IDENTIFYING DART AND ARROW POINTS IN THE GREAT BASIN: A REPLY TO HOCKETT ET AL.

Geoffrey M. Smith, Pat Barker, Eugene M. Hattori, Anan Raymond, and Ted Goebel

Hockett et al.'s (2014) comment argues two points: (1) the Nicholarsen Cache does not contain both dart and arrow points;, and (2) the "early" Elko points in our sample are Large Side-notched points. We appreciate their reanalysis of the Nicholarsen Cache points using a different approach, which leads them to the same conclusion made in our original article. Whereas we concede that one of the Elko points is difficult to classify and could be viewed as a Large Side-notched point, we find no evidence that the other specimen is anything but an Elko point directly dated to the middle Holocene.

En su comentario, Hockett et al (2014) argumentan dos cosas. Primero, sugieren que el depósito de Nicholarsen no contenga tanto puntos dardos como flechas. Además, proponen que los puntos tempranos de Elko identificados en nuestra muestra no sean de Elko sino que son puntos grandes con muescas laterales. Agradecemos el análisis que han realizado de los puntos del depósito de Nicholarsen. A pesar de abordarlo de manera distinta, han deducido las mismas conclusiones que nosotros. Aunque no discutimos que uno de los puntos de Elko es difícil de clasificar y pudiera ser visto como un punto grande con muescas laterales, insistimos en que no existe prueba alguna que el otro punto no sea de Elko y claramente procedente del periodo medio Holocene.

In a recent SAA symposium, Bob Kelly proclaimed "there is sex ... and there are typologies," suggesting that the former is enjoyable while the latter are not. He went on to indicate that while somewhat less enjoyable than sex, typologies remain relevant. Great Basin researchers have expended considerable effort developing—and debating—projectile point typologies. Thomas's (1981) Monitor Valley typology (MVT), which is objective and is based on metric attributes, is the most common method used to assign Great Basin points to morphological—and sometimes temporal—types.

Recently, Smith et al. (2013) directly dated a sample of Great Basin points and evaluated the temporal ranges associated with Thomas's (1981) morphological types. Whereas most specimens fell within accepted timeframes, two specimens returned unexpected dates given their classifications using the MVT. The first, 26Ek6892-243 from Bob's Cave, was dated to 6831 ± 57 ^{14}C B.P. and classified as an Elko Eared point (Figure 1, top). The second, 26Hu3557-37 from Elephant Mountain Cave (Figure 1, bottom), was dated to 6879 ± 58 ^{14}C B.P. and also classified as an Elko Eared point[1]. In our article, we also demonstrated potential problems with typologies, including the MVT, using the Nicholarsen Cache. This collection of corner-notched points, some of which classify as Elko dart points and some of which classify as Rosegate arrow points using the MVT, found in a hide bag, dated to 1330 ± 50 ^{14}C B.P.

