New Theory Links Aztecs, Incas to Asia

By Tom Harvey

All of the advanced Indian civilizations in the Americas can be traced back to members of a round-headed race who first crossed the Pacific from Asia about 3000 B.C. and established a settlement in what is now Ecuador, according to a recently published Smithsonian Institution anthropological study.

A Comparison of Formative Cultures in the Americas—which Smithsonian Institution anthropologists Clifford Evans and Betty Meggers believe to be one of the milestonest of modern archeology— is the work of the late Florida State Museum anthropologist James A. Ford. Ford was stricken with cancer while working on his book. He died on Feb. 25, 1968, while the typing was being finished on the final draft of the manuscript.

Ford's theory has had a widespread impact among anthropological scholars but to date has received little or no attention in newspapers and popular magazines. By comparing similar traits in ceramic art uncovered in archeological sites between coastal Ecuador and the southeastern United States, and tying these comparisons to radiocarbon dates, Ford amassed a body of evidence that ties to a common ancestry the Olmec, Aztec, Inca and Mayan civilizations in South and Middle America and even the Hopewell burial mounds in Ohio.

The chronologies of each of these cultures point back to the arrival of Asians who Ford theorized may have had a seafaring, exploring and colonizing tradition similar to that of the later Vikings and Polynesians.

Ford writes that if he is correct in his thesis, it means that the traditional concept that Aztec and Inca civilizations arose independently of Old World developments is wrong. It is likely instead that they were based on the trans-Pacific importation of new knowledge and new techniques that diffused and evolved among the existing population.

Prior to 3000 B.C., the date Ford sets for the beginning of trans-Pacific contacts, the New World is believed to have been thinly populated by nomadic hunters and fishermen who had crossed the Bering Strait land bridge sometime before 12,000 B.C. and spread downward to the tip of South America.

This is a detail from one of the elaborate charts illustrating James Ford's book on how "round-head" culture developed and diffused in prehistoric America. The peoples by 3000 B.C. had formed small villages along the coasts and had begun in some measure to cultivate plants. But there is no evidence of ceramic knowledge, organized community effort, mounds, pyramids, or temple structures like those that became so popular in those regions after 3000 B.C.

The suggestion that knowledge of ceramics may have been introduced to these people about 3000 B.C. by trans-Pacific contact came in 1963 when Smithsonian anthropologists Evans and Meggers, in collaboration with a South American colleague, discovered Japanese influence in pottery excavations at Valdivia, Ecuador. They theorized that the explanation for this may have been Japanese fishermen landing by accident on the coast of South America after storms had swept them off course.

Ford, however, carries this a step further by advancing the theory that the remarkable variety of Valdivia ceramics was evidence of a pottery industry of such considerable scope as to suggest that far more than one skilled craftsman had suddenly arrived in South America.

At the same time he takes note that the skeletal remains found in the strata with the pottery are of a round-headed people, contrasting with the differently shaped skulls that are found in the strata predating 3000 B.C.

The picture that he pieces together is of an exploring and colonizing expedition involving a number of individuals—"of both sexes and varied skills." nor was there only one such expedition, in Ford's opinion. He cites evidence that there may have been repeated trans-Pacific contacts after 3000 B.C. Another group of round-headed persons, he believes, settled about 2000 B.C. at Machalilla, Ecuador.

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The Smithonian Institution, Washington, D.C.
No. 1, April 1970

Historical Museum Park

To Focus on U.S. Revolution

By Mary Krug

The "citizen-soldier" of the American Revolution will be the star of a national historical museum park, according to National Armed Forces Museum Advisory Board plans. To be known as Bicentennial Park in commemoration of the nation's 200th birthday, the park would be developed on sites already set aside for NAFMAB at Fort Foose in Prince George's County, Md., and across the river at Jones Point in Alexandria, Va.

"In terms of contributions to national development, the citizen-soldier of the Revolution personifies the traditional role of our armed forces in national defense," says John H. Magruder, NAFMAB Director. "What would be more appropriate, then, than to focus the museum park initially on the American Bicentennial?" Plans for the park stress not only the military life of the Revolutionary soldier, but also his motives and his background—ethnic, cultural, and religious. Emphasis will be on camp life, with both a summer encampment and winter hut area reconstructed.

In the encampment, visitors will be able to see all sorts of day-to-day activities performed by the troops as they passed the time between encounters. The Colonial

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4th Kite Carnival Will Again Draw Big(ge) Winner

So popular it has spawned similar events in Baltimore, Richmond, and Philadelphia, the annual Smithsonian Kite Carnival will be held Saturday, April 4 at Fort Washing­ton, a Maryland park.

Paul E. Garber, Ramsey Research Associate at the Smithsonian, will again direct the colorful field day for the Associates. Prizes will be awarded.

