

2. Colonialism, slavery, and the degradation¹ of the environment: 'Every drop of sugarcane² juice cost blood and groans³'

Visiting the Spanish colonies, Humboldt did not only observe the natural environment, but also had an eye for the indigenous⁴ peoples' living conditions and the structure of the societies he visited. He commented on the interactions between the Spanish colonizers and the population of South America and made a connection between the form of colonialism he witnessed there and the degradation of the environment.

When he had visited mines in Mexico, Humboldt had not only investigated⁵ their geology and productivity, but also the crippling effect that mining was having on large parts of the population. At one mine, he had been shocked to see how indigenous labourers were made to climb some 23,000 steps laden with huge boulders⁶ in one shift alone. They were used like a 'human machine', slaves in all but name because of a labour system — the so-called *repartimiento* — that made them work for little or nothing for the Spanish. Forced to buy over-priced goods from the colonial administrators⁷, the labourers were sucked into an escalating⁸ spiral of debt⁹ and dependency¹⁰. The Spanish king even enjoyed a monopoly¹¹ on snow in Quito, Lima and other colonial towns, so that it could be used for the production of sorbet for the wealthy elites. It was absurd, Humboldt said, that something that 'fell from the sky should belong to the Spanish crown'. To his mind the politics and economics of a colonial government were based on 'immorality¹²'.

During his travels Humboldt had been amazed at how colonial administrators (as well as their guides, hosts and missionaries¹³) had constantly encouraged him — the former mining inspector — to search for precious metals and stones. Many times Humboldt had explained to them how misguided this was. Why, he asked, would they need gold and gems¹⁴, when they lived on land that had only to be 'slightly raked to produce abundant¹⁵ harvests'? That was surely their avenue to freedom and prosperity¹⁶?

All too often Humboldt had seen how the population was starving and how once fertile¹⁷ land had been relentlessly¹⁸ over-exploited¹⁹ and turned barren²⁰. In the valley of Aragua at Lake Valencia, for example, he had observed how the world's lust for colourful clothing brought poverty and dependency to the local people because indigo, an easily grown plant that produced blue dye²¹, had replaced maize and other edible²² crops. More than any other plant, indigo 'impoverishes²³ the soil', Humboldt had noted. The land looked exhausted and in a few years, he predicted, nothing would grow there any more. The soil was being exploited 'like a mine'.

Later, in Cuba, Humboldt had noticed how large parts of the island had been stripped of their forests for sugar plantations. Wherever he went, he had seen how cash crops²⁴ had replaced 'those vegetables which supply nourishment²⁵'. Cuba produced not much other than sugar, which meant that without imports from other colonies, Humboldt said, 'the island would starve'. This was a recipe for dependency and injustice. Similarly, the

inhabitants of the region around Cumaná cultivated so much sugar and indigo that they were forced to buy food from abroad which they could easily have grown themselves. Monoculture and cash crops did not create a happy society, Humboldt said. What was needed was subsistence²⁶ farming, based on edible crops and variety such as bananas, quinoa, corn and potatoes.

Humboldt was the first to relate colonialism to the devastation²⁷ of the environment. Again and again, his thoughts returned to nature as a complex web of life but also to man's place within it. At the Rio Apure, he had seen the devastation caused by the Spanish who had tried to control the annual flooding by building a dam. To make matters worse, they had also felled the trees that had held the riverbanks together like 'a very tight wall' with the result that the raging river carried more land away each year. On the high plateau of Mexico City, Humboldt had observed how a lake that fed the local irrigation²⁸ system had shrunk into a shallow puddle, leaving the valleys beneath barren. Everywhere in the world, Humboldt said, water engineers were guilty of such short-sighted follies²⁹.

He debated nature, ecological issues, imperial power and politics in relation to each other. He criticized unjust land distribution³⁰, monocultures, violence against tribal groups and indigenous work conditions — all powerfully relevant issues today. As a former mining inspector, Humboldt had a unique insight into the environmental and economic consequences of the exploitation of nature's riches. He questioned Mexico's dependence on cash crops and mining, for example, because it bound the country to fluctuating³¹ international market prices. 'The only capital,' he said, that 'increases with time, consists in the produce of agriculture'. All problems in the colonies, he was certain, were the result of the 'imprudent³² activities of the Europeans'.

(...)

For Humboldt colonialism and slavery were basically one and the same, interwoven with man's relationship to nature and the exploitation of natural resources. When the Spanish, but also the North American colonists, had introduced sugar, cotton, indigo and coffee to their territories, they had also brought slavery. In Cuba, for example, Humboldt had seen how 'every drop of sugarcane juice cost blood and groans.' Slavery arrived in the wake of what the Europeans 'call their civilization' Humboldt said, and their 'thirst for wealth'.

(The Invention of Nature, pp. 124-7)