillness that legitimises its financial (electronic) circulation. More specifically, I examine the labour of people working for the two major global industry authorities: the World Gold Council (WGC), and the London Bullion Market Association (LBMA) as they intend to make gold an *attractive* investment asset. I first explore the WGC's work of *desire management,* aiming to brand gold's value as a risk-free, solid, and pure asset that gives financial markets the stability to thrive. Through marketing strategies and policy influencing, the WGC persuades financiers (and government regulators to let) invest and accumulate gold in times of crisis. I examine how the affective narrative around 'the story of gold' has adapted over time, not only to stimulate demand, but to perpetuate a racialised desire for gold—the desire to extract gold is portrayed as less legitimate than the desire to accumulate it.

Then, I move on to analyse the labour of attraction of LBMA employees and collaborators as they reform key features of the gold financial market and teach new market participants key mechanisms and practices that give the gold market an appearance e of being risk-free, trustworthy, rational, and transparent. Specifically, I examine the history of the gold price and the changes adopted in response to allegations of price manipulation. Importantly, I show how the underlying narrative about gold as a hoardable substance is what enables an oversupplied market to keep sucking in freshly mined gold by the tonnes; in other words, the stimulation of gold desire is successfully turned into gold demand. This is possible because the market borrows political power from Central Banks, which have been the historically major gold *hoarders* (see Peebles 2014). I conclude by showing how the market authorities realised that their legitimacy depended not only on telling 'the story of gold'—why gold is financially valuable—but telling a 'supply chain story' to emphasise the broader socio-economic, environmental and sustainability impacts of gold; an emerging approach that gave gold market authorities the power to govern the entire supply chain.

Stimulating gold de(sire)mand

The advertisement at the beginning of this chapter was produced by the World Gold Council (WGC), an organisation composed of the 32 biggest gold mining companies in the world. Since its creation in 1987, the purpose of the WGC has been to stimulate the global demand for gold. For more than 35 years, they have used different strategies, from advertising, standard setting, and institutional lobbying, to build a coherent narrative that could persuade market agents and regulators that gold has value that is stable, technologically useful, and morally upright (contra other financial markets). They have adapted this narrative over time in response to the emerging concerns of an ever-changing world. As John Mulligan, WGC's Head of Sustainability, once said: 'one of our core mandates is this idea of mainstreaming gold: making gold fit the purpose as an investment asset, in particular in the 21st century' (John Mulligan, Sustainability and Responsible Sourcing Conference, 2022). But what does this specifically mean?

In 2023, I personally met Mulligan at the LBMA Global Precious Metals Conference in a luxury hotel in Barcelona. We sat at a small table in the busy WGC stand while delegates were passing by collecting small WGC-branded chocolate boxes for the coffee break. Mulligan, a middle-aged British man with a BA in Sociology from Sussex who has worked in the WGC for more than 20 years—he is the most senior person currently working at the WGC—would explain to me that the WGC was first created to stimulate jewellery demand, as it made around 60-70% of the total gold demand at that time. The jewellery demand was indeed rising, but the gold price was going down. They realised the jewellery sector was a 'market taker,' and not a 'market maker,' so it did not influence the price. Therefore, they began approaching central banks and investors: 'We understood we had to work more on increasing investment demand.' (John Mulligan, pers. comm., October 2023). This shift from fostering jewellery demand to investment demand was, therefore, a price-oriented action.

Mulligan's account of the WGC shift from jewellery to investment can be historically situated in the context after the official end of the convertibility of gold with the dollar at a stable rate of $35 per ounce. Importantly, this decoupling gave rise to a lively, volatile, and speculative gold market where gold was not much praised for its intrinsic value but for its speculative value. By the end of the 20th Century, many Western central banks—including Belgium, the Netherlands and Switzerland—were reducing their gold reserves, dragging the price down. In 1999, the Bank of England sold over half of its gold reserves (395 tonnes), and both the UK and the US governments were considering selling their IMF-held gold reserves to use it to write off part of the Third World debt (BBC 1999). In other words, as a 1999 New York Times editorial put it, 'gold's reputation as a store of value ha[d] eroded' (Norris 1999).

Amidst the crisis in the value of gold, which was 'destabilising the market, and driving the gold price sharply down' (World Gold Council 2020a), the WGC initiated numerous coordinated actions to make gold an attractive substance for people with quite divergent interests: Western and non-Western central banks, and investors. In 1999, the WGC highly influenced the securement of the Washington Gold Agreement, an arrangement between 15 European central banks that stated that 'gold would remain an important element of global monetary reserves,' and that central banks would limit their collective sales to 400 tonnes per year. Central banks also announced that their gold lending and use of derivatives would not increase over the same five-year period (World Gold Council 2020). In the years that followed, they began to approach the Chinese, Indian, Japanese, and Vietnamese governments to encourage them to deregulate their gold markets to stimulate the demand for gold investments further. Mulligan confirmed this to me when he explained that to stimulate investment demand better, the WGC realised it should prioritise Asian markets, because 'they [Asians] recognise a structural value in gold entirely different from how financial gold is perceived in Europe.' At that time—he would explain to me—in Europe the gold market was quite an incipient market, and 'it wasn't as important as for the Chinese.' In other words, the WGC had the challenge to conjure a narrative that would make gold attractive both for its intrinsic value (gold as a safe-haven asset) and for its high economic value and potential for investment return.

Indeed, the WGC played a significant role in the liberalisation of the Chinese gold market in the late 1990s and early 2000s, which resulted in the abolition of China's retail price controls, the creation of the Shanghai Gold Exchange, and the launch of gold investment bars for Chinese private actors who were now allowed to own gold freely. During this period, they also released a publication analysing the deregulation of gold in India and launched the 'Gold Pension and Inheritance Initiative in Japan', the 'Gold Accumulation Plan for Vietnam (see Truitt, 2018),' the 'Reliance pure gold coin in India' (see Truitt, 2018), as well as the 'Coin programme with Dubai Multi Commodities Centre in Dubai,' and the 'Shari'ah Standard on Gold' to stimulate the use of gold in Islamic financial markets, to mention a few.

Notably, this work of cultural translation and adaptation of narratives around the significance of gold in different instances is an example of what I term 'labour of attraction', which is central to the WGC's operations. The labour of attraction of the WGC, combined, of course, with historical contingencies such as the rising power of 'emerging markets' (see Chong 2024 for a critical account of the emergence of this term) in the global economy, and the 2008 global financial crisis, made central bankers reconsider the relevance of gold reserves. As the WGC put it in one of its most recent reports: 'Emerging market central banks have increased their official gold purchasing, while European banks have ceased selling, and the sector now represents a significant source of annual demand for gold' (World Gold Council 2024). This shows us that, indeed, the labour of attraction of the WGC produced a revival of central bank demand, which is currently playing a central role in driving up the price of gold as I write this in April 2025 (Dempsey 2023).

Gold as a useful substance

Paradoxically, in order to stimulate the desire for investment gold, the WGC still needs to produce a narrative around gold's cultural and technological usefulness, because these sectors are what sustain the perception of gold's intrinsic and pure value. Indeed, in only four years, the organisation has produced three documentary films exploring such themes[11]. When I asked John Mulligan —who himself has participated in the production of all of them—why they insist on highlighting these uses of gold, he confirmed that people buy jewellery because they know it will never lose their value, they recognise their jewellery as a store of value, and so for many people this is the main form of savings. So, it was critical for the WGC to maintain that perception (John Mulligan, pers. comm., October 2023). In other words, the need to keep stimulating physical uses of gold, such as jewellery and technology, is fundamental to sustain the metaphor underpinning gold's financial value—that of being a safe haven, a store of wealth and a risk hedger.

One of the documentary series made by the WGC is entitled The Golden Thread[12]. This five-episode series explores the role of gold in space exploration, technological innovation, medical research, and art and culture. The very first scene of the series shows an image of a golden halo, that quickly transforms into an effervescent liquid that turns into the fire produced in a rocket ignition (Figure 6).

[11] The Golden Thread (2021), GOLD. A Journey with Idris Elba (2024), and GOLD. The Journey Continues (2025).

[12] https://www.youtube.com/watch?v=Bmx9EgygwPU&list=PLWQlqZ0qu7TYBFyVyY4ZXMsq3BSmb83sj

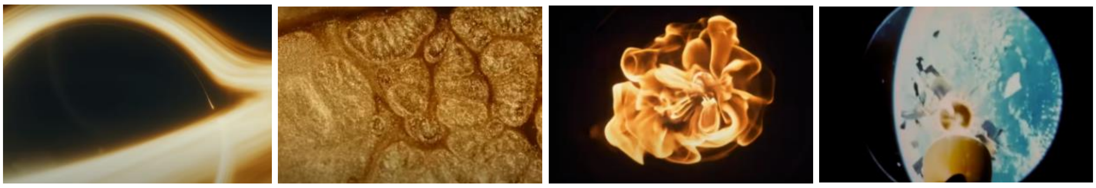


FIGURE 6. THE GOLDEN THREAD'S FIRST IMAGE SEQUENCE. SOURCE: THE GOLDEN THREAD.

Alongside these images, we hear the voice of the series narrator, Hanna Fry—a British mathematician, best-selling author and radio and television presenter—telling us that 'Humans have an irrepressible *desire* to explore'. The first episode (The Next Frontier) is precisely about the role of gold in space exploration. In the next scene, we see Hannah looking at photos of astronauts that are spread all over a light table. She narrates the entire documentary standing in this aseptic, bright room (Figure 7), with a golden background wall resembling the WGC's logo (Figure 8).

FIGURE 7. HANNA FRY HOLDING A PHOTO OF AN ASTRONAUT. SOURCE: THE GOLDEN THREAD.

FIGURE 8. WORLD GOLD COUNCIL'S LOGO. SOURCE: THE GOLDEN THREAD.

Throughout the series, scientists, researchers, and artists explain why gold plays such an important role in their areas of expertise –ranging from a machine that converts carbon dioxide into oxygen to support missions to Mars, to a project that uses gold nanoparticles to encapsulate chemotherapy drugs to make sure they only attack malignant cells. They all praise the physical properties of gold: 'it's ridiculously stable, it doesn't oxidise or corrode easily, it's an excellent heat conductor' (The Golden Thread, Ep. 1). Yet, gold is so expensive that it can hardly be used for any of these purposes.

The enormous quantity of work the WGC has done in order to persuade investors that they should buy gold only demonstrates that, as opposed to the rather evident value of gold jewellery, gold's value as an investment asset is not as straightforward. Therefore, as they themselves have stated as their most recent core mission on their website (which again has been adjusted over time), their work consists of 'improving understanding, access, and trust in the gold market' (WGC's Website, November 2023). This work is necessary due to the inherent opacity of gold financial markets, or, in Ferry's (2020b) words, because gold's value emerges in part from being 'sequestered' away. Investors need to understand, access, and trust the gold market, since they are investing in something whose value rests supposedly on its physical properties, but they may never get to see or touch. Thus, the labour to produce desire for a sequestered and hidden substance to create demand is profoundly affective. Or, in other words, demand is something that is affectively worked on through the circulation of narratives and images intended to elicit desire in imagined particular consumers.

The labour of desire management

For anthropologist David Graeber (2011), in the Western philosophical tradition, desire has been conceptualised as stemming from a sense of absence or lack. According to him, the one constant element in all Western theories of desire (Deleuze & Guattari 2000; Jacques & Alan 1977; Spinoza 2000) is that 'desire (unlike needs, urges, or intentions) necessarily involves the imagination. Objects of desire are always imaginary objects and usually imaginary totalities of some sort because […] most totalities are themselves imaginary objects' (Graeber 2001 in Graeber, 2011: 494). Moreover, desire can be distinguished from needs, urges, or intentions as it often focuses on the development of some kind of social relation, whether real or imagined, and this relationship typically involves a desire for recognition, leading to an imaginative reconfiguration of the self (Graeber 2011). Insofar as objects of desire are always imaginative objects, one can say that the production of desire relies fundamentally on the impossibility of materialising the imagined promise.

In his work on commodity and political branding, William Mazzarella (2003, 2019) analyses the production of desire as a matter of 'affect management'. He argues that the production of desire 'depends on maintaining an ongoing and irresolvable tension between concretely situated, affect-intensive materials and their would-be authoritative discursive elaboration in the form of brand narratives […]. It is precisely in the tension between the two levels that desire is harnessed to meaning and value' (2003: 46). In this way, by conjuring image with narrative, the labour of branding manages to engage consumers (2003) or voters (2019) on an affective level. In this way, the conjuring of images through affective narratives is an example of how imagination is stimulated for the production of desire.

This analytical perspective is particularly useful to understand the stimulation of gold investment demand precisely because gold in its financialised form is nothing more than a promise. Nowadays, most transactions in gold financial markets occur through unallocated accounts, which means that a gold bar can change ownership many times a day without physically moving. Therefore, the circulation of images of gold investment bars is essential to stimulate investors' desire. In the WGC's advertisement, reports and, most recently, in their documentary production, we encounter quite often images of gold bars and golden objects being held primarily by white hands (Figure 9). The purpose of these images is to generate an affective response in potential investors, linking gold with sentiments such as confidence, stability, safety and a racialised desire. If advertising is a kind of cultural production of commodity images (Mazzarella 2003: 45), arguably, gold advertisements like the one in the introduction of this chapter, conjure affect-intensive materials (images of pure, solid and stable gold) with a would-be authoritative discursive elaboration in the form of brand narratives of a world in permanent crisis, ongoing political and economic uncertainties (*lack* of certainties), and, more recently, exposed to climate change's existential threat. In other words, gold advertisement presents gold as a remedy for speculative 'excesses' (see Weszkalnys 2016).

FIGURE 9. GOLD BULLION IN A WGC REPORT. SOURCE: WGC, 2015.

Gisa Weszkalnys (2016) has argued that 'affect has come to play an increasingly prominent, if somewhat nameless, role in global debates about natural resource extraction' (141). She suggests that resource affect is not merely an external consequence of resource extraction, but rather an integral part of it. Crucially, she examines how the problematisation of excess affect (hope around oil extraction) is itself a technology of power, that enables corporations, state, and non-state institutions to navigate affective dissonances and inconsistencies that emerge from the possibility of oil extraction. She analyses how community expectations are managed to prevent them from being too hopeful about the potential arrival of the oil industry. Interestingly, she notices that affective responses generated by resource extraction can inform corporate policies and state practices. Thus, resource affect can be an object of ethical, political, and scientific thought and action (2016b: 133). I find Weszkalnys's (2016) conceptualisation of resource affect as constituted in relations of power and difference particularly useful. She draws attention to the fact that the affective responses of local communities in African producer states are problematised as 'excessive' while the affective responses of other actors are not. In the context of gold, there is a similar power imbalance that is being seized by industry authorities to create authoritative affective narratives regarding who should legitimately desire gold and who shouldn't. In the next section, I reflect on the fact that the affective labour of desire management relies on practices of racialisation.

A racialised desire for gold

Elizabeth Ferry (Ferry 2020b: 15) has drawn attention to the 'role of racialised bodies in the transfer of gold from mine to vault.' Crucially, through a comparison of the politics surrounding gold reserves in mining and central banking she has suggested that:

> In its passage and punctuated appearances from underground mine to vault, gold becomes a kind of switchpoint or transfer station, where (mostly) black and brown bodies are destroyed in the transfer of value to (mostly) white bodies, providing the very basis of European sovereignty.

In the rest of the thesis, I will examine in more detail how 'the co-constitution of racialization and geologic extraction' (Ferry 2020b: 15) works out in different nodes of gold's valuation chain. In this chapter, however, I will focus on how the production of gold desire relies on establishing a racial hierarchy between gold investors and, crucially, between investors and actors of the gold valuation chain.

In 2016, the WGC concluded a study on the buying behaviour of four major gold markets: China, India, Germany and the US (World Gold Council 2016). The objective was to understand what people's motivations were to buy gold and what the main barriers were throughout their 'purchase journey'. The results were then used to assess the potential for growth of the global gold investment market. On the one hand, the report classified Germany and the United States from the beginning as 'developed markets,' with slow economic growth and recent financial crises that justify a more cautious approach towards gold investment. Their main reasons for buying gold were to protect wealth or to make good returns in the long term. China and India, on the other hand, were classified as 'developing markets' whose rapid economic growth made them more confident to speculate with gold. They supposedly have a greater interest in speculative and short-term investments. Ironically, in many of the figures of this report, the US and India were closer to each other than to their fellow countries in the WGC's developmentalist classification. For example, in the graphic they used (Figure 10) to illustrate that 'investors in developed economies are generally more cautious', USA and India only differ by 6%, whilst Germany and the USA were separated by almost 20% (World Gold Council 2016: 7).

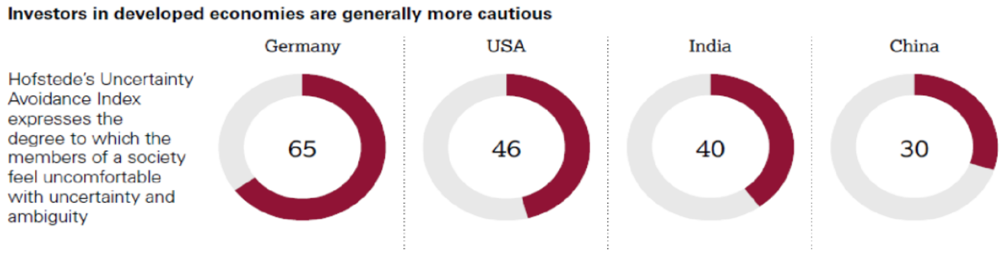


FIGURE 10. HOFSTEDE'S UNCERTAINTY AVOIDANCE INDEX. SOURCE: WGC, 2016.

Applbaum's (2000) work on marketing agencies in the US has drawn attention to the arbitrariness of marketing instruments. Market researchers not only navigate an existing reality but contribute to the creation of one. For instance, Maslow's hierarchy of needs (1943), a pyramid with physiological needs at the base, followed by safety, social esteem, and self-actualisation, divides society into a progressive scheme from 'traditional' to 'modern' styles of consumption, according to a Western hierarchy of values. Market researchers, Applbaum argues, believe in an 'innate universal psychological tendencies that transcend local culture' (Applbaum 2000: 260).

Similarly, Kimberly Chong (2024) has critically questioned the very meaning of the term 'emerging markets', arguing that the 'concept not only indexes racial hierarchies, but also encapsulates ideas of race and social difference'. Even though China is the world's second largest economy, it is still classified as an emerging market, which means that the term does not really denote an economic status, but rather 'the capacity of markets to civilise peoples who have once been differentiated as to degenerate and incapable of self-governance' (2024: np). Importantly, she traces the origin of the term back to fund manager Antoine Van Agtmael, who intended to encourage investors to put their money in places considered too risky and associated with backwardness and corruption. Thus, Van Agtmael decided to rebrand these places as 'emerging markets' to conjure up associations with optimism and potential. Notably, the work of Van Agtmael can be analysed as a kind of labour of attraction aimed at rendering specific territories attractive for investment (see Gilbert 2015 a similar analysis on Bangladesh).

The WGC similarly classifies regions into a hierarchical model of market segments, and, crucially, it influences which countries can be treated as gold consumers and which ones should remain to be treated as gold producers. Latin America and Africa, for instance, have never been conceived as having a latent demand for gold, hence the WGC do not even try to stimulate gold demand in there. China, India, and the Islamic World, on the other hand, are considered potential markets for gold that need some intervention to create desire for the financialised resource. The concept of geo-racial regimes (Zeiderman 2025) is useful here to understand WCG's classification systems as 'symbolic and material systems of hierarchically valued difference (and difference-making, to state things more processually) that organise society and space primarily, though not exclusively, along racial lines' (2025: 26).

In this section, I have shown how the desire for gold is unleashed and sustained by the labour of attraction of the WGC. Drawing attention to the practice of desire management gives analytical purchase to the affective and communicative labour involved in making gold an attractive investment asset, not only for investors but also for regulators and nation-states. In the following section, I analyse how the desire elicited by the labour of attraction of the WGC is transformed into concrete financial transactions in the world's major gold market: the London Bullion Market. In the remaining part of the chapter, I draw from my participation in an LBMA training course to examine how the desire for stability and accumulation is transformed into gold financial demand.

Learning to trade gold, risk free

The smooth functioning of the market absolutely depends on us having confidence in the underlying metal.
LBMA trainer, 2023.

The statement in the epigraph above was one of the very first sentences I heard when I joined a Zoom meeting to attend LBMA's 'Introduction to Loco London' training course. The LBMA promotes the course on its website as 'a detailed and definitive primer for any investor or institution looking to understand and take part in the global precious metals market'.[13]Although I think they never understood why an anthropologist was interested in knowing the nits and grits of the most important financial market for gold, I was granted free access to the training since I was working as a consultant for their ASM strategy (I will expand on this role in chapter 3). The phrase of above condensed itself the purpose of the course, which was to provide specific knowledge to develop the level of confidence needed to trade a metal that one may never get to see. In this section, I draw on my experience as an LBMA trainee to explore the workings of the gold financial market. I examine the work of the course trainer, and LBMA representatives as a form of labour of attraction intending to deploy a specific practical pedagogy around gold's financial value and, importantly, I show how the

[13] https://www.lbma.org.uk/training-and-education

market is structured in a way that borrows legitimacy from central banks to reinforce the affective narrative of gold as a hoardable substance while allowing its electronic circulation in the form of financial derivatives.

The Introduction to Loco London course is held twice a year and costs approximately £700. It is delivered online by a woman with a significant professional trajectory in commodity derivatives trading. She is not an LBMA employee, but the founding director of a company that delivers training courses in commodity markets for major investment banks, regulatory authorities, investors, auditors, and other financial institutions. For an entire day, twelve participants—including myself—gathered online to learn the basics of the London Bullion Market. Interestingly, almost half of the cohort were newly appointed LBMA employees, while the other half represented gold refineries, commercial banks, and commodity exchanges. When introducing themselves, most participants said they had considerable experience in the financial sector; some of them were already working in commodity trading or corporate finance, but almost everyone was new to the gold market. Indeed, all of them declared that their main motivation to take the course was to increase their understanding of this specific market.

The course content is structured first to reinforce the idea of gold as a pure, solid, and safe substance, and then to explain in practical terms how it can be globally traded. During the first part of the session, course participants (i.e. future market participants) were reassured about the importance of gold physical accumulation as the underlying narrative that supports (physically and ideologically) specific financial mechanisms for trading gold in a risk-free manner. Thus, the first topic that was covered was the Good Delivery Standard. The trainer played a video in which Neil Harby, LBMA's Chief Technical Officer, explains that the Good Delivery List (GDL) is the list of refiners that satisfy LBMA's standards in terms of purity, quality and physical appearance[14]. In the video, Harby appears alone against a pitch-black background. The image of him speaking is alternated with short clips of gold being refined and transformed into the standardised 400oz GDL gold bullion bars (Figure 11). Notably, the harnessing of gold's material affects is not limited to the work of the WGC but seized by the LBMA as well as by other actors along the valuation chain.

[14] https://www.lbma.org.uk/good-delivery/about-good-delivery

FIGURE 11. LBMA'S GOOD DELIVERY VIDEO. SOURCE: LBMA'S WEBSITE.

The role of standardisation is to guarantee the physical purity (and moral purity, as I will analyse in Chapter 3) of gold bullion bars, but, importantly, it also enables the reproduction of the image of 'the gold bar that we all have seen' to make market participants feel familiarised with an object they can own but may never have in front. When the video finished, the trainer took out a large gold bar, similar to the one in the video, and placed it in front of her camera. 'Obviously this is not real'—she says—'I wouldn't be holding it like this if it were a real bar. This is actually a Chocolate box… But, you know, you all have seen these bars in films, like in The Italian Job, and in any sort of gold heist.' Crucially, the trainer's assumption that people have only encountered gold bullion bars in movies proves how generalised the idea is that the right place for gold bullion to be is in a vault, and that most people in the world would only get to know a gold bar in movies, media articles, or in industry videos and advertisements. Precisely because these bars are produced primarily to be hidden, they must meet rigorous standards to maintain confidence in the market.

The GDL bars are primarily traded in the London Bullion Market. The reason why course participants were willing to learn more about this market is because it is pretty exceptional. Unlike Stock, Commodity or Metal Exchanges like the NYSE, COMEX or the LME, which operate with standardised contracts, prices, and delivery dates, the London Bullion Market is an over-the-counter (OTC) market, which means that people trade with each other on a bilateral and confidential basis. An LBMA Guide to the market published in 2017, states that OTC markets give more flexibility to clients, who are offered 'a tailor-made service [with] quotes for variable quantities, qualities and types of precious metal as well as for various value dates and delivery locations' (Jonathan Spall 2017: 7). This OTC market is also known as the Loco London Market, meaning that the traded metal is delivered in London vaults through the London Precious Metal Clearing Limited—a company founded in 2001 by four banks functioning as the market *clearing members*: HSBC, ICBC Standard Bank, JPMorgan and UBS—better known as the bullion banks. Crucially, gold transactions are settled either physically or electronically, and to get access to the market, a company must open an account with one of the bullion banks, which is not an easy process.

While explaining to us the main features of the market, the trainer explained the difference between 'allocated' and 'unallocated accounts.' Often, she would make examples using participants' names: 'If Giselle were to have an allocated account, that would mean that she would own a pile of physical bars, each one with a unique serial number, and quality specifications'—she would say. However, choosing to have an *unallocated* account, according to her, would be extremely helpful because *clearers* (bullion banks) could just *clear* (deliver) the metal electronically, facilitating the circulation of gold between unallocated accounts. In other words, with an unallocated account, I would not own specific bullion bars but an entitlement to an amount of metal, like the money we all have in our bank accounts.

The difference between *allocated* and *unallocated* accounts is central to the construction of the affective narrative that sustains the legitimacy of the market, and thus, gold's financial value. On the one hand, allocated accounts stimulate gold material affects of solidity, and safety because it allows material property ownership. On the other, unallocated accounts are the core of gold financialisation, because they facilitate the (electronic) circulation of gold and the implementation of the financial operations I will explain in short. This is why even when more than 90% of gold is traded over unallocated accounts (Spall 2017: 37), the possibility of holding physical gold remains open. In her explanation on the differences between the two accounts, for example, the trainer insisted that 'bullion banks comply with liquidity standards to meet allocation requests' and so 'if we *ever* feel nervous with our bank, we can *always* request our gold to be allocated at any time.' Nonetheless, the trainer did not mention the fact that on the 1st of January 2023, a new change in international banking regulation (Basel III[15]) classified unallocated gold as a *risky* asset (Basel Committee on Banking Supervision 2014). Under the new rule, unallocated gold is subject to a Required Stable Funding (RSF) ratio of 85% like other 'risky assets' such as equities. In other words,

[15] Basel III is an internationally agreed set of measures developed in response to the 2008 financial crisis. The measures aim to strengthen the regulation, supervision and risk management of banks.

banks are required to hold physical gold or other High-Quality Liquid Assets (HQLA) for an amount equal to at least 85% of the value of unallocated gold on their books. Yet, the trainer strategically omitted this information because it does not contribute to LBMA's pedagogy of gold as a *risk-free* asset.

Building price legitimacy

Financial regulation, such as Basel III, or reputational scandals (as I will analyse in chapters 3 and 4), are constantly threatening the narrative of gold as a risk-free investment asset, the legitimacy of gold's value, and the hierarchy of market participants, as imagined by the WGC or LBMA. Therefore, industry actors continuously work to reinforce this narrative through an affective communicative labour intended to attract gold towards financial markets. Significantly, part of this labour consists in reforming traditional features of the market—like the price setting mechanism—to respond to allegations of market manipulation and lack of transparency.

Jane Guyer's work on African markets has proposed a departure from price 'as a whole,' or as emerging from the 'intersection of supply and demand (scarcity and desire)' (Guyer 2009: 203). She encourages us to focus on 'how price is produced, presented, revealed, and concealed as a *composite* as distinct from a *singular* amount' (2009: 203 emphasis in the original). Guyer suggests that in the twenty-first century, people are more aware that 'all prices are fictions—literally the results of narratives of creation, addition, and substraction' and that 'price fictions can also fail' (2009: 204). In 2014, the fiction of the gold price almost collapsed, but it thrived, and it came out stronger, as a result of the labour of attraction of the LBMA and people like the course trainer who help keep the narrative underlying gold's financial value.

The London Fix was an institution created in 1919 as a mechanism for setting the gold price. For almost a century, five men (representing the member banks) gathered for a closed door auction every day in London at 11:00, but in 2015 the pricing mechanism experienced significant changes. While showing us a 1992 picture of the Fix (Figure 12), the course trainer told us that in 2015 the fixing company was wound up and the LBMA established a more transparent, neutral, and accountable pricing mechanism. Indeed, the pricing mechanism was outsourced to a benchmark institution (ICE Benchmark Administration or IBA), it went from having 6 bullion banks participating in the London Fix[16] to 15 direct participants[17], the auction chairman was replaced by an allegedly more neutral algorithm, and the Union Jack flags used to pause the auction, like the ones in the 1992 photo, were eliminated to avoid price manipulation (Figure 12). The new mechanism—as the trainer would emphatically reassure—was a 'transparent electronic platform […] which ensures that everyone can see the information at the same time [and allows] maximum engagement from as many people as possible in the market.' According to her, this was a very good pricing scheme as it was compliant with three key features of 'a good auction process': (1) to define a time limit for the bids, (2) to enable wide participation, and (3) to be based on actual trades.

FIGURE 12. LONDON GOLD FIX OPERATING IN 1992. SOURCE: LBMA'S WEBSITE.

With the instauration of the new pricing scheme, the LBMA not only managed to overcome the reputational crisis but gained even more power over the market. Ferry (2016b: 84) has suggested that 'the name has been changed to the London Gold Price, presumably to avoid the somewhat unfortunate connotations of the word "fix" in a time of widespread concern over market manipulation.' Interestingly, the name of the price was actually changed to 'LBMA Gold Price', giving the LBMA the intellectual property over the name. The gold pricing mechanism was indeed outsourced to an independent institution, but the LBMA became the

[16] Barclays Bank, Goldman Sachs International, HSBC Bank USA NA, Societe Generale, The Bank of Nova Scotia - ScotiaMocatta and UBS

[17] Bank of China Limited, London Branch, Citibank, N.A. London Branch, Coins 'N Things Inc., DRW Investments, LLC, Goldman Sachs, HSBC Bank USA NA, Jane Street Global Trading, LLC, JPMorgan Chase Bank, N.A. London Branch, Koch Supply and Trading LP, Marex, Morgan Stanley, Standard Chartered Bank, StoneX Financial Ltd, Toronto-Dominion Bank, Virtu Financial Global Markets, LLC.

intellectual owner of the four precious metals prices (Gold, Silver, Platinum, and Palladium), meaning that any firm using the *LBMA Gold Price* in valuation and pricing activities, trading or clearing contracts, or that redistribute the price data to third parties, should get a paid licence.

Similarly to the omission of Basel III, the course trainer never referred to the fact that in the years that preceded the development of the new pricing mechanism, the legitimacy of the gold price was in question. In March 2014, investors sued the five banks members of the London Gold Fix claiming that they conspired to fix gold prices from 2004 to 2013, and in 2016, Deutsche Bank reached a $60 million settlement after being found guilty of manipulating the daily gold price (Stempel 2016). Thus, the financial pedagogy of the trainer who emphasised certain things while omitting others and the affective labour of LBMA representatives who gave press conferences and prepared a big launch for the new pricing mechanism[18] were pivotal not only for overcoming the crisis, but also to regain legitimacy and visibility as the gold market authority.

In a provocative short piece, Elizabeth Ferry (2016b) has called for an analysis of prices as 'material-social actors.' Drawing on scholars of the social studies of finance (Beunza et al., 2006; Muniesa, 2007), Ferry invites us to recognise the materiality of prices, and how by circulating as signs they take material forms with concrete effects in the real world. Importantly, Ferry sustains that an analysis of the gold price contributes to an understanding of the centrality of finance in 'how mines themselves come to be and cease to be, and how they engage miners, community members, state and corporate actors and others in their orbits.' (2016b: 84). Prices are undeniably powerful signs that produce concrete effects in the real world. The fact that the LBMA is now the price intellectual owner (and just even the fact that an organisation can own a price) is telling of how powerful the gold price as a sign can be. With the recent sharp rise of the gold price[19], the circulation of the LBMA Gold Price in the media, and in all kinds of websites and apps is producing nothing else than unbridled mineral extraction both by large-scale miners (LSM) and artisanal and small-scale miners (ASM) alike. Gold rushes are no longer chance encounters of mineral deposits like the ones of Brazil, California, Australia, or South Africa, but are triggered by the high price of minerals.

[18] https://www.lbma.org.uk/articles/the-new-lbma-gold-price-successfully-launched-on-20th-march-2015

[19] As I revise this chapter in April 2025, the gold price has reached an all-time high of $3,500. It has increased by 30% in just a few months.

Crucially, while the *gold price* as a material-social actor is reinforcing the power of the global gold market authority and fostering unbridled gold extraction, the *gold pricing mechanism* is enabling a steady rate of accumulation for the powerful financial actors participating in the auction. Critical studies of price composition assume that the price is an outcome of market relations (Beunza et al. 2006; Ferry 2016b; Guyer 2009; Muniesa 2007). In contrast, for the case of gold, price formation occurs not only before, but outside daily gold transactions in the market. During auctions, direct participants can adjust their selling or buying orders strategically to guarantee a certain price. After the price is set, they can keep on trading during the day without affecting the price. In this sense, we could say that auctions are not *gold* markets but *price* markets; investors are not betting on gold but on the price of gold. Since the price auction runs separately from the market, once the price is set, their clients can continue trading gold throughout the day in the OTC market, where people trade gold bilaterally 24/7 in flexible and customised arrangements of price, quantities, and delivery times. This market structure, and, importantly, a 10,000 oz threshold designed to help 'balance' the market, and the use of derivatives were left out of the discussion of the pricing reform. I came to understand the implications of this during two workshops during the Loco London training course.

Workshop #1: a simulated auction

On the day of the training, we simulated an auction to understand LBMA's new pricing mechanism better. A few days before the training, the course trainer sent us a welcome email with an 'order book' we would need for the workshop. The order book was a one-page file with a list of ounces each participant should buy or sell according to the auction trial price. During the workshop, the trainer—acting as the algorithm—informed us that the trial price was $1,948.50[20]. We all entered our buy and sell offers on the Zoom chat according to the indications of our order book and the resulting imbalance was -41,500 oz. This meant that with such a price people were willing to sell too much and buy too little. 'This means the trial price is too high'—the trainer explained. Next, the simulated algorithm (I.e. the trainer's Excel sheet) lowered the price to $1,947.75 and let us make new bets. We should look at our 'order books' to know how many ounces we should buy or sell at that specific price (in real life participants are given only 30 seconds to adjust their offers to minimise the risks of

[20] That was the average price of gold in November 2023, when the training toom place. In just over a year, as write this, the gold price has increased almost by 50%.

manipulation). In the second round, the imbalance was +19,000 oz, meaning that now the price was too low. Finally, in the third round with a new price of $1,948.00, we got an imbalance of –1,000 oz., which fell within the threshold of –10,000 oz. The new price was officially 'discovered.'