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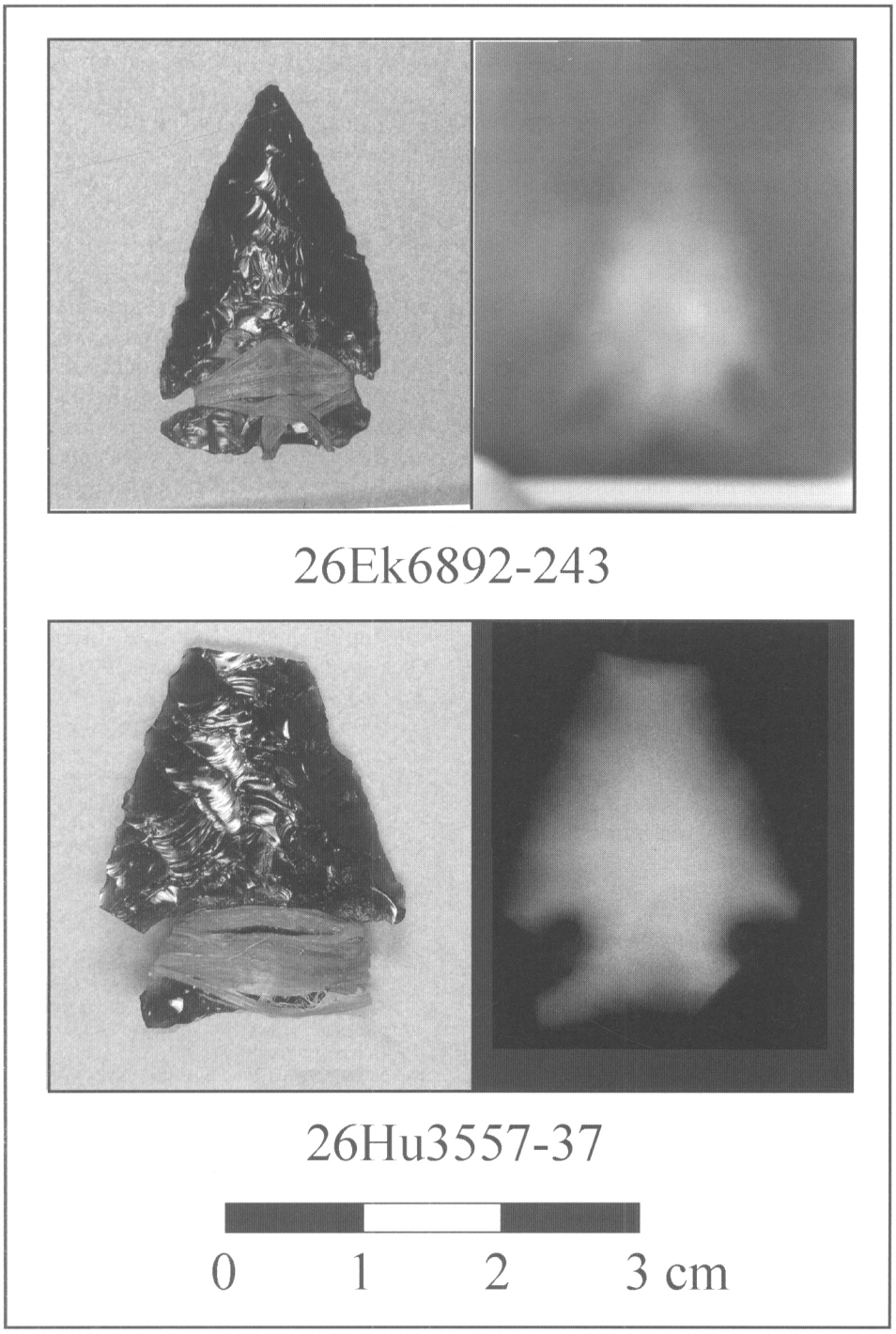


Figure 1. Dart points from Bob's Cave (top) and Elephant Mountain Cave (bottom).

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Hockett et al.'s (2014) reply to our article argues two main points: (1) the Nicholarsen Cache does not contain both Rosegate and Elko points and (2) the early Elko points in our sample are Large Side-notched points. Regarding the Nicholarsen Cache, we noted that "classification schemes create arbitrary morphological distinctions that lack temporal and/or technological significance within contemporaneous corner-notched point assemblages" (Smith et al. 2013:588) and directed readers to Hildebrandt and King (2012) for an alternative method for distinguishing dart and arrow points. We appreciate Hockett et al.'s (2014) application of that method, which relies in part on thickness to differentiate the point types, to the Nicholarsen Cache. Because the points classified as Elkos and Rosegates using the MVT possess identical mean thicknesses (3.6 mm), Hockett et al. (2014:562) argue they are all arrow points and "simultaneous use of bow-and-arrow and atlatl-and-dart technology... probably did not occur." We made this very point in our article, stating:

> while the transition from the atlatl and dart to bow and arrow was probably a gradual process, the homogenous lithic technology and morphology exhibited by the points in the cache—deposited in a single moment in time—suggests that one weapon system, but not both, are represented. [Smith et al. 2013:592].

Nevertheless, for the Nicholarsen Cache, Hildebrandt and King's (2012) approach appears better suited for distinguishing dart and arrow points than the MVT that we employed.

