

## Mobilizing and Invoking

### knowbotiq's Video *Swiss Psychotropic Gold Refining* as a Gold-Evocation Machine

“In an important sense, in a breathtakingly intimate sense, touching, sensing, is what matter does, or rather, what matter is: matter is condensations of response-ability.”<sup>1</sup>

“A ghost never dies,” a voice whispers from the darkness of the screen, echoed by a second one. “A ghost never dies, it remains always to come and to come back,”<sup>2</sup> the voice and its echo repeat at the end of the video, from the blackness of the screen. Now it can start again from the beginning.

knowbotiq's approximately 21-minute video *Swiss Psychotropic Gold Refining*<sup>3</sup> (2018) begins and ends with this requote of Jacques Derrida's observation. Hence it does as it says in a whisper: summons the undead and the revenants; updates what has not been taken care of. And in doing so proposes the video as a machine that invokes ghosts and gold. A narrative begins that deals with gold and the obsession with it, with its making and becoming, with its paths and its added value. And Switzerland always plays a role. If we follow the voice's movements, both of them have belonged together for half a century, if not longer: “Today three quarters of all the world's gold in circulation is refined in Switzerland,” the voice makes known after several minutes, after we have seen images of digital models of a factory in which a type of metal is processed. And it is, as we suspect, mercury, that toxic heavy metal that even today, like centuries ago, is used for the leaching and

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<sup>1</sup> Karen Barad, “On Touching—The Inhuman That Therefore I am (v1.1),” in Suzanne Witzgall and Kerstin Stakemeier, eds., *The Politics of Materiality* (Zurich: Diaphanes, 2015), pp. 153–64, esp. p. 161.

<sup>2</sup> Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International* (New York: Routledge, 1994), p. 123

<sup>3</sup> Credits: *The Swiss Psychotropic Gold Refining*, HD video, 21:13 min, © knowbotiq 2018; concept, realisation, montage/animation: knowbotiq; script: Nina Bandi (script: “A Molecular Listening Session mit Fred Hystère und Nina Bandi”), knowbotiq; sound: DJ Fred Hystère, knowbotiq; voices: Nina Bandi, Sally Schoenfeldt, Jord/ana Rosenberg, Romy Rüeegger, Paolo Caffoni, Stef Huber, et al., with quotes from: Karen Barad, Jacob Tanner, Trinh T. Minh-ha, Rohit Jain, Audre Lord, Paul B. Preciado, Michael Taussig, Imelda Marcos, Gloria Wecker, Paul Wilmott, Nina Simone, Junglepussy and others; performer: Teresa Vittucci; Thanks to: ifcar, ZHdK Zurich, DRAFT/Christoph Schenker, Gitanjali Dang, Rohit Jain, Anna Frei, and others.

amalgamation of gold. Mercury, that “base” element out of which alchemists wanted to produce gold.

Like in a computer game, much too fast to be able to comprehend, the strange, silvery, serpentine-like fluid heads toward us, curls, becomes enormous, washes over us, does not cease, is vitally alive, quicksilver.<sup>4</sup> The video deals with this insistence of matter; this is the “psychotropics of gold,” its material and mind-altering effects, its agency, which mobilizes and affects everything it comes in contact with: gold is alchemy, amalgamation, and transformation. It is gaming, obsession, the craving for more, the voracity for power and subordination. Gold creates hierarchies that transform everything they take hold of into beauty or waste. For gold is not easy to come by. Gold is extractivism, erosion, and the accumulation of mountains of waste.<sup>5</sup> It has to be arduously withdrawn from the earth’s crust and refined. Its legacy are filthy terrains and exploited people. That is why gold is also always shit: it yields a profit *and* destruction; revaluation *and* exploitation. Countless are the names and legends that tell of these costs, of the alchemy of re- and devaluation and their insanity: King Midas, who miserably died of starvation, since everything he touched turned into gold. Aguirre/Klaus Kinski, the Spanish conquistador in Werner Herzog’s movie who, as the last surviving human, cannot stop romancing about the legendary El Dorado in front of a horde of squirrel monkeys. Or, acutely quoted in the video, Imelda Marcos, whose husband—a gold trader, lawyer for gold mines, and dictator—so deeply loved her because she knew how to exchange his blood gold for beauty: “And then he said to me: because all you buy is beauty.”

