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Global Histories of Environment and Labour in Asia and Africa

Chapter 16

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Since the 1990s, historians have explored the relationship between environment and labour in Europe, North America, and Latin America. Only since the 2010s, however, has there been a growing body of similar scholarship concerning Asia and Africa. This chapter surveys this burgeoning field to highlight the similarities and differences between Global North and South, while also offering conceptual and methodological suggestions. First, the chapter reviews how colonialism and colonial modernity have shaped labour and environment through several themes: alienation, knowledge, health, subjectivity, and resistance. Next, it considers how energy history is a particularly productive space to think about how labour and environment are tied together but separated in effect, requiring multiscalar analysis. The final section offers a case study to illustrate these themes in the history of the Nigerian oil industry. The chapter offers the conclusion that the timing of the colonial and postcolonial periods makes labour and environment of special relevance to these regions, distinct from histories of Europe and the Americas. It also highlights plurality across multiple spaces and questions the applicability of Euro-Atlantic concepts. By foregrounding languages and epistemologies of these regions, there is great scope to change existing knowledge of how labouring bodies relate to the world.

To an outside observer, the connection between labour and environment in the study of history may seem tenuous. Yet as existing surveys exploring this intersection attest, these two categories were co-constitutive through humans' alienation from the means of their own subsistence. Indeed, they often begin by invoking Marx's idea of social metabolism and capitalism's twin commodification of both labour and environment. Hence, despite the distinct origins and separate trajectories of labour and environmental history as sub-fields, since the 1990s historians have endeavoured to bridge these through several rich studies, which previous surveys have

already comprehensively covered (Andrews 2014; Barca 2014; Chomsky 2016; Peck 2006; Soluri 2014).

Yet traditionally, the geographical scope of scholarship exploring this intersection was limited. Most of these histories are related to North America, Europe, and, to a lesser extent, Latin America. The 2010s, however, have seen a proliferation of studies at this juncture focusing on Asia and Africa, for which there is no existing overview historiographical survey (see Chapter 15, this volume). Thus, this chapter will examine these works to illuminate the current state of the field and its new directions. On the one hand, it highlights similarities with the main themes outlined in existing surveys of the Global North, especially between settler colonial and colonial contexts. On the other hand, it points to idiographic divergences because of the specific nature and timing of colonialism and postcolonial development. It also questions the “universal” applicability of certain concepts that originated in a Euro-Atlantic context, such as “environmental justice”, “environment”, “energy”, and even “labour”. Instead, it foregrounds the languages and epistemologies of these regions as a warning against universalist assumptions and a way to deepen our understanding of the unique histories of these regions (see also Chapter 1, this volume).

First, the chapter offers a review of how colonialism and colonial modernity has shaped the relationship between labour and environment across Asia and Africa, explained through several key themes including alienation, knowledge, health, subjectivity and resistance. Next, the chapter explores how energy history is a particularly productive space to think how labour and environment have been imbricated. It shows how they are put to work in systems of colonialism and global capitalism, but are simultaneously separated in effect. We show how this was achieved through divergence between the Global North and South – through localised violence in Asia and Africa – thereby requiring multiscalar analysis. The final section offers a detailed case study to illustrate the aforementioned themes – connecting labour, environment, and energy – in the history of the Nigerian oil industry.

Histories of labour and environment in Asia and Africa

Given scholars' original interest in social metabolism, it is unsurprising that one of the major themes arising from histories of labour and environment in Asia and Africa has been the co-constitution of these categories and their separation through colonialism or colonial modernity. This is especially pronounced in the modern history of the river Nile. For instance, Alan Mikhail shows how political and economic power in Egypt transformed in the late 18th century through the interface of labour and environment. Land became increasingly concentrated in the hands of wealthy landowners who sought to manipulate environments through large infrastructural projects to increase agricultural yields. These projects required hundreds more workers now removed from their home villages, sometimes even forcibly, and river management relied less on local environmental knowledge and ethical obligations than labour expended in the abstract – a process that accelerated with larger-scale projects in the 19th century involving hundreds of thousands of workers, and that consequently resulted in environmental degradation (Mikhail 2011, 2014).¹ Mikhail's work is important in showing how transformations that helped separate labour and environment were already underway before the arrival of European colonialism.

