Clovis Counterrevolution

The debate on who came first to the Americas, and where they lived, seems headed for a new round as the skeptics strike at "pre-Clovis" discoveries

IT SEEMS THAT a counterrevolutionary assault is being mounted in the anthropological community—one with major implications for who first settled the Americas and when they arrived. A band of revolutionaries—call them the Clovis iconoclasts—has been boasting that the Berlin Wall wasn't the only grim structure to topple in the Western Hemisphere last year; the "Clovis Barrier," they crowed, was crumbling as well.

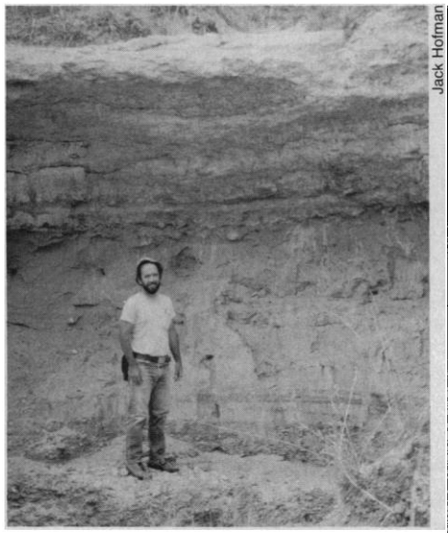
They were referring to a 50-year-old concept that until recently was broadly accepted in the field. Clovis, New Mexico, is the site where five decades ago anthropologists found a trove of stone artifacts from the late glacial period. Gradually a consensus had formed that these were the oldest tools in the Americas and that therefore it could be safely surmised that the earliest Americans arrived from Asia 12,000 years ago.

But this theory has not gone unchallenged. The challengers, who vigorously disagree with the arbitrary barrier at 12,000 years, point to sites that are now at the center of this dispute and argue the entry date must be pushed back to 16,000—even maybe 30,000—years ago. And, until recently, it was beginning to look as though their radical view might indeed be taken as the basis of a new consensus.

But in recent months, there has been a backlash from anthropologists whom some researchers feel function as a kind of "Clovis police," patroling the old barrier against any new incursions. And this counterrevolutionary movement has, in turn, sparked some sharp exchanges in the community of archeologists and anthropologists who study the early prehistory of the Americas.

Thomas Lynch of Cornell University earned a place among the Clovis police with an *American Antiquity* article earlier this year. Dismissing the decades of work by the Clovis iconoclasts, he argues that in 100 years of searching for proof of very early, glacial-age humans, "no indisputable or completely convincing cases" have come to light in the Americas.

Another counterrevolutionist is Dina Dincauze of the University of Massachusetts who, in a forthcoming issue of the *Journal of Field Archaeology*, says the data from Monte Verde, Chile—one of the most celebrated of the pre-Clovis sites—suffers from an "enthusiastic, uncritical use of the radiocarbon ages" that tends to overstate its antiquity. Aside from that, she praises the work of the Monte Verde's principal investigator Tom D. Dillehay, now of the University of Illinois.



Jack Hofman

Centrist. *David Meltzer, sympathetic to both sides in the debate over when the Americas were populated, stands where Clovis tools were found.*

These salvos may be the beginning of a movement designed to restore the Clovis hypothesis to its previous position of unquestioned authority. It is too soon to tell how successful they will be, but their story provides a window onto what happens in a field when an old consensus begins to erode and a new one appears to be taking shape. Opinions and interpretations take on great importance. Personal questions of style, nuances of presentation, even endorsements from colleagues (or the lack of them) loom large. Until a new consensus is firmly established, rising tempers and radical shifts of opinion are the rule.

One reason why the argument over estimated times of arrival in the Americas has escalated is that the challengers to the old view have received wide publicity. Among those whose views have been given wide attention in both scholarly and popular press is Dillehay, who led the Monte Verde excavation. He has argued for some time that the question isn't merely one of dates, but cultures; he thinks pre-Clovis Americans might, in fact, have used quite different tools from those of the Clovis big-game hunters.

Dillehay backs up his claim with the results he says he has obtained at Monte Verde, including 13,000-year-old wooden dwelling frames, along with edible seeds brought in from other locations, and wooden tools. That material suggests to him that there may have been a pre-Clovis culture that relied more on wood and on plant-gathering than on stone tools and big-game hunting.

Says Dillehay, when archeologists consider how humans came across the Bering land bridge into the Americas, they tend to think unimaginatively "in terms of a train." In this concept, "each car represents a lithic tradition and life-style and economic behavior, with each one pulling the next one along into time and sequence." But things may not have happened that way. Probably "all these cars were running parallel" on different tracks. Perhaps one group used Clovis spear points on the Great Plains while others lived in coastal or forested areas, using wooden tools and eating plants.