For the price to be 'discovered' the difference between the supply and demand must not exceed a -10,000 oz threshold. When the orders exceed this threshold, another round starts, and participants must make new bids. Crucially, the trainer, as well as the official documentation on the benchmark methodology (ICE Benchmark Administration n.d.), suggests that the threshold is a mechanism to achieve 'market equilibrium.' But in making the market 'stable', the threshold is actually guaranteeing a minimum accumulation by any seller of gold. This is because the price would go down in a flooded market with too many sellers and not enough buyers. Thus, the function of the threshold is to limit excess supply (i.e. selling), allowing participants to adjust their bids strategically in each round. In other words, the threshold will never allow participants to sell in massive quantities, and if people cannot sell in massive quantities, the price will never fall significantly. In fact, a renowned analyst of the market once described the auction as a 'twice daily game of high stakes "spoof"', and he even suggested that the 'art of the market makers' was to 'hold off from declaring as a seller until the declared price has been raised significantly - and then to nip in just before the other participants declare as willing sellers too.'[21] Crucially, what we are seeing here is that the desire for stability created by the WGC-influenced affective narrative of gold as a hoardable substance is transformed into a concrete process of value creation that actually enables a guaranteed form of accumulation by the few and most powerful actors of the valuation chain: the global banks and financial institutions that have direct participation in the daily auctions.

It is worth noticing that this pricing mechanism is specific to precious metals markets (I.e. gold, silver, palladium, platinum)—which, according to the Oxford Dictionary definition, are 'relatively *rare* and *expensive* metals used in jewellery, high-value coins, etc.' (my emphasis). Thus, the technical devices of the algorithm and the creation of seller advantage contribute to creating precious metals' value as *rare* and *expensive* objects and bring them into being (see Graeber, 2013). Jane Guyer (2009) has suggested that the costs of finance and the roles of emerging industries, such as risk management and consulting, have been entirely omitted from price equations. Similarly, the new LBMA price auction is portrayed as a neutral and

[21] https://www.bullionvault.com/gold-guide/gold-fix

transparent mechanism to 'discover' the price of gold, while obscuring the fundamental role of strategic financial decisions that still occur during the auction.

Workshop #2: Chopping off risks with derivatives

After learning about the allegedly more transparent and neutral pricing mechanism, we were introduced to the world of financial derivatives of the OTC market. A derivative—we are told—is any security whose value depends on the price of something else. Gold bullion derivatives are contracts—also known as paper gold—whose value depends on the LBMA Gold Price. However, in practical terms, the main point of trading derivatives is to *reduce the risk* of trading physical gold. Anthropologists Edward LiPuma and Benjamin Lee (2004) have described the creation of financial derivatives as a process where an imagined element of risk is abstracted from the intertwined social, economic and political circumstances that defined that situation (LiPuma & Lee 2004). Notably, they have suggested that financial derivatives stem from the commodification and objectification of risk, and that this practice has contributed to the impoverishment of developing nations.

According to a depoliticised version of the course trainer, market participants can use a derivative 'to exactly mirror an exposure to buying and selling physical metal'. For example, if a mining company agrees to sell gold to a refiner in a year's time, they generally set that price in advance—commonly known as a 'forward price.' But suppose the refiner is not entirely happy with the pricing terms. In that case, they can use a derivative that allows them to either borrow, lend, buy or sell gold at different points of time to eliminate *entirely* the risk of the contract they had with the miner. The most common derivatives are forwards and options, but there are all sorts of creative combinations such as forward swaps, forward-forwards, and borrowing and lending on the swap— 'fancy derivatives' as the trainer would call them.

To better understand this rather complex world of derivatives and, importantly, to teach course participants how to trade gold without facing any risk, the trainer designed a second workshop. In a hypothetical situation, a mining company wants to sell its gold production in a year's time, the gold price *at spot* (in the present day) is $1900 but the company does not know what the gold price will be in the future. When a year has passed, it turns out that the price of gold is $2,000. The trainer gives us three options and divides the group into three

Zoom breakout rooms. Each group must calculate the price the mining company would get paid according to the chosen strategy. The options are as follows:

1. The mining company uses no derivatives.
2. The mining company agrees to sell at a forward price of 1950.
3. The mining company pays a premium of 21 USD per ounce to buy an option to sell at 1930.

I joined my breakout room eager to observe a lively discussion around the use of derivatives and hoping to confirm that I was understanding well such a complex theme, but it turned out that the people in my group were at least as confused as I was. After the usual awkward silence of the first minute at a breakout room, I turned on my microphone and tried to rephrase the task in my own words. Two members of the group seemed to be too confused to participate, but together with one of the LBMA new employees we managed to do the following calculations:

1. If the miner would have used no derivatives, they would get paid $2,000/oz.
2. If the miner would have agreed to sell forward, they would get paid $1,950/oz.
3. If the miner would have paid $21/oz for an option to sell at 1930, they would get paid $1,979/oz.

After coming back to the main Zoom room, every group should explain their calculations and said which strategy they liked more. Interestingly, nobody chose option 1 (to use no derivatives) even when this would have been the most profitable decision. One participant said he would choose option 2, because it was in the middle, he liked 'the stability and the simplicity of it,' for him, using no derivatives would be 'too risky.' Another one liked option 3, arguing that the risk of paying the premium to get the option was a risk worth taking because 'if the price rises you can always drop the option and make more money'. Notably, a woman said that option 1 was the 'less attractive because it would leave you at the mercy of the market'. This last phrase was highly praised by the trainer who emphasised that that was precisely the 'beauty' of derivatives, that we would never be left at the mercy of the market.

In sum, the interactions during this workshop demonstrate how, during the training course, the affective narrative of gold's value as safe, solid and risk-free is translated into practical financial tools intended to 'chop off risk,' as the trainer said. In other words, derivatives are a promise of risk mitigation. By the end of the workshop, the participants in the course no longer considered option one a viable choice, because whenever market actors are dissatisfied with pricing conditions (a forward contract, for example), they can always use more ‘fancy derivatives’ to mirror their risks and hedge them off. This ultimately creates the illusion that gold can be traded in a risk-free way. But can it?

In the rest of my thesis, I argue that these financial tools are not actually chopping off risk but devolving it to other nodes of the valuation chain in the form of socio-environmental conflicts, conflict financing, and political instability triggered by the gold rushes produced by extremely high gold prices. Ironically, these supply chain risks appear to be threatening gold’s financial value, rather than being a consequence of it. With this analysis, I aim to contribute to recent ethnographic analyses examining the extent to which productive, profitable, and voluntary risks are made possible and financed by the destructive and often inescapable risks faced by racialised, classed, and gendered others (Appel 2019; Bryan & Rafferty 2011; Guyer 2009; Maurer 1997). Crucially, the illusion of risk-mitigation that derivatives provide depends on the capacity to borrow power and legitimacy from state actors. Despite being highly abstract (LiPuma & Lee 2004), the legitimacy and the material viability of gold derivatives depend on the affective narrative of gold as risk-free, which is sustained by central banks’ practice of gold hoarding.

Gold leasing: borrowing power and legitimacy from central banks

In the first part of this chapter, I showed that institutions such as the WGC have influenced the growing demand for gold among central banks. They successfully managed to do that with their labour of attraction consisting of the combination of an affective narrative around the importance of gold accumulation for times of crisis, but also with the influence on government policies concerning their internal gold markets. In this section, I suggest that central bank gold hoarding is presented as a matter of nations’ wealth preservation, but in fact it is a practice that allows private individuals participating in the gold market to generate and accumulate capital through gold derivatives transactions.

Although nations no longer need to back up their currencies with gold, many states nonetheless still hold significant amounts of gold as part of their international reserves through their Central Banks. The United States heads the list with 8,133.46 tones, followed by Germany (3,352.65t), the IMF (2,814t), Italy (2,451.84t), France (2,436.88t), Russia (2,329.63t), China (2,113.46t), and Switzerland (1,040t) (Figure 13). A common explanation of the recent surge in gold prices is that non-Western central banks are increasingly buying gold to become less dollar-dependant. While non-Western nations see in gold a way to gain financial sovereignty, central bank gold hoarding is pivotal in sustaining gold financial derivatives and, by extension, further practices of speculation and accumulation of financial market participants. This is made possible through a derivative called 'leasing.'

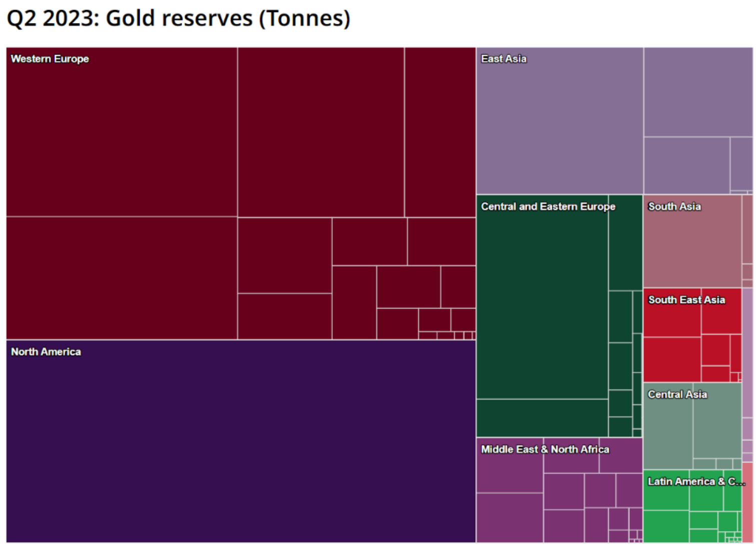


FIGURE 13. GEOGRAPHICAL DISTRIBUTION OF GOLD RESERVES. SOURCE: WORLD GOLD COUNCIL 2024B.

The affective narrative of gold as stable and safe sustains that the OTC market should not be a place for speculation; therefore, it is not a market for gold *futures*[22], which are widely recognised as highly speculative investments. Forward prices, instead, should be calculated in an objective, rational manner. The practice of gold leasing (the financial mechanism through which market agents can lend and borrow gold primarily from central banks) is an essential step to set the price of gold derivatives. The trainer explained the 'objective' formation of a forward price with the following example:

> Tom [mining company] wants to agree on a forward contract with Julia [commercial bank] to guarantee a good price for its future production. In this case, Tom will ring up Julia and say he would like to sell metal in one year's time and would like to agree on a forward price. What Julia does is to *chop off this risk*. She's going to do a whole

[22] The primary market for gold futures and options is COMEX, whose contracts are physically settled in New York in the form of kilo bars.

series of transactions, so she can agree on a forward price without taking any risk. What Julia will do is *borrow some gold from a Central Bank* and sell it into the market at spot price[23] [that same day]. […] When she sells it, she will get dollars that can be placed into a bank account to earn interest for a year. At the end of the year, Tom will deliver the gold to Julia who will use it to repay the Central Bank. Julia can then take the dollars from the bank account plus the interest (LBMA's course trainer, pers. comm., November 2023).

In a nutshell, to be able to quote a forward price for the miner's production in a year, a commercial bank relies on the gold reserves of a Central Bank. Crucially, in making this set of transactions, the commercial bank is not only *borrowing gold* but *borrowing political power and stability* from central banks (see Bear 2015a). This means that state power is being seized to create the possibility of financiers and miners to profit from gold transactions, providing legitimacy to the market, and crucially allowing an oversupplied market to effectively create a vacuum in the market to absorb newly extracted gold.

An oversupplied market?

Geographer Erica Schoenberger (2011: 3) has argued that gold's value has been historically sustained by 'an artificial scarcity arising from how powerful groups have used it.' Precious metals are supposedly valuable for being rare. However, during my fieldwork, it was very common to hear the phrase 'there is plenty of gold out there.' I heard this many times as part of a narrative to justify the low environmental impact of the gold market through the idea that all gold that has ever been mined is 'still with us', to emphasise it has and will always be reused and recycled (see Chapter 4 for an analysis of the controversy of recycled gold). During the LBMA training course, the trainer referred to this again to justify the borrowing of central banks' gold reserves by gold market participants:

> 'The supply-demand for industrial metals is just much more finely balanced. [In these markets,] sometimes there isn't just enough metal. Whereas for gold, what we tend to see is that because of *such large inventory* that we have, there is plenty of stock around *that we can access*... [because] Central Banks hold a lot of gold in their vaults to back their currencies, we're not going to run out of gold any time soon' (LBMA's course trainer, pers. comm., November 2023)

[23] The price of the day.

Although the trainer never said it explicitly, a supply-demand *less* finely balanced really means that the gold market is an *oversupplied market*. Every day more and more tonnes of gold are being extracted, but since gold is almost indestructible, it cannot really be consumed (in the literal meaning 'to seize or take over completely'; see Graeber (2011) for a critique of the concept of consumption) but accumulated. For any other market, this condition will be disastrous, but in the case of gold, this is precisely the required material condition that sustains its valuation as a safe, solid, and stable asset. Importantly, in the quote of the trainer, we see that she describes the large inventory of gold, not as a problem but as an opportunity. When she says 'there is plenty of stock around *that we can access*', she refers to the possibility of *financiers to borrow* the gold that will underpin derivative trading.

Importantly, the transactions I have been describing are only possible because of the existence of unallocated accounts. In the mind of financiers, it seems to be nonsense to 'leave all these lovely bars sitting in vaults gathering dust', as the course trainer recalled hearing from her old boss when she was a commodity trader. In order to make profits, financiers need the market to keep moving, which implies that gold needs to keep moving too, but, as I have explained above, this movement does not always need to be a physical movement of the metal. So, financiers do need some 'lovely gold bars' to remain still to be able to price and trade gold derivatives, but also to reproduce the affective narrative around gold's value as safe, solid and risk-free. In fact, when the trainer was explaining the practice of leasing, she would say that '*sometimes some* Central Banks are willing to lend *at least some* of that metal to generate a return, so there is plenty of metal around for leasing.' Notably, she spoke very carefully, using words like 'sometimes' and 'at least some,' not to compromise the narrative that sustains that gold is valuable because it is a safe-haven asset; and in order to be a safe haven, the metal should remain being a hoardable substance (Peebles 2014) waiting to be used in times of crisis.

The work of the trainer is thus a type of affective labour that aims to transmit a clear sense of security and confidence to course participants, who learn to approach gold pricing and gold financial circulation as sober, responsible acts rather than accumulative or volatile actions with significant consequences for the world outside. In this sense, the course is also a process through which market participants learn to differentiate (unstable and volatile) financial markets from (stable, solid and responsible) gold markets. Or, in the words of the WGC advertisement, to understand gold as The Economy's greatest companion and saviour.

Conclusion

In this chapter, I developed an ethnographic analysis of the labour of attraction of employees and collaborators of the WGC and the LBMA—the two global gold market authorities—as they intend to make gold an *attractive* investment asset. I examined the WGC's affective labour involved in conjuring an affective narrative of a world in crisis (lack of certainties) with gold's material affects of solidity, stability, and indestructibility. This labour included advertising campaigns targeted at investors and regulators, the development of market research, the publishing of reports and strategic data, and, crucially, institutional lobbying to influence countries' mining and market policies. I analysed how the affective narrative around 'the story of gold' has adapted over time, not only to stimulate demand, but to perpetuate a racialised desire for gold. So-called 'emerging markets' are portrayed as being less rational and emotionally driven, while gold-producing countries are far from being considered potential gold consumers. Then, I moved on to critically assess recent reforms to the gold financial market to give it an appearance of being risk-free, trustworthy, rational, and transparent. I examined the history of the gold price and the changes adopted to respond to allegations of price manipulation. Yet, the pricing reform left untouched the core aspects of gold valuation. First, a 10,000 oz threshold that prevents the gold price from drastically falling, and second, the trade of derivatives, which allows for the borrowing of gold and legitimacy from central banks.

I also suggested that the WGC's affective narrative that stimulates gold hoarding by central banks enables an oversupplied market to keep sucking in freshly mined gold by the tonnes. Crucially, risks do not vanish when financiers 'chop them off' with the use of derivatives; they are devolved to weaker actors in the racialised valuation chain (see Bear 2013; De Neve 2009). Ultimately, the financialisation of gold has pushed the gold price higher and higher, transforming those chopped-off risks into 'supply chain risks'—conflict financing, child-labour, money laundering, and environmental devastation. As I demonstrate in the next chapter, these risks continue to threaten the affective narrative of gold's value; therefore, the industry has recently expanded this narrative to include the attractive elements of sustainability and development. In a speech at the 2022 WGC-LBMA Sustainability and Responsible Sourcing Summit in London, John Mulligan stated that the WGC, and the industry in general, 'need to tell a *value chain story*, rather than an *asset story*. We must look for this value elsewhere in the supply chain [...] to go back to the mining site and talk about the benefits that gold mining can bring to the environmental challenge' (Mulligan, WGC-LBMA Sustainability and Responsible Sourcing Summit, 2022).

This reasoning is pretty much reflected in the latest production of the WGC. A documentary featuring actor Idris Elba travelling across the entire gold supply chain (Figure 14). Elba, a black British man of Ghanaian heritage, visits key locations along the gold value chain, primarily the mining concessions of WGC members, to showcase some of their most innovative and sustainable practices. He also travels to Ghana and visits Ashanti King Otumfuo Nana Osei Tutu II to illustrate how valuable gold is for the Ghanaian people. Notably, the film skips the entire problematic around ASM mining in Ghana and the conflicts that the gold rush is fuelling there and in other parts of Africa (Hilson et al. 2017). The journey ends in the vaults of the Bank of England, in an unknown location, because—as Idris tells the audience—'for obvious reasons [he] can't reveal [their] route.' Once in the vault, he has a conversation with Sarah John, the Bank of England's Chief Cashier, who tells him no other story than the one I have analysed throughout this chapter—that same affective narrative that underpins gold's financial value and justifies gold attraction:

> Countries have what are called reserves, so basically savings, that they can draw on when they need to, because gold holds its value very well in a time of crisis. And it is really easy to buy and sell here in London, and that supports financial stability[24].

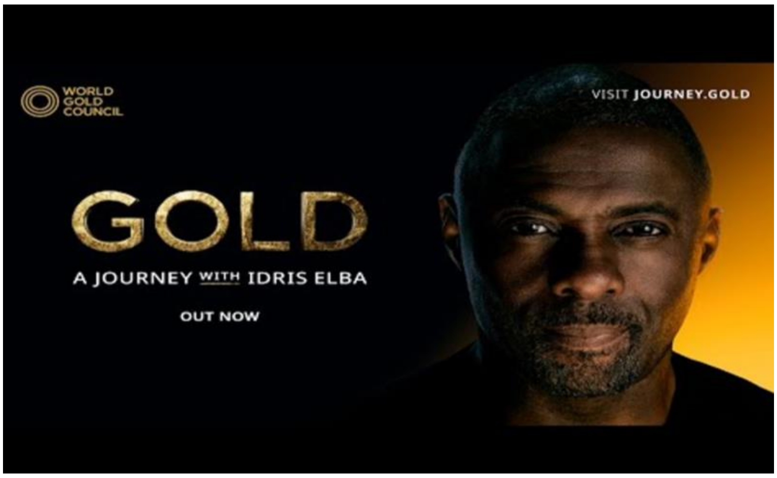


FIGURE 14. POSTER OF 'GOLD. A JOURNEY WITH IDRIS ELBA'. SOURCE: WGC'S WEBSITE.

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[24] https://www.youtube.com/watch?v=R7UikzYdgTc

CHAPTER 3. THE PURIFICATION OF ASM GOLD AND THE SOURCING OF ETHICAL VALUE

In September 2010, a member of the United Nations (UN) Group of Experts (GoE) for the Democratic Republic of Congo (DRC) told LBMA conference delegates in Berlin that their gold trade was helping finance the armed groups creating mayhem and misery in the DRC. With the rise of media, NGOs, and activist groups' allegations against 'blood' or 'conflict minerals' being used in jewellery (Bieri 2016) and mobile phones (The Times 2020) and the post-2008 increasing pressure on financial markets by regulators and public opinion to behave in a more responsible way (Leins 2020), the gold industry realised it had to 'revise their understanding of "integrity" beyond the physical cohesion of gold products, in order to integrate supply chain due diligence on human rights, labour conditions, and conflict financing as part of what can be coined the ethical integrity of gold' (Bolay 2021: 85). For example, Ruth Crowell, LBMA's CEO, wrote in an article titled "The LBMA – Providing a Chain of Integrity in the International Gold Market" that '[n]ot only does gold have to be gold, but it also has to be responsible' (Ruth Crowell 2016: 6). The fact that now both the physical and the social constitute an integral part of gold's value has made the LBMA, the WGC and the GDL refiners turn its attention to—and enhance its power over—the entire supply chain.

In the previous chapter, I examined how the financial value of gold as stable, safe, and risk-free is built and sustained with the labour of attraction of global authorities at the top of gold's hierarchical valuation chain. In this chapter, I tell the story of how artisanal and small-scale mining (ASM) came to be seen as a threat to this financial value and how the industry tried to manage this 'risk.' More specifically, I analyse how responsible sourcing standards aim to morally purify the gold coming from a racialised ASM sector. I draw on Andrew Barry's (2004) conceptual framework of ethical capitalism to shed light on the practices and narratives involved in the 'ethicalisation' of gold. Barry's approach encourages an exploration of 'what problems and issues are made visible as ethical and what are not,' whether 'corporations derive ethical resources from bodies that are exterior to the business' (2004: 195) and, importantly, who claims to have the moral authority to propose, influence, or lead these processes.

Most of my interlocutors along the chain were in permanent anxiety of a potential 'contamination' with illegal/illegitimate gold commonly associated with an ASM origin. However, they also knew that sourcing ASM gold could help the industry build a narrative about its contribution to sustainability and local economic development. The gold industry, alongside rent-seeking nation-states, has marginalised the ASM sector for decades. More recently, however, actors in the valuation chain have realised that engaging with the ASM sector could be more beneficial for their reputation than excluding it. Crucially, to integrate ASM, the industry first needs to morally purify the sector from the allegedly chaotic reality. This process of purification is achieved through a type of labour of attraction I call 'ethical value sourcing.'

In what follows, I analyse how ASM gold, and importantly, ASM miners come to be perceived as racialised 'dirty,' and 'risky' subjects, and how, in a recent shift, the industry is seeking to integrate them into the mainstream supply chain as part of an emerging narrative of sustainability and development. Then, I examine how the practice of ethical value sourcing is exercised in public events, where non-industry members are often invited to speak at panels about the importance of ASM. Notably, the labour of ethical value sourcing occurs at both settings—the public and the private—and it is exercised in a multilayered way by most actors of the valuation chain. I examine how people perceived as being more virtuous are invited to validate the LBMA ASM strategy in a private task force, where the value of ASM and the future of gold trade in ASM gold-producing countries is negotiated. Importantly, I show that in private settings, the contributions of actors perceived as more virtuous (NGOs, and ASM experts, like academics and consultants) are not taken as seriously as in public venues like industry conferences.

The purification of gold—and the racialisation of miners

Allegations linking the mineral trade to conflict financing gave rise to a wave of conflict minerals regulations and standards. While these measures were initially intended to mitigate the harmful effects of corporate activity at mining sites, the precious metals industry reinterpreted them into standards that, over time, have not only marginalised but also racialised the ASM sector. The concept of responsible sourcing was first introduced when the U.S. government, under President Barack Obama, enacted the Dodd–Frank Wall Street Reform and Consumer Protection Act in 2010, in response to the 2008 global financial crisis. The Act aimed to increase transparency, reduce systemic risk, and protect consumers in the U.S. financial system. Specifically, section 1502 required U.S.-listed companies to report whether they were sourcing 3TG minerals (Tin, Tungsten, Tantalum, and Gold) from the DRC or adjoining countries. From then on, 3TG minerals have been known as 'conflict minerals,' a label that highlights the link between these minerals and potential conflict financing.

A year later, the Organisation for Economic Co-operation and Development (OECD) published the *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* (henceforth the OECD Guidance or the Guidance). The OECD Guidance was collaboratively built between governments, international organisations, industry, and civil society to promote accountability and transparency in mineral supply chains. It establishes minimum standards for how companies sourcing minerals from conflict-affected areas should carry out *due diligence*, meaning the proactive and reactive steps they must take to identify, prevent, and mitigate *risks* of adverse impacts arising from their *own* activities, those of their suppliers, or their sourcing decisions. Notably, the Guidance adopted a risk management language to develop a five-step due diligence framework[25] that companies should follow to prevent potentially adverse impacts of their operations. The document explicitly defined risks 'in relation to the potentially adverse impacts of a company's operations, *which result from a company's own activities* or its relationships with third parties, including suppliers and other entities in the supply (OECD 2020: 13 my emphasis). In other words, responsible sourcing was first conceived as a concept to hold companies accountable for their potentially harmful activities.

In the following years, however, industry associations like the London Bullion Market Association (LBMA), the Responsible Jewellery Council (RJC), the Responsible Minerals Initiative (RMI), and the Dubai Multi Commodities Centre (DMCC) *adapted* rather than *adopted* the OECD risk-based approach. They developed their own standards[26] supposedly aligned with the OECD Guidance, but as confirmed by an OECD alignment assessment study in 2016, three initiatives were 'not aligned' and the other two were 'partially aligned', and, in 2018, standards had not completed full alignment (OECD, 2016, 2018). In sum, the language of risk management allowed companies to interpret due diligence as a process for identifying those 'supply chain risks' that could threaten companies' reputation, and not as negative impacts of companies' operations.

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[25] Step 1. Establish strong company management systems; Step 2. Identify and assess risks; Step 3. Mitigate risks; Step 4. Get your practices audited; Step 5. Publish a report.

[26] The Responsible Jewellery Council's Chain of Custody Standard, the World Gold Council's Responsible Conflict-Free Gold Standard, the LBMA's Responsible Gold Guidance, and the Responsible Minerals Initiative's Responsible Minerals Assurance Process.

Bieberstein and Evren (2024) have rightly observed that such an international system of governance operates through a politics of responsibilisation. Responsibilisation refers to 'the transfer of a portion of on-the-ground operations of extraction, as well as the politics of security and accountability attached to them, to an actor or entity […] for facilitating the valorisation of resources'(Bieberstein & Evren 2024: 232; see also Makori 2024; Streinzer 2024). Thus, the gold industry standard setters adapted the concept of responsible sourcing to transfer the responsibility of being responsible to actors further down in the hierarchical valuation chain—the so-called Annex II risks that were defined by the Guidance[27] were reinterpreted not as illegal activities that companies might be fuelling, but as 'dirty' activities endemic to specific regions that might be threatening to 'contaminate' the supply chain.

The definition of 'conflict-affected and high-risk areas' (CAHRAs) is pivotal in reproducing a racialised stereotype of ASM populations. Although the OECD Guidance was drafted directly in response to the DRC scandal, it was later expanded to include mineral sourcing from all the world's CAHRAs. The Guidance defines CAHRAs as:

> Areas identified by the presence of armed conflict, widespread violence, including violence generated by criminal networks, or other risks of serious and widespread harm to people. […] Such areas are often characterised by political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure, widespread violence and violations of national or international law (OECD 2020: 66).

Crucially, the conceptualisation of CAHRAs as chaotic, fragile places, characterised by widespread violence and institutional weakness, contributes to the reproduction of what anthropologist Austin Zeiderman (2025) calls geo-racial regimes: 'hierarchical orderings of society and space organized primarily along racial lines' (20). For Zeiderman, there is a profound connection between racialised inequality and resource extraction (2025: 16; see also Appel, 2019). Furthermore, the concept of CAHRAs is a system of classification underpinned by what Aníbal Quijano has called 'the coloniality of power': the long-lasting patterns of power, knowledge, and social relations that originated with the European colonialism of the Americas and still structure our present world (Quijano 2000). Labelling certain areas as CAHRAs naturalises the chaos, violence, and fragility of these places—most

[27] Annex II risks according to the OECD Guidance: torture, compulsory labour, the worst forms of child labour, gross human rights violations, war crimes, conflict financing, bribery and the misrepresentation of taxes, and money laundering.

of them postcolonial nations—while obscuring the historical causes that have produced instability, violence, and precarity in these territories.

Significantly, CAHRAs are the primary locations of ASM mining activity. In these areas, which most of the time correspond to entire African and Latin American countries, the ASM sector has been historically stigmatised and marginalised by international and national policies. Since the 1990s, African and Latin American countries, pressured by the IMF's structural adjustment policies, updated their Mining Codes to prioritise large-scale mining (LSM) over small-scale mining (ASM). For decades, governments and industry members have tried to eradicate ASM mining by integrating it into LSM regimes as a subcontracting labour force. Thus, the conflictivity and fragility of these areas have been rather an outcome of recurrent practices of exploitation and dispossession of corporate and state actors.

This exclusion was reinforced by industry standards, particularly the LBMA Responsible Gold Guidance, which in 2012 classified the entire ASM sector as high risk. Around the same time, journalistic investigations (Castilla et al. 2015) and NGO reports (Society for Threatened Peoples 2016) accused some of the major Swiss GDL refineries of sourcing 'dirty gold' from Peruvian ASM. Consequently, the Good Delivery List (GDL) refineries, which are certified by the LBMA, stopped sourcing ASM gold because they could not risk losing their GDL status (SWI 2019). During my fieldwork, my interlocutors would often describe the 'unintended consequence' of ASM marginalisation as resulting from a misinterpretation of the OECD Guidance: industry standards and GDL refiners confused 'risk mitigation' with 'risk avoidance'. In other words, supply chain actors chose to avoid the risk of sourcing from ASM over working on a strategy to mitigate those risks and promote the 'progressive improvement' of the ASM sector, as it was suggested in the Guidance (OECD 2020: 64). Intended or unintended, the classification of ASM as 'high risk' evolved in a terminology that, although it does not appear in official standards, is highly used by most actors in the valuation chain in public events and informal conversations. This is the terminology of 'supply chain contamination' with 'dirty gold.'

Building on the black radical tradition (Bhattacharyya 2018; Gilmore 2007; Kelley 1996; Robinson 2020) Kimberly Chong (2024) has drawn attention to the role of race and racial hierarchies in helping produce economic explanations that are considered legitimate. She has explored, for example, how concepts like 'emerging markets' or 'human capital,' have gained rhetorical traction by drawing on racialised futures and racialised imaginaries of value. The concept 'supply chain contamination' has a similar story. It was first proposed by management scholar Mauro Fracarolli Nunes in an article in the European Managerial Journal in 2018. The term accounts for 'the dissemination of negative events through customers and suppliers, in terms of either market value or any other perceivable and/or measurable factors' (Nunes 2018: 582). The phenomenon, as discussed by the author, is 'related to the study of value destruction, and […] to its dissemination through supply chains' (2018: 583). Strikingly, to develop the concept of 'supply chain contamination', Fracarolli Nunes quite explicitly borrows from medical and biological literature on infectious diseases:

> the concept of supply chain contamination allows the construction of metaphorical transfer, borrowing from the medical and biological literature the idea that some diseases (i.e. negative events) are infectious, possibly spreading around those who get in direct or indirect contact with the disease carrier (i.e. supply chain partners and source firm, respectively) (2018: 583).

The objective is then to prevent contamination through 'the development of more rigorous approaches in the selection of supply chain partners' (Nunes 2018: 583). In the case of gold, ASM was deemed as the pollutant that the industry must evade. In fact, the use of the term 'dirty gold' is widespread, though it was not coined by economists or management scholars but by NGOs and activists. In 2005, the Washington-based NGO Earthworks launched the 'No Dirty Gold' campaign targeting companies like Tiffany, and Rolex for their 'dirty gold' sourcing (Bloomfield 2017). The concept of dirty gold was first used to shame companies for fuelling conflicts with their allegedly careless mineral sourcing. However, companies swiftly responded to criticism with the implementation of responsible sourcing initiatives—which combined logistical and affective labour to create sustainable and development narratives like the ones I will analyse in brief. Yet, the term 'dirty gold' kept circulating not much as a term associated with companies' activities but as an inherent characteristic of the messy and chaotic reality of the ASM sector. Indeed, anthropologist James Smith (2021) observed that a similar process happened with the notion of 'blood minerals' in Eastern Congo: '[we] have never heard any state or NGO actors argue that companies were dealing in blood minerals—this was a term reserved for the minerals unearthed by artisanal miners' (268).

Thus, the conceptualisation of responsible sourcing as a practice of risk management allowed for the emergence of specific terminology that further contributed to the racialisation of the ASM sector. As Gregory (2014) has noted, classic risk management theory is based on assumptions that do not necessarily correspond to reality (Friedman 1953: 3). These assumptions '[deny] uncertainty and [allow] for the development of models premised on the belief that the future is predictable and is calculable using probability theory (Gregory 2014: 55). This 'ethics of probability', as Appadurai has called it (2013), has contributed first to classify specific actors and places as risk objects, and second, to create the illusion that such 'risks' can be effectively managed. Crucially, this ethics of probability is underpinned by an ethics of detachment: a disconnection – but still a form of relationship — sustained by practices of audit (Cross 2011). According to Cross (2011), codes of practice and audit regimes emerge as unique material technologies to establish limits and endpoints between supply chain actors and their suppliers. Essentially, to retain their GDL status, refiners must undergo an annual audit in which an independent assurance provider (an auditing firm) assesses whether a refinery is Conformant, or presents low, medium, high-risk or zero-tolerance non-conformances (i.e. whether refineries' supply chains have been 'contaminated' with 'dirty gold').

Responsible sourcing standards are, therefore, technologies that contribute to the valuation of gold through a process of purification[28] that targets specific individuals and locations. As Mary Douglas (1983) has emphasised, societal values and cultural biases significantly influence how risks are understood. Importantly, Douglas (2003 [1966]) has also argued that 'dirt' is not an objective substance but 'matter out of place.' Dirt is essentially a product of cultural classification systems—what counts as dirty depends on how a society organises and defines order. Industry actors perceived ASM gold and ASM miners as 'matter out of place' because it is a sector full of ambiguities and contradictions that could not be easily controlled. As matter out of place, ASM was perceived as dangerous because it seemed to be disrupting the symbolic system of gold's value as risk-free.

According to Douglas (2003 [1966]), when something is perceived as dirt, it tends to be (1) segregated or excluded, or (2) ritually transformed into a socially acceptable form or product. For decades, the strategy of industry and state actors was the former. More recently, however, the sector has realised it can benefit from transforming the ASM sector into an 'acceptable form of product,' in Douglas's terms. During my fieldwork, this shift was taking place, and my interlocutors were working hard to push for a narrative that would cast ASM more as an opportunity than a risk.

[28] My conceptualisation of purification distances from Latour's conceptualisation of purification (1991), which describes the modern project of separating nature and society into distinct spheres, even as real-world practices constantly generate hybrids that blur these boundaries.

Mainstreaming ASM through ethical value sourcing

In October 2022, at the LBMA Global Precious Metals Conference in Lisbon, the LBMA formally announced it would move to support the world's artisanal gold miners. Ruth Crowell, LBMA's CEO, referred to this move as an opportunity to take 'artisanal mining *mainstream* and create a *halo effect* for investors'. A halo effect is understood in psychology as a cognitive bias that occurs when a first good impression of a person unconsciously influences the perception of the individual as a whole. For example, observing an initial attractive feature can make a person or object generally appealing, making it difficult to revise that impression based on new or opposing information. For example, an attractive individual may also be perceived as interesting, ambitious, or funny, whether that assessment is warranted (Nisbett & Wilson 1977). Although only 1–3% of ASM gold formally enters the mainstream market (Mthembu-Salter & Salter 2022), the industry has chosen to support ASM publicly, leveraging this support to cast itself as an ethical actor that fosters local economic development, thereby generating a halo effect of ethicality across the sector.