Gold is economically tolerated madness. It is, as *Swiss Psychotropic Gold Refining* demonstrates, not only one of the major material resources that depends on the (expendable) economy of capitalism but also a psychoactive agent that unleashes mind-altering, libidinous powers. Gold is doing: it is digging for gold, making gold, becoming gold. It is becoming element, becoming elementary. Dissolving boundaries. Flooding. Infecting. Gold is never a finished thing. It is the molecular power of transformation. Gold creates relations, hierarchically structured relations,

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<sup>4</sup> Quicksilver comes from the “Old English *cwicseolfor*, literally ‘living silver,’ so called for its mobility.” <https://www.etymonline.com/word/quicksilver> (accessed September 7, 2019).

<sup>5</sup> “Sandro Mezzadra and Brett Nielson use the term ‘extractivism’ to name the relationship between different forms of extractive operations in contemporary capitalism.” Quoted in Kate Crawford and Vladan Joler, “Anatomy of an AI System: The Amazon Echo as an Anatomical Map of Human Labor, Data, and Planetary Resources” (2018), <https://ainowinstitute.org> (accessed January 30, 2019).

and subjects (*sub-iecta*). Gold is othering.<sup>6</sup> But it is also mutable. It is virtuality and harbors the potential—the alchemically conceived hope—of the conversion of one thing into another, from the “base” into the “high,” from quicksilver into gold (although in reality, the process is more likely to take place in reverse: from fertile soil to toxic slag). “Matter itself,” it says in the video, quoting Karen Barad, “is diffracted, dispersed, threaded through with materializing and sedimented effects of iterative reconfigurations of spacetime-matterings.” Accordingly, gold is an assemblage of energies and relations. “Assemblage,” writes Jasbir Puar, “is actually an awkward translation—the original term in Deleuze and Guattari’s work is not the French word *assemblage*, but actually *agencement*, a term which means design, layout, organization, arrangement, and relations—the focus being not on content but on relations, relations of patterns.”<sup>7</sup>

The video sees itself as “a critical fabulation” of such “patterns” of relations and subjectification. It creates a relation, shows the pattern between the colonial and colonizing history of gold and Switzerland. Thus the emergence of an ornamental pattern in that place where “exemplary” Switzerland is evocatively called out suggests that it may be about a very specific pattern of colonial structures. Officially, Switzerland had neither colonies (with gold mining), nor was it involved in the gold trade prior to the second half of the twentieth century. Until 1968, this was in the hands of the London Gold Pool. When it had to close for two weeks due to American financial speculations, the three major Swiss banks at that time seized the opportunity and established the Zurich Gold Pool. From that point onward, they dominated the international gold trade for a long time.<sup>8</sup> As the video fabulates, it may be precisely the ostensible “cleanliness” of Switzerland that provides the condition for its continuing post/colonial gold practices. Elements such as neutrality, which is repeatedly represented to the outside world, its basic democratic convictions, as well as the Protestant work ethic suggest a moral superiority that seems to be incontestable. It becomes apparent that both current Swiss gold transactions as well

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<sup>6</sup> With respect to waste, the environmental historian Marco Armiero speaks of its processuality and relationality. “Waste” is always “wasting” and “othering.” In my opinion, one can apply this crucial insight directly to gold, whose flipside is always waste. See Marco Armiero (2018), <https://www.space4235.com/archives/fumogeni-2-marco-armiero> (accessed April 15, 2019).

<sup>7</sup> Jasbir Puar, “‘I would rather be a cyborg than a goddess’: Intersectionality, Assemblage, and Affective Politics,” *Transversal* 8 (2011), *Inventions*, <http://eipcp.net/transversal/0811/puar/en.html> (accessed September 6, 2019).

