IX. ELKO EARED/ELKO CORNER-NOTCHED PROJECTILE POINTS AS TIME MARKERS IN THE GREAT BASIN

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In attempting to achieve an understanding of the culture history of man, archaeology is faced with the need for description and interpretation of material culture. It best approaches this problem through an analysis of local sequences of artifact types. Once a sufficient number of these sequences is available for comparative study, it is possible to note stylistic and temporal correlations between and among artifact types over a widening geographic area. It is with this comparative aim in mind that the following report is presented.

The present body of data on local sequences of projectile point types in the Great Basin permits one to posit long range formal affinity and temporal consistency for certain of these types. I propose that the Elko Eared/Elko Corner-notched elements of the Elko series of projectile points can be utilized as time markers in the Great Basin because of their wide geographic range, their consistent temporal limits within that range, and the relative certainty with which they can be recognized.

Elko Eared/Elko Corner-notched[1] projectile points have been defined primarily on the basis of form by Heizer and Baumhoff (1961:128) in their report on the archaeology of the Wagon Jack Shelter. Elko Corner-notched points (fig. 1g-m) are large, basically triangular in form, and have shoulders and stems which widen toward the basal end. Alternatively, they may be described as triangular points with deep parabolic corner notches. Heizer and Baumhoff suggest that the corner-notched projectile points are probably a variant of the eared form. The Elko Eared point (fig. 1a-f), which is the more numerous of the two types at Wagon Jack Shelter, is said to vary between two extremes: (1) large, triangular points with two large nubs or ears projecting diagonally from the base; and (2) stemmed, corner-notched points with a base sufficiently concave to give an eared appearance.

Lanning's Elko points from Rose Spring are closely comparable to those from Wagon Jack Shelter. They are described (Lanning 1963:251) as large, stemmed, flat, and broad. All were probably formed by percussion flaking with an extensive pressure retouch. The sides are straight, and occasionally convex. The blades are usually flat in section, and quite

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[1] Hereafter referred to as EE/ECN.

Map 1

Surface Occurrences of Elko Eared/Elko Corner-notched Projectile Points

broad in relation to their thickness. Lanning's distinction between corner-notched and eared points contrasts the straight or convex character of the former with the deeply V-notched, bifurcated base of the latter.

In terms of specific dimensions, EE/ECN points from Wagon Jack range from 25 to 80 mm in length, 15 to 35 mm in width, and 1.0 to 9.0 gm in weight, with an average of about 3.7 gm (Heizer and Baumhoff 1961:129). Projectile points from South Fork Shelter (Heizer et al., n.d.) correspond closely, with an average weight of about 4.0 gm. The smaller sample of points from the Rose Spring site (Lanning 1963:250) is somewhat heavier, averaging about 7.0 gm in weight.