This deliberate effort to create a halo effect can be understood as a sort of labour of attraction, presented in the form of an affective, performative labour of desire management, intended to give legitimacy to the narrative of responsible sourcing. I call this type of labour of attraction *ethical value sourcing*. Actors of the valuation chain engage with moral beacons (i.e. ASM advocates and experts such as NGOs, certification schemes, and academics) to source ethical value from their experience, practices, and narratives. In a nutshell, ethical value sourcing is the process through which the narrative of responsible sourcing gains legitimacy. Analyses of ethical certification schemes have investigated how 'components of risk management practices – standards, audits, and protocols – [are] adapted as the instrumental tools of ''ethical'' regulation' (Dolan 2008: 277). In particular, Dolan (2008) has argued that risk is arbitraged through the instrumentalisation of moral values around notions of ethical consumption and remedial responsibility among Western consumers. With the concept of ethical value sourcing, I aim to investigate how such instrumentalisation of moral values or the process of ethicalisation (Barry 2004) of gold gains legitimacy.

Industry conferences

One of the central nodes of my extended conceptualisation of the hierarchical valuation chain is industry conferences. Conferences were an essential part of my research. My first day of fieldwork was at the Colombian Gold Symposium in Medellín, Colombia, where I spent two days listening to presentations, observing interactions and overhearing conversations between representatives of mining companies, government officials, and consultancy firms in an interplay to make each other attractive. My last day of fieldwork was at the LBMA Global Precious Metals Conference at the W hotel in Barcelona, where I did almost the same thing but was much more conscious of the importance of these kinds of events and their centrality in the configuration of valuation narratives along the chain.

LBMA's Global Precious Metals conferences are recognised for being high-profile and exclusive events, where representatives of the valuation chain gather to discuss the most critical issues of the industry. With conference fees varying between $1,700 and $2,600[29], these events are usually hosted at a prestigious, high-end hotel in a major global (North) city, each year in a different continent (Barcelona (2023), Miami (2024), Tokyo (2025)). In these events, networking—the affective work of connecting with people—is central. In Barcelona, for example, attendees were invited to an 'Informal Networking Reception' at 15:00 with biscuits and coffee and then to the official 'Welcome Reception' at 17:00 on the rooftop of the hotel, looking at the Mediterranean Sea with wine, cocktails, and Serrano ham legs. On the evening of the next day, the highlight was the LBMA Gala Dinner—a semi-formal event held at a venue in the iconic Poble Espanyol. Delegates were welcomed with an outdoor circus-like show and then guided to the ballroom, where they enjoyed a carefully designed menu paired with fine wines and a live Flamenco show (Figures 15 and 16). Notably, these are not only networking opportunities but finely curated spectacles intending to transmit a glamorous aura that gives attendees the sense that they are part of a stable, solid, and wealthy industry.

[29] I was granted a complimentary pass to attend these conferences.

Figure 15. LBMA's Gala Dinner show in Barcelona, 2023. Source: photograph by author.

Figure 16. LBMA's Gala Dinner menu, 2023. Source: photograph by author.

By contrast, the WGC-LBMA Sustainability and Responsible Sourcing Summit is held every two years at a 4-star hotel in London, with an entrance fee of £450 (set in pounds) and with a much less ambitious and captivating atmosphere. In the Summit I attended, delegates were invited to the LBMA Annual Party, which took place at a high-tech mini golf venue in the heart of the City of London (Figure 17). In contrast to the Barcelona conference, this one was less luxurious and more austere, which I interpret as a way to resonate with the conference's narrative of an industry willing to become more socially and environmentally committed.

FIGURE 17. PUTTSHACK LONDON BANK. SOURCE: PUTTCHACK'S WEBSITE.

Importantly, conferences are key events where actors of the valuation chain calibrate their narratives through a performative version of the practice of ethical value sourcing. Anna Tsing (2000) has suggested that 'dramatic performance is the prerequisite of [companies'] economic performance' (118). In an 'economy of appereances,' as she calls it, the 'self-conscious making of a spectacle is a necessary aid to gathering investment funds' (118). Tsing's conceptualisation of the dual meaning of performance (economic and dramatic) is central to understanding those practices intended to 'attract capital' or 'attract investors' (2000), but it is also pivotal to comprehend how those practices gain legitimacy. In gold's valuation chain, performative acts are intended not only to *attract* investment but also to make gold more *attractive*. Thus, conference speeches and participation in panels can be understood as a labour of attraction. This time, such labour was helping to morally purify gold, not by excluding and marginalising the ASM sector, but by integrating it as actors that would benefit from the local economic development brought by the gold industry. In other words, by framing ASM as a development issue, industry authorities, NGOs, and ASM experts were able to source ethical value from each other and from the racialised imaginary of ASM as a vulnerable population in need of development.

In March 2022, the London Bullion Market Association (LBMA) and the World Gold Council (WGC) partnered to host their first Sustainability and Responsible Sourcing Summit. The topics of sustainability and social responsibility had been increasingly appearing in industry reports and conferences since the mid-2010s, but it was in this Summit that the WGC and the LBMA—the global gold market authorities—joined forces to put such themes at the centre of the industry's agenda. This was arguably a result of the increasing awareness that there was an imminent 'contamination' of gold's financial value with the supply chain risks outlined in the OECD Guidance, but also the manifestation of post-2008 anxieties in the financial sector to re-legitimise itself as an ethical, responsible actor. In the case of gold, 'critical events' (Das & Singh 1995) like the DRC conflict minerals scandal, or more recent accusations of ASM exclusion and marginalisation, unleashed waves of public contention that were being 'absorbed into a renewal of accumulation and legitimacy' (Bear 2020a: 2).

In his introductory speech to the 2022 Summit, Randy Smallwood, WGC's Chairman, emphasised that:

> '[having] LBMA and WGC side by side *is rock to ring*, right here. Having the entire industry underneath this one roof is incredibly exciting. Here we have the opportunity to *change* gold, to bring it into the 21st century. We're gonna make history here, and I'm looking forward to working with all of you to achieve that' (Randy Smallwood, WGC-LBMA Sustainability and Responsible Sourcing Summit, 2022).

'Rock to ring' was a common idiom used by my interlocutors to refer to the whole supply chain that enables the physical transformation of ore into gold. Although industry actors are more devoted to stimulating investment demand than jewellery demand, they often use jewellery idioms as it conveys a material sense of gold value as intrinsic, pure, and safe—the symbolic value of gold jewellery creates a halo effect over the value of investment gold. Notably, the process through which a rock becomes a ring—or a bullion bar—is not solely a supply chain process of transforming ore into gold, but a *valuation chain* process in which the *value* of gold is continuously purified through the labour of attraction. Interestingly, the WGC, as the global mining authority, and the LBMA, as the global bullion market authority, are the starting and ending points of gold's supply chain. Yet, in gold's *valuation chain*, the WGC stands at the top of the hierarchy alongside the LBMA. They both have the capacity to influence the way in which actors along the chain value others and are valued by others—and crucially, source value from one another. Importantly, I have come to understand that industry conferences are places where the hierarchical valuation chain of gold is *imagined* and *performed* as a coherent entity. Notably, in his presentation, Smallwood also acknowledges that a lot of work needs to be done to keep gold and its value relevant in contemporary society. It is precisely in these conferences that all actors share the work they have been doing and calibrate their narratives through their labour of attraction.

Take, for example, the intervention of John Mulligan, WGC's Head of Sustainability. In his speech, Mulligan claimed that the WGC started looking at climate change about four or five years ago 'because one of our core mandates is this idea of mainstreaming gold, making gold fit the purpose as an investment and asset in particular in the 21st century.' According to Mulligan, some of the major institutional investors with which the WGC was engaged wanted to hear about ESG and, specifically, about climate change. So, the WGC started researching the topic. In 2018, the WGC effectively launched their first report on Gold and Climate Change, which highlighted the environmental benefits of the gold market and gold extraction, and they have published a set of reports on the matter (World Gold Council 2018, 2019, 2020b, 2021a). Drawing on those reports, in the 2022 Summit, Mulligan stated that:

> There are indicators, which broadly suggest that gold as an investment asset can contribute to the *decarbonisation of portfolios*. So, from an investment point of view, it starts to become an opportunity for gold. And many of you will have heard of gold's traditional roles as a risk mitigation asset. Well, we're starting to say that this data suggests gold can move towards being a *climate risk mitigation asset*. And that's an opportunity for gold.

What Mulligan seems to be arguing is that gold's carbon emissions are mainly concentrated in the node of extraction (i.e. mining sites). So, if gold mining shifts energy sources from fossil fuels to renewable energies, it can decarbonise gold as a commodity and eventually gold as an investment asset. But the narrative does not stop there. Mulligan goes on to state that:

> This isn't just a story about decarbonisation and numbers and pathways. It's also a story about development impacts, socioeconomic impacts on the ground. Because if you decarbonise gold mining, you're actually decarbonising processes that often occur in developing or frontier economies. So, if you were able to decarbonise the energy where you're mining, in many cases, you will be the driver, the engine of bringing clean energy to that location. Basically, clean energy can change people's lives and change the real economy in places where it's really needed.

A narrative calibration with the ESG framework is a key mechanism for the ethicalisation of gold and the gold industry. Standing for Environmental, Social, and Governance issues, ESG is a framework that measures a company's sustainability and ethical impact, often used to make responsible investment decisions. In her introductory speech, Ruth Crowell claimed that 'the S in ESG has got to be the 40 million artisanal miners who depend on ASM for their livelihoods and survival.' (Sustainability and Responsible Sourcing Summit, Ruth Crowell, 2022). This figure of the 40 million ASM miners was first published by DELVE—an ASM Global Database project funded by the World Bank, and it has become central to the industry's development and sustainability discourse (DELVE 2019). The 40 million livelihoods are cited everywhere, from presentations of NGOs and certification schemes to reports of CSR programmes and multilateral ASM projects.

Stephan Leins (2018, 2020) sees the inclusion of responsible investment narratives into financial practices of valuation as a way to legitimise speculative practices through a 'commodification of ethics.' He suggests that 'ESG became a technique for harmonizing the ethical order of the market (which is based on the ideal of optimizing financial gains) with the ethical order of society (which is based on moral concerns about the consequences of such optimization)' (2020a: 3). His analysis draws attention to the ways in which public discomfort about the social consequences of financial capitalism gets absorbed to legitimise practices of accumulation and speculation. Importantly, Leins (2020) shows that ESG gained traction among financial analysts—initially resistant to incorporating moral considerations into valuation practices—only when they recognised its potential to be woven into investment narratives that enhance financial returns. A similar process happened in the gold industry; although these conflict financing scandals were not new by 2010, and definitely not unique to the DRC context, they became a concern for the industry when they were framed as *risks* that could 'contaminate' supply chains, the industry's reputation, and, ultimately, gold's financial value. While Leins was interested in how narratives around ESG became market signals that could be easily incorporated into asset valuation reports, in precious metals industry conferences, and working groups, the integration of the economic order with an ethical order was achieved through performative acts where ethical value could be sourced from moral beacons.

Through their speeches at industry conferences, gold market representatives like Crowell, Smallwood, or Mulligan build together a narrative of sustainability and development to make gold an attractive and legitimate asset. In her introductory remarks, Ruth Crowell referred to LBMA's primary goal of increasing the demand for responsibly sourced gold as a strategy to 'gain momentum.' Momentum, as defined by the Cambridge dictionary, is 'the force that keeps an object moving' or 'the quality that keeps an event developing or making progress after it has started'. Indeed, the vibe I experienced in every conference throughout my fieldwork was that of gaining momentum, the specific affective and communicative work to seize a trend and build a narrative around it as an impulse, a sudden force, to make gold or themselves attractive for investment. Importantly, to gain public legitimacy and take off, valuation narratives must be constructed at the right time and with the right people. Industry conferences are the perfect place for ethical narratives to gain momentum, as they serve as platforms for making significant claims to garner public attention and, importantly, for publicly sourcing ethical value from people perceived as being more virtuous—an essential part of the process of gold's ethicalisation.

The recent shift in the narrative was, without doubt, a cunning move because critics cannot easily reject a narrative around sustainability and development. In fact, the LBMA and the WGC's narratives gain legitimacy because they source ethical value from non-industry actors at industry conferences. These actors, mostly ASM experts and advocates from NGOs, consultancy firms, and academia, are often invited to speak on panels about responsible sourcing, the Sustainable Development Goals, and the future of ASM. For example, a panel discussion on the 2022 Summit called 'Growing Responsible Demand for ASM,' gathered representatives of different organisations to share their positive experiences sourcing gold from ASM. A representative of PX Precinox, a Swiss GDL refinery, discussed their successful NGO-mediated ASM sourcing model, which has managed to establish direct supply chains with Swiss watchmakers and pension funds. He highlighted that ASM was the answer to the decarbonisation of the industry as it produces ten times less greenhouse gases (GHG) than large-scale mining (LSM). He also emphasised that engaging with the ASM sector means that 'we can have a positive impact on those 40 million livelihoods.' Then, the Europe Director of the Alliance for Responsible Mining (ARM), a proudly Global South (Colombian) NGO, recounted the story of the organisation, which originated 15 years ago as an afro-Colombian grassroots initiative Oro Verde (Green Gold, I analyse this further in Chapter 4). In his intervention, he encouraged the industry to 'change the narrative' around ASM, to stop thinking about it as a liability to be ashamed of or hidden away and start seeing it as a great opportunity not just to 'show the impact you can make' but also 'in terms of the possibility of wealth transfer from the wealthy to the poor' (WGC-LBMA Sustainability and Responsible Sourcing Summit, 2022).

The next panellist was the Executive Director of the international NGO IMPACT (who holds a PhD in Anthropology). In her presentation, while displaying a photo of a female African miner (Figure 18), she called for a change of narrative that considered that 'the face of ASM is also the face of women', who are being empowered by mining. Then, she showed SDG-like coloured graphs produced by the NGO to adapt the SDGs to ASM activities and stated that such data was 'the type of data that can accompany the gold from the DRC' (Figure 19). The panel closed with the intervention of Gavin Hilson, a renowned international development scholar and expert on the African ASM sector. As a critical development scholar, Hilson questioned many of the most common assumptions of the industry and told the audience 'some truths' about the social complexity of ASM operations—namely, that they are immersed in power structures, and that they are an eclectic group of people who have different histories and motivations. He also asserted that the OECD standard is so strict that it excludes 99% of ASM gold, that it is simply not possible to 'de-risk something that cannot be de-risked,' and that 'half-baked solutions' like 'partnering with LSM companies' have not worked. Instead, Hilson proposed that 'it's all about changing the narrative, changing the mindset, giving ASM more positive visibility. Let's talk about it more as a development issue rather than as a mining issue.' (LBMA-WGC Sustainability and Responsible Sourcing Summit, 2022).

FIGURE 18. FEMALE AFRICAN ASM MINER. SOURCE: IMPACT.

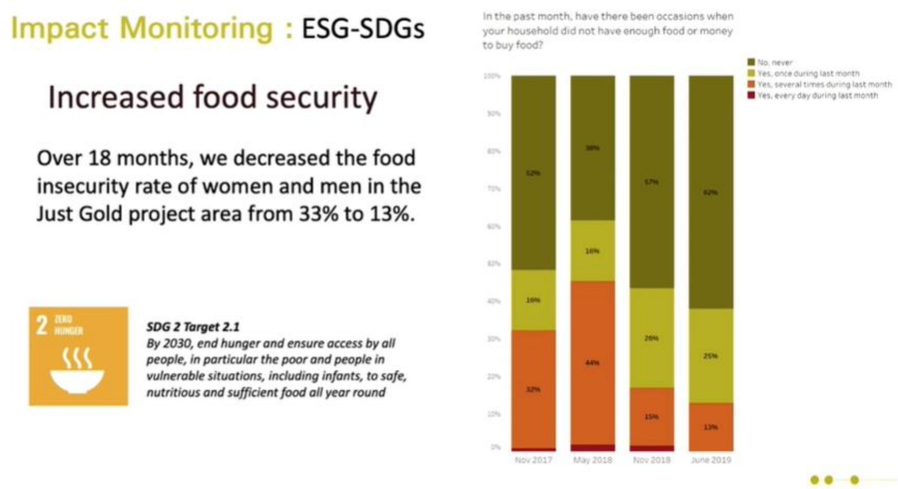

FIGURE 19. INCREASED FOOD SECURITY IN IMPACT'S JUST GOLD PROJECT. SOURCE: IMPACT.

Although all panel participants were speaking from a different standpoint, and of course with different goals in mind, the conference proved to be a space where they could calibrate their narratives towards a common ethical framework. Significantly, the example above also evidences the multilayered sourcing of ethical value: the refinery sources ethical value from scientific calculations of carbon emissions and from NGOs that help them certify the provenance of their gold, the Global South NGO sources ethical value from ex-Oro Verde afro-Colombian miners, and from all ASM miners that it continues to certify, the international NGO sources ethical value from female artisanal miners, and the scholar sources ethical value from the miners he has studied. And, in turn, the WGC and the LBMA source ethical value from the four panellists.

In sum, conferences are places for the calibration of narratives that are made possible by the practice of ethical value sourcing. This practice aimed at purifying something previously conceived as a pollutant by framing it as a development issue. ASM actors, which were historically stigmatised, invisibilised and deemed to be high-risk, became the core of this valuation process that was sparked by the capacity of some industry actors to gain momentum and extend that halo effect of ethicality upon the entire industry and upon gold itself. Importantly, the practice of ethical value sourcing is not always a spectacular or performative act. It also manifests in more nuanced ways like in hiring decisions and private discussions about the value of ASM.

Sourcing ethical value from a Quaker

One person played a particularly relevant role in the revalorisation of ASM from a risk to an opportunity. This was Gregory Mthembu-Salter— *the* member of the UN GoE who, back in 2010, told LBMA their gold trade was fuelling conflict in DRC, and also one of the authors of the OECD Due Diligence Guidance. Gregory is a middle-aged British man, married to a Zulu woman, and living in South Africa. He has researched, reported, and consulted on political economy and natural resource governance for over twenty years. In 2011, he left the UN Group of Experts to set up his own consultancy firm—Phuzumoya Consulting. Ten years later, the LBMA recruited him as a consultant to advise their new ASM strategy. In her introductory remarks at the Global Precious Metals Conference in Lisbon, Ruth Crowell told the audience the story of how she had met Gregory years ago:

> So, I first met him in, it must have been 2009 and he came into the LBMA but the leadership at that time basically told him to go away. Myself as well as the PAC

> (Political Action Committee) were able to invite him to speak at the Berlin [Global Precious Metals] conference back in 2010, when Greg, more or less, came into the room, yelled at us and then left. I'm happy to say 10 years on that we have made some progress.

Crucially, not only was the industry looking to make up for excluding ASM for more than a decade, but Gregory was also supporting LBMA's ASM initiative as a form of personal redemption, as he was involved in the drafting of the first edition of the OECD Guidance, which ended up excluding and marginalising the entire ASM sector. Indeed, in an interview, Gregory told me:

> I didn't think properly what could happen to complex narratives to do with assessments of contingent situations when they get reduced to compliance tools, because at that time we didn't know enough about auditors and compliance officials. […] We never thought when we did this guidance that, Peruvian artisanals would be shut out of supplying the good delivery list (Gregory, pers. comm., 2024).

Gregory's commitment can be understood as a 'remedial responsibility,' a sense of having a special obligation to put a bad situation right. David Miller (2001) has defined remedial responsibility as 'having a responsibility toward the deprived or suffering party that is not shared equally among all agents' (2001: 454). Importantly, Gregory's commitment to revaluing the ASM sector seems to be deeply influenced by the fact that he identifies himself as a Quaker. In an interview, he explicitly drew on his Quaker background when he was explaining to me why he decided to support the LBMA with its ASM strategy:

> It's incredible to me that while the world agrees on almost nothing, nearly all the world seems to agree the gold's really valuable. As a Quaker, it [gold] isn't something I personally like. It doesn't do anything for me emotionally. I don't look at gold and think I want that stuff, but […] in a broken world where poverty and cruelty are way too prevalent and malevolent political forces are on the rise, having a commodity that is directly accessible by the poorest of the poor, which has a possibility of reaching formal markets that in other ways would be completely inaccessible to these communities, is something. That's where my commitment is coming from. It's to those communities and also the earth they're working from which is sort of being silently poisoned (Gregory, pers. comm., 2024).

Intentionally or unintentionally, Gregory has built his public persona around the fact that he has made the industry aware of the link between gold trade and conflict financing. He is a sort of moral beacon to the sector. As Ruth remarked when introducing him, he is known for telling the industry what he thinks in a very direct way. However, rather than cancelling him, the industry has made him an ally to be able to source ethical value from him. Alongside the announcement of supporting ASM, the LBMA published a feasibility report authored by Gregory, in which he assessed the industry's perception of the challenges and obstacles of engaging with the ASM sector. The report, called *Towards an LBMA Good Delivery List for Artisanal and Small-Scale Responsibly Mined Gold (2022),* made the case for increasing ASM gold sourcing by GDL refiners, identified key obstacles to increasing ASM gold volumes, and proposed solutions to overcome them. As suggested in the report's title, Gregory's ultimate recommendation was to create a GDL of intermediate refineries for the sourcing of ASM gold.

The proposal to create a GDL for intermediaries of ASM gold, however, is highly problematic as it intends to extend the audit logics of a standard that was developed in the 18th Century while the Bank of England was trying to retain the power of the British Empire by monopolising the gold market (Green 1973; Harvey 2008). Analyses of standardisation have drawn attention to the 'epistemological dilemma' of standards, noting their roots in colonial ethnocentrism and their tendency to impose Western ethical frameworks that frequently conflict with the values and realities of the communities they aim to support (see Besky, 2014; Comaroff & Comaroff, 1999; Ferguson & Gupta, 2002; MacDonald, 2002; Mutersbaugh, 2002). In particular, Dolan (2008) has noticed that although standards might be pursued in the name of social and economic justice, the requirements 'are often ''locally'' experienced as an instrument of authority and control' (285). Dolan (2008) also observes that, driven by a sense of remedial responsibility, the standard casts workers as rights-holders but simultaneously portrays them as too powerless to realise these rights without external intervention, thus positioning initiatives like Fairtrade as moral agents in a way that echoes an era of colonial paternalism. Gregory's proposal to extend the GDL to regional and local refiners was indeed helping to legitimise LBMA's sustainability and development narrative about compensating for the unintended exclusion of the ASM sector, and it was also contributing to reinforcing LBMA's position in the hierarchy as the global authority and its power over the entire valuation chain.

This power imbalance is reflected in the voices that Gregory's report brings out. To produce the document, Gregory interviewed a vast number of supply chain actors (trade and mining authorities, representatives of GDL refineries, supra-national organisations, multilateral organisations, mining companies, NGOs, and academics, among others). However, the report did not include the vision of government representatives, let alone ASM miners. Thus, the problematisation of ASM, as reported throughout the document, is biased towards the perceptions and expectations primarily of GDL refineries. This is reflected in the first recommendations made in the report, which suggest that:

> The LBMA should engage with its GDL members to establish in more detail what they are or should be looking for from regulatory regimes for ASM, and then engage with governments, civil society and other stakeholders in ASM-producing countries *to seek to secure the reforms required to achieve these regimes* (Mthembu-Salter & Salter 2022: 12 my emphasis).

This recommendation suggests that producing countries should undertake reforms to meet the regulatory expectations of GDL refiners, rather than the other way around; a proposal that reinforces the hierarchical ordering of the valuation chain and the power imbalance among its actors. Crucially, this hierarchical ordering is deepened through the usage of images of racialised ASM miners. The cover image of the feasibility study (Figure 20) was a close-up view of the hand of a black miner holding small nuggets of gold. Although the background is blurred, one can get the sense that the miner has dirty short pants covered in red mud, he is standing over a large muddy puddle, and for the plastic buckets, one can also tell he has just extracted these gold nuggets from washing the mud, which are probably tailings from past cycles of mineral extraction.

Figure 20. Feasibility study's cover image (Mthembu-Salter & Salter, 2022)

Importantly, this representation of ASM miners was not exclusive of this report. Throughout my fieldwork, I encountered images like this and the one of the female miner displayed on IMPACT's presentation (Figure 18) in almost every report, campaign, or project website about ASM mining. The circulation of these images unintendedly contributes to the racialisation of gold desire described in Chapter 2, as they strikingly contrast with the images used in the WGC's advertising and reports of white, clean hands holding GDL-certified gold bullion.

One could read the relationship between the LBMA and Gregory as one that enables the former to source ethical value from the latter. Gregory—encouraged by industry actors—has built his public persona around the fact that he was the man who made the industry aware of the importance of responsible sourcing; indeed, Ruth introduced him with the exact words in two more conferences I attended during my fieldwork[30]. Therefore, he is the person with the moral authority to tell the LBMA how to reshape their relationship with ASM, but this also mean that the LBMA can source ethical value from him to build an ethical narrative around sustainability and development, while eclipsing and instrumentalising the intellectual and practical work of a whole range of other critics (academics, NGOs, etc.) who are making important critical points about ethics in minerals supply chain. I now turn to my last example of how Gregory's and other ASM advocates' expertise is seized at closed-door discussions for the implementation of the LBMA's ASM strategy.

Task forces, SWOT analyses and the closed-door negotiation of ASM value

In 2022, when I was finishing fieldwork in Colombia, I contacted Alan Martin, LBMA's Head of Responsible Sourcing, and a former NGO worker, looking to get access to the LBMA through an internship. I introduced myself as a Colombian anthropologist, with considerable experience on the state of affairs of ASM in the country, researching the transformation of gold's value along the supply chain. To my surprise, he replied quite enthusiastically; the LBMA was about to start a new phase of their ASM Strategy in which Alan and his team were going to examine in depth the ASM context of a handful of African and Latin American countries— or 'low-hanging fruits' as they used to call them. They selected Ghana, Senegal, Tanzania, the Philippines, Ivory Coast, Peru, and Colombia because they perceived these countries to be jurisdictions that could be influenced and redirected to meet the

[30] The Global Precious Metals Conference in Barcelona in October 2023, and the Sustainability and Responsible Sourcing Summit in London in March 2024.

expectations of the industry or, in other words, countries whose risks and perceived 'dirtiness' could be managed and mitigated.

It was in this context that I met Gregory for the first time. He was about to start desk-based research to write SWOT analyses (Strengths, Weaknesses, Opportunities, and Threats) on the seven ASM gold-producing countries. These studies aimed to provide evidence to help the LBMA and the GDL refiners identify which of the seven ASM producer countries were most suitable for on-the-ground research and future engagement. During a period of 4 months, I remotely supported Gregory in building up the Colombia and Peru reports. The reports included a description of the ASM sector, its history, 'maturity' and organisation, and its relationship to large-scale mining (LSM); a brief general political economy analysis including corruption, politics, and government 'rent seeking' from the mining sector; a description of the legislative and regulatory framework, government policies –including an 'assessment of appetite to introduce reforms'; and an assessment of the presence of aggregators and intermediate refiners, including reputational issues. The reports then finished by determining the Strengths, Weaknesses, Opportunities, and Threats with regard to LBMA's plan for increasing responsibly mined ASM gold production into the GDL and concluded with recommendations on how LBMA should proceed with each country[31].

Once finished, the seven reports were presented and discussed at the monthly virtual sessions of the LBMA ASM Task Force. According to the Cambridge Dictionary of Business English, a Task Force is a 'a group of people that are brought together to do a particular job, especially when there is a problem to solve' (Cambridge Business English Dictionary, accessed on 20 Feb 2024). The ASM Task Force was composed of representatives of some Swiss GDL refiners, the WGC, mining companies, NGOs, ASM certification schemes, and private initiatives on ASM responsible sourcing[32]. The ASM Task Force met virtually on a monthly basis to discuss documents that were circulated before the meetings, such as the ASM Toolkit[33], the work plan for 2024, the need to develop a public awareness campaign about the benefits of sourcing from ASM, and, importantly, the seven SWOT reports that I

[31] In conducting this work, I tried to limit myself to describe the context of ASM in each country (Colombia and Peru) drawing on governmental and non-governmental published data. I summarised the data in bullet points and let Gregory undertake his own assessment to build the SWOT analysis and write the conclusions. He wrote the Executive summary (which implied he had to choose the information he considered more relevant), the SWOT analysis, the conclusions, and the recommendations.

[32] There was no representation of ASM miners or governments from ASM gold-producing countries.

[33] The ASM Toolkit was an Excel matrix with specific recommendations for refineries to help them assess the risks of sourcing from ASM.

helped produce. At the beginning of each session, members were reminded that the Task Force would be held under Chatham House Rule, so 'the issues discussed should be treated as private and confidential to allow participants to express their views freely and openly[34].'

In the first meeting, the LBMA team presented the main objectives of the group. They emphasised that members were carefully selected for their knowledge and experience in the area of ASM. Then they introduced the Terms of Reference of the task force and asked participants to comment. This started a lively discussion. A concern was raised about potential abuses stemming from power imbalances between ASM actors and larger aggregators or refiners. Another person suggested that the Task Force should agree on how the strategy's success and impacts would be measured; a participant noted that, despite the explicit goal of increasing ASM gold volumes sourced by GDL refiners, higher volumes would not necessarily translate into benefits for miners or local communities. Another member also asked what the value proposition for ASM miners was, and whether they were going to invite ASM miners to contribute to the group, and whether the LBMA was planning to make assessments on the unintended consequences of the strategy. Overall, these participants were pushing for an ethical/social approach to be considered, but they were politely told that the points they were raising were indeed very important and required further elaboration, but were not necessarily relevant for the specific aim of the group. The day after the meeting, I exchanged some WhatsApp messages with one Task Force member who told me that it was annoying that 'NGOs always want everything to be a development project.' Internally, it seems that the ASM strategy was not meant to be a development project, but that was not the narrative at industry conferences.

Indeed, the participants who raised the above concerns were representatives of some of those organisations that were often invited to speak at the LBMA-WGC Sustainability and Responsible Sourcing Summit. They were called to be part of the ASM Task Force due to their experience and knowledge of ASM, but it was precisely this experience and knowledge that had given them a special sensitivity to the type of concerns that often get ignored in top-down schemes like the LBMA ASM Strategy. Importantly, in terms of power, these members were situated in a lower position in the hierarchy of the valuation chain. Yet, they were

[34] Under Chatham House Rules people can share the content of what was said but cannot attribute it to a specific person or organisation. The analysis of this section adheres to this guideline. I cite certain contributions without identifying the specific individuals who made them.

perceived as being more virtuous or as having moral value that could be sourced to ethically infuse and give legitimacy to these sorts of multi-stakeholder groups.

Over the next few months, Gregory presented two or three SWOT analyses per meeting. In each session, task force members reacted to Gregory's risk assessment. For each country, there were a few members who had either research or business experience with the ASM sector, so that they would expand on the political and social complexities of each case. Task forces were a closed-door space where the value of ASM—and the future of ASM gold-producing countries—was being negotiated. Task force participants discussed, for example, the presence of 'Islamist terrorist groups in some regions of Ghana' or 'that there was an 'inward processing regime' established by the Senegalese authorities intending to promote refining within the country, but that it was largely unsuccessful.' When Gregory presented the Colombia report, the task force members were interested in hearing more about the governmental traceability initiative and the interest of the Central Bank in resuming ASM gold purchasing. Notably, participants were also aware of the fact that gold mining was a significant funding source of criminal and insurgency groups, and that a violent underground war was taking place at a Canadian-Chinese LSM concession. Each time, Gregory emphasised that this was the result of desk-based research, and so to really assess the complexity of each country, a second phase of on-the-ground visits would be needed.

The last meeting of the Task Force I attended—and the first one in person—took place at the LBMA's Global Precious Metals Conference at the W Hotel in Barcelona. I arrived early, eager to personally meet most of my interlocutors. The event was taking place in a small room with a round table on the underground floor of the conference venue. When I arrived, the first person I bumped into was Ruth, who recognised me and thanked me for writing the Peru and Colombia reports. She introduced me to the newly appointed Chief of Staff—a British woman who happened to be in love with Colombia. Ruth was very proactive in preparing everything for the meeting. She was all around the room checking the Zoom connection and putting paper tags with our names on top of the table. The goal of the meeting was to approve Gregory's conclusive report, which suggested selecting three or four countries for further engagement with government representatives and other 'relevant stakeholders' on the ground. The meeting took place early in the morning as group members should agree on the formal announcement that Ruth was going to give to conference delegates the following day about the progress made by the Task Force. After Gregory presented a summary of the seven SWOT reports, the group discussed whether they should rank the countries and how to make the announcement so the countries excluded would not feel left aside. Some said they could come up with a traffic-light schematic using green, yellow, and red colours, but then most of them agreed this could send a bad message about the countries labelled with red. A suggestion was made to add weighting to the SWOT criteria to be more 'objective' in selecting the countries, but then someone noted that even assigning numerical values could remain a subjective exercise. After a long discussion, someone asked whether they actually needed to announce the 'lottery winners' tomorrow. At the end, they selected three countries for the priority phase, one for a second phase, and two as the least priority. They decided to announce the ones they will be working on now and state that they will still find ways to engage with the others.

The countries that were chosen were Ghana, the Philippines, Tanzania, and Peru. Ultimately, task force members selected these countries, not quite influenced by the SWOT analyses we built, but for two main reasons. First, these countries were not classified as CAHRAs (except for the Muslim autonomous region of Mindanao in the Philippines), and second, because their central banks (of at least the first two) were running a WGC-influenced programme of ASM domestic purchase. In that sense, the prioritised countries were strategically selected in accordance with the problematic category of CAHRAs, and, importantly, to manage the risk of contamination by sourcing not only ethical value but political value, and thus legitimacy, from Central Banks (see Chapter 2). Incidentally, Colombia was excluded from the priority list; in fact, it was considered by an influential task force member as 'probably the most dangerous to engage.'

Conclusion

In this chapter, I have examined key practices and narratives involved in the active process of the ethicalisation of gold and the gold industry in essential—yet overlooked—nodes of the valuation chain of gold: industry conferences and task forces. More concretely, I showed how responsible sourcing standards were initially conceived to mitigate the harmful effects of gold trade in mining regions; however, they were reinterpreted by industry standards that not only marginalised but also contributed to the further racialisation of the ASM sector. Casted as a chaotic, violent and vulnerable population, ASM was avoided for more than a decade. More recently, however, responsible sourcing narratives are reassessing the value of ASM. ASM is now presented as a great opportunity for the industry to contribute to local economic development and sustainability goals.

I proposed to understand the ethicalisation of the gold industry as a project of purification intended to legitimise the financial value of gold as risk-free. Purification carries with it moral hierarchies of disgust and danger, which rely on stigmatising representations of people and places. Crucially, the process of ASM valuation through purification is no longer a process of excluding what is cast as dirt; it now consists of a paternalistic intervention to integrate ASM miners as vulnerable subjects in need of development aid.