Other highly publicized Clovis rebels include James Adovasio of Mercyhurst College, who excavated the Meadowcroft Rock Shelter near Pittsburgh, the location of human artifacts which he says date back 16,000 years; Jacques Cinq-Mars of the Canadian Museum of Civilization and his colleagues who explored the Blue Fish Caves of the Canadian Yukon and came up with tools dating 10,500 to 13,000 years old; and the husband and wife team of Alan Bryan and Ruth Gruhn of the University of Alberta, Edmonton, who investigated an ancient water hole in northern Venezuela called Taima-Taima and concluded that remains of a mammoth they found had been butchered by humans 13,000 years ago. All contain what seem to be human artifacts that have been dated or linked to other objects that are more than 12,000 years old (see map, p. 740).

Yet in spite of the publicity Monte Verde, Meadowcroft, and other pre-Clovis sites have received, the "pre-Clovis police" say

that they are far from secure in a scientific sense. In some cases—such as that of Meadowcroft—that conclusion arises from decades of scrutiny. In others, including Monte Verde, the site has been in the spotlight for only a few years.

Whether they have been in the eye of the community for years, or have only lately come into view, these sites fail crucial tests, say the staunchest of the conservatives. Lynch, for example, has dismissed all the pre-Clovis claims in South America as not yet established. He argues that all too often the validity of claims for these sites turns on the interpretations of ambiguous artifact evidence—interpretations provided by the researcher making the claim and not an independent reviewer.

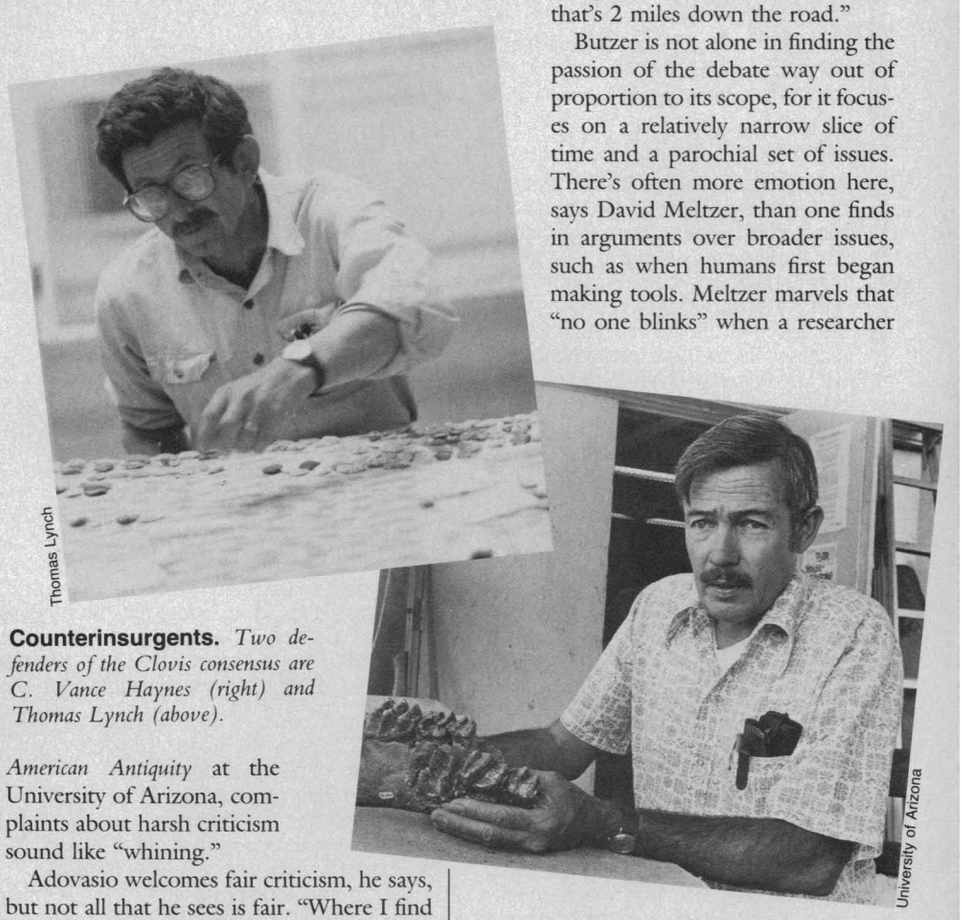
Indeed, Lynch says, some of the claims made by the pre-Clovisites go beyond the realm of what can be tested. He likens his dialogue with Dillehay to a conversation between an agnostic and a priest on the subject of God's existence, a topic "not subject to proof." Dillehay, he says, is an old friend, and the article in *American Antiquity* may cost him that friendship. Yet he couldn't keep silent about his doubts. "Some of us smell another site about to go down," Lynch says.

