

**Excerpts from *The First Human:
The Race to Discover Our Earliest Ancestors***

Written by Ann Gibbons

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EXCERPT FROM THE INTRODUCTION

As the sun rose over an open-air camp in the Djurab Desert of Chad, Michel Brunet sat up on his cot and saw nomads appear over the dunes with their camels, almost like an apparition in the early-morning light. At first he tensed, wondering if these Arab men and women were members of the warlike northern tribe that had waged war with southern tribes for thirty years on the desolate land, littering it with mines. But when the men in flowing blue-and-white robes and turbans smiled and the women offered him camel's milk and tea, he realized they were Gorane camel herders, who roamed the region in search of water. He relaxed as his team members conversed with them. As Brunet prepared to leave, the nomads offered a customary blessing to him in their language, asking Allah to protect him and give him happiness.

Later that morning, Brunet felt a bit like a nomad himself as he headed out into the sand dunes. He must have been an odd sight to the nomads who had come to watch him work. Now in his mid-sixties, he can resemble a bearded version of the actor Anthony Hopkins, with silver hair swept back to reveal a high forehead and startling blue eyes. But on the morning of January 23, 1995, Brunet wrapped his head in a cloth and donned a ski mask as he prepared for another day's work in the Djurab, where sand blows relentlessly into a person's eyes, ears, nose, and mouth. Temperatures can get so hot that plastic drink containers left in the shade of cars and tents—there is no other shade—can spontaneously explode.

As Brunet joined the other members of his party, they spread out across the area, each one walking slowly, stooped at the waist so they would not miss anything as they scoured the ground. They were sweeping the desert floor for bones, passing back and forth over the same terrain so they would not overlook even the smallest fossils. They were careful not to touch anything metal, in case it was one of the mines left by the northern rebels—deadly reminders of the civil war waged with government forces in this desolate region. It was tedious work that would have to stop as the sun rose higher and temperatures soared. Brunet was trying to keep focused on the rubble in front of him when he spied a bone protruding from the sand. He let out a cry. But it was only the fossil of a pig.

Then the Chadian driver, Mamelbaye Tomalta, called Brunet to come over to him. He had found a jaw with its teeth dug into the ground. Brunet would never forget what he saw as he brushed off the sand. It looked like the jaw of an ancient ape, but the shape of its teeth startled him. They had a closer resemblance to those of a human. He quickly recognized that he was looking at the jawbone of an early human ancestor who had lived on the ancient shore of Lake Chad about 3.5 million years ago.

Later that night, Brunet could not sleep. As he lay awake on his cot, he remembered the nomads' blessing and wondered if this jawbone would indeed bring him happiness. He got up twice just to shine his flashlight on the jawbone, while members of his team slept beside him in a tent. He wanted to make sure that he wasn't dreaming—that the jawbone was real. The only shadow that clouded the moment was that he could not show it to his longtime collaborator, geologist Abel Brillanceau, who had died six years earlier of drug-resistant malaria when he and Brunet were searching for fossils in the woods of Cameroon. Brunet vowed that night to name the jawbone Abel. A few days later, when he got to a telephone in N'Djamena, he called another longtime friend and colleague, paleoanthropologist David Pilbeam of Harvard University, who had been part of the mission in Cameroon. It was early in the morning in Cambridge, Massachusetts, and Brunet woke up Pilbeam. He said: "David, I've got it." Pilbeam knew immediately what he meant, and was deeply pleased for Brunet. If anyone deserved a discovery like this, it was Brunet.

The jawbone was a long-sought prize for Brunet, who had never before found a fossil of an early human ancestor. He certainly had tried—by the time he found the jawbone in 1995, Brunet had made his name as a paleontologist's paleontologist, and was respected for his skill in finding animal fossils in some of the world's most remote and hostile sites. His adventures in the field were legendary: he had been strafed by a fighter jet in Afghanistan, arrested in Iraq, threatened at gunpoint in Chad. But still, even when he was down on his luck and without funding for his fieldwork, he persisted. Year after year, he left his lab at the University of Poitiers, in central France, to return to the field, even scouting new sites in the Djurab Desert in a rented four-wheel-drive car with barely enough water to brush his teeth. He persevered, and it paid off—his team found thousands of fossils of extinct monkeys, elephants, giraffes, rhinoceroses, hippopotamuses, and pigs. But one type of mammal eluded him: a hominid. Until that day in January, Brunet had never even held an actual fossil of an early hominid, only casts of fossils found by others. So when he finally cradled the hominid jawbone in his hands, it was a life-transforming moment. Nineteen years of searching for the fossil of a hominid had been "a long time in the life of a small bipedal ape," Brunet would say, referring to himself.

What is it that makes a piece of gray jawbone with rotting teeth so tantalizing? Why was it worth risking his life to find? Brunet throws up his hands in a characteristic French way, exhaling, "Pfew!" He is an intense man with a short fuse who describes himself as "crazy, French, poor, a Socialist"—albeit a Socialist who drives a Mercedes. As if it is obvious, he declares that he wants to know where humans come from. He has been obsessed with the question ever since reading Darwin's *The Descent of Man*, written in 1871. Darwin proposed that humans originated in Africa because African chimpanzees and gorillas are the great apes most closely related to humans, and that we are all members of the primate order. Ever since, explorers have been searching for this missing link, a name that comes from the old idea of the Great Chain of Being, in which creatures of the earth are connected one to the other, from lowest to highest. Scientists have been looking for fossils that would show how humans fit in nature and their place in the animal kingdom. Starting with Dutch anatomist Eugène Dubois's discovery of Java man in Indonesia in 1891, many fossils have been proposed as the missing link, only to be bumped from that spot when an even older and more primitive fossil was found.

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