

## **An Extractive Science? Complicated Industries and Oily Natures**

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221 hectares of hydrocarbon-contaminated soil reimagined as a promissory garden bed. The renaturalisation and bioremediation of *Qara Şəhər* (Black City) – a historic industrial district of Baku, Azerbaijan–, was launched by state and corporate investors in 2011. The intended outcome of the ten-year project was the creation of *Ağ Şəhər* (White City), an eco-urban hybrid, which would signal the return of nature to a space that had been otherwise designated an unsalvageable wasteland. With the fast-paced demolition of petrochemical facilities, the introduction of biodiverse and exotic plant life, as well as the implementation of carbon neutral policies, state actors and environmental scientists alike celebrated the apparent liberation of the city from its toxic legacies – not only of crude oil contaminants, but also Soviet subjugation and widespread state corruption. Arguing against this neat narrative, the paper will make the case that, via processes of gentrification, the displacement of marginal communities, and the destruction of ruderal ecologies, remediation has actually continued the work of extractive capitalism in Baku. Furthermore, many of the greening projects have required the expertise and financial support of the oil industry, complicating the relationship between extractivism and environmentalism in both the capital city and the wider region of the Caucasus. Through examining collaborations between environmental scientists and oil corporations like the State Oil Company of Azerbaijan Republic (SOCAR) and BP, the paper will comment on the close entanglement between the extractive industry and scientific knowledge production. It will finish by pivoting towards local community practices – of backyard 'neft' gardens, seed care, and informal waste collection –, which seek to intercept the above-mentioned relationships and envision toxic land otherwise.

### **Introduction**

With the inauguration of the 'Comprehensive Action Plan for Improving the Ecological conditions in the Azerbaijan Republic during 2006-2010', a promissory environmental campaign exploded across the refinery-dominated landscape of Baku, the capital city of Azerbaijan. Brought together by President Ilham Aliyev, and backed by corporate investors, it sought to transform the arid landscape of the Absheron peninsula into a fecund site of greenery and ecological diversity. This entailed highly publicised events – ranging from mass tree-planting to volunteer beach clean-ups–, in addition to the creation of a new state organisation by the name of Tamiz Şahar (Azeri for 'Clean City'), tasked with the provision of centralised waste disposal services. The former industrial zone of the capital, known as the Black City (*Qara Şəhər*), became the primary battleground, where the government was to exercise its capacity to transform an unsavoury past into a profitable future.

Here, by presidential decree, the Black City was to 'turn white, clean', providing a 'desirable place' for work, life, leisure, and entertainment, whilst simultaneously attracting foreign investment and business (Baku White City, 2021). A masterplan for the redevelopment of 221 hectares of land was quickly approved and the construction of ten urban neighbourhoods began in earnest. Weedy plant species, like the camelthorn, were uprooted by overly zealous volunteer hands, whilst front loaders dumped topsoil across orphaned oil wells and miscellaneous patches of land. The shift towards urbanism and environmentalism was, in many ways, to signal the country's 're-emergence into the international

community' through adequately showcasing a range of 'achievements since independence' (Grant 2014, p. 515). By incorporating the natural world and its nonhuman subjects into the nation's infrastructure, public life, and governing structure, the state aimed to produce material evidence of change - a redemptive narrative of a blasted landscape salvaged and made anew.

However, state-endorsed practices of environmentalism required both funding and existing knowledge of the terranean and subterranean features of the peninsula. Collaboration with the State Oil Company of Azerbaijan Republic (SOCAR) and British Petroleum (BP) became a vital component in mapping sites for remediation - in part due to SOCAR and BP's expertise in hydraulic engineering and geology, as well as the monopoly they wielded over equipment and machinery. Furthermore, many of the ecological projects launched over the past three decades derived their funding from a thirty-year production-sharing agreement signed in 1994 between Azerbaijan and ten foreign oil companies from six countries (Blau & Rupnik 2019). The 8 billion USD 'contract of the century' kickstarted the economy and highlighted the centrality of oil within processes of policy implementation, diplomacy, and environmentalism (Sagheb & Javadi 1994). Whilst the link between oil-derived revenues and state-building in hydrocarbon-rich republics is quite apparent, the way ecological projects function as extensions of extractivism remains much more elusive. This paper intends to highlight the ways in which environmental discourse and strategy have both fused with the petrochemical industry, maintaining infrastructures, methods, and modes of governance which have wielded considerable harm and disruption. It renders a 'green' future antithetical to the dismantling of violent systems, with the very upkeep of environmental programs dependent on continued fossil fuel production.

Within the context of Azerbaijan, both oil and nature have been historically linked to technologies of governance and population management, constructing distinct epistemological and material infrastructures. Indeed, the very first instance of greening in the Black City was initiated by the Nobel brothers - the founders of the Branobel Oil Company -, who set out to create a lush oasis surrounding their primary residence of Villa Petrolea. This entailed the intensive re-engineering of the local environment, not only via the importation of European flora, but also the incorporation of oil infrastructure for irrigation and other horticultural necessities. Indeed, to overcome the aridity of the landscape, freshwater was transported all the way from the Volga River in oil tankers belonging to Branobel. Later, condensed steam generated in the refinery was routed to the park via special pipelines. These strategies forged a reliance on petrochemical infrastructure, where the act of creating green space necessitated involvement from the fossil fuel sector. It collapsed the categorical distinctions between extraction and nature-making, rendering both part of the same continuum of intervention, engineering, and the imposition of governance - particularly over spaces already occupied by marginal and precarious populations. Though perhaps implicitly, the link between nature and oil can also be found in Baku's biological and ecological collections - the most clear-cut example being the Mardakan arboretum. Storing approximately 1540 plant varieties from Azerbaijan and abroad, the collection is at the centre of the country's conservation and renaturalisation efforts. However, whilst championing biodiversity in the present day, its origins stem back to the Murtuza Mukhtarov, a tycoon and oil millionaire, who established the arboretum as his personal garden in the early 1900s.

