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Commentary

Environmental ethics on Antarctic ice

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I have been thinking about nature as an environmentalist for a third of a century; in search of the global picture, I sought out the last, lonely continent. I found challenges and struggled what to make of the place.

Antarctica is the uninhabited continent. There is no nation-state of residents, which makes any territorial claims somewhat anomalous just because the place is so evidently uninhabited. There are no farms, no stores, no homes, and no ordinary government. So here, perhaps, we should not apply the criteria used for other continents when deciding our uses or concerns, our rights and responsibilities. But then the usual humanistic grounds for an ethic — that people present now and in future generations are helped or hurt by what we do —seem to drop out. Or at least they get exported to non-residents.

The inhabitation question raises an even more serious problem. There is impressive biodiversity below water, on it, over it — and around the edges, where marine life nests and rests. Maybe the focus can be an ethic of the sea. Or marginally a land ethic, on the two percent that is ice-free in the summer. But when one moves farther inland, there is little terrestrial fauna and flora of the kinds so familiar elsewhere. There is no familiar wildlife — no deer, bears, squirrels. There are almost no higher flora, only two species on the Peninsula and none farther south, and nothing above the mosses.

The US Wilderness Act (1964) was put into force to conserve 'the Earth and its community of life.' Aldo Leopold, the prophet of the 'Land Ethic,' claimed, famously: 'A thing is right when it maintains the integrity, stability, and beauty of the biotic community.' But on 98% of the continent, there is no 'land' with much of a biotic community. Leopold wanted harmony between people and their landscapes. Obviously, this will not work if there are no residents. On the massive ice cap, we almost need to go beyond a human-less environmental ethic, to a life-less one, and that is a puzzle. So much for respect for life, or so it first seems.

More recently, ethicists have been keen on biodiversity conservation, sustainability, sustainable development, ecosystem management, environmental economics, and green politics. All those approaches echo concern about fitting people onto or into their landscapes. My worry here is that none seem relevant on the uninhabited ice.

Perhaps the ethic is like that for canyons, mountains, rivers, or caves. Mountains are here, and, indeed, Mount Erebus is majestic. But so much of this wilderness really is desolate and empty. The expanses of the continental interior, even after being mapped, are little more than white spaces on the map. You can't have duties to icebergs and glaciers, or can you? I think not, so we should go back to people. Wilderness, some say, is 'gymnasium and theatre.' Here you show what you can do (like explorers), and you get let in on nature's show (icebergs and penguins), which can happen even on an uninhabited continent.

So what shall we call this place: 'Antarctic world park'? Yes, if it is gymnasium and theatre. Still, if so, this park is very different from Yellowstone or the Serengeti. 'Antarctic nature reserve'? But what is reserved, and for whom? 'The Antarctic wilderness?' That seems both real and ideal, combining the fact of the matter with respect for the particular kind of wildness here. 'Antarctic sanctuary' might be even better, suggesting that we leave it sacrosanct.

Life in extremes

Actually, the continent is not so much lifeless, as a place where life is driven to extremes. This is already a sanctuary for whales and seals, so we have duties to these more familiar forms of life, here marvelously adapted to Antarctic waters. Ashamed of our history of exploiting them, we increase our responsibility now. Dogs have been banned since 1994, for fear of contaminating seals with distemper. Tourists are advised by IAATO not to go closer to penguins than 15 feet; scientists are requested not to disturb nesting colonies. Watching penguins porpoising, at home in waters where I would die in minutes, I thought how this place belongs to them, not me. Ice fish have no hemoglobin — bizarre, but an ingenious characteristic evolved for icy waters.

On land and in ice, life goes to extremes — right down into rock in the Dry Valleys, with microbial colonies that are 200,000 years old. There are even microbes at the South Pole. There is life in the deep freshwater lakes, perhaps even in Lake Vostok. One ought to respect rare and extreme solutions. So respect for life is not gone.

Here is nature in its wildest extremes: the coldest temperatures on Earth, the fastest winds, the southernmost colonies, penguins that live on ice and need never touch land. We respect Mount Everest as the highest point on Earth, or the geysers in Yellowstone and life at high temperatures. We respect remote oceanic islands, with

odd forms of life. We respect desert canyons with little life, or even the crystals in caves. The combination of nature in extremes and life pushing into those extremes does deserve our respect, and Antarctica is no exception.

People who visit, not to remain

People here are tourists in the basic, etymological sense, taking a short 'turn' to see another place in passing. A world park needs tourists, now about 10,000 per year in Antarctica, mostly in the Peninsula region, with only hundreds going to the Ross Sea. Even scientists take only a 'tour' of duty. Everybody is a non-resident, an alien.

