The Lessons of Easter Island

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http://away.com/features/easterisland.html

In just a few centuries, the people of Easter Island wiped out their forest, drove their plants and animals to extinction, and saw their complex society spiral into chaos and cannibalism. Are we about to follow their lead? Among the most riveting mysteries of human history are those posed by vanished civilizations. Everyone who has seen the abandoned buildings of the Khmer, the Maya, or the Anasazi is immediately moved to ask the same question: Why did the societies that erected those structures disappear? Among all such vanished civilizations that of the former Polynesian society on Easter Island remain unsurpassed in mystery and isolation.

Easter Island, with an area of only 64 square miles, is the world's most isolated scrap of habitable land. It lies in the Pacific Ocean more than 2,000 miles west of the nearest continent (South America), 1,400 miles from even the nearest habitable island (Pitcairn). Its subtropical location and latitude—at 27 degrees south, it is approximately as far below the equator as Houston is north of it—help give it a rather mild climate, while its volcanic origins make its soil fertile. In theory, this combination of blessings should have made Easter a miniature paradise, remote from problems that beset the rest of the world.

Giant Statues, Thriving Population

Easter Island's most famous feature is its huge stone statues, more than 200 of which once stood on massive stone platforms lining the coast. At least 700 more, in all stages of completion, were abandoned in quarries or on ancient roads between the quarries and the coast, as if the carvers and moving crews had thrown down their tools and walked off the job. Most of the erected statues were carved in a single quarry and then somehow transported as far as six miles, despite heights as great as 33 feet and weights up to 82 tons. The abandoned statues, meanwhile, were as much as 65 feet tall and weighed up to 270 tons.

The Dutch Admiral Roggeveen, onboard the Arena, was the first European to visit the island on Easter Sunday 1722. He found a society in a primitive state with about 3,000 people living in squalid reed huts or caves, engaged in almost perpetual warfare and resorting to cannibalism in a desperate attempt to supplement the meager food supplies available on the island. During the next European visit in 1770 the Spanish nominally annexed the island but it was so remote, under populated and lacking in resources that no formal colonial occupation ever took place. There were a few more brief visits in the late eighteenth century, including one by Captain Cook in 1774. An American ship stayed long enough to carry off twenty-two inhabitants to work as slaves killing seals on Masafuera Island off the Chilean coast. The population continued to decline and conditions on the island worsened: in 1877 the Peruvians removed and enslaved all but 110 old people and children. Eventually the island was taken over by Chile and turned into a giant ranch for 40,000 sheep run by a British company, with the few remaining inhabitants confined to one small village.

For at least 30,000 years before human arrival, a subtropical forest of trees and woody bushes towered over a ground layer of shrubs, herbs, ferns, and grasses. The earliest radiocarbon dates associated with human activities are around 400 to 700 A.D., in reasonable agreement with the approximate settlement date of 400 estimated by linguists. The period of statue construction peaked around 1200 to 1500, with few if any statues erected thereafter. Densities of archaeological sites suggest a large population; an estimate of 7,000 people is widely quoted by archaeologists, but other estimates range up to 20,000, which does not seem implausible for an island of Easter's area and fertility. Eventually Easter's growing population was cutting the forest more rapidly than the forest was regenerating. The people used the land for gardens and the wood for fuel, canoes, and houses—and, of course, for lugging statues. As forest disappeared, the islanders ran out of timber and rope to transport and erect their statues.
Disappearing Forests, Scarce Food

People also found it harder to fill their stomachs, as large sea snails and many seabirds disappeared. Because timber for building seagoing canoes vanished, fish catches declined and porpoises disappeared from the table. Crop yields also declined, since deforestation allowed the soil to be eroded by rain and wind, dried by the sun, and its nutrients to be leached from it. Intensified chicken production and cannibalism replaced only part of all those lost foods. Preserved statuettes with sunken cheeks and visible ribs suggest that people were starving.

With the disappearance of food surpluses, Easter Island could no longer feed the chiefs, bureaucrats, and priests who had kept a complex society running. Surviving islanders described to early European visitors how local chaos replaced centralized government and a warrior class took over from the hereditary chiefs. By around 1700, the population had dwindled to one-quarter, then one-tenth of its former number. Around 1770 rival clans started to topple each other's statues, breaking the heads off. By 1864 the last statue had been thrown down and desecrated.

As we try to imagine the decline of Easter's civilization, we ask ourselves, "Why didn't they look around, realize what they were doing, and stop before it was too late? What were they thinking when they cut down the last palm tree?" I suspect, though, that the disaster happened not with a bang but with a whimper. Any islander who tried to warn about the dangers of progressive deforestation would have been overridden by vested interests of carvers, bureaucrats, and chiefs, whose jobs depended on continued deforestation. Our Pacific Northwest loggers are only the latest in a long line of loggers to cry, "Jobs over trees!" The changes in forest cover from year to year would have been hard to detect. Only older people, recollecting their childhood's decades earlier, could have recognized a difference.

Learn and Live

By now the meaning of Easter Island for us should be chillingly obvious. Easter Island is Earth writ small. Today, again, a rising population confronts shrinking resources. We, too, have no emigration valve, because all human societies are linked by international transport, and we can no more escape into space than the Easter Islanders could flee into the ocean. Corrective action is blocked by vested interests, by well-intentioned political and business leaders, and by their electorates, all of whom are perfectly correct in not noticing big changes from year to year. Instead, each year there are just somewhat more people, and somewhat fewer resources, on Earth. It would be easy to close our eyes or to give up in despair. But there is one crucial difference. The Easter Islanders had no books and no histories of other doomed societies. Unlike the Easter Islanders, we have histories of the past—information that can save us. My main hope is that we learn from the fates of societies like Easter's.

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