In 1906, the Santa Fe Railroad operated a small station in eastern New Mexico called Riley’s Switch. As a part of the search for an official name for the town that was developing around it, the daughter of a railroad official was permitted to suggest a name. Captivated by her study of a fifth-century Frankish king who had become Christian, the daughter suggested Clovis. In May 1909 the town of Clovis was officially incorporated. As a result, one of the first indigenous cultures of the New World has been irretrievably encumbered with a name prominently associated with an alien European culture.

The theory against which all other First American science was measured for seventy years was the “Clovis-first” paradigm. In 1929 at Blackwater Draw near Clovis, New Mexico, the material artifacts that became the Clovis cultural “tool kit” were unearthed and the culture was subsequently successfully dated to thirteen thousand years ago—the then-oldest documented evidence of human presence in the Western Hemisphere. The stone artifacts have a shape that is characteristic of a culture that purportedly existed only in the New World, and only for a limited period of time.

Blackwater Draw, New Mexico—the physical location that produced the original Clovis artifacts—is actually located some fourteen miles southwest of Clovis. The closest town, albeit a small one, is Portales, New Mexico, which is six miles still farther south. In 1929, local resident Ridgely Wightman discovered and sent to the Smithsonian Institution a piece of mammoth bone and a stone point that he found in Blackwater Draw. Consequently, Wightman, a non-scientist, can be credited with the discovery of what became known as the Clovis culture. According to the October 20, 1932, Portales Valley News, “many prehistoric bones are being uncovered at the highway gravel pit northwest of Fort Palace and there is an interesting display of these bones in the show window of Ed J. Neer’s store. Centuries ago monsters roamed the prairies where Portales now stands, and one can visualize the strange animals after looking at the bones now being uncovered.”
From its beginning, the artifacts discovered at the Blackwater Draw site have demonstrated the unique intersection that the search for the First Americans has created among science, popular public interest, American Indian myths, and governmental politics. The site was designated by the US government as a National Historic Landmark, and a cottage industry has developed around it. In early 1933, E. B. Howard, of the University of Pennsylvania, and John Cotter, of the Philadelphia Academy of Natural Sciences, reported the first successful results by professionally trained investigators. That same year a Clovis expedition party with members of the prestigious International Geological Congress included R. Prall, Victor Van Strahlen, Peter Anderson, Lady Smith Woodward, Sir Arthur Smith Woodward, Chester Stock, John C. Merriam, Jake McGee, R. W. Wilson, Ridgely Whiteman, Edgar B. Howard, and either F. D. Bode or H. D. Curry. A participant in that excavation commented some years later that “We excavated industriously, in our quest for mammoth bones and artifacts. Not quite as modern archaeological practice requires, but not without method.” Excavation continues to this day under the auspices of Eastern New Mexico University.

After scientists knew what to look for, variations of this Clovis tool kit (principally associated with a lanceolate fluted projectile point, scrapers, and ivory, antler, and bone implements) were found throughout North America. Despite the absence of convincing evidence of these tools having been found in South America—based largely on an erroneous belief that Clovis was older than any found in South America—the Clovis-first model contended that the Clovis people crossed the Beringian land bridge from Asia during the latter part of the last ice age, very quickly spread through North America, and rapidly populated the entire southern continent as well. The stature of the Clovis theory became such that any archaeological evidence hinting at an earlier peopling was termed pre-Clovis—not worthy of an independent designation—and its scientific value usually discounted. Associated with the Clovis model were assertions about the number of subsequent migrations from Alaska, the precise route of entry (between or around glaciers), and whether the Clovis people were responsible for the extinction in the Western Hemisphere of megafauna such as the mammoth and the mastodon. With the near-consensus of the past two decades that archaeological evidence from Monte Verde, Chile, disproves the Clovis-first model, there is now no clear theory explaining who the first Americans were and by what route they entered the New World.

The Clovis-first paradigm had been able to offer both archaeological sites (observations) as well as an associated explanatory model (theory) in its support. While there are several sites—some are more contested than others—that are
now believed to predate the Clovis sites, there is currently no associated explanatory theory to support their existence. The Thomas Kuhn thesis that one paradigm cannot be overturned, even in the face of contradictory evidence, until there is a suitable theoretical replacement would appear not to be sustained in this instance. The single most important pre-Clovis site is that of Monte Verde II. Its antiquity (fourteen thousand years ago), location (Chile), and rigorous archaeological documentation have shown the Clovis-first model to be untenable. Other important pre-Clovis sites include Meadowcroft Rockshelter (Pennsylvania), Page-Ladson (Florida), Cactus Hill (Virginia), Buttermilk Creek (Texas), Chliquihuite Cave (Mexico), and Paisley Cave (Oregon). In 2017 the San Diego Natural History Museum announced that it had discovered artifacts documenting a human presence in California dating to 130,000 years ago. This has yet to be confirmed by the broader First American community in what will be a contentious endeavor.