The chapter analysed the labour of attraction involved in the production of this new narrative. In particular, I proposed the concept of 'ethical value sourcing' to understand how this narrative gains legitimacy through the onboarding of non-industry actors who are perceived as moral beacons. Importantly, the practice of ethical value sourcing only occurs when there is a power imbalance among the actors of the valuation chain. Some actors, like the LBMA and the WGC, have the power to imagine and give shape to a hierarchical valuation chain where the desire for gold can be effectively managed. Thus, attention to the concept of ethical value sourcing gives analytical purchase to the affective labour involved in the process of resource attraction, and the legitimation of financialised resource value. But the higher the financial value of gold, and the higher its price, the higher the risks, violence, and unbridled extraction of gold. In other words, the purification of gold entails not only the devolution of risks, but the creation of risks further down the chain.

Paradoxically, the process of increasing the attractiveness of ASM gold had the unintended consequence of further racialising ASM miners. The visual imagery used in all sorts of reports from industry authorities to NGOs still plays up connotations of miners as darker-skinned individuals, contrasting strikingly with the representation of shiny, pure gold bullion being held by white hands. In other words, the narrative of responsible sourcing is part of the broader framework of a racialised gold desire described in chapter 2, in which ASM miners' desire for gold is akin to greed, and it needs to be purified through the labour of actors higher up in the hierarchical valuation chain. In the following chapter, I examine the labour of attraction of key actors in gold's valuation chain—transparency intermediaries—as they strive for recognition as legitimate actors in capacity to resolve the radical uncertainty around the origin of gold.

CHAPTER 4. RECYCLED GOLD AND THE INTERMEDIARIES OF TRANSPARENCY

Around 216,265 tonnes of gold have been mined throughout human history (World Gold Council 2025). Industry reports or texts about gold usually put this figure into perspective by imagining the measures of a single cube made of the total amount of ever mined gold. By the end of 2024, this cube would measure approximately 22 meters on each side. The figuration (Tsing 2009) of the golden cube is useful to convey two key messages contributing to the contemporary valuation of gold—first, that 'almost all the gold ever mined still exists in some form,' and second, that this is a 'surprisingly small volume for such a valuable and historically significant metal' (World Gold Council 2025). For these two reasons—namely, indestructibility and high value—gold has been reused since its discovery 6,000 years ago, and it has rarely been considered as *waste*. More recently, however, the term 'recycled gold' has gained traction within the gold sector. After the reputational crisis that affected the gold market around the 2010s (chapter 3), recycled gold became one of the main strategies of *downstream actors* (demand) to meet industry promises of sustainability and responsible sourcing. Consequently, companies like Pandora (a luxury jewellery brand), Cartier (a luxury goods brand), and Dell (a technology company) have recently committed to sourcing only recycled gold in the near future.

In general terms, 'recycled gold' refers to gold that has been recovered from existing products—like old jewellery, electronics, coins, or industrial materials—rather than being newly mined from the earth. In 2022, recycled gold accounted for more than half of the gold refined each year by GDL refiners (London Bullion Market Association 2023: 32), and it was the most preferred material origin among the jewellery and watch industry (World Gold Council 2022). Recycling not only helped downstream actors make ethical claims by distancing themselves from the tarnished reputation of the mining industry but also helped them make sustainability claims regarding carbon footprint reduction. Pandora, for example, has claimed that the company avoids 58,000 tons of CO_2 every year by using recycled silver and gold instead of newly mined materials (PANDORA 2024). Moreover, UBS, a major Swiss bank, has recently launched a carbon-neutral gold ETF, a financial product designed to meet the increasing demand for responsible or ESG (Environment, Social, and Governance) investments (MKS PAMP 2023).

At first glance, recycled gold may seem to be a great strategy towards the ethicalisation of gold discussed in chapter 3. However, NGOs, sustainability advocates and supporters of artisanal and small-scale mining (ASM) have criticised the term for being a ruse for obscuring the origins of gold and discouraging the sourcing of ASM gold. On the 13th of April 2024, eleven responsible ASM advocacy organisations[35] published an open letter urging gold industry standard setters[36] to regulate the misleading uses of the term 'recycled gold.' Titled *Old jewellery is not waste! The necessity to clearly define "recycled" gold to avoid greenwashing*, the letter questioned 'the jewellery and the gold industry [for] using "recycled" gold as the silver bullet to claim responsible, eco-friendly, zero carbon, conflict-free sourcing and even ethical practices' (Alliance for Responsible Mining et al. 2024: 1). The authors sustained that the term 'recycled gold' was not consistent with the EU, UK, US, and Swiss legal and normative definitions of recycled material, which generally define recycling as 'the reprocessing of waste material' and waste as 'discarded material.' For the authors, the term was falsely conveying a narrative of a positive social and environmental impact since 'any unwanted product with a high gold content cannot be considered waste, because [gold] is not something that is destined to be discarded or trashed' (2024: 2). The letter also argued that the misuse of the term recycled gold was discouraging actual e-waste recycling; that there was no evidence to suggest that the demand for recycled gold was reducing the extraction of freshly mined gold; that recycled gold was a tool to bypass the question of the origin, and importantly, that sourcing only recycled gold was discouraging the sourcing of ASM gold.

Notably, the recycled gold controversy sparked a debate about the legitimacy of the refining process. Refineries are well-known as the industry's *choke point*—they are key *intermediaries* where gold from many sources is smelted and turned into standardised bullion. Thus, they are considered to be the guarantors of the physical and ethical quality of gold (Bolay 2021). In asking standard-setters to tighten the regulation over the use of recycled gold, the authors of the open letter were explicitly questioning the transparency of

[35] Alliance for Responsible Mining, Artisanal Gold Council, Ethical Metalsmith, Fair Luxury, Fairtrade Max Havelaar Switzerland, Impact, Pact, Solidaridad, Society for Threatened Peoples, Switzerland, Swissaid, and The Impact Facility.

[36] International Organization for Standardization (ISO), London Bullion Market Association (LBMA), Responsible Jewellery Council (RJC), and the Responsible Minerals Initiative (RMI).

gold refineries. However, in questioning the morality of intermediaries using the term 'recycled gold,' the authors of the letter were not demanding *less* intermediation, but *better* intermediation. As critical scholarship on transparency has argued, 'transparency is a process of mediation which incorrectly understands itself to be a process of disintermediation' (Calvão et al. 2026: 4; see also Ballestero 2012). In other words, any transparency initiative necessarily involves the mediation of multiple actors, institutions, standards, laws, and documents to generate the very illusion of direct, unmediated visibility that transparency promises (Calvão et al. 2026). Indeed, all the authors of the open letter—most of them NGOs—are themselves intermediaries in the gold valuation chain. Interestingly, the value of their work is underpinned by their recognition as morally good actors or, as I propose to call them, transparency intermediaries.

This chapter analyses the work of transparency intermediaries as they navigate different controversies arising from the debate around recycled gold. Drawing on reports, interviews, and participant observation of discussions around recycled gold in industry conferences, multistakeholder groups, and social media, I examine the labour of attraction of intermediaries striving to be recognised as legitimate actors of the gold valuation chain. This chapter is a hinge between the labour of attraction of financiers (chapters 2 and 3) and that of gold-producing countries (chapters 5 and 6). The chapter is structured around three controversies that generate what Callon et al. (2009) would call hybrid forums; however, I show that hybrid forums do not take place in a politically neutral arena. First, I analyse the work of the Precious Metals Impact Forum (PMIF), a multistakeholder initiative, as it strives to become a legitimate mediator capable of achieving consensual solutions through means that disturb ISO's[37] standardised and 'politically neutral' methods. Secondly, I analyse the controversial role of Dubai in the debate of recycled gold. The emirate was accused of transforming 'risky gold' into recycled gold to be imported by Swiss GDL refineries. I show how NGO allegations for more transparency and higher controls over the flows of gold ended up reinforcing the moral authority of GDL refineries over non-GDL refineries. Third, I analyse how the controversy of recycled gold opened an opportunity to present ASM certification schemes as the ultimate ethical solution to guarantee a legitimate origin of gold. I analyse two competing ASM responsible sourcing schemes—Fairmined, from Colombia and SBGI, from Switzerland to reflect on the unequal labour value of these transparency intermediaries in gold's hierarchical valuation chain. Lastly, I conclude with a reflection that smooths the

[37] ISO is the International Organization for Standardization. It is a global body that develops and publishes standards for a wide range of areas.

transition to the chapters based on my fieldwork in Colombia. I draw attention to the contrasting perceptions my interlocutors along the valuation chain had of the UAE. While my European interlocutors thought of the UAE as a shady place, my Colombian interlocutors were proud to strengthen connections with Dubai, 'the market of the future.' In sum, these four sections suggest that although transparency intermediaries are profoundly critical of many of the narratives and practices underpinning gold attraction, most of the time they are unable to challenge the audit culture (Strathern 2000) that sustains a rather racially hierarchised extractive-logistics-finance nexus (Mezzadra & Neilson 2013). They are an essential part of the gold valuation chain because their labour contributes to the moral purification of gold and thus to gold attraction.

'Recycled is not an origin!'

The first time I heard about recycled gold was at a roundtable held during the OECD Forum of Responsible Mineral Supply Chains in Paris in April 2023. The room was so full that people had to remain standing as there were not enough seats for everybody, and some latecomers even had to sit on the floor. The panel was organised by the Precious Metals Impact Forum (PMIF), 'an inclusive, multistakeholder platform gathering participants in the precious metal sector [to address] any issue that may be encountered by its members and [work] collaboratively to create consensual solutions'[38]. The PMIF was founded in 2020 by Sabrina, a Swiss woman of Arab descent who had worked for several years in legal compliance and sustainability for two GDL Swiss refineries and was also finishing a PhD in Law about the effectiveness of gold industry standards. The PMIF was born from her critical analysis of the impossibility of standards to solve the problems of the industry. 'I realised we did not need more standards, but more dialogue,' she said when introducing the PMIF to the audience that day. Sabrina was convinced about the positive impact that the precious minerals industry could have on marginalised communities in Africa. When I interviewed her, she told me that her parents were Moroccan, and so she was being driven by a sense of social justice for African people.

Sabrina was deeply disturbed by the fact that companies were using recycled gold to disregard the problems at the mining sites completely. 'They think that because they do not take freshly mined gold, they are not part of the problem, but it's not that simple; you are still part of a global supply chain. That gold has been extracted at some point.' For her,

[38] https://pmimpactforum.com/

recycled gold was even worse than mined gold because companies were unable to specify where their gold came from—'you're just telling me it's recycled, but recycled is not an origin!' For her, hiding or avoiding the question about the origin of gold was deeply unethical. Since knowing the true origin of recycled gold was inherently impossible, she thought that the first step in solving this problem was to discourage the use of the term. She inaugurated the PMIF with a multistakeholder working group with representatives of all nodes of the value chain to agree on a new definition of recycled gold that could effectively discourage the misuse of the term.

During the crowded roundtable at the OECD Forum, the PMIF working group on recycled gold was proposing a new definition for the term. Sabrina was leading the session, and five representatives of the different stakeholders that were part of the working group (industry standards, refineries, and prominent critics of recycled gold like Global South ASM certification schemes, and international NGOs) were sharing their experience of reaching a consensus on the new definition. It had not been an easy task. They had met regularly for more than two years to agree on a new definition that would work for everyone. They introduced to the audience the new definition of *recycled gold*, which went along with a second definition, that of *reprocessed gold*:

> Recycled: Gold recovered from any product containing less than 2% of gold in weight, destined to be discarded and returned to a refiner of other downstream intermediate processor to begin a new life cycle as "recycled gold". Freshly mined material, including tailings and any wastes and by-products of mining operations are excluded from this section.
>
> Reprocessed: Gold produced from any product more than 2% of gold in weight with the purpose of changing in state (e.g. bullion melted to create jewelry, jewelry melted to become a bar being sent to a refinery, unsold or used or broken jewelry being melted to create new jewelry or a different type of product, sputtering targets, manufacturing scraps).
>
> *Recycled and/or reprocessed gold may be provided in rough form or in melted form, the latter leading to enhanced due diligence procedure to guarantee the true nature (recycled or reprocessed) of the gold supplied.

By drawing a boundary between these two types of gold, the group was aiming primarily to address, in Sabrina's words, 'the very urgent issue of green claims that are coming with the term recycled.' They hoped that by setting a limit of gold content up to 2% only e-waste (e.g. small gold pieces used in phones and computers) could be considered *truly* recycled material. The rest—especially gold entering refineries only to change form—should be called 'reprocessed.' The proponents were hoping that the term 'reprocess' would eventually discourage greenwashing because it was less 'attractive' for consumers looking for ethical or sustainable alternatives.

After hearing the proposal, the atmosphere felt tense, and people started whispering to their neighbours and taking pictures of the screen. Most people in the room agreed that 'recycled gold' was an issue that needed urgent resolution, but there also seemed to be an additional consensus on the fact that coming up with a new definition was not enough. Indeed, companies were unlawfully using it for greenwashing purposes, but most importantly, supply chain actors were using it to obscure the dubious origins of gold. Some of the shady strategies that were mentioned in the event included 'the UK wanting to get rid of Russian gold, sending it to Switzerland as recycled', 'illegal gold from Brazil, exported to the UAE and then imported by Swiss refineries as recycled', or 'ASM gold entering the mainstream supply chain through Dubai disguised as recycled.' People were denouncing these gold flows with outrage.

Although everyone knew that recycled gold was ultimately a shady move to obscure gold's origins, it proved to be extremely hard to discourage its use. In the case of recycled gold, a labour of attraction—the affective work of creating non-monetary value and affects associated with gold—was necessary to make recycled gold *less attractive*. The PMIF, a relatively new organisation, needed to find a legitimate place in gold's valuation chain as a mediating actor. Sabrina ran one of the most successful sessions at the OECD forum that year, and she announced that more working groups would soon start to discuss crucial issues, such as how to report the origin of gold and how to calculate gold's carbon footprint. However, despite having reached a consensus with the participation of the most influential actors of the global valuation chain, the proposal of establishing a new definition for recycled and reprocessed gold did not take off. As of revising this chapter (August 2025) the PMIF definition has not been officially adopted by any global standard-setter.

In fact, an ISO committee was created to work (once more) on a definition of recycled gold. During a briefing session about the progress of the ISO committee at the 2024 WGC-LBMA Sustainability and Responsible Sourcing Summit, Jonathan Jodry, the Chair of the ISO committee—and also the Business Development Director of a major Swiss refinery—argued that the ongoing standardisation process was necessary because the issue had been politicised. According to him, the standardisation of recycled gold through an ISO process would favour international trade and protect consumers through what he described as a politically neutral process. However, many people in the room remain sceptical about it. During this session, representatives of NGOs and ASM advocates, whose contributions are usually ignored during closed-door meetings but then are celebrated at conferences for bringing an ethical perspective (see Chapter 3), questioned the capacity of an ISO standardised definition to address the problem of misleading claims from brands, or the fact that recycled gold was not having a positive social impact but the opposite. They suggested the industry should just consider recycled gold as 'high-risk' or draw a hard line between recycled and ASM, but Jodry responded that, in line with the neutrality of the process, ISO was not allowed to give a competitive advantage to any party. With a standardised definition, he said, 'everyone will have the same advantage on the market, and everyone will be able to sell their product and build a story […] it will be a matter of consumer choice' (Jonathan Jodry, LBMA Sustainability and Responsible Sourcing Summit, 2024).

For about an hour, a heated discussion took place in which no one seemed to agree on anything. Overwhelmed by this sense of impasse, one of my neighbours of the row behind said to her colleague: 'The only thing that is clear is that nothing is clear.' This phrase resonates with how Callon and colleagues (2009) have defined the concept of uncertainty: 'we know that we do not know, but that is almost all that we know' (21). Ultimately, the impossibility of determining the origin of gold, and in particular, the controversy surrounding recycled gold, created a hybrid forum where people discussed not what they know, but what they do not know. Contrary to what we might have thought, advances in science and technology have not led to greater certainty but have engendered more controversies, which have increased the visibility of uncertainties and the feeling that recognising what we ignore is perhaps more important than what we know (19).

For Callon and colleagues (2009), controversies generate hybrid forums where groups can come together to discuss and address the uncertainties affecting the collective. They are hybrid 'because the groups involved and the spokespersons claiming to represent them are heterogeneous' and 'because the questions and problems taken up are addressed at different levels in a variety of domains, from ethics to economics [..] (18). Moreover, they describe the outcome of hybrid forums as an enriching experience of exploration and collective learning (Callon et al. 2009). Indeed, the controversy on recycled gold included broad participation among very different people (i.e. representatives from the LBMA, mining companies, refiners, NGOs, aggregators, and ASM responsible sourcing schemes). However, in the world of gold, hybrid forums take place in a *hierarchical valuation chain* governed by standards that produce new hierarchies of value according to racial and geographical distinctions (Bear 2013), devolves the risk to weaker actors of the chain (De Neve 2009) and encourages an ethic of detachment (Cross 2011). In other words, the valuation of gold is the result of an uneven and conflicting process of purification rather than a process of collaboration and coordination between market participants (cf. Callon et al. 2002).

The discussion around standards, neutrality, and consumer choices sparked an angry reaction from a representative of the mining sector of Ghana. He stood up and started a rant about the incredible amount of resources spent in Europe 'writing documents, creating more standards […] more organisations, more NGOs, all concentrated here while the most important actors are left out.' He urged the people in the room to address the bottom of the issue: that 'ASM exists because they are displaced people.' He said that indeed the tone of the industry had softened a bit in recent years, but that still 'elites were wanting to solve the problem by talking to themselves' (Ghana's mining sector representative, LBMA Sustainability and Responsible Sourcing Summit, 2024). In other words, the Ghanaian miner was questioning the allegedly political neutrality of standardisation practices. Usually presented as technical processes, they deliberately ignore the social and political factors that initially gave rise to the need for a standardised solution in the first place. In this case, they were ignoring the very fact that the hype of recycled gold was provoked by an urge to avoid 'supply chain contamination' with 'dirty gold' from a racialised ASM sector (see Chapter 3).

A year passed, and at the LBMA Assaying and Refining conference in 2025, Jonathan Jodry gave a presentation that he titled: *Recycled Gold: A Technical & Political Journey Toward Failure*. In this presentation, he announced that the proposal for the ISO standard was firmly rejected by the countries participating in the technical committee. He suggested that this was because the ISO standards 'have not been designed to operate under strong political influence.' At the end, countries had joined the committee to defend their often-conflicting political and economic interests. And, according to Jodry, only a few months before the voting, nine countries 'which are not necessarily known for their gold businesses' asked to join the committee and all of them rejected the proposal despite not having attended any meeting[39]. Right after saying this, Jodry removed his ISO pin from his suit so he 'could say what he really wanted to say' and the audience burst in laughter. He continued by saying that:

[39] https://www.lbma.org.uk/events/lbma-assaying-refining-conference-2025

> Our world has changed a lot over the last couple of years, and even more over the last couple of months… we have a war in Europe, we have a new president in the US who is really favouring the usage of tariffs, and the reality is that simply technical committees within ISO *have not been designed to operate under strong political influence*. They have been designed to reach *consensus with experts*, and to bring that consensus at country levels. They have not been designed to have what we have seen: countries asking other countries to join the process and even sending them the comments they had to make on the ISO proposal (Jonathan Jodry, LBMA Assaying and Refining conference, 2025).

By removing his ISO pin, Jodry proved that the alleged neutrality of ISO is necessarily performative. Experts in ISO committees are as politically influenced as the Chair, and not only because of the current turbulent times, but because they represent the commercial interests of their own countries, which, for obvious reasons, will never be politically neutral. Once relieved of his ISO identity, he began speaking in his capacity as a senior representative of a Swiss GDL refinery. He said that the people not liking the ISO proposal because it was not limiting recycled gold to e-waste were wrong (i.e. the PMIF), because 'in Switzerland, we don't through away glass after having a nice bottle of wine, we bring it to a recycling centre,' so 'no one would come and say this is not recycled because it's not waste. It's not waste, but it's still recycled!' As a refiner, he was conceiving the refining work as merely logistical, ignoring the relations of power and acts of violence that have historically underpinned the field of logistics, which has commonly been depicted as an apolitical science of management (Chua et al. 2018). As a representative of a GDL refinery, one of the most powerful actors in this hybrid forum, he claimed that 'the point is that fundamentally we know the flows of our industry, but what we need is to be able to speak the same language.' In saying this, he suggested that he did not really consider that the flows of gold were uncertain. He had the power—as most GDL refineries do—to claim that refiners have the capacity to determine the origins of the gold they process. Thus, for GDL refineries, the ISO standardisation process was not a means to resolve the uncertainty about the origins of gold (cf. Callon et al., 2009) but a way to reach an authoritative definition that could help them 'maximize the traceability and the transparency we can offer to the market.' So far, however, they had not been able to do it.

‘If it comes from Dubai, it’s certainly not from Dubai’

At the end of the PMIF recycled gold session at the OECD Forum, I approached Sabrina and asked her if I could participate in the next round of working groups. I told her I had just returned from a year of fieldwork researching the mining, trade and institutional environments that made possible the extraction of ASM gold in Colombia, and she granted me access to the subsequent PMIF discussions. The PMIF was starting a new working group to discuss the topic of ‘The origin of gold.’ In the sessions I attended, the discussion centred on the challenge of reporting the origin of *secondary gold*—i.e. gold that had circulated for a while before entering the ‘mainstream market’ like old jewellery, coins or bars coming from a pawnshop, and, specially ASM gold that had been sourced by an aggregator or ‘intermediate refiners’ in African and Latin American countries. In the weekly meetings, participants engaged in lively debates about the practical impossibility of physically segregating the gold to prevent ‘supply chain contamination,’ whether they should simply ban purchases from certain countries, or engage with suppliers to ‘teach them about the importance of due diligence.’ Each week, the discussions would go like this for an hour. When reading my fieldnotes, the contradictory proposals almost entangled me in this knot, until I realised that the discussions were just proving how impossible and contradictory the aim to determine the origin of gold was.

As discussed in Chapter 3, the promise of responsible sourcing is ultimately a practice of responsibilisation (Bieberstein & Evren 2024; Makori 2024; Streinzer 2024) – the transfer of responsibility to those intermediaries in charge of guaranteeing the ethicality of the chain. Indeed, a key preoccupation laid at the core of the PMIF discussions: who should take responsibility for supply chain contamination? Standard-setters, luxury brands, GDL refiners, intermediate refiners, governments, miners? Although the PMIF participants were all quite critical about the inequalities reproduced by the status quo of the gold industry, they nevertheless seemed to agree that all troubling gold was coming from (racialised) places in the Global South. Therefore, their responsibility laid in preventing dubious gold from entering the mainstream supply chain. Importantly, this troubling gold was not only coming from gold mining countries, but from intermediary countries that had become increasingly relevant in the sector.

Undoubtedly, the most controversial actor in the debate around recycled gold was the United Arab Emirates (UAE), and more specifically, the non-GDL refineries located in Dubai. One representative of a refinery once said at a PMIF discussion that his refinery had a specific policy that banned sourcing from Dubai, because ‘if it [gold] comes from Dubai, it’s certainly not from Dubai.' At the beginning of the 21st Century, the UAE set out to become one of the most important international trading centres, to overcome the country's dependence on the extraction of fossil fuels. To become 'the City of Gold,' as it is recognised internationally, Dubai established attractive legislation, special tax regimes, and minimal control over gold imports. The Dubai Multi Commodities Centre (DMCC) was established in 2002, and today it is the largest of the 37 free trade zones in the city. It is estimated that between 25% and 40% of the world's gold passes through the DMCC (Ummel 2020: 8). In what follows, I examine how the industry and civil society deemed the entire UAE as an illegitimate intermediary, and I show how NGO calls for increased transparency and stricter controls over gold flows reinforced a hierarchy between GDL refineries and non-GDL ones.

In 2020, SWISSAID, a renowned Swiss NGO, published a report called *Golden Detour. The hidden face of the gold trade between the United Arab Emirates and Switzerland*. The document revealed a scheme through which some Swiss Good Delivery List (GDL) refineries—the largest in the world—were buying tonnes of 'recycled gold' from non-GDL refineries in Dubai. The research traced the origin of some of this 'recycled gold' and found out that it was coming from gold mines controlled by armed groups in Sudan. The report describes Dubai as a 'platform for high-risk gold,' signalling that 'several trading companies and refineries in Dubai have questionable practices,' that 'controls by the customs authorities in the emirates are very weak' and that 'UAE gold stakeholders are subject to lax and fragmented legislation' (Ummel 2020: 7). The report, thus, recommended tightening controls over the circulation of gold, improving audit processes, and that companies should commit to complete transparency by disclosing the country of origin and the identity of their suppliers along the chain.

Notably, the title of the report, 'Golden Detour', suggests that there is a mainstream supply chain through which gold should flow, and that a detour, understood as an unusual route to avoid a problem, should be looked at with suspicion. In demanding more transparency, the report was not asking for less intermediation but demanding the improvement of audit practices to control the flows of 'gold from dubious origins' that were coming through Dubai. Unintendedly, by denouncing the suspicious sourcing practices of GDL Swiss refineries, the NGO was legitimising the GDL standard and the audit regime that sustains it while casting Dubai as an illegitimate intermediary.

Since the emergence of the first gold standard in 1717, when the pound sterling was first fixed to gold, the role of refineries transformed from simply performing industrial smelting to being the guarantors of gold's value for national banks (Bolay 2021). More recently, their role has expanded due to emerging concerns regarding the potentially harmful conditions of gold production and trade (Chapter 3). Now, they are not only expected to guarantee the physical purity of gold but also 'to act as the international market's barriers against flows deemed illicit or not compliant with human rights, as defined by the OECD Guidance for Responsible Mineral Supply Chains' (OECD 2016 in Bolay 2021: 86).

Paradoxically, as Bolay (2021) has rightly observed, 'the technical purification towards obtaining fine gold inevitably goes hand in hand with erasing traces of its earlier states that would precisely give credence to claims of ethical integrity' (88). The physical qualities that make gold a good financial asset (i.e. density, malleability, and indestructibility) are the same that make its origin so difficult to determine because gold from 'ethical' or 'unethical' origins gets easily melted and mixed without affecting its properties or value. The work of gold refineries, as Bolay (2021) has observed, can therefore be understood as 'a dual work of mediation and purification' (90) in Latourian terms. Refineries both assemble hybrid gold bars from a complex network of materials, labour, machines, and regulations, and simultaneously try to strip away these connections to produce a standardised product presented as purely 'natural' gold. Crucially, this dual work of mediation and purification produces new irreversibilities (Bolay 2021: 87; Callon 1991: 150) that enable gold to be transformed into a standardised financial artifact that enters a zone of qualification (Barry 2006).

Bolay's (2021) Latourian understanding of purification may be important for an analysis of the impossibility of creating a pure natural substance separated from the sociality of its production process. However, as I explained in Chapter 3, my conceptualisation of purification aims to underscore the moral hierarchies around disgust and danger, which rely on stigmatising representations of people and places (Douglas 2003; Douglas & Wildavsky 1983). My analysis, therefore, aims to highlight the fact that the labour of gold refineries—and other transparency intermediaries—along the value chain of gold is not equally valued when it comes to the moral purification of gold. The work of transparency intermediaries is hierarchically organised according to a 'geo-racial regime' (Zeiderman 2025) that values less the work of aggregators, intermediate refiners, and non-Good Delivery List (GDL) refineries.

GDL refineries stand at the top of this hierarchy. They are certified by the LBMA's Good Delivery Standard, a mechanism established in 1750 by the Bank of England, when the British Empire was already the centre of the gold market (Green & Murray 2010). GDL refineries are the only ones allowed to produce standardised GDL bars, which are considered to be safe and secure investments. In contrast, non-GDL refineries are generally referred to as 'intermediary refiners.' Mostly located in Global South countries, their work is constantly questioned and scrutinised even when they claim to comply with standards based on the OECD Due Diligence guidance, like the GDL refiners (Chapter 3). Since GDL refiners do not always source directly from miners, non-GDL refiners aspire to become a supplier to a GDL refinery. This hierarchical ordering of the world's refining capacity is unintendedly reinforced by critics of recycled gold, and by international NGOs in particular, who aim to reveal obscure trading practices but end up reproducing a stereotype about non-Western intermediaries like the UAE as corrupt, weak, and questionable, that need to be overseen by morally superior standards, which happen to be all Western.

The concerns raised by the Swiss NGO report and other parallel investigations (Castilla Contreras 2018) motivated the Swiss State Secretariat for Economic Affairs (known as SECO) to ask Swiss refineries to 'tighten up audits on imports arriving from the United Arab Emirates to make sure illicit African bullion isn't involved' (Spence 2021). This immediately sparked an angry but very comprehensive response of the Ahmed Bin Sulayem, the CEO of the Dubai Multi Commodities Centre (DMCC), Dubai's largest gold trading hub (Bin Sulayem 2021). Published as a LinkedIn post, Bin Sulayem points out that all DMCC accredited refiners are required to implement the OECD Due Diligence Guidance, just as the LBMA enforces the same mandatory policy for its GDL refiners. He also suggested that such accusations are 'insinuating' that 'the OECD guidelines to which [the Swiss market] adheres aren't worth the paper they're printed on.'

For Bin Sulayem, perhaps the most offensive aspect was the fact that the Swiss had no moral authority to make these judgments. By targeting the UAE as a nation, rather than specific refiners or businesses, criticisms of the UAE framed the entire nation as responsible for making 'African gold available to the Swiss market'. He found these accusations deeply contradictory, given Switzerland's 'morally dubious and irrefutably sordid trading history, which includes using gold to aid the Nazi war effort despite its supposed neutrality, through to its reputation as the de-facto refuge for the illicit funds of dictators and political crooks' (Bin Sulayem 2021).

This was not the first time Bin Sulayem defended the UAE from attempts to render the country an illegitimate intermediary. In 2020, in another LinkedIn post, he reacted to a Reuters headline reporting that the LBMA was threatening to blacklist the UAE and other centres if they failed to meet regulatory standards. In this post, Bin Sulayem suggested that mainstream supply chain actors were perceiving the growing success of the UAE as a threat to their dominant position (Bin Sulayem 2020). And, again, he pointed out that LBMA would not 'apply the same ethical standards to its existing members and stakeholders, including JPMorgan Chase, which admitted manipulating precious metals futures' or that the LBMA would never consider blacklisting the United States after federal prosecutors charged two previously GDL refiners in that country for buying illegal gold from criminal groups in Latin America (Bin Sulayem 2020).

Although NGOs usually conceive themselves as ethical actors outside the supply chain with the moral authority to unveil unethical practices of industry participants, they are indeed part of the hierarchical valuation chain of gold. Their work contributes to the legitimation of a hierarchy of intermediaries that ranks their labour value according to their capacity to contribute to the moral purification of gold. The report had the good intention of unveiling the unethical practice of concealing the African origin of recycled gold, but the notion of 'detour' and the demands for 'more transparency' and 'improved audits' reinforced the 'organizing logics and optics [that] allow the logistics industry to bring a wide range of actors, objects, and events into a single framework by rendering them commensurable as factors that either facilitate or threaten circulation' (Zeiderman 2025: 85). In fact, in a 2018 report, the Society for Threatened Peoples (another Swiss NGO) had published a report titled: 'Switzerland, a Hub for Risky Gold?', suggesting that Switzerland was the core of the suspicious flows of gold. However, two years later, the SWISSAID publication was calling the UAE 'a hub for risky gold', contributing to the shift of responsibility from one place to the other.

In response to criticism over recycled gold and allegations of suspicious ties to Dubai, most Swiss GDL refineries stopped sourcing gold from the UAE and launched a responsible gold sourcing programme in Latin America—the Swiss Better Gold Initiative (SBGI). In the next section, I analyse how this initiative rapidly gained relevance and legitimacy in the gold valuation chain, in contrast to a 20-year-old grassroots initiative from Colombia, which still strives for recognition as a global transparency intermediary.

Certified ASM gold as a type of origin

In July 2024, Patrick Schein, a precious metals trader and refiner and current Chairman of the Alliance of Responsible Mining (ARM), posted on LinkedIn a poll inquiring about people's preference between recycled gold and Fairmined gold. The context of the poll was the opening ceremony of the Paris Olympics. The post compared the origin of the gold present in the gold medals and in the Olympic Laurel Trophy. The #gold medals were made of silver and covered with 6 grams of pure gold, and the #Paris2024 Organising Committee requested they should be made with 'recycled gold.' The Olympic Laurel trophy, on the other hand, was made with Fairmined gold, which has been chosen as 'the most ethical gold available', according to the post. Fairmined, he explained, is an initiative 'whose label certifies the responsible sourcing of #ASM gold. The label guarantees that the gold is traceable and has been extracted and processed using the best mining practices. This gold is also used to mint the #Peace #NobelPrice medal.'

The poll, which remained open for the duration of the game, gave the victory to Fairmined gold with 84% of the votes (36 persons) over 16% (7 persons) that voted for recycled (Figure 21).

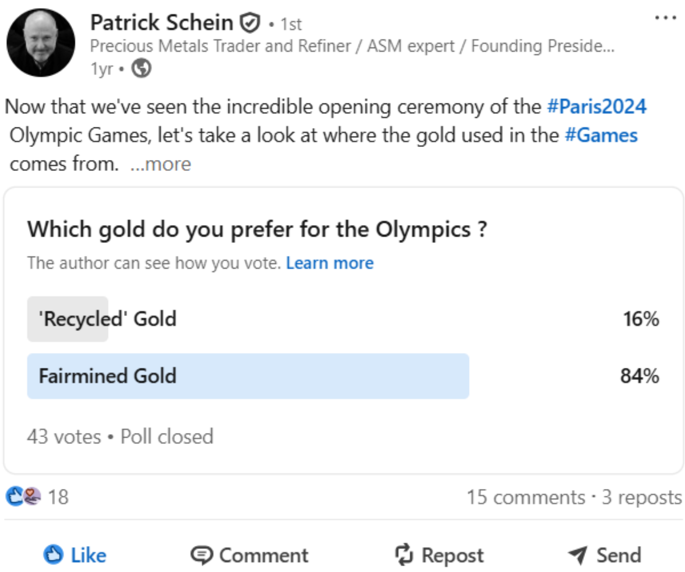

FIGURE 21. RECYCLED GOLD VS. FAIRMINED GOLD POLL. SOURCE: LINKEDIN.

The comparison between Fairmined and recycled gold reminds us of one of the open letter's arguments against recycled gold—that it was encouraging the market to turn its back on ASM. As I have shown in Chapter 3, the industry has recently realised that it cannot continue marginalising the ASM sector, and that there are significant (business, development, and environmental) opportunities in integrating them into the 'mainstream supply chain'. Therefore, the accusation that recycled gold was undermining the collective aim of mainstreaming ASM was a very important one. At the PMIF, for instance, participants once discussed whether certified ASM gold could be considered a *type* of origin that could make the *geographical* origin a less relevant question. One refiner shared the following example to support this idea:

> I import Fairmined gold from Colombia and Peru, and I mix them, because my clients in Japan don't care what mine the gold is coming from. Not because they don't care about the origin, but because they know it is *certified* ASM. Then I just send them a report with all the ASM mines that work with us, and they can choose the mine they want to publicise and tell the story they want about that gold (Precious metals refiner, PMIF, 2023).