As Jennifer Derr shows, Egypt's later colonial economy would also rely on the ecological change wrought by labour. Although scholars have long noted how Egypt's expansive cash crop production relied on augmenting the Nile over the course of the 19th century, especially through irrigation, Derr centres labouring bodies in this process as “agents and sites of ecological change” (Derr 2018: 196; cf. Derr 2019). In particular, river management schemes that achieved perennial irrigation (as opposed to the previous system of seasonal irrigation that channelled waters of the annual flood) enabled increased yields of summer crops such as cotton, which was Egypt's main export and quickly came to dominate agricultural production.

Perennially irrigated agriculture had both ecological and biological effects. The proliferation of canals allowed freshwater snails carrying the parasitic diseases bilharzia (schistosomiasis) and hookworm to flourish, and labourers were now exposed to these for longer periods of the year (Derr 2018: 200–2). Likewise, perennially irrigated soils were sandier and moister, providing ideal conditions for hookworm to thrive. Workers also increasingly encountered hookworm through mud, which they used to line irrigation canals (Derr 2018: 205). Agricultural workers experienced the temporality of perennial irrigation especially through their embodied

experiences of schistosomiasis and hookworm, both of which caused incremental damage over several years. The former, for instance, not only caused fatigue, aching, and fever but also left gradual layers of scars and lesions in tissues and inhibited organ function. Through the colonial economy, then, subjectivities of agricultural workers were defined not against the environment, but through “the enmeshment of laboring bodies within the ecologies of perennial irrigation” (Derr 2018: 207).²

Plantations best exemplify how labouring bodies were imbricated within ecological transformations across Asia and Africa. A number of scholars have shown that plantations especially provided ideal conditions for the spread of disease in the first decades of the 20th century. First, they were all extremely labour-intensive, requiring large numbers of workers living on site in packed barracks without adequate sanitation and water supply, which were conditions conducive to the transmission of diseases like hookworm (Kaur 2012). Second, the clearing of large tracts of forest for plantations left large pools of stagnant water or limpid streams, which were ideal breeding grounds for malarial mosquitos, giving rise to high rates of malaria in Malaya and Vietnam during the 1920s and 1930s (Aso 2018; Kaur 2012; Ross 2017: 117). Similarly, the waterways serving Firestone’s plantations in Liberia, shaded and wind-broken by monoculture rubber forests, became infested with black flies that carried parasites causing river blindness (Mitman 2021: 206). Third, malnutrition made workers susceptible to beriberi due to vitamin B deficiency, and the arduous nature of work compromised their ability to fight off all diseases more generally. Finally, chemicals such as ammonia and herbicides increasingly became part of plantation agriculture, which could cause immediate bodily harm and had longer-term carcinogenic effects on those exposed (Mitman 2021: 206–7).

Ecological transformations similarly facilitated the rapid spread of disease in tea plantations in Assam, India, during the period of British colonial rule. The proliferation of mosquitoes in plantations combined with the malnutrition of labourers to cause high mortality rates among plantation workforces. At the same time, this made plantations ideal sites to produce scientific knowledge about tropical diseases; although this was nominally undertaken for the mitigation of disease, the exigencies of profit often prevailed (Aso 2018; Bhattacharya 2012; Dey 2018). For instance, planters evaded quarantine and vaccination programmes, in addition to labour laws, for

fear these might temporarily decrease the number of available workers, preferring instead to employ a diseased workforce. As Arnab Dey argues, paying attention to ecology allows us to examine how “worker exploitation in Assam went far beyond methods of bodily regulation and structures of recruitment”, experienced in the often-invisible forms of embodiment (Dey 2018: 13).

