

The Anthropology
of Precious Minerals

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Introduction to Part One
Scrappers, Miners, and Hunters

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This first set of chapters focuses on the work of artisanal miners to extract precious minerals from their matrixes, exposing the brute physicality and social implications of miner-mineral entanglements. Humans have been so entangled since at least the Neolithic period, when digging into the earth for materials became more commonplace, creating trajectories of human-thing interdependencies (Hodder, 2012). That new “economy of substances” (Thomas, 1999: 74) involved the circulation of materials in an emergent system of signification that gave rise to new identities, and the same still occurs today.

Neolithic peoples became entangled primarily with useful, mundane, and oftentimes ubiquitous earthy substances such as clay, chalk, and stone (Boivin, 2004; Conneller, 2011; Hodder, 2012; Thomas, 1999). Yet, during this same era, copper, gold, and jade – precious minerals – were first exploited for their distinctive properties, conjuring new categories of persons and social relationships (Renfrew, 2001). From those early beginnings, minerals and gems were set “in-motion” (Appadurai, 1986: 5), becoming central to shifting assemblages engaging human and non-human actants (Latour, 2005). Once polished, primed, or primped, these materials tend to retain their irresistible qualities. They may move with less “friction” and they age well – they “perdure,” not in a state of stasis but as a means to gain new leases on life (Ingold, 2013: 104). Precious minerals are not limited to mere symbolic functions but bundle specific physical properties with indexical associations that play their own roles in social interactions (Renfrew, 2001: 131; Thomas, 1999: 73). As revealed throughout this volume’s studies, the value of precious minerals is neither inherent nor strictly economic, but is constantly gauged and reassessed within multiple interconnected socio-material assemblages.

These three chapters – on cellphone scrapping in the United States (Joshua A. Bell), sapphire mining in Madagascar (Andrew Walsh), and

crystal hunting in the Alps (Gilles Raveneau) – detail how extraction is an act of disassembly that requires assembling local and historically specific actors: people, materials, tools, and places. Operating as individuals or as members of a loose community, the miners and the minerals they seek come into a relation with one another, one which Ingold (2013: 70) characterizes as a “correspondence” foregrounded in the anticipated use of the mineral as “precious.” This physical work engages certain bodily moticities as well as other acquired experiential skills (Warnier, 2001), such as knowing where to look and whom to look out for.

The minerals themselves have their own agencies and can act in obstreperous ways, resisting attempts to encounter, dislodge, and carry them away. Their rarity or scarcity requires patience and forbearance, as well as a bit of luck and possibly supernatural intervention, to accomplish the goal. Landscape features, rocky matrixes, and the dispersal of minerals in concentrated veins, Alpine “ovens,” or cellphones are themselves principal actants that impact the decisions, actions, and success of the extractors. The work is fraught with uncertainties, risks, and the threat of bodily peril, even death – an affective quality that hangs over the entire enterprise. Risk intersects with the marginalized positioning of some miners, although it may also play a role in elevating their status.

Once obtained, the minerals and the miners are still “in-motion,” forming new assemblages necessary to assess or realize the mineral’s economic value, even as it values the miners themselves. As Walsh indicates, this process is another kind of “correspondence,” now with fellow practitioners and markets as well as collectors and publics. This assemblage can be characterized by competition, rivalry, and conflict, as well as cooperation and collaboration, and is coloured by unpredictability and risk, like the extractive activities themselves. These two assemblages are interdependent: without the markets and institutionalized standards to monetize the minerals, there would be no mining; but the scarcity, risk, and – very often – the stories of their extraction combine with the minerals’ physical qualities in their eventual valuation.