What becomes evident in the case of Azerbaijan is the co-constitutive relationship between the oil industry and environmental knowledge, where the very ecological parameters of a given space emerge through extraction. It highlights a fraught context in which understandings of the land rely on prospecting, mining, tapping, and other invasive technologies of industry. The next section will outline

the ways in which SOCAR, and BP have incorporated notions of sustainability and environmental management into their corporate persona, particularly as decommissioned processing units and exhausted oil fields turn into a liability. The section will also propose the concept of 'extractive environmentalism' to comment on the way environmental management is fast becoming an extension of corporate strategy within the petrochemical industry. Previously reliant on a finite resource, greening offers a potent and profitable future for both nation-state and corporation.

## **Greening Extraction**

In early 2020, a highly anticipated agreement was signed between SOCAR, and an Italian energy infrastructure group called Snam, heralding the development and use of biogas and biomethane, including the potential creation of anaerobic digestion plants. The agreement also promised to introduce sustainable mobility using compressed natural gas (CNG), liquefied natural gas (LNG) and hydrogen, through the development of new distribution stations across Azerbaijan. Rovnag Abdullayev, SOCAR's President, assured that the steps would lead to the "development of a greener economy", curbing global warming whilst also sustaining "life and prosperity". These proposed experiments with renewable natural gas were, however, reliant on a more expansive infrastructural policy which entailed the extensive re-ordering of Baku's urban landscape. All relics of extractive industry in the downtown district were to be promptly removed and done away with, or otherwise softened via the use of arboreal buffers (in the form of hedges, ornamental flowers, and arcane olive trees) and towering billboards depicting utopic eco-friendly futurescapes.

This was the case in the area in front of Umid Production and Supply Base, located on the Baku-Gazakh motorway, where, in 2019, SOCAR AQS personnel planted 2000 trees in a single day. Eldar Pine, Goyush, Thuya, Cypress, Mulberry, Tezalpinia, Eucalyptus, Legustura, Aliander, Palm, Althaea, as well as figs, pomegranates and other fruit trees effectively formed another security fence, obscuring the extractive infrastructure so that it would not be visible to tourists riding into the capital city from the airport. Samir, a local environmental activist, described his frustrations to me, saying: "roughly 60% of those trees don't survive their first year. It just becomes a way for the oil company to control yet another resource". Indeed, Samir lamented the fact that for the last decade or so the coordination and rolling out of environmental campaigns has necessitated SOCAR in some shape or form. Whether a request to conduct a survey of former oilfields, or the access a map of aquifers in the area, everything requires the explicit permission of the oil company - in the words of Samir, "even if you are working for the Ministry, you better hope you know someone at SOCAR".

It highlights a system whereupon environmental activism is folded into the extractive industry, becoming yet another branch within their vast enterprise. Knowledge around, and access to, the local environment becomes tightly restricted, requiring exhausting engagements with both corporate and state bureaucracy. In many ways, this has impeded the ability for community groups and organisations to carry out environmental work independently. Even those working in the government require the go-ahead from industry to conduct environmental management and monitoring. Such obstacles have frequently led to the complete absence of community groups from remediation and renaturalisation projects - entrenching power imbalances and increasing the risk of corruption. Indeed, in the case of the Black City, the entire decontamination of the area was carried out by SOCAR (acting through its subsidiary CJSC Ecol Engineering Services), and under the guidance of a global engineering and architectural design firm Atkins (UK).

Having complete monopoly over the space allowed SOCAR to become the arbiter of the Black City's future. Any human and nonhuman community seen as a hindrance to development became at-risk of removal and resettlement. Indeed, the thriving ruderal ecologies and makeshift settlements scattered across the former industrial zone were the first to be targeted for removal – justified by a rhetoric of concern over health and safety. According to Arzu, a resident of a makeshift settlement called NZS, despite local councillors and SOCAR representatives frequently making claims of the toxicity of the air and soil, no long-term epidemiological study was ever conducted to justify the removal of the community. Furthermore, the actual remediation was often surface only, with rumours circulating around the newbuilds of oily water running through taps and flammable patches in the newly cultivated flowerbeds. It reveals a fantastical notion of toxicity as easily containable and manageable via selective removal – of soil, communities, or even undesirable species. Indeed, weedy rubble plants, like the camelthorn, were removed indiscriminately during the transformation of the Black City, despite their capacity for phytoremediation and their medicinal use within the makeshift community itself.

In all these instances, extraction sets the parameters of discursive terrain -- it defines what is natural and what is unnatural, toxic or benign, liveable or unliveable. It sets up the very structure for the future of the post-industrial space, which assures corporate survival at the expense of marginal residents. The next section will introduce a series of counterstrategies by local human and nonhuman communities, aiming to disentangle extraction from environmentalism.

### **Living with Neft**

**\*To be introduced/discussed during the conference\***