The embeddedness of labouring bodies in their environments also brings into focus the impact of pollution and toxicity in industrialised settings. Whereas works at the intersection of labour and environmental history in North America and Europe initially flourished in relation to industrial hazards and disease in urban settings, relatively little has been written about labour, pollution, and toxicity in urban spaces of the Global South. One notable exception is Brett Walker’s *Toxic Archipelago*, which shows how pollution and toxicity have impacted human bodies through the engineering of landscapes in modern Japan. From the late 19th century, industrialisation created hybrid environments that allowed the easier spread of toxins through seamlessly connecting ecosystems, technological systems, and bodies. For example, oxidised metals from the Ashio and Kamioka mining complexes were carried along rivers and irrigation channels before being deposited in rice paddies and entering food chains (Walker 2010). Drawing on Linda Nash, Walker argues that it is the most industrialised landscapes – supposedly emblematic of human alienation from Nature – that we are most reminded of the human body’s embeddedness in surrounding environments (Nash 2006).

Much less has been written on toxicity and labour with reference to the Global South. Walker aside, some other notable exceptions perhaps indicate why: epistemic erasure in the archive. Both Gabrielle Hecht and Iva Peša show how occupational exposure was rendered invisible in the extractive industries across different parts of Africa. For example, Hecht (2012) demonstrates how radiation exposure in uranium mines in the second half of the twentieth century was obfuscated. In some contexts, this was through the deliberate work of mining companies to conceal exposure, as in South Africa; and in others, like Gabon, it was partially because of workers were mostly unaware of exposure, much like some anthropological studies about the “slow violence” of chemical exposure show (Nixon 2011). But, drawing on Michelle Murphy’s concept of “regimes of perceptibility”, Hecht (2012) argues that common across all these sites

was the lack of technical instruments to make radiation legible to established transnational science.

Peša (2022) similarly brings attention to the invisibility of pollution in corporate archives relating to the Zambian and Congolese Copperbelt during the same period, despite companies being aware of their polluting effects. This was through a combination of corporate denial and medical findings either complicitly denying ill health or not being made public when they challenged corporate interests. However, through oral histories, Peša shows how it was also because even when workers were aware of pollution, they learned to live with it rather than make it a subject of political contention, especially because of its perceived inevitability and the economic benefits that came with the copper industry. Together with recent anthropological studies on inaction and “unnoticing” on pollution and toxicity in Global South contexts, this cautions environmental historians against filling silences in the archive with normative concepts of environmental justice, and forces careful consideration about its translatability from its specific origin in the United States to the rest of the world (Lou 2022).

The universality of concepts is further challenged by Tamara Fernando’s (2022) study of the Mannar pearl fishery (off the west coast of Ceylon) in the 19th and early 20th centuries. Fernando shows how labour, as an embodied “mode of knowing nature”, clashed with the efforts of the colonial state to rationalise, standardise, and centralise both Nature and labouring bodies according to the principles of scientific management. This was not pre-given: in the mid-19th century, the colonial state relied on divers’ embodied expertise to find pearls underwater, especially where “the sea remained inaccessible” (Fernando 2022: 141) This gave labourers some power: throughout the remainder of the century, colonial administrators sought to increase yields not by supplanting the labouring body by new technological instruments but by disciplining and maximising its productivity. A colonial police force was present on shore and at sea, which compelled divers to work and inspected their activities. Nevertheless, divers used their privileged underwater authority in strategies of resistance, for instance by refusing to work after the sighting of a shark. Ultimately, by the 1920s, colonial administrators ceased their efforts to apply scientific methods the fisheries in the quest to maximise profits: these were complex undersea ecologies “of which humans were one part”, existing beyond capital, abstraction, and

any universalising tendencies. By implication, then, the very categories of “labour” and “environment” were abstractions that assumed a separation conforming to colonial exigencies, but which failed to correspond to relations on the ground.

