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A Mesoamerican System ofWeights and Measures? Did the ancient peoples of Mesoamerica use a system of weights and scales in measuring goods and their values?

Ancient Mesoamericans used some systems of weights and measures; items in the market, though, were usually sold by volume. The Mesoamerican weights and measures may coincide with the weights and measures described in Alma 11 of the Book of Mormon, but more research is necessary in order to make conclusive claims.
Alma’s experience with the antagonist Zeezrom in the city of Ammonihah as reported in Alma 11 describes a system of standard weights and volumes in use among the Nephites in their commerce. We would expect that in Mesoamerica, quite certainly the area where the history of the Nephites was played out, there might be evidence of standards. Such would include measures of volume for grains plus weights of precious metals of values equivalent to the amounts of grain.

When the Spanish invaders arrived, they reported that in the markets everything was sold by volume. For example, the Aztecs used a wooden box, called quauhtia-quihuitl, to measure corn and other dry goods; this box was divided until the smallest unit was a twelfth part of the whole. Graded sizes of jars served to measure liquid. They also had special cups to measure out gold tribute payments to the Spanish in units roughly equivalent to our ounces. Maya groups in southern Mesoamerica also relied primarily on volume measures (for example, the “armload” and “the fistful”). From the area around Kaminaljuyu on the outskirts of Guatemala City (the “land of Nephi” to some) archaeologists have, in fact, found bowls manufactured to a standard pattern and of gradually reducing sizes; these may represent socially established measures of volume belonging to the time period—the first and second centuries B.C.—when the Lamanites are reported by the Book of Mormon to be living in Nephi.

Further, there is all but conclusive evidence that weights were not used anywhere in Mesoamerica at the time of the Spanish conquest, nor were scales known. The archaeological and ethnological literature has credited Andean peoples and other South Americans with the possession of scales. Fragmentary information hints at the possibility—no more—that scales were known at some points in Mesoamerica in an earlier era even though they apparently were not continued in use for Spanish eyewitnesses to observe. (Many other cultural ideas and objects are known to have been lost since ancient times.)

It has been suggested by some Latter-day Saints that sets of small metal objects used currently in weighing goods for sale in Guatemalan marketplaces are descended culturally from a system of weighing assumed to have been used in pre-Spanish, and indeed in Book of Mormon, times. Objective evidence for this claim is lacking. Indeed, historically the use of scales and weights in Guatemala appears to have been brought in by Europeans perhaps no more than 90 years ago. All the materials and terminology involved in these devices are of Spanish origin.

Yet the studies of Mesoamerican standards for measurement that have been done so far have been extremely limited. The topic deserves in-depth research whereupon greater clarity may be attained.
1. The writings of several prophets are not found in the Old Testament: Zenas, Zenock, Neum, and Ezias (see 1 Nephi 19:10; Helaman 8:19–20).


3. Although the biblical text implies that Moses died, the Book of Mormon makes it clear that he was actually translated (see Alma 45:19).


5. An important discussion of these passages are found in the Old Testament and Ancient East (Minneapolis: Augsburg Publishing House, 1980), 40–49.

6. See Ruth 4:1–2; Harold B. Clark, Biblical Law (Portland, Ore.: Binford & Mort, 1943), 260 n.19, “Ordinarily the judges were not paid.” Haim H. Cohn, “Beibyra,” Encyclopaedia Judaica (Jerusalem: Keter, 1974), 4:1357, “[judges] are urged to be impartial, and not susceptible to bribes” (2 Chronicles 19:7–9) and reminded that judicial services should be given free (Bek. 29a).


23. Gardiner, Egyptian Grammar, 22:207. See also the reference to balances in Houq, “Balances of the Peruvians and Mexicans,” 30 (cited in Sorenson and Raish, Pre-Columbian Contact, 47). I thank John Sorenson for this information.


25. Powell, “Weights and Measures, “ 6:905. The Bible also mentions stone weights. For instance, the Hebrew phrase and kohen“weights, a great and a small” (Deuteronomy 25:15) could be translated literally as “stones, a large stone and a small.”


28. The Printer’s Manuscript has senum, and chiasm in Alma 11, also as chiasm in Mosiah 8:9. These may be Akkadian carryovers from the Jaredes.


33. Powell, “Weights and Measures, “ 6:905. The Bible also mentions stone weights. For instance, the Hebrew phrase and kohen“weights, a great and a small” (Deuteronomy 25:15) could be translated literally as “stones, a large stone and a small.”

34. For other possible relationships between Nephite weights’ meaningful term known from other ancient cultures, see Smith, “Nephite Weights and Measures.”


37. Powell, “Weights and Measures, “ 6:905. The Bible also mentions stone weights. For instance, the Hebrew phrase and kohen“weights, a great and a small” (Deuteronomy 25:15) could be translated literally as “stones, a large stone and a small.”


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9. Felix W. McBryde, Cultural and Historical Geography of Southeast Guatemala (Washington, D.C.: Smithsonian Institution, 1945), 84; McBryde, Sololá: A Guatemalan Town and Calakmul Mayan Site (Newton, Massachusetts: Tsingtao University Middle American Research Institute, 1933), 124.

The Numerical Elegance of the Nephite System