The controversy of recycled gold put in evidence that the issue of gold's origin was a matter of 'radical uncertainty' (Callon et al. 2009). As I will show in chapters 5 and 6, the production of ASM gold is such a dynamic and relational process that any attempt to apply risk-management tools to control it may eventually fail. Still, the due diligence framework underpinning the industry's responsible sourcing narrative was based on a logic of risk-management (see Chapter 3). Thus, ASM certification schemes can be understood as an alternative to this risk-based approach. They aim to reduce uncertainty by establishing more direct supply chains that enable ASM miners who follow socially and environmentally responsible practices to access formal markets, while also offering consumers and businesses a more direct way to support ethical and sustainable gold sourcing. Crucially, in becoming transparency intermediaries, they can certify a legitimate origin, eventually making the geographical origin irrelevant. In doing so, they support the idea that what the industry needs is better intermediation.

Nevertheless, certification schemes are also caught up in a geo-racial hierarchy of transparency intermediaries. Racialised Global South initiatives must work much harder than their Global North peers to gain recognition from 'mainstream actors.' And, even within Global South-based certification schemes, there is a racial hierarchy of the labour regime, as the current representatives of what was once a grassroots movement (Oro Verde – Green Gold) are no longer from Afro-Colombian communities but white, urban, and foreign people.

The Alliance of Responsible Mining (ARM), from Chocó to the world?

On its website, the Alliance for Responsible Mining (ARM) presents itself as a 'leading global expert on artisanal and small-scale mining (ASM)' that works to 'transform the ASM sector into a socially and environmentally responsible activity'[40]. The role and history of ARM in the gold industry are essential to understand the workings of the hierarchy of intermediation between and within responsible sourcing schemes. ARM is an example of a bottom-up initiative from the Global South. Their precursor was Oro Verde, an Afro-Colombian ASM organisation aiming to defend their territories from large-scale mining and criminal mining. However, ARM is itself a mediator with global aspirations, striving to sustain recognition in the global hierarchy of transparency intermediaries. Its Fairmined standard certifies, represents, and mediates the relationship between ASM miners from Latin America and the global gold market, and, more recently, they began to expand their operations to Africa.

In an interview, Claudia, one of ARM's founders, told me that everything began around the 2000s with the creation of Oro Verde (Green Gold), an initiative established by two black community councils in the Chocó region (Asocasan and Cocomacoiro) and two local NGOs formed by the first Afro-Colombian leaders who went to university (Fundamojarras and Amichocó). In her narration, Claudia emphasised three things that caught my attention. First, that Oro Verde was the result of many contingent processes like the law 70/1993 that recognised the territorial rights of the country's black communities; second, the incipient demand for ethical and green gold in the international markets; and third, that Oro Verde was the world's first gold certification initiative. 'This is very important Giselle'—Claudia would say—'because you know history is always narrated from the North, so it is very important that you know that ARM was born from that specific history and philosophy of Oro Verde, a scheme that was built bottom-up, and it wasn't like the US or the OECD coming to tell us what to do.'

Eventually, with the help (and mediation) of people like Claudia, a white Colombian woman who did her undergrad studies in a British university in the 70s, and the visionary children of a former minister of mines in the 1990s, Oro Verde was able to establish direct supply chains with jewellery boutiques in London. A few years later, with the financial support and mediation of the Dutch government, ARM was created to scale up Oro Verde and set a standard (Estándar Cero, then Fairmined) that could be applied beyond Chocó. For many years, ARM has been an articulator of ASM representatives across Latin America, drawing attention to the problems concerning the people in the region and bringing together miners, NGOs, and market participants in a regional network to exchange knowledge, experiences, technologies and processes related to ASM.

[40] https://www.responsiblemines.org/en/history-2/

Twenty years later, ARM is still a very important actor in the gold sector. They were actively involved in the most relevant discussions during my fieldwork, and they worked hard to make their voice heard in international instances like the OECD Forum, the LBMA conferences and task force, and the PMIF working group. However, during all this time, the Colombian state has been on the margins of everything they have done. Since the beginning, they have received—and perhaps aspired to receive—much more attention from the international community than from the Colombian state. For example, Claudia recounts with excitement when they established an alliance with Fairtrade UK and exported the first kilogram of Fairmined-Fairtrade gold to the UK:

> 'Giselle, remember that we were an organisation from the jungle in Chocó, we weren't a big NGO like Oxfam or such. We were an organisation based in Envigado, Antioquia (a region in the Colombian Andes), not even in Bogotá (the capital city)'. This alliance was very strategic for us because finally, we were having international visibility.

Importantly, the transformation of ARM into a *global* ASM certification scheme is underpinned by a deeper history of Colombia's geo-racial regime of identity and belonging, where 'lighter-skinned people from the cool, mountainous highlands are presumed intrinsically superior to the darker-skinned inhabitants of the hot, coastal lowlands' (Zeiderman 2025: ix). And, more particularly, it bears the legacy of a history of *paisa* colonialism (see Tubb 2020). Ethnographic work in the Chocó region has documented the widespread presence of *paisas* (white Colombians from the Antioquia region) in the majority black-populated Pacific coast (Jonkman 2025b; Taussig 2004; Tubb 2020). As described by Taussig (2004), paisas' 'indomitable work ethic encourages them to scorn blacks along the coast who have a more relaxed attitude toward life, […] paisas have spread out from their homeland of the Colombian province of Antioquia to colonise much of western Colombia as small farmers or as agile entrepreneurs' (110). As Claudia said, Oro Verde started in the jungles of Chocó, but then, with the creation of ARM, the organisation's headquarters were established in Envigado, Antioquia, and when Estándar Cero and then Fairmined were created, they replaced Oro Verde for good. Anthropologist Peter Wade has analysed to what extent the relationship between the neighbouring regions of Chocó and Antioquia can be understood as one of 'internal colonialism' (González Casanova 1969) In general terms, the concept 'refers to a situation in which an ethnic group, often spatially segregated, finds itself in a structural relationship of subordination to another ethnically identified group, which promotes its own interests in the region' (Wade, 1993, np). Although Wade recognises that the idea of internal colonialism 'might be somewhat incoherent', the concept draws attention to the historical and structural factors that have made Chocó 'a region whose particular culture suffers from the contempt of the dominant ideology, a contempt that becomes a further factor reproducing its position of dependency' (Wade, 1993, np). Thus, it is essential to note that a paisa expansionist logic underlies ARM's worldwide ambition.

During my fieldwork in Europe, ARM was indeed invited to every panel I attended on ASM. They were recognised as relevant ASM experts. In 2016, for reasons that they never publicly explained, they ended their alliance with Fairtrade, and today, both schemes compete in the supply and demand parts of the chain. In 2017, in response to some of the critiques that have been made to certification schemes like high auditing costs and unrealistic technical, and environmental requirements, ARM created the CRAFT Code (Code of Risk-mitigation for ASM engaging in Formal Trade) an adaptation of the OECD Due Diligence Guidance intended to promote progressive improvement in the ASM sector to facilitate their access to formal markets. This Code, however, has not received much attention from the industry's key players. Indeed, at international conferences, ARM representatives consistently remind attendees that the CRAFT Code exists and that its implementation can help address many of the issues the industry is facing with ASM. In other words, the attention ARM receives is more the result of their hard work to make their voices heard than a genuine interest from mainstream actors to fully incorporate their model. Although ARM has indeed extended its influence into key international arenas, like successfully advocating for the use of the term '(i)legitimate mining' over 'illegal mining' in the OECD Guidance, and drawing attention to the needs of ASM miners in the Minamata Convention, recently, they are struggling to maintain such recognition in the global hierarchy of transparency intermediaries. In 2024, ARM only facilitated the sale of a total of 74.12 kg of Fairmined gold to the international market (Alliance for Responsible Mining 2024) compared to 133kg in 2023 (Alliance for Responsible Mining 2023).

Although I was aware of ARM's existence during my fieldwork in Colombia, I never had the chance to meet them there, perhaps because my interlocutors at the National Mining Agency never considered them a relevant actor. I only realised about the very relevant work they were doing in 2023 at the OECD Forum in Paris. One day, when I was catching up briefly with one of ARM's directors after a panel, a Swiss-Colombian man joined us. I learned he was part of a consortium that had just won a bid against ARM to be the implementer of Tierra Dorada, the new USAID ASM project in Colombia[41]. They were having a gentle conversation in Spanish, but I could notice a tense atmosphere. Months later, I learned that USAID selected a Swiss consultancy company over the Colombian organisation to implement the five-year project in Colombia—the tension in the atmosphere was because the Swiss-Colombian man was part of the Swiss consortium. Later in an interview, one interlocutor close to the work of ARM told me it was a shame that international cooperation projects were not supporting and strengthening local civil society organisations that had been working with ASM communities for years, and that have built great experience and knowledge alongside the miners[42]. Ironically, the Swiss were becoming the new ASM experts not only for the international community but in the national context too. But who are the Swiss, and how were they taking up ARMs' place so smoothly?

The Swiss Better Gold Initiative (SBGI), from Geneva to Chocó?

In response to criticism over recycled gold and allegations of suspicious ties to Dubai, Swiss GDL refineries stopped sourcing from Dubai and Africa and launched a responsible gold sourcing project in Latin America—the Swiss Better Gold Initiative (SBGI). SBGI is a public-private partnership between the Swiss Government and the Swiss Better Gold Association (SBGA), a non-profit organisation whose members are Swiss gold supply chain actors such as watch and jewellery makers, banks, funds, and refineries. Founded in 2013, their objective is to establish responsible gold supply chains from ASM mines in Latin America to the Swiss market. They export approximately 3 tonnes of gold per year from ASM mines in Colombia and Perú, and are planning to increase the production to 5 tonnes in 2025 (Swiss Better Gold 2024). Today, SBGI is the leading supplier of ASM gold to the GDL refineries, and it is arguably the only way ASM gold formally enters the gold financial market.

When they first arrived in the region, they got in touch with ARM. They told them they were not aiming to create a certification or a label, but just to establish responsible supply chains for the Swiss market. They supported ARM for a few years with funds to run some of their

[41] USAID, the U.S. Agency for International Development, has implemented numerous projects intended to reduce the impact of illegal mining in the country. Oro Legal (2015-2021) was USAID's largest and most ambitious bilateral initiative in support of artisanal and small gold mining (ASM). In 2023, the Tierra Dorada/Golden Land project was a 20-million-dollar initiative intended to continue the work of Oro Legal until 2027. However, in 2025, it was abruptly cancelled due to the closure of USAID under Trump's administration.

[42] ARM is not the only organisation in Colombia working to support the ASM sector; there is also Fundación Atabaque and the GDIAM (like a Colombian PMIF).

projects, and in the early years ARM was even part of SBGI's verification committee. Eventually, ARM realised SBGI was becoming more of a competitor than an ally. SBGI established a progressive set of criteria comprising 10 basic requirements that enable miners to export to the Swiss market (Step 1) and 17 additional requirements for miners to earn a premium of $ 1 per gram sold (Step 2). During the years of the partnership with ARM, SBGI was able to meet most of the miners that were on track to obtain the Fairmined Standard, so when SBGI launched their two-tier verification scheme, miners preferred to go for it rather than to continue working with ARM, because SBGI's verification scheme was much laxer than ARM's third-party certification scheme.

Indeed, a handful of interlocutors in other parts of the valuation chain told me in interviews that they were concerned about the potential lack of transparency of SBGI. Primarily, because SBGI is a *two-party verification* scheme which, in contrast to *third-party certification* schemes, does not involve the participation of an external auditor, making the whole process quicker and cheaper, but, in the eyes of some of my interlocutors, questionable. Furthermore, another interlocutor also told me that SBGI was sourcing ASM gold not directly from ASM miners, but primarily through alliances with large and medium-scale mining companies that had agreements with ASM miners to aid them with the processing of their ore.

Crucially, as a public-private initiative, SBGI is backed by a bilateral agreement between Switzerland and Colombia. This agreement is not limited to the creation of direct supply chains with the Swiss market but is also meant to give technical assistance to ASM miners, promote their financial inclusion, offer training to government officials, and provide policy advice on gold production and trade. Certainly, SBGI took off very quickly in the region not only for the support of the international community, but for the legitimacy Latin American governments gave it themselves. In Colombia, similarly to the racialised perception of *paisas* as better workers than chocoanos (Jonkman 2025b; Taussig 2004; Tubb 2020) it is commonly believed that international organisations are more knowledgeable than national ones. Ironically, Colombia's internalised geo-racial ordering that gave rise to ARM was now playing against them.

In this section, I examined the entangled history of ASM certification and verification schemes to analyse how they are all tangled in a geo-racial hierarchy of transparency intermediaries. This is an expression on a paradox documented by analyses of Fair Trade which have noted that 'on the one hand [Fair Trade] presents itself as a critique of mainstream trade relationships and as an attempt to reengineer relationships between consumers and producers, while on the other hand it works through, and is located well inside, mainstream [and racial] capitalist trade relationships (De Neve et al. 2008: 15).

Contradictory perspectives on the UAE

For mainstream actors such as GDL refiners and international NGOs, Dubai was perceived as an opaque place that was threatening the reputation of the global gold market. Relations with refineries in Dubai were nothing to be proud of but rather something to be avoided or, in many cases, concealed. However, for my Colombian interlocutors, Dubai represented an opportunity to join a global market, a market of the future. These contradictory perspectives on the role of the UAE—and of Dubai's non-GDL refineries in particular—illustrate the hierarchical orders that rank the labour value of supply chain actors along the valuation chain of gold (see Bear 2013; Rofel & Yanagisako 2019; Zeiderman 2025 for similar analyses on hierarchical valuations of labour).

In late 2021, the Colombian government participated in Expo Dubai, the universal exhibition that took place in the UAE. Colombia's National Mining Agency (NMA) publicised the event with the slogan 'Colombia, Beyond El Dorado Mining Legend.' At the time of the exhibition, I was exploring the possibility of getting an internship within the NMA. After having vanished for about a month, my main contact there explained that she had been swamped preparing for Expo Dubai. I quickly turned to the government's official social media accounts and found that they were filled with messages about the upcoming event. At least three months before the event, ad pieces started circulating announcing Colombia's participation in the exhibition, with phrases like: 'join us in writing a new mining legend' or 'let's connect with the market of the future' (Figure 22).

FIGURE 22. COLOMBIA, BEYOND EL DORADO MINING LEGEND POSTER. SOURCE: NMA'S X ACCOUNT.

One could feel the excitement of the NMA president at the time, Juan Miguel Durán, when he tweeted the following message on the first day of the Exhibition:

> ‘It is an honour for us as representatives of Colombia to the world to open the doors of @expo2020dubai in the company of the Minister of Finance, Ambassador of Colombia and the President of ProColombia. So far, the only country to have received this recognition 👏.’

Indeed, the Colombian delegation was chosen to literally open the doors of the Exhibition at the inauguration event. This recognition was publicised on the social media accounts of Expo Dubai with an emotional video and a voiceover emphasising that Colombia was opening the doors from South America to the UAE, to the Middle East, Africa and Southeast Asia (Figure 23).

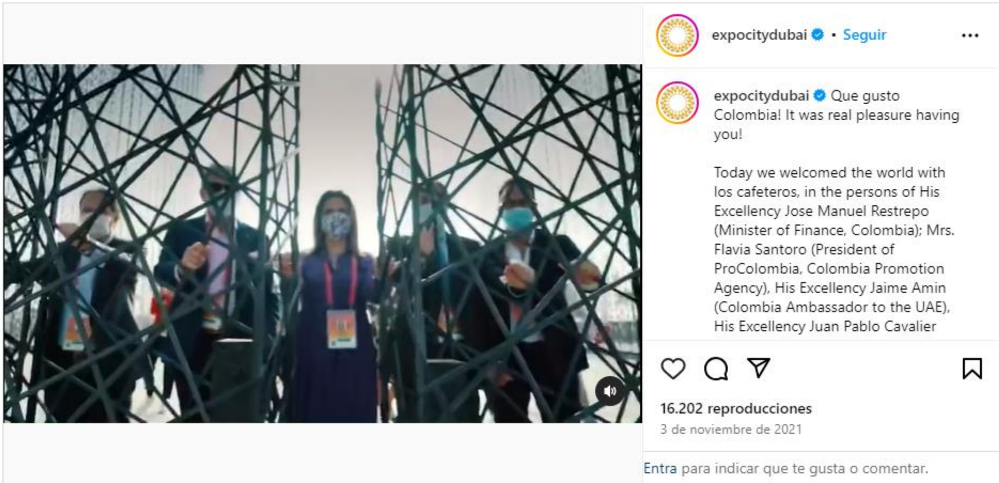

FIGURE 23. VIDEO OF COLOMBIAN DELEGATION OFFICIALLY OPENING THE DOORS OF EXPO DUBAI. SOURCE: EXPO DUBAI'S INSTAGRAM ACCOUNT.

Like other contemporary usages of the El Dorado Legend documented throughout this thesis, the NMA was intending to re-signify the indigenous legend that triggered the violent gold rush at the time of the American conquest. Through a romanticisation of the El Dorado Legend—or an interesting form of ethical value sourcing (see Chapter 3)—the NMA portrayed Colombia as the gold paradise explorers never found. Crucially, the aim was not only to publicise the country as an attractive investment destination for large-scale mining projects, but to consolidate Colombian gold exports to the UAE.

The opposing perspectives of my interlocutors in Colombia, Switzerland, and London with respect to Dubai are evidence that the actors involved in gold extraction, commercialisation, accumulation, and speculation form a 'racially hierarchised labour regime' (Tilley & Shilliam 2018: 541)—or in terms of Zeiderman (2025), a geo-racial labour regime—the labour across the chain is unevenly valued according to the country of origin of people and the metal. The Colombian state sees in Dubai an opportunity to meet its aspirations to join a global and modern market, whereas financiers and NGOs in the Global North render Dubai as an illegitimate actor that needs to be regulated. In fact, the vocabulary commonly used to describe actors along a supply chain is telling of this hierarchical order: upstream (miners), chokepoint (refineries), downstream (demand). These terms, a metaphor of a river flow, suggest that there is only one possible direction for the flow of commodities.

Conclusion

Ultimately, what the controversy around recycled gold shows us is that the valuation chain of gold is not a bounded space—any attempt to control it will end up creating a new 'detour,' or as Patrick Schein has claimed on LinkedIn: 'El oro es como agua, siempre fluye hacia las zonas de menor resistencia!' (Gold is like water; it always flows to areas of least resistance!) Patrick Schein, LinkedIn post, October 2024). Gold will always overflow because of its physical properties and high economic value. Thus, initiatives to control the flows of gold inevitably end up making moral judgements about the legitimacy of intermediary actors. Indeed, as I have shown, transparency efforts do not aim for disintermediation, but rather for improved intermediation in a moral sense.

In this chapter, I analysed the friction (Tsing 2005) that characterises gold's 'logistics space' (Cowen 2014) with a focus on how the racialised and national qualities of people influence the quality of their labour as transparency intermediaries. Logistics is a decisive dimension of supply chains precisely because its work is to make them appear a 'seamless' process. Although this process is made possible by an entire network of infrastructures, technologies, workers, and finance, its power relies upon the invisibility of all this work (Cowen, 2014). In words of anthropologist Anna Tsing commodity chains are full of *friction*, 'yet, the commodity must emerge as if untouched by this friction' (Tsing 2005: 51). The controversy around recycled gold shows that the apparent seamless logistical and technical work of collecting and refining natural resources is a politically and morally contentious practice. Disruption—or controversies questioning the role of logistical actors—plays a key role in revealing the often-hidden labour and friction involved in making markets and logistics look smooth and seamless (Appel 2019; Bowker & Star 2000; Cowen 2014).

Importantly, the questioned legitimacy of recycled gold underscored the 'public secret' about the uncertainty of gold's origins. For Taussig (1999), public secrecy is not just about hiding knowledge but about managing visibility and the circulation of truth. Power thrives not only on what is concealed but on the tension between knowing and not-knowing, and between recognition and enforced silence. For years, the problem of the uncertain origin of gold was addressed as a risk-management issue (chapter 3). However, the debate around recycled gold put into evidence the fact that risk cannot be confused with uncertainty: 'Risk designates a well-identified danger associated with a perfectly describable event or series of events' while uncertainty is when 'we know that we do not know, but that is almost all that we know' (Callon et al. 2009: 21). The use of the term recycled gold was so strongly rejected by ASM supporters primarily because it was disguising the uncertainty about gold's origins with a sustainability discourse. In a way, the labour of attraction of transparency intermediaries was a way to counteract what Taussig has described as the 'labour of the negative'—the work of denial and concealment that maintains uncomfortable or destabilising truths in the realm of the unspeakable (21).

Moreover, the controversy over the legitimacy of recycled gold shows that actors along the chain have different, and often conflicting, visions of how and why the value of gold should be purified. Good Delivery List (GDL) refineries, found in the label of 'recycled gold' a way to meet the responsible and sustainability promises of the industry, but in doing so, they were deliberately bypassing the problem of the origin. On the other hand, the critics of recycled gold believe that sourcing gold from ASM origins was the truly ethical and sustainable choice. However, for ASM gold to become ethical, it needs to be certified by transparency intermediaries as either Fairmined, Fair Trade, or Better Gold, and, certainly, as Good Delivery. In sum, the work of transparency intermediaries can also be understood as a labour of attraction towards gaining recognition as moral intermediaries in the capacity to contribute to the moral purification of gold. In doing so, however, they do not challenge but reinforce the racially hierarchized audit regime that sustains the extractive-logistics-finance nexus (Mezzadra & Neilson, 2013). This is important because it points out that even though the qualities of a product are not properties which already exist but need to be defined by 'calculative devices' (Callon & Muniesa 2005) the valuation of gold is not a process of collaboration and coordination between market participants (cf. Callon et al. 2002) but the result of an uneven and conflicting process of purification.

Finally, this chapter contributes to an examination of how the 'extraction-logistics-finance nexus' is built and maintained (Mezzadra & Neilson 2013) amid the uncertainty produced by controversies (Callon et al. 2009). While extraction is a practice commonly related to processes of dispossession and exploitation, logistics and finance 'are driven by and produce fantasies of smoothing out the world by eliminating friction and resistance' (Mezzadra & Neilson 2015: 7). Looking at the nexus between extraction-logistics-finance as this thesis does allows us to see 'the "extractive" dimensions of finance and logistics as well as the calculative and immaterial conditions of extraction' (2015: 5) and, importantly, how they relate to each other in a racially hierarchised valuation chain.

In chapters 2 and 3, I analysed the labour of attraction of my interlocutors in the financial sphere. In this chapter, I explored the role of transparency intermediaries in the logistics space. In the following two chapters (Chapter 5 and 6), I draw on my fieldwork in Colombia to examine the labour of attraction in an extractive context. Right after Expo Dubai, I was accepted as an intern at the National Mining Agency (NMA), where I observed and participated in the implementation of a traceability project aimed at resolving the uncertainty about the origins of gold during Colombia's political transition to its first left-wing government.

Chapter 5. The promise of traceability

It was a hot and humid afternoon. Together with a team from the National Mining Agency (NMA), we were visiting a compraventa (gold shop) in Caucasia—the mining town with the most registered subsistence miners in Colombia—to learn about the functioning of a private traceability software. A woman named Jenny approached the counter to sell 21 grams of gold dust (a significant amount, considering that subsistence miners in Colombia are only allowed to extract up to 35 grams per month). The woman at the counter asked Jenny to provide her ID card, took her picture and captured her fingerprints. Then she entered the data into the traceability software, which made a series of automated queries in databases of the ANM, the police, and other control agencies, to corroborate that Jenny was indeed registered as a subsistence miner and that she did not have a criminal record that would prevent her from selling gold in the country. After validating all the information, the software accepted the purchase, and the employees of the compraventa took the gold to the back of the facility to melt it down and determine its purity level.

As Jenny waited at the counter, I asked her how many days it had taken her to extract that amount of gold, to which she replied: 'No, I am not a miner. I just help my husband sell the gold because he doesn't have the papers.' I nodded and asked her again how long it had taken her husband to extract the 21 grams of gold. 'About four days'—she replied. After hearing her answer, I immediately turned to my companions to see their reactions, as I was sure they had all heard what Jenny had just told me. However, no one seemed to be surprised, and the transaction concluded successfully. The traceability system issued a certificate of origin confirming that Jenny had indeed legally extracted the 21 grams of gold. Those 21 grams will be melted together with gold from many other sources to form small ingots that will be sent to *comercializadoras internacionales* (gold exporting companies, C.I.s) in the Colombian cities of Cali, Medellín or Bogotá. The C.I.s would then export the gold to refineries in Switzerland, the United States, India, or the United Arab Emirates, where it would be converted into bullion for investment (49%), jewellery (44%), or small pieces for technological use (7%) (World Gold Council2024).

For the last 15 years, investors, jewellers and technology companies—also known as downstream actors—have seen their reputation affected by the threat of 'supply chain contamination' with 'dirty gold' from criminal, illegal or informal mining. The aim to integrate ASM gold into the global gold financial market, as examined in Chapter 3, has created new challenges for the valuation of gold as a pure, risk-free, and stable financial asset. As the case of Jenny illustrates, the ASM sector is a socially complex practice that is sustained by intimate relationships like Jenny's with her husband, relations of reciprocity or alliance between miners, or coercive relations between criminal groups that extort miners and control their territories. Downstream actors perceive such complexity as a threat and struggle to control the chaotic reality in order to differentiate between 'legitimate' and 'illegitimate' gold. In other words, the industry does not want all ASM gold; they want ASM gold that can add moral value and does not compromise the reputation of the entire valuation chain. For ASM gold to add value to the industry and to gold itself as a pure and ethical substance, a pure origin must be traced. Thus, industry, multilateral organisations, NGOs, and national governments have found the idea of traceability to be a promising solution for the moral purification of gold.

In this chapter, I analyse how the uncertainty regarding the origin of gold was attempted to be resolved with the promise of traceability. I delve into the labour of attraction of Colombian mining authorities, bureaucrats, engineers, and entrepreneurs as they strive to bring to life a mineral traceability platform, aiming to separate gold from exploitative social relations and give it financial value. I argue that traceability is a form of speculation that uses technologies of imagination to support practices of legitimation and accumulation along gold's valuation chain. The promise of traceability creates the illusion of defetishisation: 'a wish to demystify what the market tries hard to keep hidden' (De Neve et al. 2008: 8) and judge the commodity not merely in terms of its final characteristics but also in terms of the production processes through which it is created (Hudson & Hudson 2003: 421). It attempts to foreground the social relations behind gold extraction and circulation, but it ends up devaluing and undermining the relations that enabled gold extraction in the first place. As one of my informants would define it: 'traceability is the capacity to tell stories with data'—the problem is that in order to generate such data, traceability infrastructures either flatten or bypass the social, constructing stories that allow for the moral purification of gold, but that rarely correspond to reality. Ultimately, traceability is an attempt not to improve the conditions of gold production but to purify actors along gold's valuation chain and the global reputation of Colombia as a legitimate country of origin.

Examining the Colombian case is relevant precisely because the LBMA Task Force considered the country to be 'the most dangerous to engage' and did not shortlist it for further engagement within their ASM strategy (Chapter 3). Indeed, in Colombia, a country with a highly complex social context, the possibility of finding a pure origin is utopian and contradictory. Yet, as utopian or contradictory as it may be, the promise of traceability is productive and beneficial for almost all the actors of the chain. In a quite Fergusonian fashion, I explore the consequences of a failed, yet productive project (Ferguson 1990). I show how the promise of traceability (1) enables practices of speculation and accumulation of private and multilateral organisations from state projects, (2) increases financial actors' power over the ASM sector, (3) helps purify the gold financial market and the global reputation of nation states as the point of origin of resources, and (4) reinforces a racialised relation between actors in Colombia and the UK gold bullion market.

Traceability, a speculative practice of purification

According to the Cambridge Dictionary, traceability is 'the ability to discover information about where and how a product was made.' Traceability infrastructures, as Power (2019) has termed them, are instruments for discovering the temporal and spatial origins of people and objects, with the primary purpose of controlling their flow. The passport, for instance, has been a long-time technology for tracking citizens' mobility. With the emergence of new technologies such as digital fingerprinting, facial recognition, GPS tracking, DNA testing, and blockchain, new traceability infrastructures have emerged as possibilities to track the movement, ownership, and origin of food, minerals, people, and genes, among others. Industries and consumers are increasingly focused on knowing the precise origins of the food they eat, the clothes they wear, or the minerals they use. Traceability has emerged as a new mode of value chain governance, designed to enhance the credibility of production by generating information about a product's origin (Eden 2010; Mol & Oosterveer 2015). Yet the production of such data is far from straightforward, and it is never politically neutral (Villanueva Ubillús & Vila Benites 2023). More specifically, the promise of traceability in the world of mineral supply chains is part of a 'hype' driven by an emergent 'new political economy of mineral extraction' based on principles of sustainability, conservation, and transparency (Seagle, 2012 in Calvão & Archer, 2021).

Over the last few years, there has been an increase in traceability initiatives aimed at resolving the uncertainty surrounding the origin of gold. Scientists, entrepreneurs, NGOs, and governments have been launching and testing all kinds of ideas, from DNA liquid marker with nano particles carrying provenance data (Haelixa, a Swiss traceability company), digital twins of gold bars encrypted on a blockchain (aXedras, a Swiss traceability company), machines capable of determine a geographical origin from geochemical compositions of gold impurities (Geo forensic Passport, a traceability initiative developed in a Swiss university with the support of a Swiss GDL refinery; and Huella digital del oro, a Colombian initiative developed through an alliance between a Colombian public university and Colombian Geological Survey), among others. However, most of my interlocutors along the chain would accept that achieving full traceability is an unrealistic aim due to the material properties of gold and the particularities of its supply chain. Paradoxically, the physical properties that make gold an attractive financial asset (i.e. purity, malleability, and indestructibility, as analysed in Chapter 2) are the same that make its origin almost impossible to trace. As exemplified by the case of Jenny from the introductory vignette of this chapter, gold from uncertain origins enters the supply chain in the very first node. It is a malleable substance that can be melted and mixed infinitely without ever losing its value. In fact, as Bolay (2021) has noticed, 'the technical purification towards obtaining fine gold inevitably goes hand in hand with erasing traces of its earlier states that would precisely give credence to claims of ethical integrity' (88). In other words, gold's most praised properties play against the market's ambition to trace its origin.

Despite the difficulties in tracing the origin of gold, most of my interlocutors work to make traceability an attractive solution to clean up the market's reputation. This is because, in practical terms, gold traceability is not much about discovering information on where and how a commodity was made, but it is rather a 'technology of imagination' (Bear 2020a) that helps actors along the chain demonstrate that they have not been 'contaminated.' In other words, traceability schemes are 'sieving mechanisms,' defined by Paul Kockelman (2013) as devices that separate desired from undesired materials. Crucially, as my ethnography shows, the distinction between 'desirable' and 'undesirable' involves an ethical imagination of social, racial and gender differences (Bear 2020a). The promise of identifying and segregating pure from impure origins of gold establishes clear distinctions between surveillers and the surveilled (Kruk et al. 2024; Smith 2021), reinforcing an invisible privilege of whiteness as technology, transparency and benign moral projects. Thus, the promise of finding a pure origin of gold can be understood as a speculative practice of purification, 'a form of affective, discursive and physical labor that evokes and then resolves the uncertainty and instability of value' (Bear 2020b: 48). An analysis of traceability as a speculative practice allows for the understanding of its emergence as an uneven, specific, and contingent process entangled with popular ethics (Dunn 2005; Weszkalnys 2011 in Bear 2020b) and moral attitudes of belief and doubt (Maurer 2002; Miyazaki 2007; Zaloom 2004 in Bear 2020b).

Before examining the construction of the traceability promise in Colombia, I would first like to give the reader a sense of how global gold authorities, such as the LBMA and the WGC, were simultaneously conceiving traceability as a promising solution, arguably without directly influencing policymaking in Colombia. This comparison allows me to explore purifying degrees of whiteness in the valuation chain, both outside and within Colombia, and how the traceability dream emerges from a contingent encounter between personal, institutional and national ambitions and aspirations, which nevertheless fits into a broader structure of racial capitalism (see Muehlebach, 2023).

Squeezing out illegality: traceability's imperialist dream

In 2022, at the LBMA-WGC Sustainability and Responsible Sourcing Summit, Ruth Crowell, CEO of the LBMA, and David Tait, CEO of the WGC, jointly launched the Gold Bar Integrity project. According to their presentation, the purpose of the project was to convene mining corporations, refineries, and technology companies in a pilot to create a 'digital global ecosystem for gold' using traceability technologies that could address the main concerns of gold consumers—whether their gold has been responsibly and sustainably produced, where their gold has come from, who produced it, and whether it is pure and authentic (Figure 24).

FIGURE 24. ESG AND SUPPLY CHAIN INTEGRITY CONCERNS IN GOLD. SOURCE: WGC-LBMA'S 2022 SUSTAINABILITY AND RESPONSIBLE SOURCING SUMMIT.

A year later, in a YouTube interview about his personal life and his *vision* for the future of the industry, David Tait stated that the project would create a database for 'good gold' through a ubiquitous method that could be easily expanded:

> The London closed ecosystem as we know it is pretty bulletproof as it is, but it can't stay that small. We need to *extend it to the globe*. My hope is that this ecosystem will grow and grow […] outside that ecosystem over time the value of your gold will decline, because the market for that gold will decline. We will eventually *squeeze out illegality*.[43]

According to Tait, one of the objectives of the Gold Bar Integrity project is to enable the *expansion* of the London ecosystem, which he considers to be 'pretty bulletproof.' However, as examined in Chapters 3 and 4, and reiterated in this chapter with the example of Jenny, the London market is easily 'contaminated' with gold from uncertain origins. Either 'good' or 'dirty,' gold will always be gold, and it ultimately finds its way into the chain. The London ecosystem, then, 'bulletproofs' itself by expanding its moral schema that differentiates *desirable* gold from *undesirable* gold. In other words, the Gold Bar Integrity programme is a traceability promise aiming to extend an ethical certainty of what global gold authorities consider to be 'good gold' to other parts of the globe not yet aligned with this moral schema—namely, CAHRAs or those countries where 'risky' and 'dirty' gold was being produced (Chapter 3). Although 'dirty gold' and 'good gold' can only be separated in a speculative and imaginative realm, the promise of their separation and purification is in itself a 'future-oriented action that reproduces [unequal] relations of circulation, labour and social reproduction' (Bear 2020b: 48).

Notably, these relations are underpinned by an implicit association between whiteness and notions of purity and benevolence. As I demonstrated in chapter 3, ASM miners are racialised, but only because of the obsession of a majoritarian white scientific, entrepreneurial valuation chain participants with finding pure gold. According to Kockelman (2013) 'separating substances is not an end in itself, but a means for something else' (35). In the case of gold, the ultimate purpose of the traceability promise is to expand the power of the global gold market to purify the valuation chain by 'squeezing out illegality.' The idea is that with enough controls and strict measures, actors of the 'mainstream supply chain' would be able to stop 'dirty gold' from contaminating them. Thus, eventually, illegal actors would be left with no market because 'dirty gold' would not be acceptable anywhere in the

[43] https://www.youtube.com/watch?v=Y8OT283VHsY

world. The problem is that the physical properties of gold that make it such a valuable substance remain the same, no matter whether it is classified as 'dirty' or 'good.' What should count as 'dirty gold' and, by extension, who is a 'dirty gold producer' should be first standardised through responsible sourcing standards (Chapter 3) to allow the introduction of a traceability technology that can succeed in squeezing those racialised actors out.