In other colonial contexts, labour subjectivity could be formed in opposition to environment. Aso shows how during the First Indochina War, many plantation workers in Vietnam framed rubber trees as symbols of French colonialism. Although plantations were designed to discipline both environments and bodies, anti-colonial cadres and official Viet Minh publications agitated that the French valued trees more than human bodies, and even that the former had been “fertilised” by the latter. Moreover, rubber was a profitable commodity for the colonial economy, such that the Viet Minh called for the outright destruction of rubber trees, and plantations became key battlegrounds in 1945–6 as many plantation workers destroyed thousands of rubber trees (Aso 2018: 172–3). The ecological transformations wrought by colonial (and pre-colonial) violence often produced fundamentally new environments and subjectivities to what had existed before, sometimes bringing these in opposition to one another. To understand these transformations, then, it is necessary to adopt a case-by-case analysis about the place of environment in labour subjectivity on a micro level, which necessarily also means foregrounding contextually specific (non-Western) epistemologies and languages.

Environment and labour in energy history

Energy is a productive area to think about the intersection of labour and environment because it is a concept that originated in mid-19th-century European thermodynamics to put “the world to work” in pursuit of profit (Daggett 2019). This has entailed the utilisation of raw materials, especially fossil fuels, and the human bodies needed for their extraction, processing, transportation, and consumption. Nevertheless, energy is also emblematic of the obfuscation of labour in the commodification of “Nature”, and of the apparent separation of labour from environment. Through a survey of works in this field focusing on Asia and Africa, this section shows how this connection and apparent separation is intricately linked to histories of colonialism, global capitalism, and postcolonial development, further alerting us to the geographical unevenness of the Anthropocene (see Chapter 12, this volume).

This is best exemplified by Timothy Mitchell in *Carbon Democracy*, in which he shows how oil figured in key political developments of the 20th century (Mitchell 2011). Perhaps the most insightful section of Mitchell's work is when he explains how oil could limit workers' agency and thereby alter the form of mass democratic politics: the natural properties of oil allowed governments in the West to find alternative sources of energy to coal, thereby being less vulnerable to mass strike action and workers' resistance. For example, oil's liquid and relatively light nature enabled it to be transported by pipelines and oil tankers in contrast to coal's transportation on railways, which could be more easily shut down through general strikes (Mitchell 2011: 36–8). The energy required for economic growth in the West, especially in Europe, was dependent on limiting labour activism in the Middle East, where most of the world's oil was produced by the mid-20th century. Even when oil workers did engage in mobilisations and sabotage to halt the flow of oil, Western intervention worked to maintain energy security, exemplified by the 1953 coup in Iran to oust Prime Minister Mohammad Mosaddeq. In all, Mitchell's work enhances our understanding about the global unevenness of the Anthropocene by highlighting how capitalist modernity in the Global North depended on the twin exploitation of labour and natural resources in the Global South.

This point is extended by On Barak's *Powering Empire*, which shows how industrialisation of Europe was enabled by the proliferation of British coaling stations in the Middle East and the western Indian Ocean (Barak 2020). In the process, coal-fuelled infrastructures such as irrigation pumps and desalination plants – and the new populations they supported in the arid environments of the region – transformed local ecologies. For instance, they contributed to the Lessepsian migration of marine life between the Indian Ocean and the Mediterranean Sea. Far from replacing human labour (and that of animals), these infrastructures each increased and intensified the demand for labour in the extraction (miners) and transportation (heavers and stokers) of coal. This labour was performed along lines of racial difference: Adenis and Somalis disproportionately worked in steamship engine rooms because ship owners believed they were naturally better suited to extreme heat, calling them “human salamanders” (Barak 2020: 94). This labour could also be gendered as it extended to work in the home, although less has been written about this in Asian and African contexts.

Coal supported not only colonialism, but also the formation of nation-states in the Global South. In *Carbon Technocracy*, Victor Seow argues that the coal mine exemplified industrial modernity in its taming of nature through technology, its disciplining of labour, and its productivism (Seow 2022: 9). All of these characteristics could be observed at the Fushun coal mine in Manchuria across the 20th century, from the period of Japanese occupation to that of the communist government. Whereas Mitchell finds coal had initially facilitated the rise of democratic politics in 19th-century Europe, Seow shows that the exploitation of coal at Fushun went hand-in-hand with technocratic efforts to maximise productivity through controlling labour, in line with increasingly statist preoccupations. As such, the carbon economy and the modern Chinese state were co-constitutive.