As a consequence, the entanglement with minerals mutually constitutes the miners and the networks of their extraction and trade, not to mention the objects themselves. A major theme of these chapters is the intra-subjectivation processes that make both the miners and the minerals by their participation in these assemblages. Distinctive subject positions emerge from the relational networks of people and materials (Thomas, 1999: 72). Techniques of a skilled body are configured as “techniques of the self” (Warnier, 2001), although these identities may be recognized primarily only within the community of practitioners. If

the artisanal extraction of precious minerals is a mode of self-making, it is not strictly autopoietic. It requires the intervention, engagement, and sharing of ontological properties with other actors in dynamic assemblages, some of them fleeting, others institutionalized.

Scrappers

In Bell’s analysis (chapter one), contemporary American artisanal e-waste scrappers who salvage gold and other metals from cellphones “remake themselves” by becoming and especially by *being seen* as experts. Unlike other miners, scrappers are usually autonomous individuals. They operate at some distance from one another, given that they extract metals from portable objects with no geographic restrictions. Cellphones are usually black boxes, not meant to be opened – and, indeed, scrappers may employ brute force to break them apart. Bodily skill and technical (or alchemical) knowledge are required to recognize and retrieve trace amounts of valuable metals hidden inside. These materials are rather comparable in their small size and concentrated value to gemstones, although, as metals destined for recycling, they are more fungible. As is the case with other artisanal miners, scrapping is more than just a hobby, for many truly need the income. Ironically, some scrappers earn more from disseminating their knowledge of scrapping than from selling the precious metals.

Acknowledging that they are engaged in salvage work considered secondary, dirty, and downright dangerous due to toxic chemicals needed to extract the gold, scrappers seek to acquire a certain legitimacy for this form of mining. Increasingly, their expertise is gauged in terms of the performances of the body as performance of the self (Goffman, 1956). Their extractive performances and expert advice are filmed and uploaded as instructional videos to YouTube, witnessed asynchronously by a social media audience Bell calls “scrapper publics.” By following several digital micro-celebrity scrappers – male and female – using their videos and statements as well as comments from their publics, Bell perceptively penetrates the world of online scrapping.

Many scrappers deploy monikers that disguise, exaggerate, and even fabricate their personae as scrapper experts in their videos. The videos become the foci of a virtual assemblage of social media platforms and the dispersed followers who watch the videos and record their witnessing in posts on online forums, websites, and Facebook. The videos highlight how the scrappers’ extractive actions and expertise are performative, embodied, and linguistically enacted, and must be routinely demonstrated and reaffirmed by the practitioners. In addition,

using the networking capabilities of YouTube, some scrappers link their videos to one another, in part to drive more traffic to their own performances. This competition for prestige parallels, in some ways, that of the communities of Alpine crystal hunters in Raveneau's chapter:

Stories, including autobiographies, are essential to the valuation of the miner (but not the mineral – a contrast with the chapters by Walsh and Raveneau). However, in this case they emerge in dynamic dialogues between the scrappers and their publics. The videos and websites, with their comments and responses, are “cultural texts,” which, as Bell says, “reveal attitudes and tensions in the work at hand and show how individuals are aiming to position themselves as experts and as part of a wider network of practitioners.”

Through these texts, scrappers offer insights into the dynamic interconnections occurring on the margins of the American economy in the revaluation of accumulating discarded electronic debris. They are engaged in self-making in a peculiarly American manner, calling on the tropes of hope, desire, and freedom. YouTube scrappers explicitly invoke the American dream of doing better, even as it requires dismantling icons of American progress and business success. Scrapping is simultaneously an act of revolutionary iconoclasm and of making money in the most idyllic capitalist way: out of something that is mostly free. For scrappers, transforming free things into money is a way to assert their ability to achieve freedom.

Miners

In his ethnographic study of sapphire miners in Madagascar (chapter two), Walsh usefully questions the “artisanal” aspect of what are more usually lumped together as “artisanal and small-scale mining” (ASM) producers. The “small-scale” characterization makes sense when contrasted with industrial-size, government-sanctioned mining operations, but what does it mean to be an “artisanal” gemstone miner? The obvious but until now elusive answer reached by Walsh is to compare them with other artisans, which means to focus on their engagements with the materials they manipulate, as well as on their situatedness in local and global relationships that facilitate and value their extractive production.