Attending will be William Bigge, grand champion flier for the first three carnivals, along with Iku Set, the young Turkish woman whose skill has set a high standard for the distance arch." Garber got ready for the big day with a round of talks and workshops for the benefit of interested fans.

Yale Citen Ripley

Secretary Ripley, class of '36, has received the Yale Bowl award from the Washington, D.C. Yale Club. The award is given in alternation from the Washington area for "distinguished achievement and service in the highest tradition of Yale University."
California's Roots
SI Going West In Culture Hunt

The Smithsonian Institution will follow Horace Greeley's famous advice and go west this month.

The Institution is sending six curators from the National Museum of History and Technology along with significant objects from the museum's collections, to a conference on "The Roots of California Culture" at the University Museum, April 17-19. The conference, and a related exhibition, is jointly sponsored by the Smithsonian, the University of California, Extension, and the Oakland Museum.

This marks the first such effort to bring the Smithsonian's resources directly to a part of the country too distant for most of its residents to be able to visit the Institution, according to Malcolm Watkins, who will head the museum delegation.

California is sometimes referred to as a "nation within a nation." The influence that helped to create this distinct culture will be the focus of the conference.

Smithsonian personnel and their lecture topics follow:


Carroll Greene Jr., Curator of the Fredrick Douglass Institute of Negro Arts and History, "The Afro-American Experience and its Relevance to Early California."  

'Smini-Moon' Found by Smithsonian Team; Lunar Fragment Formed by Meteor Strike

The Smithsonian's moon rock investigators have found a tiny pellet amidst their Apollo 11 study samples that mimics in its form man's image of the moon. So unique is the four millimeter in diameter globular fragment that it ranks as the most perfect lunar rock ever discovered. It was featured on the cover of Science magazine's historic Jan. 30 compilation of the first systematic studies of the lunar samples.

The pellet, which NMNH mineralogist Dr. Brian Mason calls a "mini-moon," came to the Smithsonian by accident last October when research chemists at George Washington University conducted a study sample of Apollo 11 lunar particles. Dr. William Melson, who along with Dr. Mason and a group of five other Smithsonian investigating groups selected by NASA to study the samples, was stilling the coarser particles out of the sample when he noticed the pellet. Finding that it was magnetic, he turned it over to Edward P. Henderson, the NMNH Mineral Science Department's expert on meteoritics. Henderson found as he studied the pellet that he had something intriguing on his hands—a particle that had been born when a meteoric fragment crashed on the lunar surface, producing a liquid drop, which collapsed and formed a pellet as it cooled in the lunar gravitational field. The pellet had then been cratered by high velocity lunar dust and other fragments until its surface resembled the moon's. Henderson, along with the other members of NMNH's moon team, Mason, Melson, William A. Nolen, Michael L. Stid- wich, and Joseph A. Nelen, are still at work attempting to characterize and interpret the pieces of their Apollo 11 sample. It's a project that they expect will take years.

"We've always skimmed the surface so far—a good survey job," said Mason.

Apollo 12 mission and possibly even from Apollo 13. In the meantime, Mason and Melson are at work on a source book that dissects all the currently available knowledge about the moon samples. They are writing it not only for geologists but also for interested laymen.

This is the "mini-moon" pellet discovered by Smithsonian investigators.

What the team has learned about the samples to date and the methods and techniques they have used in their analysis is a part of the subject of an NMNH exhibit open early this summer.

By the time the exhibit opens, the Smithsonian scientists will have additional samples in their laboratories from the Apollo 12 mission and possibly even from Apollo 13. In the meantime, Mason and Melson are at work on a source book that dissects all the currently available knowledge about the moon samples. They are writing it not only for geologists but also for interested laymen.

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Towering Imagination Transforms Castle

If the Smithsonian Institution can be many things to many people, its famous castle building can be just as many things to the imaginative mind of Jim Cornell, SAO information officer. Such as...
Theory on 'Round-Heads'

Continued from Page 1

Where those Machaíllaí people and their distinctive pottery originated is not known at the present, but Ford makes the suggestion that this represented a second colonizing venture from unknown points on the coast of Asia.

Once arrived in the New World, the round-headed people apparently conti­ned to explore and colonize northward along the coast. Wherever they settled, they established C-shaped villages similar to those found in Japan, left remains of pottery with distinctive shape and decora­tion, and built burial mounds.

By the year 2000 B.C., pottery-making regions had crossed the Isthmus of Panama and established settlements as far northward as the St. John River in Florida.

The 3000 years that follow the arrival of the round-heads in the New World is de­scribed by Ford in a formalistic period, "during which the elements of ceramics, ground stone tools, hand-made figurines, and agriculture were being diffused and welded into the socioeconomic life of the people living in the region extending from Peru to the eastern United States."