<sup>8</sup> Bernd-Stefan Grewe, *Gold: Eine Weltgeschichte* (Munich: C. H. Beck, 2019).

as the innovative forms of gold mining carried out by transnational companies have to be read as a continuation of colonial history.

The video produces this decolonizing knowledge, as I would like to show in the following, less by providing unambiguous information by means of documentary material, and instead by mobilizing relations, making patterns visible, and opening up virtualities—possibilities of aesthetic entanglements that are inherent between the wide range of information and research materials and developed through a kind of assembling, of “agencement.” I read the video as a mobilizing, a summoning of revenants and the undead, who in their disparity edge toward the stage: knowbotiq’s evocation calls in the subjects the gold machine has ejected in the course of its long history of othering. It assembles those voices, times, and places that were “wasted” by the alchemy of gold and that now long for transformation—for becoming gold. What results is an auditory, visual, and textual assembly of voices, muttering and rhythms, of archival and documentary materials, 3-D models, infographics and Google Maps, an assemblage of many that incessantly generates new relations and collectives: the video as a gold-evocation machine that subjectifies and affects us, the public, the world. Hence the video makes what it “tells of” aesthetically palpable. Gold is not a product, but producing; producing hierarchies, “others” that do not “count”—prospectors that stay behind in the mines, or slags that are withdrawn in the gold-parting plants. That is othering.

At the same time, and this likewise corresponds with the paradoxical alchemy of gold and its long (value-added) history, the processes of othering are in many respects entangled, reversible, or even annulable. This is the case when doses change, when others come and re/count, when they see themselves as subjects of the story. The video also demonstrates this with its evocation of the ghosts as the main protagonists in the story, with the lens of the camera directed at an Afro-American rapper who wears a heavy gold chain, or at Creole filigree work from the Surinamese diaspora in the Netherlands. Such examples show that the othering of gold implies a multiply broken process that also contains the potential to suddenly change into its opposite within it and might even transform itself into something healing. As demonstrated using the example of gold acupuncture, gold is also used for healing and purifying purposes. A fact to which the numerous gold spas in Switzerland also testify; apparently, one not only wears gold or employs it but also meditates on, inhales, or eats it. “Everything is a matter of doses, of melting and crystallization point, of the

rotary power of the molecule, of regularity, of milligrams, of the form and mode of administration, of habit, of praxis,” it says in the voice-over in the initial sequences. Like the *pharmakon*, gold is both the one as well as the other: it is poison *and* medicine, decoration *and* shit; purifying *and* polluting; parting as well as joining together and healing. From an aesthetic perspective, it is precisely this contradiction, this radical relationality and incompatibility of the opposite that makes gold open for the decline of singularity: the patterns of relations that gold (re)produces are exchangeable, can suddenly change into their opposite at any time. Gold can also heal: so let’s allow those places in El Dorado that were ruined by gold mining to receive wellness treatment! The potential of gold lies in the exchangeability of the positions of the protagonists and the changeability of the doses administered—precisely for its use in the arts as well: The history of gold extractivism and its polluting of the entire world cannot be erased, the whispering of the undead cannot be ignored. However, othering can be aesthetically perverted and momentarily suspended. Therein lies the power of the aesthetic, which works with the alchemical power/hope of gold/waste.

### **Being Stone, Becoming Stone**

The video, divided into fourteen chapters, plays with the collision and the inversion potential of these opposite meanings. While the first chapter presents the immaterialization of gold in the course of exchange abstraction and capital accumulation (and in doing so suggests initial parallels with the seeming immateriality of digital technologies), the second chapter strikes back with the contrary: gold is not immaterial value, but matter; ancient geological sediment that has been deposited in the form of nuggets, veins, or dust. As one image sequence shows, in many countries, currently in South American rainforest regions in particular, gold quartz is washed out of stone by means of small-scale hydraulic mining. The mantra-like “becoming stone” is apparently also a survival strategy on the part of the causalized protagonists: “In order to withstand the weather, we had to become stone,” says the voice off camera, accompanied by the ringing of cowbells. Who is speaking here? Is it a nugget, the destroyed forest, is it gold prospectors or their ghosts?