Similar processes were at play through the extraction of oil. In *Machineries of Oil*, Shafiee (2018) shows how the Iranian state and the transnational oil company (specifically the Anglo-Iranian Oil Company, which later became BP) were co-constitutive. On the one hand, oil concessions allowed the oil company to establish a socio-technical assemblage in south-west Iran, serving as a laboratory to establish security and for producing knowledge that could be used to manage political outcomes in its favour. For example, the company translated its racialised division of labour into technical calculations to prevent more democratic structures of oil production to emerge: it refused to promote Iranians to senior positions based on the claim that they lacked the necessary technical knowledge (Shafiee 2012, 2018). On the other hand, the company's corporate sovereignty and reconfiguration of property relations, turning lands customarily used by pastoral nomads into "state" property, laid foundations for the enactment of state power on the ground once nationalisation of oil operations took place in 1951.

Please insert figure **16.1** here

Figure 16.1 Safety training of Iranian oil workers, late 1940s. Source: ARC 100033, BP Archive, Warwick, UK. © BP plc

Yet energy was not only a site for the production of power, but also one of resistance. As argued in a recent landmark volume, despite the oil industry seemingly affording workers less capacity for disruption compared to coal workers, this has not stopped oil workers from engaging in various forms of activism, ranging from large-scale mobilisations to acts of everyday resistance

(Atabaki, Bini, and Ehsani 2018). This is especially so in the history of the Iranian oil industry, with oil workers in Khuzestan having been consistently engaged in labour activism throughout the 20th century, most notably playing a central role in the 1978–9 Iranian revolution (Jafari 2018). For this reason, as illuminated in several social histories of the Iranian oil industry, oil companies and the Iranian government devoted so much attention to controlling labour through methods of social engineering, racial segregation, and welfare paternalism. Nor is this particular to Iran, as several studies of the global oil industry show (Santiago 2006; Tinker Salas 2009; Vitalis 2007).

Nevertheless, if energy history illuminates how environment and labour are both put to work in practice, it also offers the opportunity to examine how this work is made invisible in effect. Energy erases “the circumstances of its production” so that it appears as an abstract universal force (Barak 2020: 29). This means that, in contrast to the hypervisibility of the labouring body in the plantation, the presence of humans in the production of energy has often been rendered invisible. For example, visual representations of the oil industry made by corporations and states have often occluded the presence of workers and the various forms of violence inflicted on them, creating the effect of an automated infrastructural system (Biglari, forthcoming 2024). This is perhaps why historians have only recently turned attention to labour in the history of the oil industry, despite histories of mining having been foundational to labour history as a field.

Labour in Nigeria’s oil industry and its environmental consequences

The survey of the previous two sections has necessarily been brief in order to cover the breadth of studies that have flourished in the 2010s, yet it is also important to illuminate the complexities at the intersection of labour and environment through a more detailed example. This final section selectively examines the history of the Nigerian oil industry – bringing together labour, environment, and energy – as a means of demonstrating and complicating the themes outlined earlier (for a more thorough historiographical review of the Nigerian oil industry, see Genova and Falola 2003).

Besides agriculture, extractive industries have existed in West Africa since pre-colonial times. Gold in Ghana and tin in Nigeria were the major mineral resources extracted in what later

became British West Africa. While the existing mining industries were expanded by the colonial authorities upon their incursion into the sub-region in the late 19th century, exploration for new ones was inaugurated. The most notable of the multinational corporations that dominated this sector were Ashanti Goldfields Corporation (AGC), which operated a gold mine in Obuasi (in Ghana) with its head office in London; and the British-owned Amalgamated Tin Mines (Nigeria) Ltd, incorporated in 1939 (Decker 2018: 696; Onimode 1978: 211).