Walsh understands the artisanal miners of Madagascar as skilled practitioners, rather than exploited subalterns (compare to Bell's scrapers). Employing assimilated body techniques, these “autotelic” – that is, self-propelled – actors create distinct niches of opportunity at the fringes of the more industrial-scale and legitimate mining enterprises. Where the similarity with often romanticized notions of artisanal

craftspeople (think cheesemakers) ends is the recognition that other kinds of knowledge and skills are required to outdo rivals and to navigate complex market and governmental forces on a global scale. Walsh aims to approach artisanal production in a way that attends to how artisans engage simultaneously in distinct sorts of “correspondences” (following Ingold) with the materials of their work and the landscapes in which they occur, as well as in distinctive sorts of competition, collaboration, and conflicts with other people. As he emphasizes, the miners are shaped both by the flow of the materials with which they correspond in their work and by the markets for their products.

Thus, Walsh details the properties and circumstances of the coloured gemstones themselves. He begins, unconventionally, with the gemological report on corundum (the mineral of both sapphires and rubies) for the Ankarana region, which has been the focus of his ethnographic research. The mineral's material properties and the features of the landscapes in which it occurs are salient factors in artisanal mining and the marketing of these gemstones. The sheer fact that gemstones could be found with shovels in alluvial deposits facilitated their extraction – the tools required were simple enough – but this assemblage is dynamic and shifting, requiring constant adjustments in the correspondences between miners and the ever more elusive gemstones.

Since the turn of the twenty-first century, artisanal sapphire mining has become more precarious, unpredictable, and dangerous as the gemstones seem to increasingly resist being found. Miners must work in teams, often supported by a patron, forming new or more intense and prolonged social assemblages necessary for digging into caves and excavating deep pits in the unstable alluvium. Months may go by without a find. Furthermore, because sapphires are inherently distinct, varying greatly in size, colour, visual appearance, crystal morphology, and so forth, there is far greater speculation in their valuation. The markets for sapphires are uncertain as demand and prices fluctuate; thus, the work of gem traders is equally precarious.

Nevertheless, the gems retain certain “potentials”: the concentrated value of their small size, their hardness, and (once primped) the endurance of their shape and polish – potentials that are constantly weighed against the uncertainty and risk of their extraction and trade. Although synthetic sapphires can be produced in a laboratory and are almost indistinguishable from those taken from the ground, gems with “natural” origins remain most prized. That aura, an indexical link to the earth and to the work of miners, is essential to their valuation. Thus, the materiality of sapphires and their landscapes contribute to miner-sapphire entanglements in complex assemblages impacting the global gemstone market.

Hunters

Seekers of natural crystals in the Alps refer to themselves as hunters, as if stalking a wary prey. Although quartzite and other crystalline minerals took eons to form and are difficult to pry from their stony matrix, Raveneau (chapter three) treats them as things-in-motion (following Appadurai), whose individual trajectories or “social lives” should be followed. Their value and ontological status can shift dramatically once they are dislodged from the mountains and enter – or not – the market exchange. Raveneau emphasizes how a symbolic production is added to this economic production, one that can make or undo the status and reputation of crystal hunters as well as that of the crystals, as the latter move between hunters and collectors or come to rest, at least temporarily, in museums.

Crystal hunting is a risky business. Many hunters work in small teams, in competition with one another over territory. The task requires a great deal of skill and experience for success, not to mention the sheer stamina of high altitude climbing over rough terrain for long periods. Formed in veins of quartz, high quality crystals typically can be located precisely in the areas of crumbly walls and “rotten” rocks avoided by hikers for the dangers they present. These places are where cracks appear in the earth’s surface that allow access into its depths, especially natural cavities (“ovens”) where the best crystals are hiding.

