

Lost Arts

John L. Sorenson

Jarom 1:8 "We multiplied exceedingly, and spread upon the face of the land, and became exceedingly rich in . . . fine workmanship of wood, in buildings, and in machinery, and also in iron and copper, and brass and steel, making all manner of tools of every kind to till the ground, and weapons of war."

The Book of Mormon claims that groups such as the Nephites and the Jaredites migrated from one area to another. That suggestion has sometimes been rejected because a particular idea or technological feature in the area of origin has not been found in the destination area. The absence of such "obviously useful" cultural items is used to argue that no migration took place.

In some cases, it is possible that technology was simply lost. It may have lost its usefulness in the new location, or it may have been forgotten as certain people became less cultured or less civilized. In other cases, the archaeological evidence may simply be incomplete or unrecognized.

The true arch is often cited to support the idea that there was no contact between the pre-Columbian Eastern and Western Hemispheres. Professor Linton Satterthwaite had accepted that view, but then found himself having to change: "It has been usual to suppose that the principle of the true arch was unknown to the American Indian, though here and there in some particular structure it has been argued that the principle, though not obvious, was really present." Yet finally, on the basis of a field reconnaissance, Satterthwaite was left with "no doubt that the Maya at La Muñeca roofed a long room with the true arch, and that they knew exactly what they were doing."¹

Earlier, Alfred Tozzer had reported that at Nakum, Guatemala, "two lateral doorways have what may be truthfully called concrete arches, . . . the only examples of the true arch which I have met with in Maya buildings."² E. G.

Squier had reported an arch of adobe bricks from Pachacamac, Peru, in the 1870s.³ There are other examples that either are not complete arches or have questionable pre-Columbian dates. But a single good example proves the point without multiplying cases.

The potter's wheel is another feature long supposed to have been entirely absent from the New World. That notion too has now had to change. Samuel Lothrop reported decades ago seeing in an archaeological context in Peru what "seemed to be" just such a device.⁴ Then in the early 1970s, Terence Grieder settled the matter. In the grave of a high-status woman near the Peruvian site of Pashash, he found scores of wheel-turned hemispherical ceramic cups. These offerings accompanied the burial of an aristocratic woman (although cups of the same shape in commoners' graves showed no evidence of being made on the wheel). Furthermore, the grave offerings showed fifteen stone cups evidently turned on a "lathe," perhaps consisting of a wooden shaft with a flywheel attached that could be set in motion by pulling a cord wrapped around the shaft. Archaeological evidence of these wheeled devices for processing clay and stone lasted a maximum of two hundred years, then totally disappeared.⁵

The arch and potter's wheel join other examples to warn us that even what we might consider "obviously useful" devices may be lost to a people.

Example: Pioneer settlers of Eastern Polynesia brought pottery with them and used it for centuries, yet by the time European explorers arrived, their descendants knew nothing of ceramics.⁶

Example: The Greeks had a complex, clocklike, astronomical “computer” for calculations in astronomy, but that fact was totally unknown until 1900 when sponge divers pulled one from a shipwreck (dated ca. 65 B.C.) off the Aegean island of Antikythera.⁷

Example: As is generally known, the wheel probably was invented in the Near East, possibly as early as the beginning of the third millennium. It continued in use for over three thousand years and was bequeathed to other cultures, where it was further developed. However, by about A.D. 200, the wheel began a decline in the Near East that eventually led to its complete disappearance from the entire area. It was not reintroduced until Western imperial powers became involved in the Near East during the nineteenth century.⁸

Example: The Parthians, who inhabited the Baghdad area for several centuries around the time of Christ, made electric batteries! Asphalt served to fasten and insulate an iron rod from within a copper tube filled with an unknown electrolyte (acid). The makers may have used their discovery to electroplate jewelry, but not to do anything “useful.” Their basic idea was only rediscovered nearly two thousand years later.⁹

Example: The discovery of an apparently ground rock-crystal lens in the ruins of Assyrian Nineveh has made scholars wonder what they might have seen through such a magnifier.¹⁰

Obviously, archaeological remains discovered at any given moment give only a partial record of ancient life and thus of migrations. Future finds by archaeologists may further challenge the anthropological orthodoxy that New World civilizations were essentially independent of the Old World.

Based on research by John L. Sorenson, July 1985. Paul Y. Hoskisson later added the information about the wheel in the Near East.

Footnotes

1. Linton Satterthwaite, Review of Ruppert and Denison, *Archaeological Reconnaissance in Campeche, Quintana Roo, and Peten*, in *American Antiquity* 10 (1944): 217; see also Harumi Befu and Gordon F. Ekholm, “The True Arch in Pre-Columbian America?” *Current Anthropology* 5, no. 4 (1964): 328-29.

2. Alfred Tozzer, “A Preliminary Study of the Prehistoric Ruins of Nakum, Guatemala,” *Memoirs, Peabody Museum, Harvard*, 5, no. 3 (1913): 167.

3. See Ephraim G. Squier, “The Arch in America,” *Journal of the Anthropological Institute of New York* 1 (1871-72): 78-80; *Peru: Incidents of Travel and Exploration*, 2nd ed. (New York: Harper and Bros., 1878), 70.

4. See Samuel Lothrop, “¿Conocieron la Rueda los Indigenas Mesoamericanos?” *Cuadernos Americanos* 25, no. 1 (1946): 201.

5. See Terence Grieder, “Rotary Tools in Ancient Peru,” *Archaeology* 28 (1975): 178-85; “Lost Wheels,” *Scientific American* 233 (October 1975): 54.

6. See Peter Bellwood, "The Prehistory of Oceania," *Current Anthropology* 16, no. 1 (1975): 12-14.
7. See Derek J. de Solla Price, "Unworldly Mechanics," *Natural History* 71 (March 1962): 8-17; L. Sprague de Camp, *The Ancient Engineers* (1974), 167ff.
8. See R. W. Gulliet, *The Camel and the Wheel* (Cambridge, Mass.: Harvard University Press, 1975).
9. See Rushworth M. Kidder, *Christian Science Monitor* (June 14, 1985): 20; Harry M. Schwalb, "Electric Batteries of 2,000 Years Ago," *Science Digest* 41 (April 1957): 17-19; see also Colin G. Fink on Egyptian "electroplating" of copper with antimony, 1933 *Annual Log* (New York: Scientific American Publishing Co., 1933), 85.
10. See Sir David Brewster, "On the Form of Images Produced by Lenses and Mirrors of Different Sizes," *American Journal of Science* 2, no. 15 (1853): 122-23.