

101 OBJECTS

by Charles C. Mann

When Edgar B. Howard heard

that a road crew in eastern New Mexico had stumbled across a cache of big ancient bones, he dropped everything and grabbed the first westbound train. At the time—November 1932—Howard was an archaeology research associate at the University of Pennsylvania Museum. He had been working for a few years in the Southwest and had seen his colleagues in this intensely competitive profession snatch discoveries from under his nose. Days later, he was in Clovis, New Mexico, persuading the landowners to let him excavate.

Howard launched his field project at the site the following summer, soon uncovering what he called the “matted masses of bones of mammoth.” Mixed in with the bones were slender, finger-long spear points—Clovis points, as they are called today—which Howard carefully left in place. Eminent researchers quickly converged on Clovis and bore witness to the discovery.

Clovis points are wholly distinctive. Chipped from jasper, chert, obsidian and other fine, brittle stone, they have a lance-shaped tip and (sometimes) wickedly sharp edges. Extending from the base toward the tips are shallow, concave grooves called “flutes” that may have helped the points be in-

INVENTION

illustrations by GUY BILLOUT

serted into spear shafts. Typically about four inches long and a third of an inch thick, they were sleek and often beautifully made. After discovering Clovis points in New Mexico, Howard and others looked for traces of them in collections of artifacts from Siberia, the origin of the first Americans. None have ever been found. Clovis points, it seems, were an American invention—perhaps the first American invention.

More than 10,000 Clovis points have been discovered, scattered in 1,500 locations throughout most of North America; Clovis points, or something similar, have turned up as far south as Venezuela. They seem to have materialized suddenly, by archaeological standards, and spread fast. The oldest securely dated points, discovered in Texas, trace back 13,500 years. In a few centuries they show up everywhere from Florida to Montana, from Pennsylvania to Washington State.

Care must be taken: Dating stone objects is difficult, and the results are subject to controversy (the timeline

here is from a widely cited 2007 article in *Science* by Michael R. Waters of Texas A&M and Thomas W. Stafford Jr., who then operated a private archaeological lab in Colorado). Even when dates are established, they are not easy to interpret. Because artifact styles—forms of pottery, tools, spear points—can change arbitrarily, one can't say that a particular style necessarily represents a particular society. The near-simultaneous advent of Clovis points might represent the swift adoption of an improved technology by different groups, rather than the spread of one group. Still, most researchers believe that the rapid dissemination of Clovis points is evidence that a single way of life—the Clovis culture—swept across the continent in a flash. No other culture has dominated so much of the Americas.

So quickly did Clovis proliferate that researchers imagined it must be the first truly American culture, the people who took fire and spear across landscapes empty of humankind. But others kept offering data that the Americas were inhabited before Clovis. The vituperative debate ended only when strong evidence for a pre-Clovis settlement turned up in Chile in the late 1990s. Other pre-Clo-

c. 13,000 years old • Natural History Museum

Beautifully crafted blades point to America's first successful culture

CLOVIS POINTS



vis sites followed, notably a cave in Oregon with fossilized human excrement identified by DNA analysis and dated by accelerator mass spectrometry. Little is understood about these early peoples. Clovis may no longer be the oldest American culture, but it remains the oldest American culture we know much about.

Initially discovered between the rib bones of large, extinct mammals, Clovis points were long viewed as hunting tools. Similarly, it was thought that the Clovis culture focused on hunting big game—"Pleistocene megafauna." To this day, countless museum dioramas portray doughty paleo-Indian men thrusting spears in the faces of mammoths, mastodons and saber-toothed tigers. Women and children lurk at the edges, hoping the hunters will survive. Later archaeologists questioned this picture. Chasing after giant beasts with sticks and sharp stones is dangerous. How could any group base its subsistence on something so risky? It would be like a society in which the majority of adults made their living by disarming land mines.

In a study published in 2002, Donald Grayson of the University of Washington and Da-

vid Meltzer of Southern Methodist University searched through data from scores of Clovis sites for evidence of humans killing big animals (butchered bones, for instance). In only 14 did they find evidence of hunting—or, possibly, "hunting," since at several of the sites people seemed to have killed animals at water holes that were already near death. "Pitiful," Meltzer joked in *First Peoples in a New World*, his history of America's first colonization. Today it appears likely that Clovis people depended mostly on foraging for plants, hunting small mammals and, probably, fishing. Along with scrapers, blades, drills and needles, the Clovis point was part of a generalized tool kit—the Leatherman of the ancient world—that human beings used to flood into a still-new land.

Clovis points were made for three or four centuries, then disappeared. So did the culture that created them. As Clovis people settled into different ecological zones, the culture split into separate groups, each adapting to its own separate environment. The end of Clovis marked the beginning of the enormous social, cultural and linguistic diversity that characterized the next 10,000 years. Of the brief florescence of Clovis, only the tools, notably the points, remained—the last physical traces of America's first and most extensive cultural imperium.