The personal trajectories and social relations of influential people in charge of these policies influence this process of classification. Tait's claims were part of a larger YouTube interview that addressed his 'inspirational journey' before becoming the WGC CEO. Tait is widely known in the UK for his five successful Mount Everest summits (one of these carrying a flag given to him by Her Majesty the Queen) to raise money for the NSPCC, the National Society for the Prevention of Cruelty to Children. His commitment to this cause emerged from the abuse he himself suffered as a child. In the interview, Tait says all the suffering and abandonment made him 'the perfect trader' because he would not be afraid of taking significant risks. Thus, his public persona, both as a British philanthropist and successful banker, influenced the approach of the Gold Bar Integrity project. The implementation of this technology—he would say—was an urgent matter, 'because in places like Venezuela, kids are being used in mines, and if they steal a gram of gold, they get their arms and legs chopped off.' Influenced by his personal trajectory, moral beliefs, and privileged position, Tait constructs an ethical certainty that he then aimed to expand—like an empire—over those he perceived as immoral subjects.

As a form of resistance to the industry obsession of finding a pure origin, and drawing inspiration from the GENS collective (Bear et al. 2015), I prefer to analyse the promise of traceability not as emerging from a singular origin point from which an overarching logic is extended down, but rather as constructed through an unstable and contingent network within a broader structure of racial capitalism (Muehlebach 2023). In the remainder of this chapter, I focus on the construction of a traceability platform in Colombia. I examine the labour of attraction of different actors, including bureaucrats, engineers and entrepreneurs, as they work on the dream of developing traceability software programmes that help make Colombian gold attractive to the financial sector. Importantly, I show that the traceability promise in Colombia was not a direct outcome of international discourses, such as those of the OECD, the LBMA, and the WGC, but rather the result of a contingent convergence of personal and national aspirations.

Tracing gold in Colombia

During 2022 and part of 2023, I had the opportunity to be part of the Colombian National Mining Agency's traceability project, first as a doctoral intern within the entity and then as a Communication and Articulation Officer at INNOVATION GROUP, the company responsible for executing the project. For more than a year, the project became my field site. I observed, participated, and analysed the everyday life of those who were building the promise of traceability in Colombia. Significantly, the traceability promise was not developed by a public entity but by a loose collection of entrepreneurs, local politicians, and multilateral organisations in outsourcing and speculative relationships with the state. In Colombia, as in other countries in the Global South, the IMF's structural adjustments in the 1980s and 1990s promoted the development of large-scale state projects implemented through public-private partnerships. Neoliberal policies introduced in the 1980s and the 1990s have created flexible bureaucracies and entrepreneurial governance, which have resulted in what Laura Bear (2011) has called 'speculative planning.' In Colombia, speculative state promises like the traceability project do not aim to generate state revenue like in the Hooghly River, but they are indeed 'driven by the new financial speculations of public deficit, they seek to stimulate entrepreneurial speculation, and they have highly uncertain outcomes' (49). Although these public-private speculative promises do not directly generate state revenue, they contribute to cleaning the country's reputation as a legitimate point of origin.

Like the WGC and the LBMA, my Colombian interlocutors also found traceability to be a promising solution for controlling the complex interrelation and interdependence between illegal and informal gold extraction in the country. Interestingly, the reasoning of my Colombian interlocutors did not differ much from the WGC-LBMA's objective of 'squeezing out illegality.' The traceability promise in Colombia, as I examine it in the remainder of this chapter, was intended to gather as much data as possible about the seemingly 'legal' circulation of gold within the national territory, and then use data analytics and artificial intelligence to identify and target illegal actors. Importantly, both my London and Colombian interlocutors were using traceability to avoid 'supply chain contamination' and regain the trust of financial actors. A key difference between the two, however, was that traceability would help the WGC and the LBMA convince financial actors that *gold* was an attractive investment, whereas for my Colombian interlocutors, traceability was a means to make themselves more attractive to the actors higher up in the hierarchical valuation chain. Crucially, this difference in the purposes of European and Latin American traceability promises is evidence of colonial legacies underpinning an extractive racialised present.

The 'problem of ASM' or the attempts to govern a racialised sector

Within Colombia, the history of ASM governance is also a history of racialisation deeply influenced by the country's colonial history. During the conquest of America, the Spanish sought desperately for El Dorado, a mythical city of gold mentioned in a Muisca legend. The obsession with El Dorado sparked centuries of bloody expeditions by European explorers. Although this mythical city was never found, the Spaniards and other European colonisers built an entire mining enterprise with indigenous and African slaves that primed the pump of the capitalist take-off in Europe (Taussig 2004).

In the present, 83% of Colombian gold is still extracted by ASM miners (Ministry of Mines and Energy 2011). Most of these miners are descendants of enslaved people and Indigenous communities tied to colonial-era mining contracts, and many of them are migrants from other regions of Colombia or from neighbouring countries like Venezuela. Although the last mining census was conducted almost 15 years ago, these figures have certainly not decreased. Instead, ASM gold extraction has skyrocketed in tandem with the gold price (which has almost tripled in the last decade), and large-scale mining (LSM) projects have not been able to secure the necessary social and environmental licences to enlarge their operations in the country.

Despite the significant role of the ASM sector in the national production of gold, the Colombian state, influenced by international policies, has stigmatised and marginalised them, thus contributing to their racialisation. In 2001, following the recommendations of the International Monetary Fund (IMF),[44] the government issued the current mining code with the support of the Canadian[45] international cooperation (Law 685 of 2001). This Mining Code prioritised the attraction of foreign investment for the development of large-scale mining (LSM) projects, granting these companies mining titles over large areas that were traditionally exploited by ASM communities. This led to the criminalisation of the ASM sector, and the increasing conflicts between ASM miners, LSM companies, and environmental activists seeking to prevent mining activities altogether (Echavarría 2014).

Amidst a context of peacebuilding efforts, and driven by the commitment to make Colombia a member of the OECD, the government of Juan Manuel Santos (2010-2018) implemented

[44] The deregulation of the economy and the stimulation of the exploitation of the country's natural resources through the attraction of foreign investment.

[45] Most large-scale mining companies operating in Colombia are Canadian or listed on the Toronto Stock Exchange.

measures intended to decriminalise the ASM sector. Consequently, the language of *illegality* gradually shifted to that of *informality*. In 2016, the category of 'subsistence mining' was created, and the work of ASM miners was recognised as a legitimate activity defined by the law as 'surface-level extraction involving the gathering of sand, gravel, precious metals, or gemstones' (Decree 1666 of 2016). Currently, miners falling under this category do not require a mining title to be legal. However, they are limited to extracting up to 420 grams of gold annually (or 35 grams per month) and are prohibited from using any mechanised means of extraction.

Notably, these mining policies are underpinned by racialised imaginaries that cast ASM miners' desire to extract gold as excessive and illegitimate, and their hopes to scale up their mining operations as proof of their greed. To keep pace with the global demand for gold bullion and the gold price (Chapter 2), ASM miners have shifted away from traditional means of extraction, such as using *bateas* (wooden pans) and ancestral plants to separate gold from other metals, to relying on large machinery like dredges and backhoes and toxic chemicals like mercury or cyanide (Jaramillo 2020; Jonkman 2025b; Tubb 2020). Consequently, most ASM miners oppose the definition of 'subsistence mining' as they feel that, instead of recognising the significance of the ASM sector, it condemns them to a precarious livelihood. In fact, in a mining strike in 2023, ASM gold miners contended that they did not wanted to be 'condemned eternally and for the rest of their lives to the use of a *batea* and a shovel in the exercise of small and medium scale mining activities, which favours the few but large economic conglomerates in the extraction of the riches of our lands' (Comité Pro Paro Minero 2022). Typically, ASM miners hope to scale up their operations and secure a small-scale mining title in association with their neighbours or family members. However, under the eyes of the state, they should only mine gold to merely survive.

The informal nature of ASM makes the sector particularly vulnerable to exploitation by organised crime groups, often referred to as BACRIM (Bandas Criminales), and illegal guerrilla groups such as the National Liberation Army – ELN, the dissidents of the demobilised Revolutionary Armed Forces of Colombia – FARC, and the Clan del Golfo, one of the current dominant criminal groups in Colombia (Egin 2023). The participation of criminal actors in the gold business takes a wide range of forms and extends throughout the entire supply chain. They get involved in the business either directly, by allocating capital and labour to mining operations conducted by them or their partners (Massé & Camargo 2012; Rettberg & Ortiz-Riomalo 2016) or indirectly, through the extortion of small, medium or large-scale miners (Giraldo Ramírez & Carlos 2012; Gómez Buendía et al. 2003; Rettberg et al. 2014; Rettberg & Ortiz-Riomalo 2016).

Additionally, the aim to decriminalise and enhance controls over the ASM sector had another very problematic consequence. The requirements for a subsistence miner to legally mine and sell gold in the country were relaxed, and criminal groups seized the legal figure as a means to legalise gold from illegal and criminal operations. In 2020, the National Mining Agency (ANM) created GENESIS, a registry driven by the collective global obsession to determine the true origin of gold, but that ironically ended up blurring even more the provenance of the mineral. From then on, subsistence miners only need to obtain a permit issued by the mayor's office, which allows them to legally mine and sell gold (Resolution ANM-623 of 2020). Subsistence miners registered on GENESIS are required to declare the town where the gold was mined. Still, this declaration does not tell us much about gold's true origin, because anyone can be registered as a subsistence miner—like Jenny, who sold on behalf of her husband. In other words, we will never know the real reason why Jenny sells the gold that her husband mines; whether it is simply because he is a Venezuelan immigrant, who cannot be recognised as a subsistence miner in Colombia, or whether he is a member or ally of a criminal group which regularly forces non-miners in mining towns to register as subsistence miners to help them legalise their criminal gold. Either way, the traceability promise kept alive the hope that someday we will be able to know.

The Mineral Traceability Platform

The dream of creating a public mineral traceability platform in Colombia started in 2020, with a pilot project explicitly designed to address 'the problem of ASM gold' (MME's functionary, pers. Comm., 2022). It was conducted by the Ministry of Mines and Energy (MME) and financed with a loan from the Inter-American Development Bank (IDB). During the pilot, a foreign software development company was hired to design a platform capable of recording gold transactions in real time. In theory, the system would register gold purchases and would link them to miners' personal data, such as their identity card, fingerprints, and photo, and automatically verify in national and international databases that miners were authorised to mine and sell minerals in the country. After the buyer registered the transaction, the seller would receive an email with a one-time password, which they would have to provide to the buyer to prevent impersonation. The gold purchase would be recorded in a database, and a unique origin code would be assigned to it. This 'unique code of origin' would then enable the mineral to be tracked and traced until it is exported. The reporting of gold transactions would be made mandatory in the national territory. The NMA would monitor the entire ecosystem of gold transactions in real-time and utilise data analytics and artificial intelligence to detect suspicious activity, such as forgery, money laundering, and other related offences.

Once the pilot was over, the idea was to create a traceability system that would work for other mineral chains such as coal, emeralds and construction materials. However, due to a combination of events, including the COVID-19 pandemic and political interests during an election campaign year, the traceability project lost momentum and was gradually hindered by bureaucratic inefficiency. By the end of 2021, most of the project's budget had not been spent. In Colombia, when public funds are not spent at the end of a fiscal year, they must be returned to the national treasury. A common practice to resolve this situation is to transfer the funds to multilateral organisations for execution, thereby marking the budget as spent. And so it happened. The NMA signed an agreement with the Organisation of Ibero-American States (OEI), a multilateral organisation comprising 23 member states of Iberophone nations in Europe and the Americas. The OEI hired an unnecessary, inexperienced and mysterious consultancy company, which ended up outsourcing the work to INNOVATION GROUP, the consultancy company that had been involved in the design of the platform since its inception. Although being the company with the most experience in the topic, INNOVATION GROUP ended up at the lower node of the hierarchy of intermediaries—a situation reminiscent of how transparency intermediaries were organised in other parts of the valuation chain (see Chapter 4).

The fact that the development of the Traceability Platform was in charge of a multilateral organisation, which outsourced the work to a digital innovation consultancy company, made the traceability project an arena for speculation, enabling public-private partnerships to gain control over public resources and accumulate capital from state funds. Indeed, the public-private partnership was built under the premise that the state was incapable of innovating without the support of the private sector. The core of the agreement between the OEI and INNOVATION GROUP was to implement a Sandbox, an 'innovative methodology' to test the Traceability Platform with 'actors of the mining ecosystem' (private companies) in Colombia and give advice for the regulatory process. Since the 2020 pilot project, the Traceability Platform has been conceived under the premise that a public entity was not able to manage such a complex and ambitious technological infrastructure. Thus, the design of the platform envisaged the participation of private technology companies that would collect data on mineral purchases through their own software programmes and transfer it to the Traceability Platform.

One of my primary responsibilities in INNOVATION GROUP was to organise weekly virtual events that convene miners, traders, and technology companies in Colombia to inform them about the traceability project and invite them to participate in a 'Regulatory Sandbox'. During these online events, Adrian, the founder and director of INNOVATION GROUP, would introduce the traceability project as a business opportunity for private technology companies that could apply to become Technology Operators for the Traceability of Minerals (TOTMs) and charge a fee to comercializadoras internacionales and compraventas for the use of their software programmes. He would love to explain the role of the TOTMs through a car metaphor: 'we built the engine and the chassis, and now we need the TOTMs to build the body of the car.'

The Sandbox: speculative innovation

Sandboxes have recently emerged as controlled experimentation environments for testing innovative products in the Fintech industry. Interactions within this controlled environment are usually monitored by national financial authorities, who collect data to regulate the market for innovative products. When Adrian, a middle-aged, middle-class charismatic entrepreneur from Bogotá and a digital transformation consultant, heard about Sandboxes at an international conference, he immediately thought this was the perfect method to test the Traceability Platform and regulate it. In his presentations, he described a sandbox as 'an *arenera*: a safe and controlled space where you can take your children to play'. Moreover, he would proudly repeat that that was 'the first time a public entity in Colombia was doing something like this.' Ironically, it was also the first time Adrian was doing it.

Adrian's entrepreneurial spirit was excited to bring innovative solutions to what he considered a boring, passive, and extremely bureaucratic entity. Similar to the entrepreneurial subjects produced by hackathons in India (Irani 2015) Adrian drew legitimacy from the global prestige of the technology industry to propose the Sandbox as an innovative solution that could bring together entrepreneurial subjects who believed that 'individual aspirations and productive activity could produce social surplus, national development, and global progress' (Irani 2015: 801). Indeed, Adrian was one of these entrepreneurial subjects, and soon he would discover that he was not alone in the endeavour of controlling gold circulation in order to make Colombia an attractive country of origin. The call for the Sandbox was incredibly successful. Representatives from mining associations, international traders, NGOs, the financial sector and around ten traceability companies expressed their interest in participating. Adrian was surprised that so many traceability companies showed up. So far, he was only aware of Orotrack, one of the pioneering traceability ventures in the country, which had been involved in the 2020 pilot project and had indeed profoundly influenced the engine/body design of the Traceability Platform.

During the following three months, the traceability companies tested the main functionalities of the Traceability Platform using a software called Postman, which simulated transactions through algorithms. The NMA's legal team advised creating the tests using dummy data to avoid exposing the miners' personal data. Thus, no test was conducted on the ground with real people. Instead, we held weekly online meetings, where Lucas, the mastermind behind the Traceability Platform and Adrian's lifelong friend, provided instructions for the development of tests that companies had to complete by the end of each week. Simultaneously, we organised individual sessions with each traceability company in which the entrepreneurs presented their business model. During this time, I established close relationships with many of them, which allowed me to learn about their personal histories, motivations, and aspirations.

Traceability entrepreneurs

Most traceability companies were established between 2015 and 2020 by local entrepreneurs at the request of comercializadoras internacionales (gold exporting companies), who were being increasingly scrutinised by national authorities and investigative journalists. In 2015, a police investigation dismantled a modus operandi implemented by comercializadoras internacionales in which they laundered illegally sourced gold through front companies and non-existent suppliers. The first gold exporter to fall was a company called Goldex; investigators accused the company of laundering approximately US$1 billion from illegal small-scale mining operations by mixing their gold with metal from legal ones. They were also accused of selling gold to *narcos* to help them launder money from their illegal activities (Tubb 2020). Following this scandal, the Colombian Attorney General's Office initiated a police operation called Leyenda del Dorado (El Dorado Legend), aimed at dismantling other illegal trading schemes used to export the tonnes of gold extracted illegally after the gold rush that followed the 2008 financial crisis. The main target of the operation was CI J. Gutiérrez —Colombia's most renowned metal refiner with a history of more than 140 years. CI J. Gutiérrez, better known in its glory years as the Fundición

Gutierrez (Gutiérrez Foundry), used to melt the gold with which the Banco de la República (Colombian Central Bank) minted the Colombian peso.

The fall of Fundición Gutierrez marked a turning point, leading the country's financial sector to classify the gold industry as high risk, which in turn weakened relations between the two sectors. One of the largest banks in the country was named in the scandal for enabling the monetisation of a renowned gold exporter by converting its transactions from US dollars to Colombian pesos[46]. 'After those scandals broke', one of the Sandbox participants recalled, 'banks were so freaked out about gold that they froze, and even cancelled, the bank accounts of almost every person and institution related to the gold sector.' Importantly, the classification of the gold industry as high risk was not only motivated by the national scandals. Around the same time, Colombia was applying to become a member of the Organisation for Economic Co-operation and Development (OECD), which, as I showed in Chapter 3, was promoting the implementation of its Due Diligence Guidance to ensure responsible gold sourcing in Conflict-Affected and High-Risk Areas (CAHRAs) such as Colombia. Simultaneously, Colombian financial institutions were being pressured by the Financial Action Task Force (FATF) to comply with international standards aimed at preventing money laundering and terrorist financing.

This contingency represented a significant opportunity for traceability entrepreneurs who developed their business models under the premise that their softwares would increase the financial sector's trust in the mining sector. The promise of tracing the origin of gold was primarily motivated by the desire to 'satisfy the risk appetite' of financial institutions that did not want to see their reputation being tainted with the dangers of the mining sector. However, although most of these companies shared the same purpose of making the mining sector attractive for investment, the personal backgrounds of the traceability entrepreneurs varied widely.

For example, Camilo, the founder of OroTrack, was a *paisa*[47] middle-class physician in his forties with a master's degree in public health and criminality. When a start-up he had created with his brother went bankrupt, he saw a business opportunity in the gold sector.

[46] In 2010, Colombian Central bank (Banco de la República) had already begun to step aside from gold commercialization as the extradited chief of Colombian paramilitary group, Salvatore Mancuso, testified that he had laundered money through the sale of hundreds of ounces of gold to the Banco de la República.

[47] *Paisas* are white Colombians from the Antioquia region known for their 'indomitable work ethic' and for having 'colonised much of western Colombia as small farmers or as agile entrepreneurs' (Taussig 2004: 110).

Having lived his entire life in Medellín, the most violent city in the world in the 1980s and 1990s, he was against the public discourse that equated illegal gold mining with narcotrafficking:

> I’ve always thought it is a big mistake to compare something completely illegal (narcotrafficking) with something that is completely legal that just needs more control (gold). So, I took the decision to work on something that could help prevent a new wave of violence due to a substance that is in fact legal. (Camilo, pers. comm., 2024)

After months of research, he created OroTrack, a traceability software that could control what he believed was perhaps the only key node in the chain that could halt the unbridled pace of extraction: the gold trade. Arguably, OroTrack was the first gold-traceability initiative worldwide. In the first years, Camilo’s business model was to sell the software to *compraventas* (gold shops) in mining towns and to comercializadoras internacionales so they could register every gold purchase along with miners’ personal data. However, when he tried to sell the software to gold traders, he encountered considerable resistance: ‘they thought my software was bringing too much transparency,’ he once told me. However, many of my informants said that the sector did not buy his idea because they felt he was trying to monopolise the market. He recounted how Camilo had indeed made emphatic claims about his software being the only option for legal gold export in the future. However, his expectation that his software would become indispensable to local and international gold traders in Colombia proved wrong. A couple of years later, pressured by the El Dorado Legend scandals, C.I.s funded other traceability entrepreneurs who could develop similar software programmes, and quickly became OroTrack’s big competitors.

Camilo is highly passionate about the potential of his traceability solution. After ten years of trying to fulfil his dream of making a business out of controlling gold commercialisation, he has still not given up. When his business plan to sell the software to gold traders failed, he decided to approach regulators, mining authorities, and representatives of the financial sector to raise awareness about the problem of ASM gold. He decided to approach regional mining authorities, representatives of the National Tax and Customs Office (DIAN in Spanish), and actors of the financial sector, including representatives of the Banco de la República (BanRep, Colombian Central Bank), to tell them that the government was about to implement a traceability system in the near future. Camilo was trying to convince them of the benefits that mineral traceability would bring to each of them. For the Tax Office, it would help them control tax evasion and gold smuggling, for commercial banks and financial cooperatives, it would give them tools to regain confidence in mining actors and detect money laundering schemes more easily, and for the BanRep, Camilo dreamed that they could buy most ASM gold to build the country's reserves. He leveraged his relatively upper-middle-class status to connect with friends and acquaintances working in governmental institutions and the media sector. Every time I spoke to him, he was exploring a new alternative to make his business work, creating new business models, contacting new people and making new connections—a labour of attraction at its finest.

Eventually, he shifted his business model to meet not the transparency demands of the value chain actors, but the wishfulness of state agencies to control gold mining and trade. His value proposition became aligned more with a narrative around the necessity of the state to reclaim sovereignty over gold (through central bank purchases). One day, during an interview, he told me quite explicitly that he did not consider himself a 'neoliberal person,' meaning that his technology was not intended to benefit private companies, but rather to enable the government to control the extraction and flow of gold. Indeed, in many of our conversations, he would always mention that a traceability system would render 'peludos' (hairy men) unnecessary, referring to foreign auditors that are part of the ASM certification schemes, and international cooperation projects aiming to create direct supply chains with LBMA refineries in Europe and the US[48].

Another traceability entrepreneur was Jeff, the creator of a software called Auksas. Jeff is a lower-middle-class software engineer in his thirties, also a *paisa* from the city of Medellín, who left his job at a well-known insurance company to set up a venture to help comercializadoras internacionales comply with national and international due diligence requirements. In 2018, a friend and owner of a comercializadora internacional asked Jeff to develop an accounting software program for his company. This comercializadora internacional, however, only purchased gold from mining titles and not from subsistence miners. Jeff developed this software successfully but realised that comercializadoras internacionales were actually in need of a software to handle purchases from subsistence miners, who were the 'major problem after El Dorado Legend police operation' (pers. comm., Jeff, 2022). Consequently, he quit his job and became a traceability entrepreneur. He travelled to several mining towns to understand how the supply chain worked and hired

[48] ARM's Fairmined, Fairtrade gold, Swiss Better Gold Initiative, UNDP's PlanetGOLD, USAID's Oro Legal and Tierra Dorada. See Chapter 3 for an analysis on their role as transparency intermediaries.

compliance experts who helped him build a product that met clients' *risk appetite*, which Jeff noticed had diminished alongside the industry's reputation. The term 'risk appetite' is a term regularly used in the financial sector to refer to the amount of risk an organisation is willing to take in pursuit of its objectives. Jeff's previous experience in the insurance sector influenced his understanding of the mining industry and contributed to the success of his business. Indeed, on many occasions, Jeff would proudly say that banks were trusting more those companies that were using his software.

Jeff was a curious man. He learned every single detail about the gold industry from scratch, and he ensured that his brand conveyed a sense of experience, professionalism, and innovation. Auksas, his traceability software, quickly became the preferred one for comercializadoras internacionales, and he was dreaming of scaling up his operations internationally. One day, he phoned me to offer me a job to help a Swiss refinery resume its gold purchasing in Colombia: 'Giselle, initiatives like Auskas are making Colombia attractive again'. I was tempted to accept the offer, and my fieldwork would have taken a completely different path. However, months later, Jeff told me that the Swiss had cancelled the project because of the uncertainty about the mining policies of the recently elected left-wing president Gustavo Petro (Chapter 6).

The cases of Camilo and Jeff illustrate how traceability promises may have originated from the divergent life projects of entrepreneurial subjects, but ultimately evolved into speculative instruments intended to enhance the power of finance over ASM actors and make the Colombian gold sector more attractive to global finance. On the one hand, OroTrack has been an unfulfilled dream so far. Yet, Camilo used technologies of imagination in his meetings with regulators, banks, and other governmental institutions to keep the promise alive. On many occasions, he showed me his presentations, which were full of graphs and visual representations of the circulation of gold, and even a logo of a brand for Colombian gold that did not yet exist. Camilo also leveraged his contacts in local newspapers to publish notes highlighting the significant benefits of traceability, citing him as an expert and pioneer.

On the other hand, Auksas became a successful enterprise that converted gold purchases all over the country into dozens of files of supporting documentation stored in a QR which comercializadoras internacionales could use to prove they had sourced ASM gold legally. This documentation met all legal requirements and was functional for the actors up the valuation chain who were seeking in traceability a way to purify their reputation. However, as Jenny's introductory vignette demonstrates, the complex reality of ASM cannot be faithfully documented in a manner that would be acceptable to actors higher up the chain. Indeed, traceability entrepreneurs were aware that it was impossible in practice for the system to be perfect. Therefore, the traceability promise can only be sustained by acts of 'strategic ignorance' (Mcgoey 2012). Traceability software programmes, as sophisticated as they might get, cannot be more than speculative promises that strategically ignore complex social relations to turn them into the purified stories that actors in the valuation chain are willing to hear.

Between telling the history and telling a story

Every time Adrian presented the project, he would always give the same definition of traceability, no matter the audience. While showing an image of Lego bricks that were (1) cleaned, (2) analysed, (3) visually represented, and (4) explained through storytelling (Figure 25), he would explain that traceability was 'the tracking mechanism that allows us to know the *complete history* of a mineral, in its different stages, from the origin to the final consumer' and so that traceability was the possibility to 'build *stories* from the real world, with data!'. In Spanish, the word 'historia' is used to refer to both 'history' and 'story.' So, Adrian would play with the word 'historia' to value traceability not for its capacity to document the *history* (la historia) of the circulation of a mineral, but for its capacity to gather the necessary data to tell a *story* (una historia) about the circulation of a mineral.

FIGURE 25. WHAT IS MINERAL TRACEABILITY? SOURCE: INNOVATION GROUP.

For Adrian and his team, a group of software and automation engineers with no experience in mineral supply chains, traceability was a simple task. On several occasions, when the group was presenting the project to other governmental institutions like the Tax and Customs National Authority, the Financial Regulation Authority, or the Colombian Central Bank, they would explain the software by telling a *story* that would often go like this:

> Picture a miner who extracts a gold nugget from the river and then travels by canoe to the nearest town to sell it. That gold nugget is registered in the system with a unique origin code, which will make it traceable throughout the entire chain.

Traceability was presented as the ability to build *stories* with data; the problem was how much these stories would simplify, flatten, or bypass the highly complex reality of ASM gold production in Colombia. Here, like in the example of the Gold Bar Integrity project, we find the promise of traceability being used as a technology of imagination that allows engineers to create a convincing narrative out of imagined racialised social differences.

The work of anthropologist James Smith (2021) on the ASM sector in eastern Congo offers an insightful analysis of traceability as projects of purification that 'seem[s] to build on enduring colonial ideas of light and darkness, the pure and the impure' (295). He also observes that 'traceability sacralized the separateness of commodities […] over people's need to live and move.' (296). Thus, traceability as a system of avoidance of conflict or 'blood' minerals would seem to want to avoid not only violence, but blood in the sense of the life and vitality of those who extract the minerals (296). Crucially, Smith highlights that the aim to separate people from their livelihoods and things from the social relations that made their extraction worthwhile goes against the grain of the eastern Congolese theory of movement, which involves the literal movement of things and people but also practices of reciprocity and collaboration and a bottom-up ethics of invisibility (33).

Although in the Colombian case, traceability was still only a promise, it worked as a technology of imagination that seized racialising imaginaries of miners extracting gold individually for subsistence. To produce data for a story of responsible gold production, the technology flattened social dynamics that are fundamental to the livelihoods of ASM gold miners, and without which extraction would not be possible in the first place. By separating gold from the social relations of its production, the traceability platform was rendering invisible fundamental social dynamics such as that miners usually partner with friends and members of the extended family to exploit a deposit collectively and to share the costs of purchasing supplies and machinery, or that very often ASM enterprises include the work of women and children, or that quite often ASM miners are caught up in coercive relationships with criminal groups that finance their operations (see Colonia, 2017; Jaramillo, 2020, 2024; Jonkman, 2025; Tubb, 2020 for ethnographic accounts of the livelihoods of ASM gold miners in Colombia).

Although traceability initiatives are 'the expression of a desire to de-fetishise commodities' (De Neve et al. 2008: 7) or, in other words, to unveil the conditions of commodity production and circulation, 'the wish to de-fetishise is a wish to demystify what the market tries hard to keep hidden' (8). Paradoxically, the project of defetishisation often fails because it is not conceived as a process of simple disclosure, but rather as a project aimed at controlling and curtailing the social relations that enable mineral extraction. More crucially, should it be truly possible to de-fetishise gold and separate 'good gold' from 'dirty gold', the global production would not be sufficient to meet the demands of financial markets. In simple terms, the global market depends on illegal and exploitative social relations in countries of the Global South to sustain itself, and the traceability promise helps maintain the illusion of defetishisation.

Other scholars have provided insightful analyses of the on-the-ground impacts of implementing traceability projects. From a political geography and political ecology perspective, Calvao and Archer (2021) analyse blockchain-enabled traceability initiatives as processes of 'digital extraction' to highlight the way 'digital technologies are deployed to extract value in global supply chains, often under the guise of sustainability, ethical trade, or transparency' (2). They argue that the ambiguous promise of blockchain traceability, 'ultimately serves to justify increasingly invasive techniques and technologies of data collection and reinforces the idea that a technological 'fix' exists for various social and ecological challenges' (9). Importantly, traceability schemes sideline small-scale miners from the benefits it professes, reinforcing forms of political-economic exclusions, transferring to them the political and economic costs of proving the true and pure origin of the gold they extract, and enhancing the rule and power of digital experts (see Calvão & Archer, 2021; Mitchell, 2002).

Importantly, Ubillús and Benites (2023) have argued that the push for origin information of minerals can push actors to feign traceability to continue participating in the gold value chain. In this context, Peruvian 'logistical entrepreneurs' have emerged as 'mid-stream actors who operate between highly regulated links of the supply chain and the places where lead firms lack control over mineral production' (3). They are 'bikers, drivers, small-scale gold buyers, brokers, and local trading houses' whose work consists of helping supply chain actors ‘perform traceability’ (3). These logistical entrepreneurs can also be analysed as being part of a racialised hierarchy of transparency intermediaries (see Chapter 4). They are often portrayed as ‘exploitative middlemen’ who obstruct miners’ access to end-clients (Villanueva Ubillús & Vila Benites, 2023; see also Hilson et al., 2018) but, in fact, they are people with an extensive social network that take advantage of their cultural identities and knowledge to circumvent infrastructure and administrative barriers to secure gold production and trade.

One can consider traceability entrepreneurs like Adrian, Camilo or Jeff as logistical entrepreneurs in the sense described by Ubillús and Benites (2023) as they facilitate the logistical flows of gold. However, I would add that the work of these entrepreneurial subjects is fundamentally speculative as they must navigate the uncertainty of ever-changing mining policies (see Chapter 6) as well as the desires of actors up in the hierarchical valuation chain (see Chapters 3 and 4). Notably, in the Colombian case, the labour value of logistical entrepreneurs is ranked according to the type of intermediation they conduct. Colombian traceability entrepreneurs are not considered ‘exploitative middlemen.’ Instead, they draw legitimacy from the global prestige of the technology industry and are praised for their ability to imagine technological futures (see Irani 2015). Still, the work of traceability entrepreneurs is a kind of labour of attraction because it not only involves developing a technological tool, but also involves persuading people who might not genuinely desire to track or be tracked. In the next section, I examine this highly affective, performative, and speculative work, which sustained the promise of traceability even as the project stalled in anticipation of a new government’s arrival.

Managing uncertainty through an economy of appearances

As Anna Tsing (2000, 2005) has argued, the self-conscious creation of a spectacle is fundamental to the success of speculative enterprises. Thus, the traceability promise was kept alive through an ‘economy of appearances,’ which used legal and visual tools as technologies of imagination to make the promise attractive for hesitant technocrats. By the end of the Sandbox, the platform was proven to work—at least in the world of algorithms. The Traceability Platform was only thousands of lines of code; it did not have a user-friendly interface (known as front end), which meant that its existence could not be acknowledged by lay people—namely, the high-ranking technocrats of the NMA, functionaries of the Ministry of Mines and Energy (MME), and OEI officers. For them, the Traceability Platform would only come into existence by bringing it into being in the world of law. The MME and the NMA needed to coordinate action to publish the decree and resolution that would give the green light to the implementation of the platform. Following the eventual regulation of the platform, traceability companies would be allowed to apply to officially become TOTMs. This would be a matter of life and death for the enterprises, as those that were not selected would not be able to continue providing traceability services in the country legally.

Time was passing, and no one in the NMA or the MME, except for some civil servants who were providing us administrative support, was aware of the magnitude of such a promise. The project did not seem to be a priority for the top officers at the NMA. The current NMA president had been designated a year earlier as part of a clientelist practice to repay political favours to the Liberal Party[49] and several experienced functionaries were sacked and replaced with people who did not see any political value in fostering the traceability project. Nevertheless, the pressure to show results was not coming from the government officials, but from the funding organisation, the OEI. INNOVATION GROUP's contract with the intermediary company that the OEI had hired had a strict schedule to meet, and an extensive list of specific products to prove a good project execution[50]. These two intermediaries were desperately seeking to prove the value of their work, so they were constantly supervising the progress of the project. Adrian would always say that the project had two parts: one technical and one legal. The algorithmic exercises through which traceability companies tested the platform were the technical part, whilst the issuing of specific regulations was the responsibility of the NMA. During the Sandbox, we had long discussion sessions with participants about what this regulation may look like. The NMA hired two lawyers to support the project, but they were absent and finished their contracts without advancing the regulation. Amid the pressure, Adrian—an engineer with little knowledge of mining law—ended up putting together a first, very confusing draft of the Resolution. The draft was sent to the Sandbox participants, who sent back dozens of pages of comments.

To buy time and send the message that the project was not on standby, participants of the Sandbox were invited to an in-person meeting in Bogotá to discuss the resolution. The people from the OEI – or rather, their intermediary company – rented a massive conference

[49] Around mid-2022, a congressman from the Liberal Party was arrested and accused of leading a clientelism scheme within the NMA. The scheme consisted of government entities allocating a quota of jobs to congressmen, who then sell those positions. Typically, the congressman takes the contractor's first full salary and continues to demand a monthly cut thereafter. https://caracol.com.co/programa/2022/06/13/6am_hoy_por_hoy/1655119046_001693.html

[50] This list of deliverables was, in fact, written by Adrian when he thought the NMA would hire other people to finish the job. He explicitly created a lengthy and complex list of deliverables to ensure his team could not be easily replaced.

room in one of the most expensive hotels in Bogotá. I helped Adrian design an interactive workshop based on the main concerns the TOTMs had raised about the Resolution. The main points raised in the event were not different from those previously shared with us in written form. Although we did not answer their legal questions, the spectacle of the event and the affective labour of the traceability team were successful in calming down everyone's anxieties and reassuring people that the project still had the institutional support of the NMA and the OEI.