"At the start of this span of years, all those people had an Archaic economy and technology; at its end they possessed the essential elements for achieving civilization."

High civilization in Middle America first appeared in the Olmec region on the Gulf of Mexico a few centuries after 1500 B.C., with the sudden introduction of a religio-political system demanding great public works. A remarkable ceremonial center was built at a place that appeared to be the unique characteristics of the Olmec civilization, such as construction of pre­cisely engineered ceremonial mounds, actually had evolved from customs and knowledge brought to the New World by round-heads.

Ford does not believe, however, that the Olmec civilization’s development was as sudden as it has seemed.

"Instances of spontaneous and independ­ent invention of cultural items, such as ceramics," Ford says, "are becoming increasingly rare. It now seems that they either exist only where archeologists have yet discovered the steps that led up to the event. Experience thus argues against the probability of spontaneous development of Olmec ceremonialism.

He concludes his paper with the remark: "Those gentlemen, who prefer the traditional concept that American civilization arose independently of Old World developments, or that Aztec and Inca civilizations had little contact with foreign cultures, should be reminded that an alternative explanation was provided a century ago by Adolfo Bastian, who believed that psychic unity of mankind constantly im­pelled societies to duplicate another’s ideas.”


Bicentennial

Continued from Page 1

soldier filled his days constructing shelters, making and mending clothing and equip­ment, blacksmithing, repairing arms, cast­ing musket balls, cooking, baking, curing for the sick, and performing guard duty.

A highlight of the park is a Parade, where the visitor can see the rich history by troops being drilled and marching in review to the accompaniment of a band and singing and pageants, and for band performances in the Sousa tradition.

Located in the foyer of the MHT is an exhibition center, with continuous movie showings, and a reconstruction of the French and Indian War era. Taking advantage of the waterfront site, NAFMAB plans a comprehensive display of the naval side of the Revolution, including weaponry in accurate scale, representations of shipboard settings and samples of the simple furnishings that the “iron man” crews had to live with.

"The Super Scooper" may some day solve the lingering problem of pollution from cattle feed-lots.

The pilot model for a waste-disposal system demonstrated recently at the National Zoo by Biospherics, Inc., a Rock­ville company that developed the unit.

It’s a sort of “gliered garbage grinder” that can transform waste from the pens of ruminant animals, and larger beasts like elephants, into a slurry that can be flushed away through a four-inch sewer pipe.

He Stays Ahead of the Wheels of Progress

Robert Vogel is trying to stay one turn ahead of the wheels of progress.

Vogel, curator of the Division of Me­chanical and Civil Engineering, is active in American industrial archeology, the study of industrial history based on physical re­ mains. It is a field that got its start in England and has been applied by that term in the United States only during the last decade.

One of its most thorough applications to date is the race in progress actually does involve wheels. The wood-wheel in­dustry, once one of the nation’s most thriving businesses, is still alive, but the life expectancy is questionable. Vogel and his staff have conducted a year-long de­tailed study of the oldest survivor, Hoopes, Bro., and Dartington, Inc., of West Che­ster, Pa., to document, from a living exam­ple, how the industry was conducted.

Hoopes started turning out wheels back in 1867, and by the turn of the century it was producing about 600,000 a year. The wheels were made from scratch, from legs supplied by Hoopes’ own lumber camp. Legs, though not Hoopes logs, still arrive at the old red-brick factory complex, still go through the same processes on the same machines, and still come out as wheels.

Wastes Flushed Away

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"It’s just like looking through a window into the 19th century," says Peter Smith, a George Washington University graduate student in American studies doing a search in Vogel’s office. "If you had taken a picture in 1880 and today, you would see essentially the same things happening."

That is what makes Hoopes such a val­uable object of study for historians. The industry was such a large one that reached a highly mechanized state by the 1890’s and virtually froze there, Vogel points out.

Working in cooperation with the Ele­therian Mills-Hagley Foundation of Wil­ming­ton, Del., Vogel and his staff have recorded Hoopes’ operations so precisely that 200 years from now, if someone wanted to restore the wood-wheelmaking business, he would have most of the infor­mation he needs in the MHT records.

Vogel and company made measured drawings of the Hoopes buildings, and detailed measured drawings of some of the machines. The factory was originally steam powered but was later converted to electric drive. They took extensive photo­graphs, conducted interviews with admin­istrator and other personnel, collected documents and artifacts, surveyed the wheel industry as it exists throughout the country today, and even recorded factory sounds.

Motion picture footage, shot by Al Rob­inson of the Office of Public Affairs, is also part of the Hoopes archive. It will prob­ably be made into a movie for public viewing as well.

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