

# REFLECTIONS

## DEAD AS A DODO

Robert Silverberg

Dead as a dodo! It's a proverbial phrase that everybody knows. It means defunct, deceased, vanished, demised . . . extinct. But is the dodo destined to stay forever dead? Are there plans afoot to bring it back from extinction in all its ungainly splendor? Most of us have our first encounter with the dodo when reading *Alice's Adventures in Wonderland*. Not long after Alice falls down the rabbit hole, briefly turns into a giantess, and weeps herself into a deep pool of tears, she finds herself swimming about with a little group of bedraggled creatures who have also fallen into the pool—a Mouse, a Duck, an Eaglet, a Lory (the capital letters are Lewis Carroll's) and, yes, a Dodo. I had to go to the dictionary just now to find out what a lory is—a parrot-like Asian bird with brilliant plumage—but I have known since childhood about the dodo, because Sir John Tenniel, who did the classic illustrations for the Alice books, shows us one in an unforgettable drawing for Chapter Three: a huge, ungainly, splay-toed bird, round as a sack, with a bulging chest, short, stubby legs, and an immense head that had a black bill ending in a great snubbed hook.

Lewis Carroll's dodo was solemn, rather dignified, and faintly absurd. It carried a walking stick, spoke in words of many syllables, and when asked a question “stood for a long time with one finger pressed against its forehead . . . while the rest waited in silence.” But Lewis Carroll had never observed the ways of the dodo, because he wrote his book in 1863 and the last time anyone saw a living dodo was in 1681, when an Englishman named Benjamin Harry, visiting the Indian Ocean island of Mauritius where dodos lived, encountered one. Lewis Carroll might have had a chance to see a stuffed one, since one had been brought back to England some decades before Benjamin Harry's visit, ending up in Oxford's Ashmolean Museum, and Alice's creator lived in Oxford. But by 1755 the Ashmolean specimen was so moth-eaten that the curator threw it away, and just the head and one foot of the specimen were salvaged. Thus the only dodo in any museum was lost.

Extinction was plainly the dodo's destiny from the beginning. It was unable to fly and ran in a slow, clumsy waddle with its plump belly scraping the ground. Since it made its nests on the ground, both it and its eggs were vulnerable to any predator that came along. Luckily for the dodo, its habitat—its *sole* habitat—was the island of Mauritius, six hundred miles east of Madagascar, and Mauritius had no native predators to threaten the dodos.

But no island is an island, as the poet did not quite say, and the grand isolation of Mauritius and its defenseless dodos ended in 1507, when Portuguese mariners looking for a convenient base along the route from India to Africa discovered it. They surely must have noticed dodos, but their official reports say nothing about them, and so their formal discovery had to wait until the end of the sixteenth century, when a Dutch expedition under Admiral Jacob Corneliszoon van Neck arrived, named the island “Mauritius” in honor of Count Maurice of Nassau, the ruler of the Netherlands, and took note of huge flocks of an unusual bird. Van Neck tells us that one of his officers examined one closely and was “pecked mighty hard” for his curiosity.

When Van Neck's ship returned to Europe in 1599, he had a captive dodo on board, and one of his other ships brought back a second one. In his journal he described the bird as “larger than our swans, with huge heads only half covered with skin, as if clothed with a hood. . . . We call these birds *walghvogels* (‘disgusting birds’) for the reason that

the more and the longer they were cooked, the less soft and more unpalatable their flesh became."

Unfortunately for the dodo, the men of a second Dutch expedition found the dodo much tastier, and captured dozens of the slow-moving birds for food. Later the Dutch planted a settlement there, bringing with them dogs—there had been none on the island—and rats arrived aboard the ships, and between the appetite of the settlers for *walghvogel* meat and of their dogs and the rats for its eggs, the dodo swiftly began to disappear.

Meanwhile the bird was attracting attention in Europe. A Dutch painter named Roelandt Savery made a career out of depicting the one in Holland in sketches and paintings, and the other one, a gift to the Austrian Emperor Rudolf II, had its portrait done by the court painter. The dodo had also acquired a new name by then. An English sailor who had visited Mauritius, writing in 1628, told of "very strange fowles called by ye portingals Do Do." In Portuguese *doudo* means "simpleton," a good name for this lumbering, dim-witted creature.

About a dozen dodos were brought to Europe in the early seventeenth century, including the one whose partial remains Lewis Carroll probably saw a couple of centuries later. In 1638 a certain Sir Hamon Lestrange wrote of seeing one on exhibit in London, swallowing pebbles the size of nutmegs. But under the onslaught of the dogs and rats and hungry Dutch settlers, the dodo population of Mauritius was dwindling rapidly, and by 1693, when another visitor to the island went to look for them, there were none to be found. Within another sixty years the inhabitants of Mauritius did not even remember that there had been such a bird.