The hunters are thus at the mercy of the natural environment and weather conditions, incurring injuries and sometimes fatal falls. As Raveneau explains, they are egged on by a treasure quest mentality. Stories circulate of a “virgin ‘oven,’ the miraculous crack full of ‘mature’ crystals that have been waiting ... for millions of years, which [the hunters] will be able to take down intact and pristine.” The gendered and treasure-seeking tropes of crystal hunting are not unlike that of (mostly) male scrapppers busting into and taking the pristine-looking gold from the “motherboard” of a cellphone. Hunters bet that their lives will increase be taken in the acquisition of crystals; however, sacrificed lives increase the overall value of crystals as the social lives of hunters and minerals become entangled.

Unlike diamonds and recycled gold, dislodged crystals are singular objects, no two exactly identical, and some are quite extraordinary. The exceptional ones are given individuating proper names, usually that of their finder or someone else involved in their discovery or pedigree of ownership; the story of their history is a component of their singularity. Raveneau hypothesizes that crystals constitute a “principle of identity”

that can be linked to anthropological theories of the Maussian inalienable gift and prestige goods.

Although most hunters are hobbyists, they will sell or trade their finds, although they may also keep them. Nevertheless, what hunters seek is prestige and fame within the “community field” or assemblages of fellow crystal hunters and collectors. Monetary gains from selling crystals contribute to hunters’ fame as recognition of their skill. As Raveneau notes, the “social value” that differentiates the more esteemed hunters is tied up with their manhood, honour, power, “and other relevant concepts that crystallize in hunters’ relationships with one another.” In turn, the value of the crystal derives not just from its aesthetic qualities or uniqueness, but also from the history of its discovery. The personhood of the discoverer is inalienably indexed in the crystal, thus, its exchange value cannot encompass its total value.

Conclusion

These three authors, in very different studies, acknowledge implicitly or explicitly that there are no strictly “social” relations (Gosden, 1999: 120). Non-human agents are enmeshed in all human projects – here, the materials, landscapes, made objects, and texts (and other media) that act as framing or focusing devices. In following miners and minerals as things-in-motion, Bell, Walsh, and Raveneau demonstrate how situated interactions with precious minerals “make” the artisanal miners. Even these small-scale or hobbyist extractors are entangled with the properties and circumstances of the minerals themselves and the external markets and institutional structures within which their products are exchanged and evaluated.

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1 “Check Out That Gold-Plated Board!” Scrapping Cellphones and Electronics in North America

JOSHUA A. BELL

“Here we have a man whose job it is to gather the day’s refuse in the capital. Everything that the big city has thrown away, everything it has lost, everything it has scorned, everything it has crushed underfoot he catalogues and collects. He collates the annals of intemperance, the capharnaum of waste. He sorts things out and selects judiciously: he collects like a miser guarding a treasure, refuse which will assume the shape of useful or gratifying objects between the jaws of the goddess of Industry.” This description is one extended metaphor for the poetic method, as Baudelaire practiced it. Raggicker and poet: both are concerned with refuse, and both go about their solitary business while other citizens are sleeping.

Walter Benjamin,
“The Paris of the Second Empire in Baudelaire” (2003: 48)

Google the phrase “scrapping cellphone,” and a 3 minute, 32 second video entitled “Scrapper Girl scraps a cell phone for gold and talks about Top Dollar Mobile” appears.¹ Originally published on 7 September 2012, as of 15 September 2016 the YouTube video had received 637,048 views with 515 comments.² The video begins with a montage of a young white blonde woman making various faces as the names of different metals – GOLD, SILVER, BRASS, COPPER, ALUMINUM, STEEL, BRONZE, IRON – are displayed until her name is proclaimed: “SCRAPPER GIRL.” Shifting to the inside of a workshop, the woman looks at the camera and says:

Hey everybody, Scrapper Girl here. Today, I’m gonna show you guys how to scrap a cellphone ... We’re gonna do this because inside we want to get the gold-plated board and various other metals that might be inside ... We’ll start by taking the back off, just gotta press this button here. Then make sure