In 1956, four years to the end of colonial rule in Nigeria, crude oil was discovered in Oloibiri in the Niger Delta by Royal Dutch Shell (then operating as Shell D'Arcy). Both Shell and Gulf Oil were producing by 1965, with the former doing so from East Coast onshore concessions and the latter from an offshore location in the Midwest. The petroleum and oil sector accounted for about 90% of Nigeria's foreign exchange earnings and about 95% of state revenues by 1976, when Nigeria was the world's fifth-largest exporter of oil. The oil sector has remained the major income earner for Nigeria, with numerous impacts on Nigeria's political economy, as well as labour and environment, the exploration of which will be the focus of this section.

The rise of the oil industry precipitated various changes and impacted not only the environment, but also labour regimes. Above all, it led to the proletarianisation, alienation, and marginalisation of labour, thus engendering a separation between labour and nature/environment. The character of oil production differed markedly from the production of the agricultural and mining industries already developed in Nigeria before the exploitation of oil. For instance, before the discovery of oil, colonial Nigeria was integrated into the orbit of global capitalism through the expansion of peasant commodity production in agricultural and mining products. Groundnuts and cotton, ginger and cocoa, oil palm, and sesame cultivation were all integrated into the peasant economy. Tin mining and gold mining were extremely labour-intensive activities relying on the same chain of labour contractors who controlled the lower rungs of the Nigerian labour market. The production of crude oil, by contrast, is notoriously capital-intensive. Only a few thousand workers are required to produce the millions of barrels of oil annually exported from Nigeria. Thus, the impact of oil had very little direct effect on the mass of Nigerians; it was the vast sums that suddenly accrued to the Nigerian government which has been decisive (Freund 1978: 93).

This effect of the oil industry on labour was compounded by the decline of agriculture and craft, occasioned by inflation, commoditisation, and urbanisation (Turner 1986: 33). Before the discovery of oil, agriculture was the main income earner for Nigeria. About 78% of the population was employed in agriculture, while the sector contributed 78.2% of the nation's revenue by 1962, and crude oil contributed 13.3%. Following the overdependence on oil, the equation changed such that the contribution of agriculture to the national revenue dropped drastically to 1.1% in 1977, while the oil sector's contribution rose to 98.9% (Olusakin 2006: 6). The rise of the oil sector and the concentration of investment around it at the expense of agriculture, combined with the dispossession caused by oil-funded state development projects, resulted in rapid proletarianisation of peasants, traders, and petty commodity producers (Turner 1985).

Similarly, the Nigerian oil industry impacted labour on the ideological front. Before the discovery of oil, national struggle revolved around colonialism and its impact such as exploitation, alienation, and concomitant racism. However, the exploitation of oil in commercial quantity was a postcolonial enterprise. Thus, subsequent labour and national struggle became framed around the oil industry. Sudden decline in the quality of life following the 1973–81 oil boom spurred popular protest, especially when elements in key economic positions expected improvement (Turner 1986). About 30,000 oil workers were employed prior to the 1983–6 retrenchment drive, with about 10,000 of them employed by the public sector, another 10,000 by private oil multinationals, and the remaining 10,000 by domestic and international service companies that perform contract work for the oil industry. By 1987, over half of this last category had seen layoffs. The Nigerian National Petroleum Corporation (NNPC) in the public sector had seen less job loss than the private oil corporations.

Thus, the oil bust brought local labour and foreign capital into a type of direct conflict that was hitherto unprecedented. This was manifested in the rejection, in late 1985, of an International Monetary Fund loan. Following the Structural Adjustment Programme that ensued, private foreign capital gained, while ordinary Nigerians were pushed further into more or less desperate strategies to avoid destitution and death. The oil recession of the 1980s and crash in prices at the end of 1985 coincided with the emergence of new alignments and developments among Nigerian

oil workers. Retrenchment reduced their numbers, and repression weakened their unions (Turner 1986: 34–5). The dwindling fortune in the living condition of the oil workers and reaction to it is encapsulated in the Nigerian oil workers song as captured by Terisa Turner (Turner 1986, 33):

Oil Job is not good
Who can make soup with oil?
Who can drink oil?
Impossible!
The white man's trouble is more than oil.
They want us to work hard
But they don't want to pay us well
The rich eat while the poor work.