After the meeting, Adrian realised that regulating the platform would take much more time than he expected, but he still needed to prove it existed. Thus, he came up with an idea to prove the existence of the Traceability Platform: a visual spectacle. For the last 'test' of the Sandbox, traceability entrepreneurs would need to make a video showing how their software programmes (already with impressive front ends) would interoperate with the Traceability Platform. The following week, the videos began to arrive. Most of them were screen recordings with an AI-generated voiceover narrating how an end-user would register a mineral purchase, along with the miner's data. Automatically, the software programmes consulted dozens of national and international databases and decided whether to approve or reject the transaction. If approved, the software programmes would connect to the Traceability Platform using the algorithms created during the Sandbox and send to the NMA the information of the transactions.

Interestingly, one company sent a video that not only included a screen recording of the transaction but also a whole scene where its workers performed the identity verification process of a miner selling his gold to a compraventa (gold shop). The woman at the counter asks him to come close to the web camera, and we are shown the aesthetics of a blue matrix over the miner's face in a simulation of a face recognition process (Figure 26).

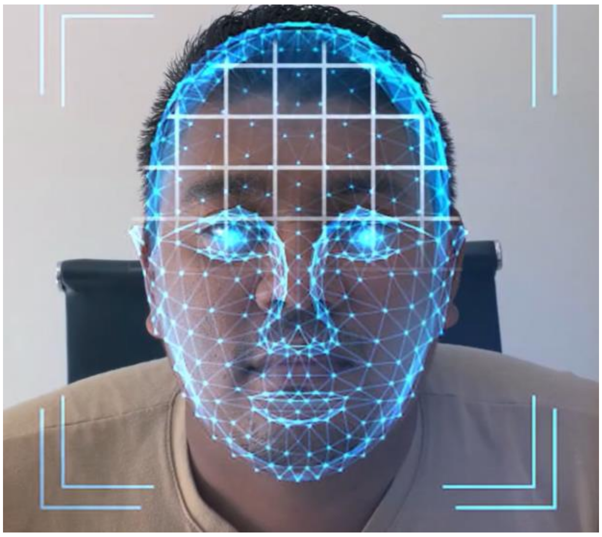

FIGURE 26. FACIAL RECOGNITION DEMONSTRATION. SOURCE: MISTER GOLDEN.

The video was highly praised by Adrian and his team, who congratulated Gonzalo, the traceability entrepreneur, in the next weekly online meeting. Strategies like this eventually gave credibility to the traceability promise as a high-quality technology that could finally resolve the issue of the uncertain origins of gold. The videos were so successful that the OEI decided it was time to start the outreach phase in the mining regions. Consequently, we travelled to four mining regions and organised five webinars to share the videos and explain the achievements of the Sandbox to specific audiences, including functionaries of public entities, representatives from the financial sector, and mining communities.

To thrive, the private institutions and the multilateral organisation behind the traceability project capitalised on the experience and reputation of traceability entrepreneurs who, in some cases, were self-made men coming from underprivileged, rural, and violent contexts. Gonzalo, for example, founded Mister Golden, his traceability company, in 2018. He was born and raised in Caucasia, a town in the lower Cauca River region that has the highest number of subsistence miners registered in GENESIS and is also one of the areas of Colombia most affected by armed conflict. He started studying software engineering, but did not finish it because a pawnshop owner in a remote town in the Pacific region hired him to develop an accounting software program for his shops. After six years of living there, he returned to Caucasia and developed another accounting software for the management of large farms. One day, in 2017, he accompanied his father-in-law to a local gold shop to sell some gold, and he realised there was a need for a software programme that could help shops to keep a register of their gold purchases. When we travelled to Caucasia to share the results of the

Sandbox, Gonzalo was extremely kind to us. He picked us up at the airport in his white Toyota and invited us to lunch. He also showed us Mister Golden's offices, which were located on the second floor of a new two-storey white building with blue glass windows. He proudly introduced us to his team of around 10 people, who were all very keen and welcoming. Then, he drove us around the town and pointed very enthusiastically to a modern complex of offices that was built recently and told us that he was hoping to move Mister Golden's offices there if they were selected as TOTM. Soon, however, Gonzalo would have to put his hopes on hold because the dream of traceability would again be disturbed by the arrival of a new left-wing government.

Conclusion

In this chapter, I analysed how the uncertainty regarding the origin of gold was attempted to be resolved with the promise of traceability. For my interlocutors in London, traceability is a tool that helps them expand their moral schema to differentiate between *desirable* and *undesirable* gold. It is a way to enlarge the power of the global gold market to an extent in which 'dirty gold' and its producers are ultimately 'squeezed out.' For my interlocutors in Colombia, traceability was similarly conceived as a technology that could help identify the good guys from the bad guys, and it was also underpinned by the aim to control a population that has been racialised since colonial times. The two projects, however, had a profound difference, which contributes to reinforcing the racialised relation between actors in Colombia and in the UK. For the WGC and the LBMA, the promise of traceability helped convince financial actors that *gold* was an attractive investment, whereas for my Colombian interlocutors, traceability was a tool to purify the nation in order to make it more attractive for investment to actors higher up in the hierarchical valuation chain. Notably, Colombian traceability entrepreneurs also occupy a position within this racially hierarchised valuation chain; their aspirations carried the invisible privilege of whiteness—embodied in technology, transparency, and ostensibly benign moral projects—rooted in the historical formation of Colombia's geo-racial regime (Zeiderman 2025).

However, despite being implemented within a racially hierarchised valuation chain, traceability is not a totalizing logic imposed from above. In Colombia, as in other parts of the world, a handful of traceability initiatives emerged quite organically from a combination of individual life projects, motivations, aspirations and changing political and economic contexts. Crucially, this does not mean that they do not bear the influence of structural racial capitalism (Yanagisako & Ho 2023; cf. Muehlebach 2023). I approached the stories of the people who gave life to the traceability promise with a focus on affective and speculative practices, and analysed the specific contingencies that paved the way for the promise to thrive. Importantly, in doing this, I am not denying but asserting that 'these instabilities and contingencies come alive within […] the historical patterns and parameters produced by racial capitalism and its long, deep injuries' (Muehlebach 2023: np).

Traceability initiatives, such as the Gold Integrity Bar and the NMA's Mineral Traceability Platform, are technologies of imagination that reinforce racial and national imaginaries to control resource extraction while legitimising gold attraction and accumulation. They reproduce a racialised relation between actors along the gold valuation chain, and crucially, impede us to see that the problem of unbridled gold extraction has been caused by a perhaps more ambitious dynamic of mineral *attraction* that legitimises the demand of gold by the tonnes, the high price of gold, among other processes of financialization and accumulation through narratives of sustainable and responsible practices.

Although the traceability platform did not materialise during the time of my fieldwork, the promise of traceability was productive in many other ways. It enabled practices of speculation and accumulation of private and multilateral organisations from state projects, it increased the trust and power of financial actors over the ASM sector, and, crucially, it contributed to purifying the reputation of the global gold financial market and the reputation of Colombia as a legitimate point of origin of resources. In Colombia, policies intended to control ASM gold extraction and circulation have been underpinned by a history of racialisation of the ASM sector. How did the arrival of the first left-wing, anti-fascist and anti-racist government in Colombia and its promises of sovereignty impact this historical tendency? In the final chapter of this thesis, I examine the significance of the political in the creation of financialised resource value and the challenges and possibilities for Global South countries in altering gold attraction.

Chapter 6. Government transitions and the gold sovereignty trap

On the 7th of August 2022, Gustavo Petro, a former guerrilla member and renowned left-wing politician, and Francia Márquez, an Afro-Colombian social and environmental leader, became the first left-wing president and vice-president in the history of Colombia. Petro and Márquez promised to be 'the government of change,' and to represent 'los nadies' (the nobodies) — historically marginalised people. They framed the idea of change as a transition from a 'politics of death' to a 'politics of life.' The former referred to the traditional way of doing politics that has caused structural inequality, territorial dispossession, and practices of exclusion, resulting in endless cycles of violence. The latter consisted of defending human rights, guaranteeing greater participation and representation from historically marginalised communities, and encouraging practices that were less destructive to ecosystems. Importantly, a key part of their discourse was the need to overcome colonial, racist, and neoliberal legacies from previous governments that had undermined any prospect of a dignified life, both for human and non-human actors (Quintana 2023).

Within the National Mining Agency (NMA), as in most public institutions, the transition of government was characterised by a sense of uncertainty for both governmental officials and multilateral and private actors who were working on projects with the previous government. When Petro won the elections, most of the projects at the NMA were immediately put on hold, as NMA workers knew that the country's mining policy might undergo radical changes. After two months of complete silence regarding the future of the traceability platform (see Chapter 5), Alfred, a colleague from the traceability team, asked me in a desperate tone: 'Giselle, what if the traceability platform doesn't exist? What if it's just an illusion that those engineers made us believe?' His genuine question reflected the fact that the Mineral Traceability Platform was just hundreds of lines of Python code—algorithms promising to organise databases that would help 'tell a story about the origin and journey of minerals'—as Adrian would say (see Chapter 5). Indeed, so far, everything had been an algorithmic simulation, without a single physical mineral having been tracked or traced. We were witnessing a derealisation of the speculative order described in Chapter 5, which had been kept alive only within a specific political and economic order that favoured the attraction of foreign capital, and the 'imaginario eldoradista' (El Dorado imaginary), which has been key in constructing Latin America's identity as a place of natural resource abundance (Svampa 2019: 29).

The traceability promise, and more generally the idea of responsible sourcing, was struggling to find a place in a government aiming to overcome an 'extractivist model' to achieve greater sovereignty. In proposing to transform the mining sector into something that could contribute—and not undermine—national sovereignty, Petro's government distanced from his past leftist peers in other Latin American countries who interpreted resource sovereignty as resource nationalism—i.e. they either nationalise oil and mining companies or increased the percentage of tax and royalty payment to foreign companies but did not really question the dependency on global commodity markets. In contrast, Petro's sovereignty aspirations aimed to challenge the core of the extractivist development model—namely, that Latin America's natural resources are meant to satisfy the demand of the countries of the Global North.

In this chapter, I examine the potentialities and contradictions of the sovereignty aspirations of the 'government of change' to explore the significance of the political in the creation of financialised resource value. More concretely, I explore why responsible sourcing (Chapter 3), and traceability (Chapter 5) initiatives did not fit into the new government's mining policy *Minería para la vida* (mining for sustaining life) and its aim to regain *soberanía de los minerales* (mineral sovereignty). In what follows, I first examine the proposal for *una política de la vida* (a politics of life) of the first left-wing government of Colombia and the genealogy of these ideas, which—at least in theory—implied a radical rupture with former neoliberal governments and neoextractivist development models. Secondly, I analyse the faltering continuity of the traceability promise, which was apparently at odds with the aim of the new government to strengthen the role of the public sector and with the principle of mineral sovereignty, conceived to foster mineral self-sufficiency for a wider project of reindustrialisation. I propose the term 'sovereignty trap' to elaborate a critique of the government's aspiration to sovereignty, and I finish with a reflection on the rationale behind the inclusion of gold in a revised list of strategic minerals. Although gold has no place in the mineral sovereignty discourse because it does not contribute to energy, food, or infrastructural sovereignty, it was considered strategic due to its potential contribution to associative practices. Drawing on this ethnographic finding, I reflect on the radical potential of including the social effects of economic action in altering gold attraction.

Colombia, a 'World Power of Life'

Gustavo Petro's National Development Plan for 2022-2026 is titled 'Colombia: World Power of Life.' The government publicised it as being one of the most democratic development plans in the history of the country. The bases of the plan, they argued, were inspired by the proposals submitted by more than 250,000 Colombians who participated in the 51 Binding Regional Dialogues. The plan has five strategic pillars: (1) a water-centred territorial planning, (2) an integrated approach to human rights, multidimensional poverty, employment, health, and gender equity, (3) food sovereignty, (4) an aim to diversify the economy and make it less dependent on extractive industries, and (5) an aim to reduce regional disparities through targeted investments in transportation, tourism, connectivity, and improved public services (DNP 2023). In sum, the development plan aimed to transform the country into a global model for protecting life in all its dimensions.

Since his speech at the UN Assembly in 2022 (see Introduction), Petro has intended to position himself as a global environmental leader. He has spoken emphatically about the significance of the Amazon Rainforest in absorbing CO_2 emissions. He has proposed measures such as swapping foreign debt for environmental protection, which have been well received by the international community, particularly by the previous US government, the World Bank, and the International Monetary Fund. Indeed, the government's political slogan, 'Colombia, a World Power of Life,' shows that Petro has found in climate change discussions a significant political opportunity for Latin American countries to regain economic and political relevance in the global order.

Crucially, for the new government, challenging the global order meant challenging a neoliberal model that had turned the country into an extractive economy. Thus, the extraction of hydrocarbons must cease, as well as the country's dependency on commodity exports. Alternatively, the national economy must be reoriented towards activities such as agriculture, tourism, manufacturing, and infrastructural development, which were seen to be less extractive and more productive. The new government was seeing the extractive economy fostered by policies of former governments as representing a 'politics of death,' and a productive economy as more aligned to a 'politics of life.'

Petro's ideas on the need to overcome an extractivist economy are rooted in a longstanding critical Latin American thinking. Around the mid-20th century, dependency theorists argued that European colonisation and subsequent imperialism, especially by the United States, had been the leading causes of Latin American underdevelopment (Cardoso & Faletto 1996;

Galeano 1971). Importantly, this vision highlights the role of natural resources in the history of colonialism and capitalism, and the fact that Latin America's enduring 'peripheral' status is rooted in colonial domination. Drawing inspiration from dependency theory, Latin American decolonial thinkers reflected on the colonial legacies that continue to structure the unequal distribution of power, racial and ethnic discrimination, epistemic exclusion, and the imposition of cultural values (Escobar 1995; Mignolo 2003; Quijano, 2000; Walsh 2006). In turn, the concept of 'extractivismo' (extractivism) was built on Latin American decolonial thinking to describe a development model based on a system of extraction and accumulation of natural resources that began with the European colonisation of the Americas in 1492 and continues to shape the present of postcolonial societies (Acosta 2012; Gudynas 2009; Svampa 2012).

During the first decade of the 21st century, there was a generalised turn to the left in Latin American countries—a political wave also known as the Pink Tide. By 2009, at the peak of the Pink Tide, leftist governments were ruling almost two-thirds of the region's population, including Bolivia, Ecuador, Argentina, Brazil, and Venezuela (Gudynas 2009). Contrary to the expectations that the Pink Tide governments could put an end to the extractivist model, there was an 'intensification of an export-oriented, resource-intensive model of accumulation, highly dependent on foreign capital' (Riofrancos 2020: 5). During this time, most countries transitioned from a neoliberal model of extraction to a post-neoliberal version of resource nationalism (Riofrancos, 2020, see also Marston, 2019). Despite criticism from environmental movements, governments justified extractive practices as necessary to combat poverty and achieve development, reinforcing a developmentalist vision adapted to the region's current political and cultural contexts. Paradoxically, in countries like Bolivia and Ecuador, which recently reformed their constitutions to include indigenous principles such as 'buen vivir' and give constitutional rights to nature, neoextractivist policies ended up 'threatening Indigenous territorial rights, compromising the purportedly decolonial goals of the Plurinational State.' (Marston 2019: 2).

Latin American scholars have proposed the concept of 'neoextractivism' (Acosta 2012; Gudynas 2009; Svampa 2019) to describe the contradictions of this development model of Latin American progressive governments, which seeks to legitimise the continuation and exacerbation of extractive practices by claiming that it is the only way to finance social and redistributive programmes (Svampa 2019: 27). As Eduardo Gudynas (2009) has noted, a renewed role of the state marks neo-extractivism. While the state seeks to capture a larger share of the surplus to fund social programs and gain legitimacy, social and environmental impacts persist or worsen. This model promotes a subordinate integration into the global economy, reproduces logics of competitiveness among Latin American countries to attract foreign investment, and deepens territorial fragmentation through enclaves geared toward international markets.

Colombia was not part of the first Pink Tide, but entered a new one along with Mexico, Chile, and Brazil, which have also elected leftist governments in the 2020s. Importantly, the accession to power of Gustavo Petro and Francia Márquez was perceived as a turning point for the country and the region's resource politics. As a direct response to the critique of neoextractivism, the government of change was aiming to radically transform the extractive sector to make it contribute to the broader ambition of making Colombia a World Power of Life. Since the late 1990s, the technocratic traditional right-wing elite that had governed Colombia had conceived the exploitation of natural resources as the primary source of economic development and state power. For the government of change, this model had only caused violence and inequality. The main challenge was to build a mining policy that would make resource extraction transition from a 'politics of death' to a 'politics of life.' Importantly, a politics of life was framed in terms of cutting the colonial ties that had made Colombians so dependent on the exports of raw materials. Thus, regaining sovereignty was the underlying goal. According to Petro, extractivism has contributed to the deindustrialisation of the Colombian economy, making the country dependent on the importation of many products, including food, technologies, and fertilisers. This dependency has weakened the capacity of Colombians to govern themselves through alternative development models that are less environmentally harmful.

Notably, Petro's conception of sovereignty was deeply tied to the idea of self-sufficiency, which he saw as achievable only through a project of reindustrialisation. His thinking is linked to the way extractivism has been framed as a 'mode of appropriation' rather than a mode of production (Gudynas 2009, 2015). In other words, Petro's sovereignty aspirations were productivist in nature. Influenced by the ideas of economist Mariana Mazzucato (2018, 2021) Petro was seeking 'to bring a mission-oriented approach to the country's industrial strategy, aligning its economic growth with sustainability and inclusion goals' (González Olarte 2023). Interestingly, to achieve energy sovereignty, food sovereignty, infrastructural sovereignty and technological sovereignty, the country first needed to regain sovereignty over mineral extraction, transformation, and commercialisation.

Mining for sustaining life, mining for sustaining sovereignty

In September 2022, I attended the Colombian Mining Association's annual conference in Cartagena. This year, the conference theme was Energy, Life and Future—an anxious mining sector was trying to thrive within the new government's narrative of protecting communities, biodiversity, and life. Indeed, on the first day, the newly appointed Minister of Mines and Energy, Irene Vélez-Torres, and the Minister of the Environment and Sustainable Development, Susana Muhamad—two middle-aged women with an activist past—were invited as keynote speakers to share with the delegates the vision of the new government with respect to the mining sector. Just a few weeks prior, Vélez-Torres had declared that the government would no longer grant new oil and gas exploration contracts and would aim to ban open-pit mining altogether, so the audience was expectant about what the Ministers were going to say. During the panel, the Ministers sustained that the government would only support *mining for sustaining life* (la minería para la vida) — which meant that from now on the state would only promote the extraction of minerals needed for a 'just energy transition' (e.g. copper, nickel, etc.), for 'food sovereignty' (e.g. phosphates to produce fertilisers), and for the country's project of reindustrialisation (e.g. minerals for construction materials). When the moderator asked them about the country's fiscal dependency on the exports of coal and hydrocarbons, Vélez-Torres referred to degrowth theory and claimed that 'in the framework of the current global geopolitics, we should demand that other countries begin to de-grow their economic models.' In line with the degrowth theorists (Hickel 2020; Kallis et al. 2020), Vélez-Torres—a PhD in Human Geography—was arguing that the world, mainly the countries in the Global North, should eventually lower the demand for minerals. The audience, confused with what they had just heard, started whispering to each other and even laughing—the theory of degrowth was completely alien in the Colombian context.

A few months later, Vélez-Torres was invited to the OECD Forum on Responsible Mineral Supply Chains in Paris as one of the keynote speakers. Despite speaking English well, that morning she addressed the OECD plenary in Spanish. She reassured the audience that the priorities of the new government were the defence of environmental and human rights, as well as the protection of artisanal and small-scale mining (ASM) livelihoods. Importantly, the mining policy of the new government was examining the 'who, how, where and to what effect' of the country's mining projects. In other words, she emphasised the importance of reconsidering the means and ends of mining in relation to the protection of human and non-human lives, and, crucially, she suggested a reconsideration of the final destination of the extracted mineral:

> We carry on our backs a mining code created in 2001 to promote foreign investment and large-scale mining, leaving artisanal and small-scale miners excluded [...] multinational mining companies are welcomed in the country, but under a new model of mineral extraction aiming at contributing to the reindustrialisation of the country and its own energy transition, rather than to an export economy (Irene Vélez-Torres, OECD Forum, 2023).

Ironically, in Europe her speech was welcomed with more enthusiasm than in Colombia, perhaps because it was closely aligned with the emerging narrative of ASM revalorisation (Chapter 3). In Colombia, public opinion consistently criticised the government of change, accusing its policies of being improvised, overly radical, and at times even unnecessary. Moreover, the arrival of the first left-wing government in the history of the country triggered a public debate over what kind of people should run the government (Lobo-Guerrero 2023). On the one hand, the press and the traditional elite who had ruled the country since its independence began to question the increasing number of functionaries in the new government with an activist past. On the other hand, the government was accusing the technocratic elite of reproducing the status quo and serving the interests of financial and economic powers. Technocrats were trying to impose technical solutions to political problems, and the new government viewed them as representing a continuity of neoliberal politics. The ambition to build a 'politics of life' that could represent 'the nobodies' needed more radical and structural reforms (Pearce & Velasco 2022).

The designation of Irene Vélez-Torres as Minister of Mines and Energy (MME) and Álvaro Pardo as the president of the NMA was of particular concern. Vélez-Torres was a doctor in political geography and a former professor at a public university in Colombia who had conducted academic research on the environmental and social impact of illegal mining in the Colombian Pacific region. Pardo was known to be a lifelong critic of the mining sector and the mining policies of recent governments. Indeed, these appointments were, among others, highly questioned by leaders of the opposition and sparked a public debate over the lack of expertise and activist past of many high-ranking functionaries of the new government. Some press articles even questioned whether 'anti-mining' people were now leading the country's mining authorities (López Suárez 2022). There was a widespread feeling in the country that under this type of leadership, mining would come to an end.

However, according to representatives of the new government, greater planning capacities would enhance state control over mineral exploitation, prevent socio-environmental conflicts that commonly arise when large-scale mining projects are imposed on territories, protect ecosystems, and grant decision-making power over the extraction of certain minerals. Using minerals to fulfil the country's own internal demand was seen as a way to overcome an 'extractivist economy' (una economía extractivista) and build a 'productive economy' (una economía productiva)—to develop a regime of 'self-sufficiency' (auto-abastecimiento) that could contribute to the reindustrialisation, and decarbonisation of the country. Framing of Minería para la vida under the guiding principle of mineral sovereignty was a cunning move to reconcile the two opposing 'resource radicalisms' that had become prominent in Latin America: 1) the resource nationalism of neoextractivist governments, and 2) the anti-extractivism social movements (Riofrancos, 2020; see also Marston, 2019). Importantly, the concept of mineral sovereignty was helping to frame the mining sector more like a necessary evil to regain state sovereignty within the global order, rather than a tool to construct a national identity (cf. Coronil 1997; Shever 2012). Indeed, Pardo would constantly say that Colombia was not a país minero (mining country) but a país con minerales (a country with minerals), in an attempt to reject mining as being the foundation of the national identity.

Significantly, the new mining policy, as well as most of Petro's policies, was explicitly framed in opposition to past mining regimes. This meant a radical shift from former neoliberal governments, which had historically prioritised the attraction of foreign investment to develop LSM projects and had, with few exceptions, marginalised and criminalised the ASM sector. In the late 1990s, Colombia entered the international mining market, pressured by the International Monetary Fund (IMF)'s recommendations to promote the attraction of foreign investment to develop the extractive sector. This regime was formalised in the 2001 mining code, developed with the assistance of Canadian international cooperation. During Álvaro Uribe's presidency (2002-2010), the model was deepened, and hundreds of areas were concessioned to multinational companies for mining exploration, undermining the territorial rights of ASM mining and peasant communities. The imposition of an LSM regime led to waves of speculation and socio-environmental conflicts (Echavarría 2014). This mining policy continued during the first government of President Juan Manuel Santos (2010-2014) when he chose LSM as one of the country's four 'engines for development'. In 2014, Santos got re-elected under the promise of finalising a peace agreement with the FARC (the largest guerrilla group in Colombia) to put an end to the most prolonged armed conflict in the hemisphere. Eventually, his government and the FARC signed the peace agreement in November 2016. However, the demobilisation of the FARC had a significant impact on the ASM sector, as former members of the guerrillas resorted to gold mining as an alternative source of income, and territories previously under the control of the FARC became attractive for legal and illegal extraction (Le Billon et al. 2020). Notably, although the Santos government (2014-2018) attempted to remedy the exclusion of ASM, it was already too late due to the number of titles already granted for LSM exploration.

Under Iván Duque's administration (2018-2022), the mining policy focused on attracting foreign investment for the large-scale extraction of a wide range of minerals, including coal ('our flagship mineral,' as the mining vice-minister would often say), gold, as well as strategic minerals for the energy transition. A clear example of this policy was the NMA's participation in Expo Dubai with a pavilion called 'Colombia, Beyond El Dorado Mining Legend' (see Chapter 4). At Expo Dubai, the NMA (under Duque's administration) announced the implementation of two of its flagship projects: *Neutral Coal* and the *Gold Route*. The purpose of the Neutral Coal project was 'to make coal attractive amidst the climate crisis.' In practical terms, the project aimed to encourage coal mining companies to invest in commercial forestry projects to offset their emissions. Interestingly, this was not to compensate for the company's carbon footprint but to create a by-product: *Neutral Coal*—coal with its emissions already offset from the point of extraction. The *Gold Route*, on the other hand, was about identifying Strategic Mining Areas—zones with mineral potential that could be characterised and reserved to be offered to large-scale mining companies in an 'objective selection process.' The NMA Promotion team would produce reports assessing a range of environmental, economic, and social variables—a kind of feasibility study to assess risk factors and help companies make investment decisions (see Gilbert 2020a) for a critical examination of political risk analysis and the production of mining frontiers).

I experienced firsthand the implementation of this mining policy as an intern of the Promotion team during the last six months of the right-wing government of Duque. I participated in the construction of the reports for the Strategic Mining Areas for gold, assessing the potential presence of ASM miners in these zones with mineral potential. In 2022, I virtually attended a briefing event in Santa Fe de Antioquia, a town where a Strategic Mining Area had been recently identified. The participants –mostly informal ASM miners– complained that those areas were not 'free areas to be offered for exploration' as the government was implying. Rather, ASM miners had been extracting gold in the region for more than twenty years, but the NMA had rejected their requests for formalisation. The delimitation of Strategic Mining Areas, under the government of Duque, was a tool for risk management intended to attract foreign investment, but it represented an existential risk for the region's ASM miners.

The historical prioritisation of LSM over ASM has led to an endless wave of violent and non-violent conflicts—a mining model that Petro's government interpreted as being part of a 'politics of death.' Consider, for example, that the areas to be offered in the Gold Route during Duque's administration were in the towns of Ituango, Peque, Santa Fe de Antioquia, and Buriticá—all four located in a region with a long history of both violent and non-violent conflict. Ituango, for instance, is the municipality where the infamous El Aro Massacre occurred in 1997, and where Hidroituango—a controversial large hydroelectric dam—is being built in the present, bearing accusations of flooding an area where there are remains of bodies resulting from paramilitary violence. In Buriticá, Zijin-Continental—a Chinese Canadian gold mining company—operates the largest gold mine in the country amid constant violent confrontations with criminal miners as well as with ASM miners that have extracted gold in the region for decades. In these regions, ASM and peasant communities have strongly opposed these sorts of development projects, which have only deepened conflict, exclusion, and dispossession.

Under the Mining for Sustaining Life policy, framed around principles of environmental and social justice, projects like Neutral Carbon were discontinued, as the policy aimed to discourage the extraction of hydrocarbons. Nevertheless, the project of selecting Strategic Mining Areas was preserved because, at least for gold, it seemed to be the perfect instrument to regain control over the granting of mining titles and tip the balance in favour of the ASM sector. The model for the Strategic Mining Areas challenged the 'first in time, first in right' principle— meaning that those companies or individuals who had first applied and fulfilled the requirements would be granted a mining title. This principle has historically favoured LSM companies over the ASM sector, as the former have more financial, technical, and legal resources to meet the requirements. Under President Duque's administration, the NMA had utilised this capacity to attract LSM projects further, thereby undermining the rights of ASM actors. By contrast, the Mining Routes scheme was modified to be aligned with the government's goal of regaining mineral sovereignty and used to formalise ASM miners by granting them preferential mining titles. Meanwhile, the future of the traceability platform was uncertain. As I demonstrated in Chapter 5, the project was sustained more by the personal aspirations of traceability entrepreneurs than by the political willingness of the NMA, which the Liberal Party co-opted during Iván Duque's presidency. Therefore, none of my interlocutors, both within and outside the NMA, knew whether the project aligned with the principles of the government of change.

Flat conceptions of sovereignty and the derealisation of traceability

During the transition, the people inside and outside the NMA who were part of the traceability project were extremely anxious about the future of the Traceability Platform. A mandate to implement a traceability system was included at the last minute in the mining formalisation Law passed by the Duque government in mid-2022, but my interlocutors were dubious about whether the traceability platform would fit into the new mining policy. Based on the obligation outlined in this law, Camilo – the owner of OroTrack (Chapter 5) – submitted various formal petitions to state regulators, requesting that they compel the NMA to put the traceability platform into operation. He also reached out to newspapers and attempted to contact high-ranking public officials on Twitter, reminding them that, according to the law, the Platform must be implemented as soon as possible. Notably, many other people who participated in the Sandbox—mainly traceability software companies, gold exporters, and even Adrian (the charismatic leader of the traceability team)—were extremely anxious about the platform's future. The representatives of the traceability software companies that participated in the Sandbox—which were starting to see themselves as an economic sector—also sent a joint letter to the new president of the NMA and the Minister of Mines asking them to implement the Platform. However, they never received a response.

A few days after taking office, Alvaro Pardo, the new NMA president, gathered all functionaries in the largest auditorium of the NMA to outline his vision for the transformation of the NMA. In his presentation, Pardo heavily criticised the entity's malfunction, the tremendously slow bureaucratic processes, and potential cases of corruption, and he announced a profound 'reengineering' of the NMA. In the days that followed, the working environment was numb. Public servants were visibly disturbed by the situation, as they felt he was making unfair accusations that stigmatised and underestimated their work. I would constantly receive emails from the NMA union complaining about this new approach. Meanwhile, Pardo requested the resignation of most vice presidents and heads of divisions, and was struggling to find the right people to replace them, as he was specifically looking for people who had not worked in the previous government.

Eventually, it became evident that the Traceability Platform was not quite in line with the vision of the new government. One day, Carolina, one of the few heads of divisions who survived the transition, gathered the team to discuss the future of the traceability project. First, she told us that Pardo was suspicious about the enormous amount of money that had been transferred to the Organisation of Iberoamerican States (OEI). It was an open secret that governmental institutions in the country had been making agreements with the OEI—an organisation with diplomatic immunity—to circumvent regulations on the expenditure of public resources (Ramírez 2023). Second, he did not seem to like that so many intermediaries were involved in the process, and that the NMA had played such a marginal role. And third, he did not like the fact that a public traceability platform would depend entirely on private actors (software companies) and that a public institution (the NMA) had created a business model for the private sector[51].

The fact that the NMA was dependent on all these different actors (the OEI, Adrian and his consultancy firm, private software companies, among others) was, at every level, contrary to the principle of mineral sovereignty at the core of the new mining policy. As I suggested in Chapter 5, traceability was not an attempt to purify gold or create social justice, but rather to purify financial markets and the global reputation of Colombia as a point of origin in a racially hierarchised valuation chain. In this sense, the Minerals Traceability Platform was not challenging the extractive model of global supply chains but reinforcing it, undermining the sovereignty of mining countries, and contributing to the racialisation of actors of the valuation chain, who matter in the equation only for being the point of origin of resources.

Nonetheless, the government's notion of mineral sovereignty rested on an understanding of sovereign power as singular, absolute, and territorially bounded. Indeed, a general aspect of Petro's policies was an aspiration to reinvigorate the power of the state. This was reflected in the sole requisite that Álvaro Pardo posed for the continuation of the traceability project: a *public* TOTM[52] must be developed before the official launch of the traceability platform, so the system would not be 100% dependent on private software companies. Pardo allocated this task to the NMA IT team, but, since almost everyone in that team was new, it took them a lot of time to understand the project, let alone the software architecture of the platform.

[51] It is worth noticing that this was also an observation made by representatives of the former government but overheard by a NMA coopted by political elites at the time.
[52] Technology Operator for the Traceability of Minerals, the term created to refer to the service that private traceability companies would offer to gold buyers and miners to register gold transactions on the NMA Traceability Platform (Chapter 5).

There were only three people left, including me, with the know-how of the project. We spent around two months explaining the project to the IT team, debriefing on the resolution that was going to regulate the platform, and modifying the technical annex to include the role of the public TOTM. Ironically, after all this work, the IT team ended up subcontracting Lucas, INNOVATION GROUP's engineer and mastermind of the Traceability Platform, on an hourly-paid contract to transfer the technical knowledge to the new staff, because one of the previous functionaries had not passed on the relevant passwords and codes before leaving the job and the new team had not been able to access the platform.

The impossibility of Pardo's NMA to continue developing the Traceability Platform single-handedly evidences the contradictions of a 'flat conception of sovereignty' of the left (Beverley 2020: 409). For Beverley (2020), these 'explicitly statist anti-colonial nationalism' and 'monistic' understandings of sovereignty produce 'a poverty of political imagination, and impedes our capacity to historicize and situate political thought and state practice […] within and beyond the penumbra of modern empire or territorial nationalism (409). Indeed, it was precisely this 'flat conception of sovereignty' that led the new government to view the traceability project as creating an unnecessary interdependency with non-state actors and ultimately as threatening the sovereignty of the Colombian nation.

In line with this flat conception of sovereignty, Pardo had other plans to regain control over the extraction and circulation of gold, which would render the traceability project redundant. In the same meeting where Carolina informed us about Pardo's perception of traceability, she also told us that the Vice Presidency was now leading the creation of a state company for the mineral sector. In fact, during a brief phone conversation I had with Álvaro Pardo before he took office, he spoke about this initiative quite enthusiastically. Although I never had the chance to speak to him again, he developed this idea further in most of his public interventions. His goal was not to create 'only a mining company.' In line with the narrative of transitioning from an extractivist model to a productive model, he was envisioning a company that could get involved in the different stages of the value chain, and not 'merely in extractive activities.' He was aware that two major comercializadoras internacionales (C.I. s, gold exporters) were under the control of the Sociedad de Activos Especiales (SAE), a state agency in charge of handling seized assets, after the El Dorado Legend police operation accused them of money laundering and illegal gold sourcing (see Chapter 5). So, Pardo's plan was to merge these two C.I.s to leverage their expertise and financial capacity, and establish a state-owned company that could regain control, primarily, over gold mining and trade.