In the next chapter, everything seems abstract again: symmetrical patterns, a voice droning out a mantra from Switzerland, whose banks not only carried out all of the necessary monetary transactions for the apartheid regime of South Africa (which at the time was the world's biggest gold supplier and therefore still has numerous gold smelters today), and where meanwhile three-quarters of the global circulation of gold is refined and hence cleansed it of its tainted history. At the beginning of the following chapter we see the factories or parting plants, which were initially introduced as virtual images, as "real" ones for the first time: unobtrusive, modern façades; fenced-off, video-monitored areas; trucks that come and go—recorded in a stop-and-go technique whose jerky zoom-in, which repeatedly starts over, does not lead to any "progress." Something halts, insists, is controlled: it is the infrastructures of gold in a hallucinogenically rendered Ticino landscape with a mushroom—reality as (video) game. Ticino is home to three of the most important gold refineries operating worldwide. A first premonition arises: the (gold) objects remain as they were, even though the methods and techniques change.

Gold is stone is digital technology. The image of a rotating, closed white (purified) smartphone brings the contemporary form of a gold fetish into the picture: In many countries, the smartphone has not only replaced the gold Swiss watch as a status symbol, but it is also a receptacle whose interior contains a relatively large amount of gold. Because gold is one of the most stable chemical elements, does not corrode, is gently cushioning, and is well-conducting, it is an important component in high-performance electronics; the contacts (plugs) are therefore normally made of gold. In numbers, this means that one smartphone contains 20–25 milligrams of gold, depending on the model and year of manufacture; today, about 8.75 kilograms of stone are required for its extraction. Three hundred and fifty kilograms of stone are required for the extraction of one gram of gold. However, if one recycles instead, one gram of gold can be obtained from 40–50 smartphones. For a gold ring weighing 10 grams, 3.5 tons of stone have to be mined or, alternatively, 400–500 smartphones recycled.<sup>9</sup> These numbers illustrate that the extraction of raw material is wasting: As we discovered in our research project "Times of Waste," in the case of smartphones the greatest amount of waste, for example, does not originate after but before their

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<sup>9</sup> On this, see the research we conducted within the scope of our project "Times of Waste," which was on the trail of the waste that a smartphone leaves behind, esp. <https://objektbiografie.times-of-waste.ch/ewaste/#Hoboken>

use—during the extraction of raw material, first and foremost gold. As attested to by the numbers mentioned, on the one hand due to its pure volume, and on the other hand because during the extraction of raw material, many toxic residues remain—quicksilver, for example, in the case of gold—or because in surface mining groundwater is pumped out and consequently polluted.<sup>10</sup> This is also one of the reasons why raw material inclusive of gold production was outsourced to countries with fewer environmental regulations and lower living standards: not necessarily because one can extract more, but because it can be extracted more cheaply there.<sup>11</sup>

Even though *Swiss Psychotropic Gold Refining* does not deal with recycling gold out of smartphones, I would like to provide several data from our research project, as they fit in with the “patterns” mobilized in the video from a somewhat different perspective. Because smartphones contain numerous precious metals in compact form with relatively little packaging waste, in Switzerland discarded models are ideally not treated as “normal” electronic waste. They go directly to the internationally active Belgian company Umicor. This is one of the few companies worldwide that has specialized in the smelting of precious metals from e-waste. (This is why smartphones do not go to the parting plants in Ticino.) The history of Umicor, which has become a flagship company in recycling matters, has its roots in the colonial period, when raw gold from the Belgian Congo was refined in Europe. In the age of extractivism, because it is cheaper to remove raw materials from mountains of stone under the worst of working and environmental conditions and to re-accumulate them elsewhere instead of recycling e-waste, recycling gold out of e-waste continues to be a small branch of industry; the rate amounts to 15–50 percent, even though gold could be recycled practically without a loss because of its stability. Instead, elements that are not so stable, such as, for instance, rare earths, are degraded in the smelting plants. However, if the rare earth neodymium were recycled, the gold could not be extracted for thermodynamic reasons. Concepts that are not yet fully functional, such as Apple’s recycling robot Liam, withhold this information. However, I do not mean to imply that recycling, in particular by those who produce e-waste and take it into their