In 1990, a *Science* article entitled “Clovis Counterrevolution” described the, at times, vicious debate between the Clovis and pre-Clovis First American science communities. Indeed, the major academic figures could generally be placed into one of two camps. The most prominent people in the Clovis-first intellectual encampment—characterized in *Science* as the “Clovis police”—were: Thomas Lynch of Cornell University, who is generally credited with primacy of place in the development of the Clovis-first theory; Dina Dinauauze of the University of Massachusetts; Paul Martin of the University of Arizona; and C. Vance Haynes, also at the University of Arizona. Haynes is generally credited with having been the leading proponent providing the continuing force behind the Clovis-first theory. Some, such as Karl Butzer, an archaeologist at the University of Texas, believed that the adamant skepticism of the Clovis-first supporters, against countervailing theories, may well have become a cult that dismissed “any kind of evidence, regardless of what it is.” Ten years ago, the phrase “Clovis police” was so commonly applied to the protectors of the Clovis-first theory that numerous entries were listed on an internet search, even after modifying it to “Clovis police archaeology” to eliminate references to the Clovis city police department. Given the shift away from the Clovis model, today the archaeological politics on the internet have been considerably muted.

Those supporting a pre-Clovis arrival in the New World, and who frequently were associated with viable specific pre-Clovis archaeological models, most prominently have included Tom D. Dillehay of Vanderbilt University (Monte Verde site in Chile); James Adovasio of Mercyhurst College (Meadowcroft Rockshelter in Pennsylvania); and Dennis Stanford of the Smithsonian
National Museum of Natural History (precursor Solutrean culture from Europe). Also included in the early pre-Clovis group were those who received less academic and popular press coverage in the United States because their research is centered outside the United States, including Alan Bryan and Ruth Gruhn of the University of Alberta in Edmonton (Taima-Taima in Venezuela) and Jacques Cinq-Mars of the Canadian Museum of Civilization (Blue Fish Caves in Canada). There have been, however, a few leading First American scientists who may have had tendencies toward one theoretical commitment or the other, but whose public expressions could be better described as academic statesmanship rather than consistent support for any particular position. One of the prominent few who fell into this mediator role has been David J. Meltzer at Southern Methodist University.

The focus of the First American debate has typically centered on whether, when, and how a migration occurred at the end of the last ice age from Siberia to the New World by means of a land bridge called Beringia. However, as the genetic evidence indicates, a Beringian migration may well have been both ways. Reflecting the popular American interest in the search for the First Americans, an August 2, 1996, New York Times article titled “American' Arrowhead Found in Siberia” proclaimed that the archaeologists Sergei B. Slobodin and Maureen L. King had discovered a Clovis point in Siberia that radiocarbon dating indicated was only 8,300 years old. That would place it in Siberia some two thousand years after the demise of the Clovis culture in the New World. Since that report by Slobodin and King appeared, however, the existence of Clovis-type cultural artifacts in Siberia has generally been discounted.

One of the more romantic notions associated with the Clovis theory is that not only were these occupiers of the New World the first to arrive, but as they sped from Alaska all the way to Tierra del Fuego, they were such consummate masters of their domain that they hunted to extinction all megafauna, generally considered animals larger than humans. What has not been answered, however, is that if Clovis sped so quickly throughout South America, why later did the much more culturally and technologically advanced Aztec and Maya civilizations not also expand to larger areas? Although Carl Sauer is credited as having proposed seventy-five years ago that early man had killed off the North American big game animals through the use of fire drives, Paul Martin is generally recognized with proposing in 1967 the theory that the Clovis hunters caused the extinction of the megafauna in his 1967 Nature article titled “Pleistocene Overkill.”

While there is still support in some quarters for Martin’s thesis, today it has generally been discounted. Martin documented that the rise of the Clovis
culture and the demise of the megafauna occurred during approximately the same period, but never successfully identified a causal relationship. As Adovasio summarized the critique, for the Clovis-first theory to be valid, it would be necessary for a small band of as few as twenty-five male super-predators to have conducted a blitzkrieg consisting of: penetrating through the glaciers of North America; inventing the Clovis stone tools; covering six thousand miles in possibly as few as five hundred years to reach Tierra del Fuego; not only surviving but reproducing at the astonishing rate of 3.4 percent annually; adapting almost instantaneously to a broad range of new ecological challenges; and driving to extinction across one-fourth of the world’s land mass all animals that weighed more than one hundred pounds.12 That such seemingly implausible theories can be put forward by reputable modern scientists lends credence to the arguments of those such as Deloria who contend that American Indian myths are as substantively explanatory of the physical world as are First American scientific theories.