Dillehay responds that the article was "not scholarly," "biased," and "based on old material." He faults Lynch for declining to examine new, unpublished data on Monte Verde. David Meltzer of Southern Methodist University, an anthropologist who has written about the history of this debate and has friends on both sides, agrees that the article was "strange" and that it ignored some published as well as unpublished evidence. Lynch says he aimed to give a balanced review and relied on printed work because he has been criticized before for using unpublished material.

Those who have been put in the position of defending their work against the pre-Clovis police think that Lynch and other skeptics have treated them unfairly. "Guilty until proven innocent" is the standard approach, says Dillehay. Others who have been on the defensive, including Alan Bryan and Ruth Gruhn, complain that pre-Clovis discoveries are asked to meet standards that go beyond what is normally expected from many other archeological sites.

Lynch dismisses this grumbling. He doesn't think the standards have been too tough. And he points to the fact that some pre-Clovisites have answered the criticisms well. Adovasio in particular has done a "good job" of answering questions, Lynch says, and agrees that Meadowcroft, Taima-Taima, and Monte Verde are "probably the best" pre-Clovis sites. But he says: "We bend over backwards to include them in our reviews. . . . We are under great pressure to accept undocumented beliefs and announcements." He also says the pre-Clovis excavators are being very well treated by another significant measure: They're well funded.

Paul Martin of the University of Arizona at Tucson, a skeptic of early sites and a senior figure in the debate, agrees with Lynch that nobody's being too tough on the pre-Clovisites. Indeed, he says, private doubts about the validity of pre-Clovis claims are stronger than anything that appears in print. People don't like to offend their peers, he thinks. Richard Klein of the University of Chicago thinks pre-Clovis claims may face a tougher academic review than others, but thinks they should. If someone does less than adequate work on a 5,000-year-old site, he asks, "who cares?"—because it isn't going to affect the terms of the debate since everyone agrees there were human beings in the Americas after 12,000 years ago. To J. Jefferson Reid, editor of *American Antiquity* at the University of Arizona, complaints about harsh criticism sound like "whining."



Thomas Lynch

University of Arizona

Counterinsurgents. *Two defenders of the Clovis consensus are C. Vance Haynes (right) and Thomas Lynch (above).*

Adovasio welcomes fair criticism, he says, but not all that he sees is fair. "Where I find difficulty is where all the problems are answered or addressed and the evidence is still deemed questionable or rejected." At this point, he says, "I think you pass beyond being constructively critical to being destructively critical."

Adovasio obtained 52 radiocarbon dates for Meadowcroft, hoping to crush all doubts about the chronological order of the sediment layers. But skeptics still worry that the charcoal used in carbon-14 dating may have been shifted from one layer to another by water, that the charcoal was contaminated by other minerals, or that the oak and walnut debris seem out of place in a late ice-age context. Adovasio says he has responded to all these doubts "ad nauseam."

And indeed, outside the battle zone, there are experts with no special stake in the debate who sympathize with the pre-Clovis advocates. Karl Butzer, for example, an archeologist at the University of Texas at Austin who has worked extensively in Africa, says he thinks there are some people who "pooh-pooh any kind of evidence, regardless of what it is," if it clashes with the established view. Butzer worries that rigid skepticism has become a "cult" or "habit" for some people. He finds Dillehay's work persuasive. "He's such a cautious man," says Butzer, "he wouldn't step out in front of a streetcar that's 2 miles down the road."

Butzer is not alone in finding the passion of the debate way out of proportion to its scope, for it focuses on a relatively narrow slice of time and a parochial set of issues. There's often more emotion here, says David Meltzer, than one finds in arguments over broader issues, such as when humans first began making tools. Meltzer marvels that "no one blinks" when a researcher changes the earliest date for African toolmaking by 200,000 years, but that "explosions go off" if someone suggests a change in the first immigration to the Americas of one or two thousand years. "Why is that?" Meltzer asks.

The answer may be that the subject touch-

es deep convictions about the kind of culture that existed in North America 12,000 years ago and feelings about one's home turf. Says R. Ervin Taylor, Jr., of the University of California: "You're dealing with the history of your own species," and in the United States it gets even more personal, for "the earliest evidence often seems to be in your own state."

There may be other reasons why the skepticism about pre-Clovisites is so pervasive and the debate so heated. One, according to Meltzer, is that anthropologists have been stung in the past by promises of great antiquity that later failed. They want to avoid repeating the mistake. "Time and time again over the last 60 years there have been these things paraded out; we gazed at them with awe and got excited, then they just sort of disappeared," Meltzer says.

