Late Survival of Atlatls in the American Southwest?
By John Whittaker

We know that atlatls continued to be used alongside bows in several parts of the world, even up to historic times in the Arctic and Mesoamerica. In the Southwest, we should expect a period of overlap as the bow and arrow was introduced, but how long? Most archaeologists believe that the bow supplanted the atlatl in the Southwest over a relatively short time between 500 and 800 AD, although there are a number of suggestions that the bow was introduced much earlier that I will not discuss here. The period in question is the transition between Basketmaker II and Basketmaker III in the Anasazi area around the Four Corners of Arizona, Utah, Colorado, and New Mexico. The Basketmakers were the pre-pueblo people, living in pithouses, and the transition between BM II and BMIII is characterized as including the beginnings of pottery, larger communities with increased dependence on agriculture, and the introduction of the bow. Similar developments took place in the rest of the Southwest.

Figure 1: The characteristic “Basketmaker” form of atlatl found all over the Southwest: a single piece of wood with an integral hook and groove, finger loops of hide or sinew, and often an attached weight or fetish. This one is from Broken Roof Cave (Guernsey 1931; Hunter 1992:57).

A recent publication (Vanpool 2006) has once again raised the possibility that atlatls continued in use in some parts of the Southwest until much later times. Vanpool points out quite rightly that Mesoamerica is one of the best examples of late atlatl use, famously documented in Spanish accounts of battles against the Aztec. Since the Toltec who preceded the Aztec had cultural and trade connections that certainly reached at least the borders of the Southwest, and according to some, exerted major influences there, why should we not expect contemporary atlatl use in the Southwest? It could also be pointed out that atlatls in the prehistoric Southwest and in both Aztec and modern ethnographic Mexico are roughly similar in form.

Moreover, Vanpool notes that atlatls have certain advantages over the bow and arrow. They propel a heavier projectile with a larger point, arguably more effective against big game and humans. They can be used one-handed, allowing a warrior to use a shield in the other hand. Frequent atlatl depictions and finds from early times show that they had a high symbolic importance, another reason to retain them, and the lack of late specimens and images may relate more to problems of preservation and dating than actual absence from the archaeological record.

Figure 2. An ethnographic atlatl used for duck hunting on Lake Patzcuaro, Mexico, collected by Starr in the 1890s. It has double finger loops, like Basketmaker and Aztec atlatls, but the whole thing is carved of wood.

It has always been difficult to decide whether bows or atlatls were used when only projectile points are preserved. David Hurst Thomas (1978) suggested that points used on arrows should have shoulder widths 2 cm or less, while points used on larger dart foreshafts are wider at the shoulder. Mike Shott (1997) took this further, and used museum specimens of stone-tipped arrows and darts to produce simple equations using shoulder width that predict whether a point should be for a dart or an arrow. Others have suggested that because a dart needs weight forward, dart points should weigh more than 4.5 grams and arrow points less than 3.5 grams (Fenenga 1953; Hughes 1998). Vanpool uses 3 grams as the break point; his criterion tends to regard more points as dart points than Shott’s formulae.
Using these distinctions between point sizes, Vanpool then gives two archaeological examples of possible late atlatl use. At Ventana Cave in the desert of southern Arizona a long sequence of Archaic occupations, where the atlatl is expected, have faunal remains showing a preference for hunting small game. In the Hohokam levels, left by later agricultural people who certainly had bows and arrows, there is more of an emphasis on bighorn sheep and mule deer. Wooden arrow shafts were recovered in Ventana Cave, but not darts. However, Shott’s formulae classify 63 out of 116 of the Hohokam points as dart points. Vanpool believes that in the Hohokam period, Ventana Cave was a specialized hunting camp, where the advantages of the atlatl in big game hunting would have assured its continued use, even if the bow and arrow was more common in Hohokam culture.