Added to these is the division and polarisation within the rank and file of labour. Oil workers are the most powerful and best paid of Nigeria's national and international corporate employees. In the rank and file of the labour movement, the oil sector also caused division and polarisation. Two employee groups – Petroleum and Natural Gas Senior Employees Association of Nigeria (PENGASSAN) for senior staff and National Union of Petroleum and Natural Gas Workers (NUPENG) for junior staff – codified the senior and junior staff status distinction in the oil industry. In July 1994 the latter went on what was until then perhaps the longest strike in the global oil industry since the 1978–9 Iranian revolution (Turner 1997).

The development of the oil and gas industry, especially in the Niger Delta region, has come with significant cost to the environment and health of the Indigenous communities (Ugochukwu and Ertel 2008). Nigeria is the second-largest gas-flaring nation in the world after Russia. In 2002, it was estimated that 108 billion cubic metres (bmc) of natural gas was flared globally, and that in 2010, 15 bmc was flared in Nigeria alone. There were over 100 flare sites in the Niger Delta, most of which are located close to human habitations (Ejiogu 2013: 983–4). Gas flaring releases over 250 identified toxins, including carcinogens such as benzopyrene, benzene, carbon-di-sulphide (CS₂), carbonylsulphide (CoS), and toluene. Exposure to such toxins is known to have more directly impacted the health of workers and local residents by causing symptoms such as chills, fever, myalgia, respiratory irritation, nausea, vomiting and headaches, renal failure, central

nervous system depression, cardiovascular failure, and altered neurobehavioral function, among others (Ejiogu 2013: 987).

Please insert figure 16.2 here

Figure 16.2 Gas flare in Nembe Creek, Nigeria, 1993. Photographer: Sara Leigh Davis, Creative Commons Attribution-Share Alike 4.0 (<https://creativecommons.org/licenses/by-sa/4.0/deed.en>)

Apart from gas flaring, oil spills have caused widespread environmental degradation. Since oil was first extracted in Nigeria, there have been over 6,000 oil spills documented, amounting to an average of 150 spills annually. Between 1976 and 1996, there were a total of 4,647 oil leak occurrences. A total of 127,467.96 barrels of oil were leaked between 2006 and 2012 alone.³ Oil spills often pollute the soil and water that local inhabitants rely on for their livelihoods and subsistence (Ahmadu and Egbodion 2013; Bayode, Adewunmi, and Odunwole 2011).

This situation has resulted in a series of protests over pollution and land use. Some of these have involved workers and local communities: for example, about 400 Bonny Island inhabitants, including oil employees, shut down Africa's largest oil export terminal in March 1986, stating that the operator, Shell, had disturbed their lives and made no positive contributions. A hundred women occupied the Shell helipad to block any helicopters from landing at the base of the tank field. They held signs that read, "Shell's 28 years in Finima is a curse to us", "Shell has destroyed our means of livelihood", and "No light, no water for us after 28 years of Shell". In Imo State, villagers demonstrated in opposition to the police killing of an oil worker in front of the military governor's office. Over 40 Shell employees were held hostage at the British company's headquarters premises for two days in April 1986 by the more than 5,000 residents of Egbema in Imo State. The occupation was a protest against the company's disregard for the neighbourhood when it first arrived in 1958 (Turner 1986: 44).

