

## CHAPTER 12

# BRAIN FOOD

## THE MIDDLE STONE AGE

If the Neandertal wasn't "us," who was? Where can we find the first modern humans? A good place to begin looking is the southern tip of Africa in a place called Klasies River Mouth. This is not a place for the fainthearted, because one of the things Klasies people were eating 100,000 years ago was each other. Almost all the human bones found there were leftovers from cannibal dinners. They had been burned, torn open, and cut with stone tools.

Hilary Deacon, the archaeologist in charge at the Klasies site, describes what the marks on the bones tell us:

Let's say that you want to heat up some brains. . . . You'd place the head on the fire. . . . When everything's nice and bubbly, you take it out. But you've still got to get the thing open, right? So you grab a hammerstone and give it a good bash. Naturally the bone is fresh and tears a bit as you pry open the skull. And that's where the tear marks come from.



“ Homo sapiens sapiens bone, Klasies River Mouth, South Africa, about 90,000 years ago

*This bone is from the face of a modern human, Homo sapiens sapiens, discovered at Klasies River Mouth. The cut marks at the top center of the bone are evidence of cannibalism.*

Cannibalism isn't uniquely human behavior. Many animals eat their own kind. The key question is why? If humans were eating humans because they were hungry, it's one thing, but if it was ritual, it's another. In some cultures, humans ritually eat parts of their dead loved ones, believing

### “ HUMAN BONES AND ARTIFACT IN SOUTH AFRICA



#### DO YOU HEAR AN ECHO?

Our official name is *Homo sapiens sapiens*. “Wise” (*sapiens*) is not repeated to show off that we got a double dose of wisdom. It's to distinguish us from *Homo sapiens neanderthalensis* (Neandertals) and our earlier selves, which until recently were called “archaic” *Homo sapiens* (now known in Europe and Africa as *Homo heidelbergensis*).



## WATCH CLOSELY NOW

Hilary Deacon was not the first person to excavate Klasies River Mouth when he began in 1984. Back in the 1960s, British and American archaeologists hot for hominids moved tons of dirt. Hilary Deacon's methods would have driven his predecessors crazy. His techniques are so exacting that they involve analyzing how individual grains of sand have weathered in order to estimate sea levels and climate.

that the best parts of their loved one's spirit—their courage, wisdom, strength—would be absorbed like a multivitamin. In other cultures, humans ritually eat parts of their enemies, believing it is an act of supreme dominance or revenge.

Anthropologist Tim White was quoted as saying in James Shreeve's book *The Neandertal Enigma*,

If you are starving to death and you eat Uncle Harry, there is probably going to be some ritual involved. Even so, your motive for eating him was still starvation. On the other hand, there are societies where they eat Uncle Harry purely because they thought he was a neat guy and want to be a little more like him.

Why is it important to know if people were eating each other with or without ritual? Ritual cannibalism is proof of a complex belief system, which is modern behavior. Being a modern human isn't just about what we look like, it's about how we behave—how we think. Chimps and other animals may make tools, they may build shelters, but they don't perform rituals.



The Klasies people lived in these river-mouth caves in South Africa 100,000 years ago. The rocky coastline of the Indian Ocean is just to the left, out of range of this photo.

## CREATIVE THINKING

To some scientists, the people at Klasies are *near* modern. These scientists believe true moderns didn't emerge until 40,000–50,000 years ago when a burst of artistic behavior spread throughout the Old World. What caused this sudden burst of creativity? Some claim a change in the brain. Others say we just got better at talking.

So were the Klasies people starving or not? Is it likely? Klasies River Mouth looks out over open ocean. The gray-green cliffs rise up from the beach. The rocks tumbling out into the surf are speckled with shellfish. Birds nest in the ledges. Seals, penguins, and dolphins ride the waves. In the layers of debris left by modern humans, Deacon found shells and bones charred from being cooked. He said, "Klasies is the oldest seafood restaurant in the world."

In the ashes of the hearths, Deacon found that seafood wasn't the only thing on the menu. The people at Klasies ate plants and land animals as well. He found so many bones from a mild-mannered antelope, the eland, that Deacon thinks the herds may have been driven by the humans over cliffs or into traps.

Bashed-in bones alongside the hearths were marked by tools that were much more sophisticated than the tools used by *Homo erectus*. The blades were thinner and the way they had been crafted was more complicated. Some blades were made into points with blunted ends designed to attach to spears. Deacon believes that the evidence is mounting that the Klasies behaved like modern humans. Klasies people were advanced enough to control fire. They made fires for cooking, warmth, and protection. Deacon believes that they may also have burned the nearby vegetation. Were they advanced enough to plan for seasons ahead by recognizing that burning the old growth of the wild plants encouraged new growth? Were the Klasies people *that* modern?

What makes a modern human *modern* anyhow? Ritual cannibalism is an act requiring complex thought. It is symbolic. Crafting a varied tool kit is an act requiring complex thought. It is innovative. Altering your environment with fire is an act requiring complex thought. It takes planning. Whereas *Homo erectus* was controlled by his environment, modern humans took control of their environment.

Not all scientists agree with Deacon. Some say that the humans at Klasies were not modern. There is no evidence that they caught fish or flying birds. Herds of eland were so rare

64 Spear blade, South Africa, about 90,000 years ago







66 Human bones, South Africa, about 90,000 years ago

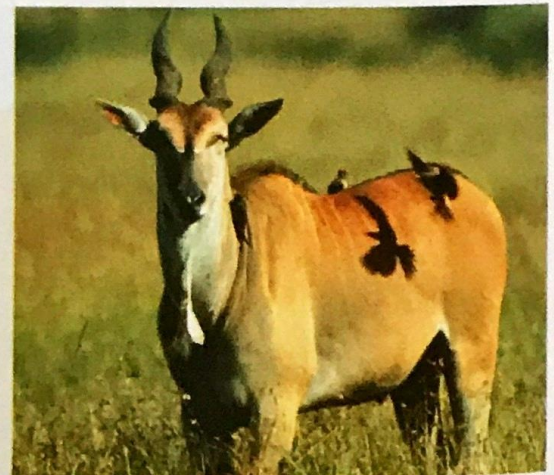
These 90,000-year-old bones, including the jaw at top left, were excavated at Klasies River Mouth. They are among the oldest modern human bones in the world.

and some shattered limb bones? The limb bones are delicate like our own. The jawbones for the most part show that the Klasies people had chins like we do. One skull fragment comes from the forehead—no browridge. All this put together convinces most scientists that this is indeed evidence of fully modern humans.

Scientists agree modern humans evolved from a human ancestor traditionally known as *Homo erectus*. It's the where, when, and how that start the disagreements. The clues are scattered all over the Old World, just waiting to be discovered.

### EASY PICKINGS

Eland are by far the largest antelope. But some scientists argue that because the eland was the *only* large animal the Klasies people hunted, they were not truly modern. Remains of more dangerous animals—the Cape buffalo and bushpig—were from the vulnerable very young or very old, which were easy pickings. Fully modern humans with modern weapons hunt dangerous prey.



that they could not be counted on for a steady diet. But if the Klasies people were just living off what they could scavenge, you have to wonder how often dinner washed ashore.

If the evidence supporting modern human behavior isn't solid at Klasies, what about the anatomy of the humans living there? When it comes to classifying fossils, being modern is what you look like. Do the fossils at Klasies look like modern humans? If they do, at 90,000 years old, they would be the most ancient modern human remains found to date. Can we tell if the Klasies people were modern from a handful of teeth, chunks of jawbone, pieces of skull,