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<sup>10</sup> See our object biography of a smartphone: <https://objektbiografie.times-of-waste.ch/en/>

<sup>11</sup> Angela Melitopoulos’s video installation *Crossings* (2017), which was presented at documenta14, strikingly demonstrates this using the example of Greece, which is responsible for the fact that, under pressure of the European Union, Canadian companies such as Eldorado Gold now perform surface mining there and are destroying the terrain. On this, see Yvonne Volkart, “Neinsagen-Lernen als ästhetisches Ereignis,” *Springerin* 4 (2017), pp. 52–55.

own hands, is not a good thing. On the contrary: If sustainability (and not simply purported sustainability, therefore greenwashing) is to one day become an economic factor, then in view of the global increase in electronic waste along with the simultaneous reduction of gold exploitation by means of mineral ores, urban mining, which is what the recycling of e-waste is also called, would have a bright future.

### **Endless Extractivism**

The next stage of innovative gold extraction, as Google Maps and Google Wayfinding suggest in *Swiss Psychotropic Gold Refining*, will presumably run in another direction. The methods are called phytomining and microbial (ore) leaching (bioleaching). They developed through the observation that specific plants and bacteria are capable of withdrawing the metals (including residual molecular gold) from the slag heaps and waters polluted by mining and thus cleansing the areas. If we follow the logic of the video—in zones ruined by surface mining, hills full of mining waste with patches of snow, a menacingly creaking, scratching sound—it quickly becomes apparent that even this gold extraction process, lauded as the “return to nature” in the promotional film imported into the video, does not serve the purpose of healing and revitalizing the run-down mining sites. Instead, it rings in the next step in the millennia-old history of extractivism. At a time in which the earth’s crust no longer yields gold nuggets, as these are already all being carried around by bodies as chains, rings, wristwatches, or smartphones, the dirt and the dust will have to be scratched together by hosts of “slaves.” Exactly what bodies these are recruited from—whether humans, machines, plants, or bacteria—does not matter for now. The main thing is that it sounds green and is profitable. One of the last shots shows printers that—like mouths, bullets, or waterfalls—churn out snow-covered mountains at Lake Lucerne. They stand for the mountains of mineral, animal, or human waste that prosperous societies produce, yet also for the production of the fantasy that Switzerland is clean, neutral, and innocent.

My text shows that knowbotiq work with a remarkably obtrusive and restless aesthetic of mobilization, fragmentation, and enumeration (not *narration*). Their style comes across as paratactical, like a hard construction, its chapters like stone, of which each one could also stand on its own. The issues the video deals with seem to be structured into chapters as well as abruptly and associatively strung together.

Some of these chapters were already integrated into earlier performances and exhibitions as modular short videos. The linear flow of the video is repeatedly interrupted and can also be experienced as a cyclically repeatable as well as monumental condensation of time. This “other” temporality is generated by the artificiality and modular nature of the chapters that have been joined together; the abrupt, rhythmizing speech; the tendency toward repetitive chanting, the gyrations of figures and dancing objects in the images as well as their temporary disappearance and reemergence. “A ghost never dies, it remains always to come and to come back,” the voice and its echo repeat at the end. The “ghosts” can only return in a nonlinear temporal structure. Only in those places where variations on narrated history are possible does hope still exist, or where hope still exists are variations narratable. Since there is no reason for optimism, this hope is solely due to the alchemy of gold/waste and its ability to suddenly change into its opposite in an unpredictable way.