In the language of the US Wilderness Act, this is 'where man himself is a visitor who does not remain,' a place 'retaining its primeval character and influence... affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.' A typical square foot of this continent has never had a human foot set upon it. If any such wilderness remains on Earth, this is it.

That seems right; here what *is, ought to be.* Unless involved in some more serious expedition, we do not want the tourists to sleep on land. There is too little land, and wildlife needs what there is. Keep the hotels floating: there should be no Ramada Inns here. Expeditions on land, or ice, should leave no trace, no imprint. People ought not to remain, or to leave their remains. So we 'pack out' our trash — which can be difficult here.

But, in this uninhabited place, who will formulate or enforce such an ethic? Will it be, perhaps, those seven nations that do make territorial claims? But nothing in the Antarctic Treaty or international law requires asking permission of anybody, although nations in their sectors may expect their law to prevail there, and on ships flying their flag. The consultative parties to the Treaty never acted and, commendably, in 1989 the tourism operators were the first to propose an ethic for the Antarctic, with a strong sense of leaving no imprint and disturbing no wildlife. Permission to visit the scientific bases or historic sites is another matter, one of culture, not nature.

Environmental ethics on other continents does invoke beauty. Antarctica is startling aesthetically, especially its coastal areas and iceberg-laden waters—almost as though this icy wilderness, deprived of fertility, was enriched with aesthetic properties in compensation. These are more forceful in the void left by the relatively absent fauna and flora, so much in evidence on the other continents. Aesthetics certainly provides a reason to save it. And that requires people present, since I assume penguins cannot enjoy the scenery. But then do we just preserve Antarctica so that we can enjoy it? If so, there will be no reason to preserve the more featureless interior expanses.

A deeper ethic seems foreboding: leave this continent forever without lasting human imprint. The failure of the Mineral Convention of 1988, and the subsequent success of the Protocol on Environmental Protection of 1991 (ratified 1998), banning mineral exploitation for 50 years, was something of a miracle; the Australians and French are to be praised for their leadership (although Australia's recent staking claim to the seabeds brings some dismay). Is it not enough for us to have exploited the other six continents? Can we leave the seventh alone, as well, perhaps, as the seventh sea?

Rights to territory are usually based on discovery and occupation, the latter requiring, as John Locke put it, mixing your labor with the land—a requirement in the US Homestead Act. But here nobody is laboring to make a true homestead— although people have been ready enough to exploit the place. So it is better to 'freeze' those territorial claims; the Treaty effectively did this. Now we have taken the next step: better not to mix our labor with mineral exploitation either — not at least for 50 years, and by then perhaps our grandchildren's ethical sensitivities will have become clearer.

'Let Antarctica be a continent for science!' That has been a frequent claim. Maybe it is uninhabited, but scientists belong here — at least for their periods of research. Still, what these scientists are studying is wild nature. Since their science is expensive, they do go to some length to ensure that it is relevant to those back home, who are paying for it. So some work on global warming. But maybe the really exciting science here is about nature in its extremes, often irrelevant for people — those microbes at the Pole or hemoglobin-less fish. Such science might bring us a deeper respect for life, more resolution to leave no human imprint.

Global axioms

Antarctica is peripheral to the main focus in environmental ethics. Antarctica will not solve the world population problem, it holds no definite answers to global warming (even if we monitor the problem there), nor to escalating consumerism or sustainable development. But, at other foci, Antarctica could be on the cutting edge. What we do with this more or less stateless continent could set the pace for thinking about the common heritage of mankind.

The challenge is the idea that it belongs to everybody, flipped over to the idea that it belongs to nobody. There is an analogy with the deep sea, the seven-tenths of the Earth that also does not belong to anybody. Or with the air, passing over all. Often the big rivers are trans-national. These whales, seals, and penguins belong to themselves. Some of us think that, on other continents, elephants and tigers, wolves and whooping cranes, even migrating warblers and butterflies are a global heritage.

One might almost wonder if the Moon provides an outlandish model. The US planted a flag there, but did not claim it. Nor do we expect to inhabit it. We could say that we are Earthlings and this is our Moon, and we can do with it what we please. Our grandchildren, after 50 years, might exploit both Antarctic and Moon. But maybe they will think better of it.

An axiom is a pivot of turning. Axiology, in philosophy, is value theory. Antarctica is where the world turns on its axis. As I became oriented, I felt something about this seventh continent — as many have felt something about the seventh day — that takes us toward powers exceeding ordinary human life. We must stay busy at work on the other six continents, but we ought to set this one aside as a place to realize deeper perspectives. Do not nationalize it. Do not internationalize it. Naturalize it!