

# Was North Africa The Launch Pad For Modern Human Migrations?

**A growing number of researchers suspect that long-neglected North Africa was the original home of the modern humans who first trekked out of the continent**

LAST YEAR, ARCHAEOLOGISTS EXCAVATING at the Grotte des Contrebandiers (Smuggler's Cave) on Morocco's Atlantic coast unearthed a rare prize: the skull and partial skeleton of a 7- or 8-year-old child. The fossils, dated to 108,000 years ago, appear to belong to an early member of our species, although study of them has just begun.

But one feature stands out already: "It has huge teeth," says Harold Dibble of the University of Pennsylvania, co-leader of the dig team. That's a feature the child shares not only with other hominin fossils found across North Africa but also with some of the first modern humans to leave Africa. And so the new fossil may contain clues to an enduring mystery in human origins research: Just where in Africa did the modern humans who first col-



**Old youngster.** This fossil child had big teeth.

onized the rest of the world come from? "It's a very exciting specimen," says anthropologist Jean-Jacques Hublin of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany.

For Hublin, who was born in Algeria, the Contrebandiers child adds to growing evidence that North Africa was likely a major source of the modern humans who first left humanity's homeland and spread into Europe and Asia as early as 130,000 years ago. "If you look at a map and think how modern humans would have moved out, you would logically look at North Africa," he says.

Nevertheless, until very recently, most researchers studying the origins of *Homo sapiens* looked elsewhere, focusing instead on the fossils of East Africa and the

sophisticated tools and ornaments of famed South African sites such as Blombos Cave (*Science*, 16 April 2004, p. 369). Few scientists thought that much of evolutionary significance had gone on in North Africa, or that the region's big-toothed, somewhat archaic-looking hominins might be closely related to the ancestors of many living people. "We've left North Africa off the map for so long, and now it deserves to be there," says paleoanthropologist Chris Stringer of the Natural History Museum in London.

Indeed, a flurry of research has now put the region firmly on the map of human evolution. Thanks to new excavations and more accurate dating, North Africa now boasts unequivocal signs of modern human behavior as early as anywhere else in the world, including South Africa. Climate reconstructions and fossil studies now suggest that the region was more hospitable during key periods than once thought. The data suggest that the Sahara Desert was a land of lakes and rivers about 130,000 years ago, when moderns first left Africa for sites in what is today Israel. And new studies of hominin fossils suggest some strong resemblances—and possible evolutionary connections—