Regarding the early Elko points from Bob's and Elephant Mountain caves, Hockett et al. (2014) use qualitative observations to argue they are Large Side-notched points. In our article, we acknowledged difficulties classifying the Bob's Cave point using the MVT (Smith et al. 2013:587, 589). When proximal shoulder angle (PSA) and weight are used, it types as a Desert Side-notched point (an interpretation we all agree is not the case); however, when PSA alone is used, it types as an Elko but is right at the break between the Elko and Large Side-notched types. As such, we do not take issue with Hockett et al.'s (2014) interpretation that it could be a Large Side-notched point.

We find Hockett et al.'s (2014) arguments against the Elephant Mountain Cave point less compelling. With a PSA of 130° and a distal shoulder angle (DSA) of 150°, it fits comfortably within the MVT's range for Elkos. Furthermore, single-observation *t*-tests indicate no significant difference in PSA (t =.294, df = 408, p >.50) or DSA (t = -.629, df = 388, p >.50) from the far western Great Basin Elko points (mean PSA = 125°, mean DSA = 167°) classified by Hildebrandt and King (2002:7)[2]. Furthermore, its PSA differs significantly (t = -2.601, df = 91, .01 <p <.02) from those of Northern (i.e., Large) Side-notched points (mean PSA = 164°) classified by Hildebrandt and King (2002). Finally, although the Elephant Mountain Cave assemblage lacks good context, we note that no Large Side-notched points and 22 other Elko points were recovered from the site (Barker et al. 2011)[3]. As such, there is no compelling reason to think that 26Hu3557-37 is anything other than an Elko point, a type dated to the middle Holocene at some northern Great Basin sites (Aikens et al. 1977; Wilde 1985) not far from northwestern Nevada.

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References Cited

Aikens, C. Melvin, David L. Cole, and Robert Stuckenrath
1977 *Excavations at Dirty Shame Rockshelter, Southeastern Oregon*. Miscellaneous Papers of the Idaho State Museum of Natural History No. 4. Papers on file at Idaho State University, Pocatello.

Barker, Pat, Cynthia Pinto-Ellis, and David Valentine
2011 Looting at Elephant Mountain Cave. *Nevada Archaeologist* 24:1–10.

Hildebrandt, William R., and Jerome H. King
2002 Projectile Point Variability Along the Northern California-Great Basin Interface: Results from the Tuscarora-Alturas Projects. In *Boundary Lands: Archaeological Investigations Along the California-Great Basin Interface*, edited by Kelly R. McGuire, pp. 5–28. Nevada State Museum Anthropological Papers 24, Carson City.
2012 Distinguishing Between Darts and Arrows in the Archaeological Record: Implications for Technological Change in the American West. *American Antiquity* 77:789–799.

Hockett, Bryan, William R. Hildebrandt, and Jerome King
2014 Identifying Dart and Arrow Points in the Great Basin: Comment on Smith et al.'s "Points in Time: Direct Radiocarbon Dates on Great Basin Projectile Points." *American Antiquity* 79:561–565.

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Smith, Geoffrey M., Pat Barker, Eugene M. Hattori, Anan Raymond, and Ted Goebel
2013 Points in Time: Direct Radiocarbon Dates on Great Basin Projectile Points. *American Antiquity* 78:580–594.
Thomas, David H.
1981 How to Classify the Projectile Points from Monitor Valley, Nevada. *Journal of California and Great Basin Anthropology* 3(1):7–43.
Wilde, James D.
1985 Prehistoric Settlement in the Northern Great Basin: Excavations and Collections Analysis in the Steens Mountain Area, Southeastern Oregon. Unpublished Ph.D. dissertation, Department of Anthropology, University of Oregon, Eugene.

Notes

1. Smith mistakenly labeled this specimen 26Hu3557-58 instead of 26Hu3557-37 in Figure 2 of our 2013 article.

2. Metric data provided in Hildebrandt and King's (2002) Table 1.

3. Elephant Mountain Cave points classified using the MVT.

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