Paquimé is a very large adobe pueblo community in Chihuahua, northern Mexico. Between 1200 and 1450 AD it was the center of its region. The excavator, Charles Di Peso, believed that Paquimé was a trade center founded by Toltecs from central Mexico in order to obtain turquoise from the Southwest. Modern understanding of the dates and other issues rules this out, but the site is still considered an important center bridging the Southwestern and Mexican cultural spheres. Most of the 98 points recorded by Di Peso are small arrow points, but there are also 21 large points, of which 13 are classified as dart points by Vanpool using Shott’s formulae.

Another piece of evidence is the presence of shell or stone finger loops for atlatls in sites in Sonora which are contemporary with the Hohokom and Paquimé (Johnson 1971). Most such finger loops are from central and western Mexico, the most famous specimen being the complete Aztec atlatl (Figure 3) in the British Museum (Eckholm 1962). Johnson believes that little stone stars or crosses also found in Sonoran sites are atlatl decorations or weights. This is based on stylized depictions in Mexican codex art, but there are no atlatls have actually been found with such decoration. Nevertheless, since the shell crosses are found at Paquimé (finger loops are not), Vanpool considers them further evidence of atlatl use there. The occupants of Paquimé would have continued using atlatls along with bows because of their Mexican connections; atlatls are symbolically important in Mexico, being associated with specific deities and with ritual warfare. It is also possible that they hunted bison with them. Further south in Mexico, atlatls were used to hunt waterfowl by the Tarascan groups around Lake Patzcuaro at least into the 1950s (Figure 2), another specialized use with ritual significance (Starr 1901; Stirling 1964).

Leon Lorentzen (1993) had a different take on late atlatls in the Southwest, arguing that the transition from atlatl to bow was very late in some areas, probably reflecting ethnic differences among small pueblos in central Arizona in the late 1200s. Points at the Grasshopper Springs site were mostly large and corner-notched, while at the nearby and contemporary Chodistaas site, smaller triangular notched + unnotched points were favored, and there were also 4 shaft straighteners, used on reed arrow shafts, on floors at Chodistaas.

The problem with all of these examples is that they are ultimately based on point size. The samples of hafted points used by Thomas and Shott to provide criteria for distinguishing darts from arrow points was pretty small, and the trends they found in a collection of artifacts from all over do not necessarily apply well to a single site or time. As many of us have found, you can use relatively large points on arrows, and quite small ones on darts. For instance, because of the ISAC rule that darts must fit through a 19-mm hole, I use stone points on some of my darts that would certainly be considered arrow points in archaeological contexts. To balance a dart, a heavy foreshaft works as well as a large point. Points are also easily moved around in archaeological sites, and large old points are very often collected and reused as points, knives, and ritual objects by later people.

Both authors give reasons why such problems should not affect their examples, and both authors bring in other evidence beside point size, but in the end I am not convinced. Vast numbers of late southwestern sites, including caves and cliff dwellings, have not yet produced atlatl specimens or atlatl images. For example, there are many rock art images of shields and warriors with shields from late pueblo sites, sometimes with bows and arrows, but none of them show atlatls. Hibben (1975) claimed to see atlatls in two wall paintings at Pottery Mound (1350-1475), but his illustrations show in one case a rectangle with 2 central loops, more likely a stylized bird or a prayer stick, and in the other some vague hooks peeking over the edge of shields. These are just not convincing, even disregarding the questions about whether his drawings of the murals are accurate. If atlatls were at all common in late times, as they were in Mexico, we should have better evidence of them than ambiguous point measurements and a few other artifacts that might or might not be related to atlatls at all. However, the
survival of atlatls along with bows in Mexico (and elsewhere) does mean that the final word is not in, and we should be alert to the possibility that they also survived (or were reintroduced from Mexico) in the late prehistoric southwest.

Ekholm, Gordon F.

Fenenga, Franklin

Guernsey, Samuel James

Hibben, Frank C.

Hughes, Susan S.

Hunley, Wryley

Johnson, Ann S.

Lorentzen, Leon H.

Saville, Marshall H.

Shott, Michael J.

Starr, Frederick

Stirling, Matthew W.

Thomas, David Hurst

Vanpool, Todd L.