In addition to the conjecture that the Clovis culture was responsible for the disappearance of the mammoths and saber-toothed tigers, there is even more that has been associated with the Clovis theory that caters to the popular imagination. There is not only the question of Clovis cultural beginnings, but also uncertainty as to its demise. Just as it arose swiftly, it also disappeared swiftly. In 2006, Lawrence Berkeley National Laboratory geologist Richard Firestone theorized that a comet struck the Earth 12,900 years ago and led to the death not only of the Clovis culture, but also to the extinction of the megafauna. While it may be hard to resist the romantic notion that the demise of the First Americans, mammoths, and saber-toothed tigers could only be produced through extraterrestrial intervention, Meltzer and Vance Holliday of the University of Arizona provided a detailed rebuttal of the comet theory.13

A principal reason behind the intense skepticism surrounding pre-Clovis sites is that there have been many such sites thought to have been discovered that were later properly dismissed for lack of sufficient evidence, such as Tule Springs, Nevada; Holly Oak, Delaware; and Calico Hills, California, where Louis Leakey famously erred.14 Although such a dismissive approach may have some intuitive comfort, it is difficult to understand how an academically trained scientist can contend that scientific observations in one case are either stronger or weaker because of unrelated observations in another instance made at a different time and a different place. This bias in First American science, according to Science, “dates back to the tenure of Aleš Hrdlička and William Henry Holmes at the Smithsonian Institution in the 1920s,” and continues today from a self-interest in preserving the status quo.15
As with any major scientific endeavor, the search for the First Americans has produced its share not only of worthwhile endeavors, but also a certain number of mysterious undertakings. One example reminiscent of an Indiana Jones movie is that of an Argentine who excavated for nearly three years at Blackwater Draw and left no notes. In 1967, Alberto Isequilla, believed to have then been a graduate student at either the Sorbonne or at the University of Paris, arrived at Blackwater Draw and began a major excavation project. So much earth was removed that the area became known as Isequilla’s Pit. By 1969, after digging his enormous hole, Isequilla “just left.” Isequilla was later reportedly living in France, possibly as an art dealer and as CEO of d’Arts Finans Trust involved in the expanding art market for Russian oligarchs.

After the 1969–70 excavation season, a plastic cover was placed over the pit. In 2009, the overburden that had accumulated over the forty-year period was removed. The Eastern New Mexico University (ENMU) Archaeological Field School subsequently used the site as a training area for excavations. According to the anthropologist David Kilby, “Little is known of the extent of excavations or the nature of what was encountered, and Isequilla’s 1967–69 fieldwork remains a poorly known episode in the history of research at the Blackwater Draw site.” Isequilla reportedly did not finish his dissertation, and his field notes have disappeared. “We have this depression out here and a hole that he filled in with sand. No one knows, for sure, exactly what he excavated, how deep they got or what the results were.”

Amid the challenges mounted against the Clovis-first model, the Clovis-associated megafauna extinction, and the Clovis extraterrestrial demise theory, it must be remembered that there is no meaningful dispute among First American scientists that Clovis was indeed a very early New World culture, created a unique set of material tools, and populated much of North America. Clovis, however, is also important as an example of a form of scientific practice that creates a theory that rests upon a particular set of material evidence, and then denies the legitimacy of other evidence because it does not conform to the rigidified theory. The absence of contradictory evidence when a paradigm is created does not necessarily provide any insight as to whether such evidence may ever exist. In the case of the Clovis culture, the Clovis-first model was considered so “validated” in the minds of many First American scientists that it was granted a concreteness that surpassed the physicality of those artifacts that directly challenged its validity. As Meltzer concluded, “The assumptions that the earliest migration involved a single, homogenous population and that pre-12,000 BP occupations must be ancestral to Clovis, are not well-founded. . . . All this,
in turn, has implications for why we may not know when the first people came to North America.”

Discussion of the settlement of the New World has been rancorous in the First American science community. Moreover, it has occurred simultaneously with the relatively peaceful approach to establishing the human migration into Australia. As Arthur J. Jelinek, an archaeologist at the University of Arizona, has pointed out, “This situation [the Clovis versus pre-Clovis controversy] stands in strong contrast to that in Australia, where, in less than 30 years, many fewer archaeologists than have been active in New World Paleoindian research have produced undisputed evidence of a human presence beyond 30,000 BP in widely separated regions, and strong indications of human activity even 10,000–20,000 years earlier. . . . There are now well over 30 sites known in Australia with dates greater than 17,000 years, and over half a dozen with convincing dates in excess of 30,000 years.” Yet, there is a natural inclination to compare the First Australian and First American searches since Australia and the Western Hemisphere are the only continental landmasses for which archaeological investigations have been conducted on recent colonization by anatomically modern human beings. If the First Americans arrived prior to fifteen thousand years ago, they left no archaeological record as did their Australian counterparts who arrived forty thousand years ago. If the First Americans simply “disappeared after leaving a few ephemeral traces of their presence to confound the archaeological community . . . then they were merely a historical curiosity and of little import or interest for the cultural development of the New World.”