And so the dodo vanished from the Earth. Only some travelers' tales, the seventeenth-century court paintings, and the fragmentary Oxford specimen remained to testify that it had ever existed. By 1800, many doubted that it ever had. No stuffed specimens existed. The reports of the early explorers might have been in error; plenty of imaginary beasts like unicorns and dragons had been reported by gullible travelers over the years, and so perhaps the dodo, too, was a figment of someone's imagination. The paintings Savery had made of them showed a creature so weird that it was hard to believe that such a ridiculous being could be authentic.

A search for dodo bones began in the early nineteenth century, by which time Mauritius had passed into British possession. In 1863 a naturalist named George Clark finally found some—many—in a muddy, marshy delta. Thanks to his work, mounted dodo skeletons now can be seen at the American Museum of Natural History in New York, at the Smithsonian Institution in Washington, and at many other museums. A study of these remains revealed that the dodo's closest living relatives were doves and pigeons, whose ancestors, millions of years ago, had been big birds with prominent beaks. One group of these birds had made its way to Mauritius, where life was tranquil and no enemies existed, and they gradually lost the use of their wings. As they adapted to life on the ground, they grew bigger and clumsier, until they could barely get around at all. Eventually the Dutch arrived, and dogs and rats, and in less than a century they were all gone, their name alone remaining as a proverbial term denoting extinction.

And now—is the dodo about to make a comeback?

I suggested such a thing in 1973 in a novella called "Born with the Dead," which proposes a process for bringing the newly deceased back to life. The "rekindled" deads prefer to live apart from other human beings, developing a separate subculture of their own that has its own special amusements—one of which is to hunt specimens of formerly extinct animals that had likewise been brought back from the grave and kept in an African hunting preserve, a forerunner of Hollywood's Jurassic Park. The story closes with my two protagonists spending the last days of

1999 together, “shooting dodos under the shadow of mighty Kilimanjaro.”

But “Born with the Dead” is only science fiction, and back in 1973 I never really anticipated that dodos would return to the world, not in 1999 or in any future year. But now—

EXTINCT IS FOREVER, a conservationist poster of the 1970s proclaimed, but these days there is serious talk of bringing back extinct animals: a National Geographic Society meeting devoted to the subject a couple of years ago even produced a list of twenty-four animals that should have priority in such projects, among them the woolly mammoth, the Tasmanian tiger, the Carolina parakeet, the quagga, the moa, and, of course . . . the dodo.

Two ways of doing such a thing have been proposed. One is to find animals that are related to and closely resemble the extinct one, and breed selectively for the extinct-relative traits until a reasonable facsimile has been created. That has been done with the zebra-like quagga of Africa—I wrote about that here a few years ago—and also with the aurochs, an extinct European bison; but the problem is that what has been produced is an animal that looks somewhat like a quagga or an aurochs but really isn’t one. The other technique is to extract DNA from the tissues of an extinct creature and mingle it with that of a non-extinct relative, which would, at least, result in an animal that has some of the genetic properties of the original. That is what has been suggested for the dodo. A well-preserved dodo skeleton found in a cave on Mauritius in 2007 may yield usable DNA, which could be paired with the genetic material of the Nicobar pigeon, a bird of the Indian Ocean area that doesn’t look at all like the dodo, probably to its own great relief, but according to DNA evidence is closely related to it.

Easier said than done, of course. So far, such projects remain in the realm of science fiction.

But should it be done at all? Some scientists object to the expenditure of time, money, and scientific effort on so pointless an enterprise as bringing back the dodo, when much else of real merit remains to be done. Others, though, reply that we have a sort of moral obligation to make the attempt, since human beings (and their dogs) sent the dodo into extinction in the first place; and, besides, they were harmless, flightless birds that would do no ecological damage if restored to existence. They would not, unlike Mr. Spielberg’s velociraptors, pose any menace to human society if a flock of them somehow got loose. And they would be fun to look at.

I’m in favor of trying to do it. As a Stanford University bioethicist puts it, restoring the dodo “would be awesome. It would be seriously cool.” I don’t admire his adolescent choice of phrase, but I do agree with the sentiment. Let’s bring the dodo back! Why not? By all means, let’s give it a shot. Imagine having a few dodos waddling around in our zoos, four hundred years after the species had undergone what has proven to be only a temporary demise. Awesome! Seriously cool!