However, most protests have been led by local communities not employed by the oil industry. For example, in January 1993, 300,000 people marched throughout Ogoniland in protest of 30 years of pollution caused by Shell and its joint venture partners, led by Ken Saro-Wiwa (an Ogoni author and recipient of the alternative Nobel Prize and President of the Movement for the Survival of Ogoni People, or MOSOP) (Sara-Wiwa and Saro-Wiwa 1995; cf. Watts 2004). From

the late 1990s, a militant insurgency was mounted by the Niger Delta people against the oil industry to demand compensation for the destruction of flora and fauna. Conspicuously absent from most protest movements have been oil workers. Indeed, even as oil workers expressed solidarity with MOSOP in the 1994 general strike, among their demands they did not list any environmental issues, or even health issues relating to pollution (Turner 1997: 81–2). Evidently, then labour subjectivity in the oil industry was detached from the environmentalism of groups living in the Niger Delta region (Aborisade 2010).

In the case of the Nigerian oil industry, then, we observe many of the major themes outlined in histories of labour and environment across Asia and Africa: alienation; proleterianisation; labour subjectivity and resistance; environmental degradation; pollution and toxicity. Like other contexts previously outlined in histories of energy, this history shows how labour and environment were both exploited at the same time that they appeared increasingly separate. Moreover, it illustrates how this separation was necessary for the production of the former – labour itself – by alienating peasants from their land. Indeed, given that the oil industry’s impact in the Niger Delta is perhaps most emblematic of the environmental degradation wrought by the global oil industry, it is instructive that none of the works on the Nigerian oil industry have approached this subject explicitly through the intersection of labour and environmental history.

Above all, the Nigerian oil industry brought about several transformations rooted in the exigencies of the colonial economy and its afterlives, which have continued to shape the nature of the industry to the present day. Ultimately, the extraction of Nigerian oil by multinationals has reproduced colonial relations of resource extraction, commodifying labour and environment for consumption mostly taking place elsewhere. The violence attending such transformations in Asia and Africa across the colonial and postcolonial periods – linked to the conjuncture of infrastructural capacity, energy supply, and the rise of the modern state – makes the intersection of labour and environment of special relevance to histories of these regions, and distinct from histories of Europe and the Americas. Yet it is also important to examine the pre-colonial period to examine how processes were already underway that alienated humans from their more-than-human environments, as illustrated in the case of Ottoman Egypt.

At the same time, the relationship between labour and environment should not be treated uniformly. If we are moving past unilinear narratives that posit a singular history of capitalism, we should also be aware of historically specific circumstances in which labour and environment are commodified and relate to each other in Asian and African contexts, which is especially pertinent when exploring how environment forms part of labour subjectivity. As outlined here, in some cases, like in the Nigerian oil industry and the rubber plantations of Vietnam, labour could be defined against or in isolation to environment. In others, like the Mannar pearl fishery or Nile delta, the experience of labour and environment could not be separated, and environment could even be a source of labour resistance. This means we should be cautious about the universality of certain concepts derived in Western contexts, such as “environmental justice”, to avoid flattening the specific relationships and conditions of possibility for how people conceptualised their environments across the Global South. Even the categories of “labour” and “environment”, and the separation this assumes, should be historically accounted for, or perhaps even provincialised. As such, we contend that not only is there ample room for more research focusing on labour and environment in Asia and Africa, but that there is an even greater need for micro-historical studies across these regions in the years ahead.

Therefore, while histories of labour and environment in these regions may be relatively new compared to those of Europe and the Americas, they are not necessarily derivative in recounting a history we already know. Rather, by centring languages and epistemologies of these regions, there is great scope to change our existing knowledge of how labouring bodies relate to the world.

Acknowledgements

We would like to thank William San Martín and Sandra Swart for their helpful comments, as well as Hengameh Ziai, Aditya Ramesh, and Tamara Fernando for sharing their intellectual insight.

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¹ On the colonial economy's reliance on labour for the maintenance of natural water sources in South India during the 19th century, see Ramesh (2019).

² The formation of subjectivity through environment in labour history is elaborated through the concept of “worksapes”, which “treats people as laboring beings who have changed and been changed in turn by a natural world that remains always under construction” (Andrews 2010: 125).

³ Federal Office of Statistics. Volume of oil spilled annually from 2006–2012. Unpublished statistics. FOS, Lagos, 2012.