In a presentation during the annual conference of the Colombian Mining Association in 2023—a year after Minister Vélez-Torres spoke about degrowth—Pardo defended his idea of creating Ecominerales (the proposed name for the public company) as an alternative to increase state participation in the different stages of the value chain of gold. With Ecominerales, the state would achieve greater transparency in the commercialisation of gold, transform ASM miners into entrepreneurs, and support the economic development of mining communities and their well-being. Ecominerales, he stressed, was not a project of bringing the industry into state ownership; in fact, the government intended to model Ecominerales on Ecopetrol, Colombia's successful national oil company, listed on the Colombian Stock Exchange and on the New York Stock Exchange, which competes freely with other private oil companies operating in the national territory. In a context where the managerial capacity of functionaries with an activist trajectory was persistently questioned, Petro and his high-ranking functionaries—who indeed came from anti-mining activist circles—visibly adapted their discourse to calm private investors' anxieties over resource nationalism and legal uncertainty (Gilbert 2020a). For example, they constantly emphasised the importance of the private sector in developing the new mining policy and argued that Ecominerales would be only another market participant in the sector.

Nevertheless, the creation of a state-owned company was not a very innovative idea. In 1968, the government of Carlos Lleras Restrepo created Ecominas, a public mining company in charge of mining exploration and exploitation. This was followed by the creation of Carbocol in 1976, Mineralco in 1990, and Ecocarbón in 1992. In 1993, the government of Cesar Gaviria merged all the country's state-owned mining companies to create just one - Minercol Ltda. In 2004, the government of Alvaro Uribe decided to liquidate Minercol Ltda., and transferred its functions to Ingeominas (the Colombian Geological Survey). In fact, in an opinion article published in 2011, Álvaro Pardo criticised the 'prolific creation of mining institutions' of former Colombian governments: 'with each liquidation or merger, institutional memory was lost, instability was created in the relationship with concessionaires, human capital was lost due to the departure of qualified officials, and in exchange, clientelism was sown with the entry of political cronies' (Pardo 2011, np). However, in the same piece, he defended the centrality of state institutions in managing the country's natural resources. He criticised the fact that 'the general trend of mining regulations in this decade has been to marginalise the state from the direct exploitation of its minerals, because state-owned companies are inefficient and corrupt. The public companies Corporación Nacional del Cobre, Codelco, in Chile, and Petróleo Brasileiro, Petrobras, in Brazil, are a striking demonstration of the opposite' (Pardo 2011, np).

In principle, the objective of Ecominerales was slightly different. The idea was that, with this public company, the state could get involved not only in the extraction of minerals, but also in the nodes of commercialisation and manufacturing. Importantly, with the creation of Ecominerales, Pardo was primarily intending to control the illegal extraction and commercialisation of gold. According to him, Ecominerales would buy ASM gold directly from miners, 'using the highest standards and guaranteeing complete traceability.' The company, he claimed, would only buy gold that had been extracted without mercury and would offer better prices to the miners, thus discouraging them from selling gold on the black market. By 'complete traceability,' however, Pardo was referring not to the traceability platform that had been developed over more than four years, but rather to the RUCOM and Genesis mechanisms, which had been proven insufficient to prevent illegal gold from entering formal chains (see Chapter 5). Indeed, the two CIs that Pardo wanted to merge to create Ecominerales were prosecuted precisely for failing to detect that the gold they were buying from 'subsistence miners' had an illegal origin. Various journalistic investigations, NGO reports, and even research published by the OECD's responsible minerals team on Colombia, have shown that it is mainly through registered miners in Genesis and traders in RUCOM that illicitly mined gold continues to be 'legalised' in the country (OECD 2018a).

Although the government of change aimed to distance itself from past neoliberal and extractivist regimes, Ecominerales was ultimately to be built upon an infrastructure that carried the legacy of past (intended and unintended) illegal activities, thereby legitimising the actors as they were integrated into the state's political and economic structure. Significantly, in his presentation at the Colombian Mining Association's conference, Pardo also announced that the NMA was already running a pilot project in Caucasia, a region particularly known for the entanglements between illegal and informal gold mining (and the hometown of Jenny and Gonzalo from Chapter 5). The pilot involved operating small compraventas (gold shops) that the seized companies already had in Caucasia, allowing the state to purchase ASM gold directly in the mining towns, thereby 'guaranteeing full traceability.' However, this pilot completely disregarded the traceability platform, even though the seized companies had participated in the Sandbox of the traceability project (Chapter 5) and had been using a traceability software designed by one of the technology companies that was willing to become a TOTM of the Mineral Traceability Platform.

It is worth noticing that the derealisation of the traceability project was not the result of an explicit rejection of the government of change, but rather an outcome of strategic ignorance, which, as McGoey (2012) has demonstrated, serves as a productive asset, helping individuals and institutions to command resources or deny liability in the aftermath of crises. Since the implementation of a traceability system was a legal mandate, representatives of mining authorities preferred to overlook the project and focus on other priorities instead. In fact, when Minister Vélez-Torres was invited to speak at the OECD Forum in Paris she presented the government's main strategies to fight illegal mining: 1) a new mining law, 2) a new national mining company and 3) a new mining census. To my surprise, she did not mention the traceability platform. After the session, I approached her and introduced myself (we had exchanged emails at the beginning of my fieldwork, when she was still a university professor). I mentioned that I had been working on the NMA traceability project, explaining that it had been stalled since the new government took office. Her expression, however, made it clear that the project was not on her radar.

It is unclear whether Pardo or Vélez-Torres were aware of the contradictions of their flat conception of sovereignty. What is clear is that this limited conception of sovereignty as state power was not allowing them to imagine other forms to regain control over the value chain of gold. Recent anthropological work has sought to challenge 'the idea of discrete units of governance imbued with the power to act as sovereign' (Streinzer 2024: 314; see also Bieberstein & Evren 2024; Bonilla 2017; Hansen 2021). Yarimar Bonilla (2017), for example, has drawn attention to the colonial origins of the concept of sovereignty. She has suggested that 'the concept of sovereignty provided a legal technology […] to dispossess native communities, or, alternatively, to establish treaties with native peoples in ways that incorporated them into an ontological order of civilizational difference' (332). Similarly, Streinzer's (2024) analysis of the Greek financial crisis has demonstrated that European economic integration has led to a complex re-articulation of sovereignty, which has enabled its use as a tool of extraction in financialised capitalism (see Gago and Mezzadra (2017) for an expanded notion of extraction).

In the same line, Jason Hickel (2021) has analysed how South Africa's decision to avoid seeking credit from the IMF or the US ended up undermining its national sovereignty even more, as it made the country entirely dependent on foreign investment. Hickel rightly observes that 'the integration into global financial markets, and dependence on foreign investment, has tied the hands of sovereign nations. They can no longer control their own macroeconomic policy for fear of angering the gods of international finance. The post-political order is too dangerous to disrupt' (73). Furthermore, in resource-rich countries, as Gilbert (2020a) demonstrates, any attempt to regain control over the terms of extraction agreements is framed by foreign investors as an 'unjust act of resource nationalism,' negatively affecting indices of jurisdiction's attractiveness (5).

In reflecting on Venezuela's aspiration to become a Magical State, Fernando Coronil (1997) highlighted this inherent contradiction in the Latin American context:

> Even when these nations try to break free from their colonial heritage, that is, their dependence on the export of primary products, through the implementation of development plans directed at diversifying their economies, they generally need foreign currency to achieve this. But they can only access foreign currency by exporting primary products, which again increases their dependence on exports. Paradoxically, by trying to exploit their comparative advantages, these countries that are exporters of natural assets, are frequently reassuming their colonial role as exporters of primary products – a role now redefined in terms of the neoliberal rationality of globalising capitalism. For them, neocolonialism is the next step on from post-colonialism (Coronil 1997: 7).

In the case of Colombia, the government of change inevitably fell into a sovereignty trap. The narrative of mineral sovereignty did not really question the extractive imperative but helped legitimise the extraction of strategic minerals to 'sustain life.' Paradoxically, the attempt to overcome an extractivist model ultimately reinforced an extractive imperative underpinned by an ethic of productivity—strategic minerals must be extracted to achieve energy, food, and infrastructural sovereignty. The government attempted to overcome this trap by proposing that the extracted minerals be primarily used for self-sufficiency; however, this aspiration is very difficult to achieve and highlights a broad failure of the left to understand the contemporary financialised value regime.

Importantly, the sovereignty trap is more evident when it comes to the gold market. Many of my Colombian interlocutors—inside and outside the state—dream about the possibility of reducing gold exports and stimulating an internal demand in the country. Interestingly, global institutions like the World Gold Council are encouraging Central Banks of gold-producing countries to establish 'domestic' ASM gold purchasing programmes (World Gold Council 2021b). Under this model, for example, the Colombian Central Bank (BanRep) could buy gold directly from ASM Colombian miners to grow the country's gold reserves. However, as one of my interlocutors within the BanRep once explained to me, the global gold market is structured in a way that only the gold that gets refined by an LBMA-certified refinery and stored in an LBMA-certified vault is considered 'monetary gold' and is valued as part of the national reserve. In this sense, it is ultimately impossible to achieve gold sovereignty when its price and flows remain under the control of international financiers and refineries. Unfortunately, the sovereignty trap reveals that in pursuit of independence, post-colonial nations risk reproducing the very logics they claim to transcend.

However, if one unsettles the flat conception of sovereignty, political imagination can bear fruit. The recent turn to sovereignty in anthropology suggests a departure from thinking with stable entities and towards 'uneven and fragmented performances' (Bonilla 2017: 333). In the words of anthropologist Thomas Hansen (2021), thinking of sovereignty in a *minor key* can help us understand it 'less as a foundation of states and societies and more as a performative category, emerging in a dialectic between promises of order, prosperity, and law, and the realities of violent domination and occupation' (42). This may allow us to develop a more nuanced analysis of modern sovereignty, not from the heart of Western Europe but from the perspective of previously colonised territories. Although the sovereignty aspirations of the government of change ended up reproducing the logics of past regimes—only that now under the name of the state—conceptualising these aspirations 'in a minor key' may help to draw attention to the radical potential of these promises and performative acts in destabilising gold attraction. In the last section of this chapter, I analyse the radical potential of including gold in a list of strategic minerals as an expression of minor sovereignty (Hansen 2021).

Gold, a strategic mineral for whom?

One of my last contributions to the Promotion team before leaving the NMA was to help justify the inclusion of gold in the official list of strategic minerals. The NMA was in charge of drafting an updated version of the list that reflected the new mining policy. When I joined the team that was drafting the document, they had already established the guidelines to determine which minerals to include. In general terms, the guidelines were underpinned by the principle of mineral sovereignty, favouring minerals that could not only be extracted but also refined and commercialised within the country to contribute to the country's reindustrialisation, energy transition, food sovereignty, and infrastructural development. Ironically, within the narrative of mineral sovereignty, there was no place for gold because, in practical terms, this mineral does not contribute to gaining any national sovereignty, but, in fact, as I have shown throughout this thesis, it creates a sense of stability in financial markets at the expense of the instability of the sites of extraction. Nevertheless, a mining policy guided by principles of social justice could not afford to overlook a mineral that sustains the livelihoods of so many people in the country.

How come gold mining, the source of all kinds of conflicts—and the kick-starter of the colonial project in the Americas—could be portrayed as a mineral worth extracting in a politics of life to regain mineral sovereignty? Fortunately, Frank, an NMA bureaucrat in charge of drafting the document, helped me resolve a contradiction that would otherwise have kept me awake for weeks. He told me they were already trying to find a way to link gold mining with the promotion of associative and cooperative practices—two concepts that figured centrally in Petro's National Development Plan. In fact, the Minería para la vida policy was already aimed at promoting the creation of ASM associations and cooperatives to facilitate the formalisation of miners. Thus, Frank wanted me to make the case for gold as a catalyst for social cohesion and needed my expertise in gold ASM communities to describe the sociocultural dynamics surrounding gold extraction.

As an anthropologist who has studied mining communities in the Colombian Andes, I wrote a couple of pages about the social relations that are fundamental for the extraction of gold on a small scale. I drew from my own experience but also from the literature on the Colombian ASM sector which has explored how ASM gold miners make futures in the margins of an LSM extractive regime (Jaramillo 2020), how miners invest in legal paperwork and environmental recuperation before, or in the absence of, their inclusion in formalisation programmes (Jonkman 2019), or how ASM practices and knowledges can be considered a Cultural Heritage of the Nation (Castillo & Echavarría 2021; see also Ferry 2002). In sum, I reassured the NMA team that miners rarely work individually; they often partner with neighbours, friends, or family members to collectively exploit a mining site; they do not pay in money but in tailings for the right to use processing facilities, and they often share their knowledge and good practices with their peers. Paradoxically, most of these social relations and knowledges have emerged as strategies to survive their historical criminalisation.

At first glance, the inclusion of gold in the list of strategic minerals can be interpreted as a betrayal of the principle of mineral sovereignty; as an impossibility to halt the extraction of a mineral that has undermined the sovereignty of the Latin American people since the time of the Conquest. However, I want to suggest that this move is precisely an expression of sovereignty in a minor key (Hansen, 2021). Although, as I have demonstrated in this thesis, gold attraction generates a sovereignty trap, a potential radical movement to alter gold attraction might rest on recognising 'the symbolic and emotional force of sovereignty as a promise of autonomy, recognition or self-determination, or as a reminder of a lost (if imagined) state of fullness, self-ownership, dignity, and freedom (Hansen 2021: 42). Indeed, the proposal to recognise the social value of gold is precisely a move towards unsettling sovereignty and recognising the 'non-sovereign nature of most social relationships—political, intimate, and affective—all of which require brokered and negotiated forms of interdependency and a relinquishing of autonomy' (Berlant 2011b, 2011a in Bonilla 2017).

Critical scholars theorising the relationship between sovereignty and extraction (Bieberstein & Evren 2024), have argued that although sovereignty manifests as a space-making power that delineates zones of extraction as various kinds of 'outside,' this 'outside' may not be reduced to an Agambenian take on 'the outside' as a space of abandonment functional to the operations of extractive capital. Instead, 'the outside' is 'shaped and saturated by symbolic investments and determinations, through discursive formations, fantasies and patterns of racialisation and dehumanisation, which assist the operations of extractive capital, but which may also feature histories and genealogies not reducible to the logics of capital (Bieberstein & Evren 2024: 225). The proposal to include gold in the list of strategic minerals for its social effects may appear contradictory on the surface, but it can also be a good start to think about how gold attraction, the creation of financialised resource value and the racialisation of gold desire can be counteracted from the 'outside.'

Valuing a mineral for its social effects and not for the degree to which it is desired in financial markets resonates with David Graeber's theory of value, which prioritises the valuation of actions rather than things (2001). The proposal for valuing gold for its capacity to foster associative practices might be at odds with the way extractive labour has been conceptualised in critiques of extractivism—as careless, destructive and unproductive. But to what extent is this negative conceptualisation of the labour of extraction reproducing the very racialised labour regime that decolonial Latin American thinkers have criticised for so long?

Recent anthropological works of extractive worlds have drawn attention to the need to 'reconsider extractivist labor—not as 'dead labor' but as activities carried out by differentially-situated subjects and communities who critically perceive, evaluate, and at times contest extractive processes by evoking deeper historical relations of enmeshment, slippage, and exploitation' (Winchell & Howe 2024: 205). This renewed attention to extraction invites us to approach it 'beyond the usual for/against models' (Ureta & Flores

2022: xi) and to ‘crack open a more binary understanding of extractivism and its alternatives’ (Jobson et al. 2024; see also Winchell 2022). Imagining ‘extraction without extractivism’ (Ureta & Flores 2022: x) may lead to ‘find sources of disruption, surprise, and even subversion within the systems [we] critique’ (Jobson et al. 2024: 259) and may ‘open new possibilities for apprehending extractive processes as well as redressing racialised structures of exploitation’ (Winchell & Howe 2024: 205).

Of course, in exploring the potential for subverting gold attraction, I am not undermining the power of the contemporary financialised value regime, which continues to fuel the different dynamics of gold attraction that I have examined throughout this thesis. Yet, what I am suggesting is that focusing on the political imagination of the government of change, and in analysing its aspirations to sovereignty, ultimately allowed me to draw attention to a ‘politics of value,’ which is not the struggle to create, accumulate and appropriate value, but the struggle to stablish what value *is*, and ‘the freedom to decide (collectively or individually) what it is that makes life worth living’ (Graeber 2001: 88). The valuing of gold for its social effects might not result in returning the capacity to the Colombian state to create, accumulate and appropriate value over gold, but it can very much contribute to setting a precedent for alternative valuations of gold for its role in sustaining life.

Conclusion

In this chapter, I analysed the sovereignty aspirations of the first left-wing government of Colombia and its consequences for the derealisation of the traceability promise. I examined how the election of Colombia’s first left-wing government radically shifted the frameworks within which mining policies and traceability initiatives were understood and deployed. The Petro administration's vision of mineral sovereignty—framed around the aspiration to transition from a ‘politics of death’ to a ‘politics of life’—represented both a rupture with neoliberal extractivism and a response to the contradictions of previous Latin American left-wing governments. Rather than simply nationalising resources or raising royalties from mineral exports, the government of change aimed to reorient extraction to serve domestic needs such as food security, energy transition, and infrastructural development. This shift destabilised the traceability promise, which had emerged under a neoliberal governance regime that outsourced the project implementation to private traceability entrepreneurs and was responding to the demands of the global gold financial market to resolve the uncertainty regarding the origin of gold.

The chapter has argued that the new government's emphasis on state-led control and self-sufficiency rendered traceability—as it had been conceived—politically irrelevant. It proposes the term sovereignty trap to elaborate a critique of the government's aspiration to sovereignty and to explore its radical potential. Ironically, the state's quest to overcome extractivism through greater autonomy relied on institutional arrangements and actors tied to past extractive regimes. Initiatives like Ecominerales sought to reclaim control over gold circulation, but it falls into a sovereignty trap where the pursuit of independence risks reproducing the very logics it claims to transcend.

However, this moment of political experimentation also opens space to imagine alternative valuations of minerals, particularly gold, that move beyond financial logics. The inclusion of gold in the strategic mineral list—not for its financial value but for its potential to foster associative practices and support small-scale miners—and the valuation of gold as part of a politics of life can be a strategic move in imagining ways to alter gold attraction. This shift recognises the social effects of extraction as legitimate grounds for valuation and invites us to think of extractive labour not merely as destructive or 'dead labour' but as socially embedded and potentially generative. While the sovereignty promised by Petro's government remains partial and fraught with contradictions, its political imagination enables a rethinking of value that can unsettle dominant regimes of gold attraction.

CONCLUSION

As I write this conclusion in September 2025, the price of gold has reached an all-time high of $3,500 per ounce (Sandlund & Hook 2025). In the few months since Donald Trump entered office in January 2025, the gold price has increased by 34%. Political and economic uncertainty and, more recently, fears over tariffs on moving precious metals to the US are some of the most common explanations for the explosion in gold demand. For over 30 years, the gold industry has promoted gold as a risk-free, liquid investment asset worth accumulating in times of crisis. However, when crises come along, the gold market proves to be vulnerable and unstable, and, importantly, far from politically neutral. In early 2025, a gold rush—like those that have become the baseline reality for Latin American and African countries—haunted the very heart of the gold market. Since Trump's election, more than 8,000 bars of gold have been 'dug out' from the vaults of the Bank of England (Chan 2025). Amid fears around the impact of Donald Trump's trade war, investors in the US were desperate to relocate gold bullion to the COMEX vaults in New York. But the gold market in New York does not trade 400oz bars but kilo bars, so the London 400oz bars were shipped to GDL refineries in Switzerland to be recast into kilo bars and sent over to New York (Hook 2025a). While the British press anxiously reported the 'exodus of gold bullion' (Chan 2025) and 'London gold shortages' (Hook 2025b), the deputy of the Bank of England and LBMA representatives tried to calm the waters. In an LBMA webinar, livestreamed on the 7th of February 2025, representatives of the LBMA, HSBC, and Bullion Vault (one of the largest online investment gold services) gathered to discuss this turbulent gold market dynamic. They reported that the Bank of England was indeed 'booked out for deliveries until late March', and that the 'lease rates to borrow gold have been blown out.' However, Ruth Crowell, LBMA's CEO, asserted that there was not an actual shortage of metal but that it was primarily a logistical issue: 'there is a shortage of a man with a van to move the gold out' (London Bullion Market Association 2025).

This incident illustrates the overarching argument of this thesis. Gold market authorities have successfully promoted the idea of gold as a safe-haven asset. This work—their labour of attraction—is paying off as gold has recently overtaken the euro as the world's second-most important reserve asset for central banks (Storbeck & Hook 2025). However, gold's value must be constantly maintained and stabilised because unexpected things—like a gold rush on the Bank of England—can always threaten the affective narrative that sustains its value. The careful reactions of gold market representatives demonstrated how gold's resource affects can be effectively managed to convey a narrative that reinforces the authority and legitimacy of those actors situated at the top of a racially hierarchised valuation chain. Headlines in the British press expressed anxiety about gold's status as a stable, liquid, and safe asset. Yet, this very anxiety underscored how deeply embedded in the cultural imagination is the assumption that gold must be safeguarded under British authority. Crucially, the legitimacy of the gold financial market is not only sustained by the work of gold market authorities. The affective narrative of gold as a stable, secure, and safe substance also depends on the labour of attraction of a diverse range of actors along gold's racially hierarchised valuation chain.

In this thesis, I examined how gold's financial value is created and sustained through a wide range of practices and narratives of purification intended to make gold and value chain actors attractive for investment. As I showed in Chapter 2, for gold to become a risk-free asset stored in the vaults of the London bullion market, global gold authorities like the World Gold Council (WGC) conjure an affective narrative of a world in crisis with gold's material affects of solidity and stability to stimulate and celebrate the desire to accumulate gold. At the same time, through training courses and market reforms, the London Bullion Market Association (LBMA) advances a financial pedagogy that instructs new market participants in key mechanisms for speculating with gold in a risk-free manner by borrowing legitimacy and gold from central banks. However, derivative traders are only able to chop off 'financial' risks because such risks are abstracted and rendered incommensurable from the so-called supply chain risks. To keep pace with the global demand for bullion, ASM miners have shifted away from traditional means of extraction, such as using bateas and ancestral plants to separate gold from other metals, and now rely on dredges, backhoes, and toxic chemicals like mercury or cyanide. However, as I show in Chapter 3, responsible sourcing standards shifted responsibility onto local ASM communities, framing them as risky and dirty sources threatening to 'contaminate' mainstream supply chains. Invested in the ethicalisation of gold, industry and non-industry actors like NGOs, consultants, and academics help morally purify the gold coming from the ASM sector by framing it as a development issue in industry conferences and closed-door task forces. In Chapter 4, I analysed how transparency intermediaries—refineries, certification schemes, and multistakeholder initiatives—position themselves as guarantors of transparency amid the uncertainties raised by the recycled gold controversy. In Chapter 5, I illustrated how Colombian mining authorities, bureaucrats, engineers, and entrepreneurs attempted to resolve the uncertainty regarding the origin of gold with the promise of tracing pure gold. And, finally, in Chapter 6, I showed how the promises of responsible sourcing and traceability were at odds with the sovereignty aspirations of the first left-wing government in the history of Colombia, whose vision can represent a starting point to alter the uneven effects of gold attraction and purification.

Ironically, my thesis was an attempt to ethnographically *trace* the connections that contribute to the creation of gold's financial value. The chapters are presented in a way that reflects the structure of the hierarchical valuation chain and the labour my interlocutors had to do to make gold and themselves attractive for people, technologies, and standards intended to govern them. But, importantly, this thesis was also an attempt to conceptually connect two bodies of literature that have remained disconnected until very recently—the anthropology of natural resources and the anthropology of finance. My approach builds on recent anthropological studies that explore the connection between financial markets and resource extraction (Ferry 2020a; Gilbert 2020a). It follows Laura Bear and colleagues' critique (Bear 2020a) in challenging Callon's and Foucault's theories for downplaying the relevance of political economy in social research. And, importantly, it aims to contribute to recent scholarly analyses on the material consequences of financial practices in exacerbating racial and geographical inequalities (Appel 2019; Bear 2015a; Chong 2024; Ferry 2020b; Gilbert 2020a; Gilbert et al. 2023; Rofel & Yanagisako 2019; Tsing 2015; Zeiderman 2025). Although this dissertation focused on gold, a natural resource with a unique history in the world's economy, I hope my analysis can contribute to a broader understanding of how material substances transform into resources with financial value. To achieve this, I have proposed shifting the focus away from resource extraction to develop a new framework for analysing resource attraction.

Towards a theory of resource attraction

Resources are extracted because they are demanded. Focusing on *resource attraction* enables an analysis of the actors involved in stimulating financial demand for a specific resource, or, in other words, those working to make a specific resource *attractive for investment*. *Resource attractiveness* is produced through a work of *desire management*—industry and market authorities stimulate the desire for investment gold by maintaining an ongoing and irresolvable tension between 'a would-be authoritative discursive elaboration in the form of narratives' (e.g. of a world in crisis) and 'a concretely situated, affect-intensive material' (e.g. gold bullion) (Mazzarella 2003). As William Mazzarella has rightly observed, the production of desire is a matter of affect management (2003). In this thesis, I called this work of affect management a *labour of attraction:* the production of narratives and practices of persuasion for the management of affects and ethics along the valuation chain. Importantly, this labour is intended to create, sustain and give legitimacy to financialised resource value. The concept of labour of attraction takes distance from Callonian theories of market formation that focus on the distributed agency of calculative devices (networks of human and non-human actors). Although emerging technologies like electronic pricing mechanisms and traceability software programmes are central to the creation of gold's financialised resource value, my analysis of resource attraction focuses in the 'conflictive and extractive human relationship between the plutonomy and the precariat' (i.e. actors that are part of the hierarchical valuation chain) (Graeber 2001; see also Gregory 2014) rather than in a socio-technical analysis of the financial marketplace as a collaborative practice in an economy of qualities (Callon et al. 2002).

As desire (unlike needs, urges, or intentions) necessarily involves the imagination (Graeber 2011) I understand the labour of attraction as affective and speculative labour that uses technologies of imagination to construct ethical certainties based on racialised, gendered, and national imagination of social differences (Bear, 2020a). In the case of gold, the WGC and the LBMA create, stimulate, and make legitimate the financial value of a natural resource through institutional lobbying, the publishing of authoritative reports and data, advertisement campaigns, training courses, and market reforms. But industry and market authorities are not the only ones doing this affective and speculative work. As my research revealed, most actors involved in the valuation chain do some labour of attraction; they speak at conferences, they conduct research and publish reports, they create standards and set up working groups, they write open letters, and they persuade state actors to implement specific technologies, among many other things. Actors may have different motivations to do this work: some try to mend past errors, some want to reveal hidden truths about the industry, some are devoted to defending the rights of a marginalised ASM sector, and some want their business models to thrive. Yet, their work is arguably always intended to make gold more *morally pure*.

Resource attraction is thus generated through narratives and practices of purification. As my analysis showed, the labour of my interlocutors is unevenly valued according to their position in the racially hierarchised valuation chain. This racially hierarchised labour regime allows for the classification of certain actors as risky and dirty (Chapter 3), or as not transparent enough (Chapter 4), reinforcing the authority of other actors to govern them. As Kimberly Chong (2012) has observed, 'financialised subjects are not all bestowed with value creating capabilities […] some workers are inscribed with productive potential – they can create value – whilst others are defined by their lack of productive value and conversely destroy value.' (204-5). Similarly, my interlocutors in Europe see themselves as having the capacity to create financialised value by purifying the gold and its value chain. As I showed in Chapter 3, for many years, this purification consisted of excluding those actors cast as lacking productive value (i.e. ASM miners) by casting them as risky and dirty, but now the narrative has shifted, aiming to integrate them into a discourse of development and sustainability. Crucially, this work of purification mobilises moral hierarchies of disgust and danger through stigmatising representations of people and places. For example, classification of certain areas as Conflict-Affected and High-Risk Areas (CAHRAs) naturalises the chaos, violence, and fragility of these places—most of them postcolonial nations—while obscuring the historical causes that have produced instability, violence, and precarity in these territories (Chapter 3).

Attention to resource attraction as a practice of purification also puts into evidence that there is an implicit significance of whiteness as purity and benevolence. Technologies of imagination intending to sustain gold's financialised resource value racialise ASM miners, but also reproduce the idea of mostly light-skinned Global North actors as honest and rational with the capacity to lead the project of gold's ethicalisation. Visual imagery in industry and NGO reports, for instance, depicts dark-skinned miners with stained hands and clothes, and financiers—mostly light-skinned—as custodians of gold bullion.

Importantly, resource attraction requires the articulation of practices and narratives of industry and non-industry actors. The narrative of responsible sourcing, central to the ethicalisation of gold, gains legitimacy because ethical value is sourced from moral beacons (i.e. ASM and sustainability advocates and experts such as NGOs, certification schemes, academics, and consultants). As I showed in Chapters 3 and 4, industry members are constantly updating their narratives to make gold attractive and relevant for the 21st Century. Thus, the critical analyses of non-industry actors are welcomed because criticism can then be absorbed into a renewal of legitimacy (Bear 2020a).

Policies and initiatives, whether originating from industry or non-industry actors, are generally developed to regulate the unbridled extraction of gold. They tend to focus narrowly on controlling ASM miners, assuming that they are inherently irresponsible and need support to participate in the global economy. But miners are just keeping pace with the unbridled global demand for bullion, and banks or investors are rarely held accountable for demanding such large quantities of gold bars, driving the gold price higher and higher.

Significantly, resource attraction is also fuelled by ASM gold-producing countries. In this thesis, I analysed the specific case of Colombia to understand the labour of attraction of bureaucrats, engineers, and entrepreneurs aiming to make the country an attractive investment destination and a legitimate point of origin of resources. The Colombian case is relevant because it has a very complex social context, which makes the possibility of finding a pure origin of gold almost utopian and contradictory. Still, the promise of tracing pure gold and segregating it from 'dirty' gold, as utopian as it may seem, is productive and beneficial for almost all actors in the gold valuation chain. As I suggested in Chapter 5, initiatives for the governance of value chains such as the promise of traceability enable practices of speculation and accumulation of private and multilateral organisations from state projects, increase financial actors' power over the ASM sector, help purify the gold financial market and the global reputation of nation-states as the point of origin of resources, and reinforce a racialised relation between actors in gold producing countries and other actors in the valuation chain.

Nevertheless, countries that produce raw materials are not monolithic or passive actors. During my research, I witnessed a government transition in Colombia from the far right to the far left. Although the promises made by Colombia's first left-wing government have remained mere rhetoric, during the first semester of the 'government of change', I was able to document the implications of an ambitious attempt to radically shift the country's resource policies. As I demonstrated in Chapter 6, the aspiration for sovereignty underpinned most of the new government's policies. Energy sovereignty, food sovereignty, infrastructural sovereignty and technological sovereignty were some of the main goals of Petro's so-called politics of life. And regaining sovereignty over mineral extraction, transformation, and commercialisation was a prerequisite for everything. Crucially, the principle of mineral sovereignty differed from Pink Tide governments in other Latin American countries, because most of them interpreted resource sovereignty as resource nationalism—i.e. they either nationalised oil and mining companies or increased the percentage of tax and royalty payment to foreign companies but did not really question the dependency on global commodity markets. In contrast, Petro's proposal of mineral sovereignty aimed at challenging the core of an extractivist development model—namely, that Latin America's natural resources are meant to satisfy the demand of other countries in the Global North.

Importantly, as I argued in Chapter 6, gold attraction creates a sovereignty trap. As Jason Hickel (2021) has suggested, 'integration into global financial markets, and dependence on foreign investment, has tied the hands of sovereign nations. They can no longer control their own macroeconomic policy for fear of angering the gods of international finance. The post-political order is too dangerous to disrupt' (73). Many of my Colombian interlocutors—both within and outside the state—dream of the possibility of reducing gold exports and stimulating internal demand in the country. Under this model, the Colombian Central Bank could source directly from ASM Colombian miners to grow the country's gold reserves. Yet, the global gold market is organised in a way that only gold refined by an LBMA-certified refinery and stored in an LBMA-certified vault can be considered part of the national reserve. In this sense, the discourse of mineral sovereignty falls into a golden trap: it is ultimately impossible to achieve gold sovereignty when its price, demand, and legitimacy remain under the control of international financiers and refineries. Unfortunately, the sovereignty trap reveals that in pursuit of independence, post-colonial nations risk reproducing the very logics they claim to transcend.

However, my analysis also evidences that this moment of political experimentation also opened space to imagine alternative valuations of natural resources that move beyond financial logics. The inclusion of gold in the list of strategic minerals—not for its financial value but for its potential to foster associative practices and support the livelihoods of ASM miners—and the attempt to integrate the valuation of resources as part of a politics of life can be a strategic move in imagining ways to alter gold attraction.

Altering El Dorado?

In South America, Amerindian Indigenous communities began extracting gold since precolonial times. They often used the precious metal in rituals as powerful offerings to their deities to maintain the balance of the world and fabricated standardised personal ornaments, such as nose rings, earrings, and breastplates, in specialised artisanal goldsmithing workshops. However, during the European conquest of the Americas, gold became a visible symbol of individual ambition. Colonisers built an entire mining enterprise sustained by the exploitation of Indigenous and enslaved African people. As archaeologist Carl Langebaek (2024) has argued, it was not gold that corrupted people but colonisers who corrupted gold when they started using it for capital accumulation. This limited way of seeing gold purely as an economic asset and determining who was allowed to desire gold and who was not depended on racist, colonial hierarchies that devalued certain communities and places.

As I have shown in this thesis, these dynamics continue to shape the gold industry today. Gold attraction is underpinned by a racialisation of gold desire that was born in the colonial encounter—the desire of the wealthy to accumulate gold is celebrated while the desire of miners to extract gold is condemned. Notably, the labour of attraction my interlocutors do in all nodes of the chain is driven by, and reinforces, such racialised desire. One way to counteract and change these systems that legitimise such unbridled demand for gold and devalue gold mining communities and environments is to question the dominant understanding of gold as a financial investment. That way of thinking not only upholds colonial ideas of who can desire gold and who cannot, but it curtails the diverse and creative ways human societies have long related to the precious metal.

As Maristella Svampa (2019) has argued, the 'imaginario eldoradista' (El Dorado imaginary) is constantly updated to portray Latin America as a place of natural resource abundance. My analysis of resource attraction aimed to underscore the structures that continue to reproduce this imaginary for centuries. Now that we know that resource attraction is not given but produced and sustained by the labour of people along valuation chains, how can resource-rich nations find a way to alter this process of purification? In orienting toward decolonial futures, Michelle Murphy (2017) has proposed to work with the concept of *alterlife* to acknowledge that 'one cannot simply get out, that this hurtful and deadly entanglement forms part of contemporary existence in this moment, in the ongoing aftermath. And yet the openness to alteration may also describe the potential to become something else, to defend and persist' (2017: 500). Gold will always be attractive, but will we find an alterlife for gold attraction?

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