In an article last fall he listed half a dozen major discoveries that flopped, noting that none of them "proved to be what they were claimed to be. Not one is even late Pleistocene in age; all are recent or in some cases downright frauds." An example is the Holly Oak pendant, an ancient shell from Delaware on which someone sketched the image of a mammoth, thought to have become extinct more than 10,000 years ago. Meltzer and others have now shown that it was a probably a fake. More recently, he writes, claims about ancient Californians, Texans, and Canadians have been rejected when the evidence fell apart.

C. Vance Haynes, the leading expert on the Clovis discoveries in New Mexico, and also the leading skeptic on pre-Clovis sites, agrees that past disappointments have a lot to do with present caution. For him, the key case was an investigation in the early 1960s of a claim that a 28,000-year-old human settlement had been found in Tule Springs, Nevada. "We all went there on the basis that we were going to prove up more," but instead, the bottom fell out. The very old dates associated with the artifacts were spurious, derived not from charcoal, but from oxidized organic matter that looked like charcoal and had been deposited among the human artifacts by spring water.

Meltzer playfully reports that the "shelf life" of a controversial pre-Clovis site is "about a decade." People have become jaded about very early claims. "Naturally, when these things get paraded out, we say: 'so what? Call me if you're still around in 10 years. Keep in touch.' "

But there may be another reason for the skepticism that goes back well beyond the current debates. Several defenders of the pre-Clovis sites say they are fighting a long-standing bias in their profession that dates back to the tenure of Ales Hrdlička and William Henry Holmes at the Smithsonian Institution in the 1920s. At that time, the prevailing view was that humans arrived in North America only a few thousand years before Columbus, when giant bison, mammoth, and other "megafauna" had already become extinct. Hrdlička debunked claims that people had been around even longer than this and as a federal official he wielded more than intellectual clout. Meltzer says this set up an enmity between big and small anthropology that continues to this day.

James Adovasio also complains that many of the present-day debunkers have a vested interest in preserving the status quo, because they have erected theories on the proposition that the early inhabitants were like the Clovis people: big-game hunters who were expert in stone toolmaking.

The critics may be self-interested, agrees Meltzer, but this isn't why pre-Clovis advocates have trouble winning converts. The reason, he says, is that they simply haven't produced an overwhelming case. "There is not now compelling evidence for a pre-Clovis or pre-12,000 migration" to North America, he wrote last fall. That's why Monte Verde, Meadowcroft, and Blue Fish Cave are only called "candidates" for inclusion in the official record. The excavators of the sites disagree, saying they have done everything they can to satisfy the critics' requirements, to no avail.

Radical presentation. *Tom D. Dillehay, presenting his data from Monte Verde, one of the contested pre-Clovis sites.*

There is one point, however, on which both sides of the debate agree. It is that outspoken skeptics often have not visited the best candidate for a pre-Clovis site—Monte Verde—and, as radiocarbon dating expert Ervin Taylor says, "it is inappropriate for someone who has not seen the sites or handled the materials to comment" on the quality of data. Everyone thinks it would be good for doubters to go and take a close look. But so far no one has offered to fund an independent on-site review.

"It's kind of like cold fusion" but more difficult to resolve, says Paul Martin. "The possibilities are exciting, the stakes are high," but unlike a chemical process, the Monte Verde find cannot be put to a laboratory test. "The only way to convince everybody," Martin says, is to get together people with "a real strong show-me attitude" and have them examine the site in detail. Preferably, they should be able to excavate a patch for themselves and thus reach an independent conclusion about the stratigraphy and chronology. As Martin and others note, this is how the clash in the 1920s over the credibility of the Clovis-Folsom discoveries were resolved. The doubters were convinced only when they themselves helped uncover an extinct bison bone with a man-made point in it.

Some, including Lynch, wonder whether it would be possible to carry out this kind of critical on-the-spot inquiry, now that the excavation is done and the site has been closed. The time to have assembled a review panel, Lynch argues, was several years ago when the work was just getting started.

Another solution that would "convince me without a doubt," says Haynes, would be to find artifacts where the stratigraphy is already well known and where Clovis points have been found. Then the barrier would come crashing down in an instant. While there are sites with reliable stratigraphy beneath the Clovis level, none has produced a trace of humanity. For this reason many people feel safe with Haynes' skepticism, arguing, as he says, that "we don't know the answers. . . . We have to keep looking."

The pre-Clovis excavators would be delighted to mount a large new search, and they have suggestions for where to explore: along the Paleolithic coastlines of North and South America, now buried by a rising sea level, and in deep caves covered by glacial debris. However, they suggest that because pre-Clovis humans have been an elusive quarry up until now, a big hunt might not turn up any more definitive evidence than already exists. That is why, Adovasio believes, a good way to catch a glimpse of very early Americans is simply to accept the pre-Clovis sites that have survived scrutiny for 10 years, realizing that the evidence is less than perfect. "When you find sites where most things work," he says, "that ought to be the end of the issue." ■ ELIOT MARSHALL