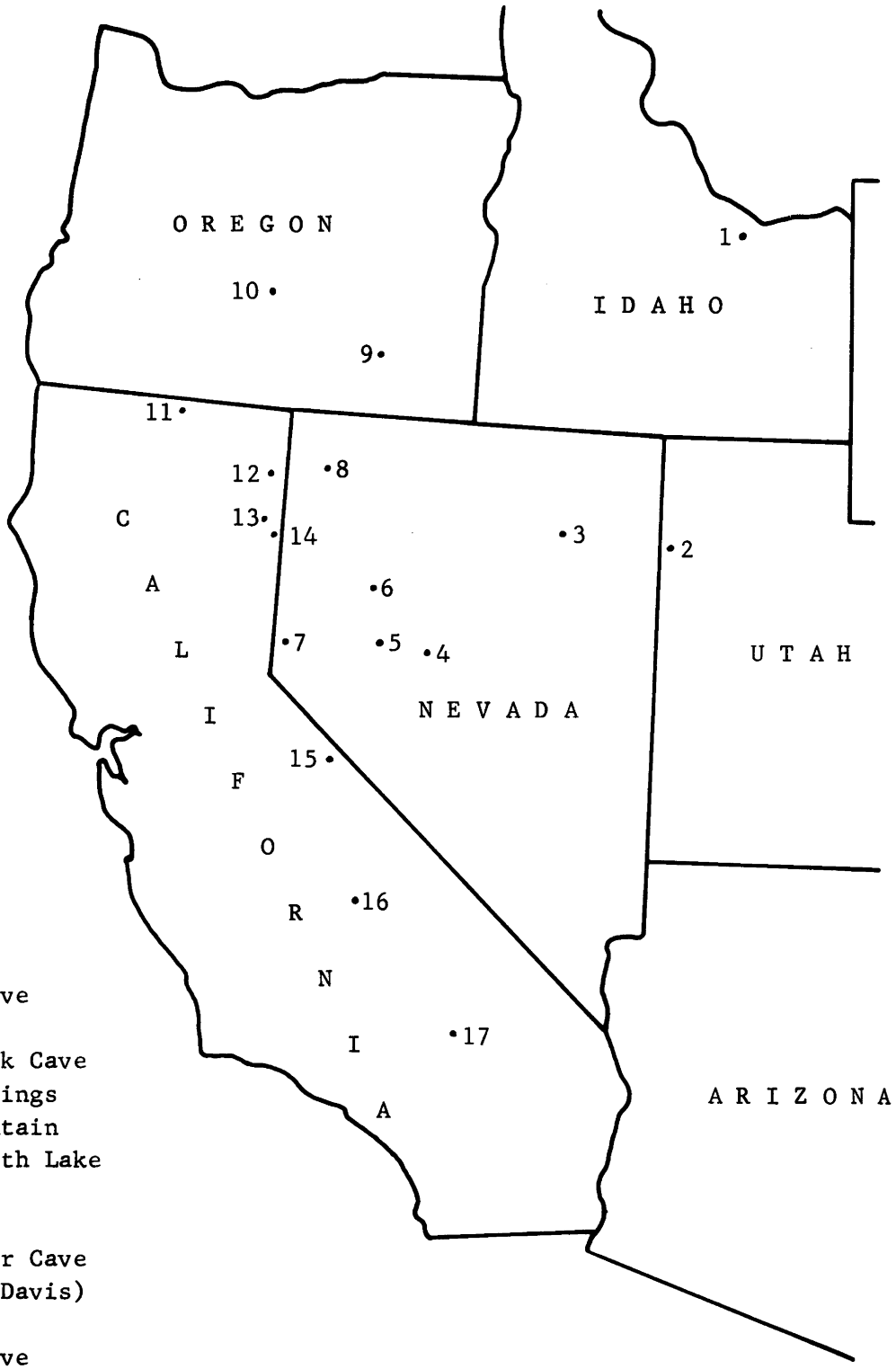
In sharp contrast to these figures, specimens from the Karlo site (Riddell 1960:16-17) which are comparable to the EE/ECN points are very light, averaging about 2 to 3 gm in weight. Because of the fact that the weight range of all points at Karlo is relatively light, this marked discrepancy may be due to factors operative in the local tradition.

As a descriptive aside, it is noted that the difference between the Elko Eared points and some Pinto series points which closely resemble them lies in the basically triangular quality of the former, in contrast to the shouldered, stemmed appearance of the latter. Also, the ears on an eared point expand, in contrast to the parallel form of the stem tips on Pinto types.

Turning to the question of areal distribution, it is noted that the EE/ECN type occurs throughout the Great Basin and in the southern and eastern areas of the Snake River drainage. Evidence for this comes from a large number of collections from surface localities, as well as those from stratified or buried sites. Among the more important of these surface collections are those from southern and central Idaho, Humboldt Lake area of Nevada, the Yosemite area of the central Sierra Nevada, the Death Valley region, and the Mohave Desert of California. There are more than twenty known published references to occurrences of this type in Nevada and eastern California alone. Maps 1 and 2 indicate surface and stratified occurrences respectively of EE/ECN points in the Great Basin.

In addition to the surface occurrences noted above, EE/ECN type points have been found in stratified sites throughout the Great Basin. Sequences from these localities enable us to comment on the projectile point forms which precede and succeed the Elko series in time.

At Rose Spring in the Owens Valley of California, Lanning (1963:268) found the Elko series preceded by Pinto types and followed by the smaller Rose Spring series points. At Bare Cave in lower Surprise Valley, California,



Key

1. Birch Creek
2. Danger Cave
3. South Fork
4. Wagon Jack
5. Hidden Cave
6. Lovelock Cave
7. NV-Do-12
8. Smokey Creek Cave
9. Roaring Springs
10. Coagar Mountain
11. Lower Klamath Lake
12. Bare Cave
13. Karlo Site
14. Tommy Tucker Cave
15. Mono Lake (Davis)
16. Rose Spring
17. Newberry Cave

Map 2

Stratified or Buried Site Occurrences of EE/ECN Projectile Points

W. R. Brown (n.d.:24) reported a stratigraphic sequence derived from statistical analysis of projectile point distribution in an undifferentiated midden. Briefly summarized, Brown's Stratum I, the lowest and earliest, is characterized by what he terms Notched Stem and Bifurcate Stem points, forms which strongly resemble the Pinto series; Stratum II is marked by the introduction of the Elko series, including the eared and corner-notched forms; and Stratum III includes both Rose Spring and Desert Side-notched points.

The sequence from Wagon Jack Shelter (Heizer and Baumhoff 1961:129) in central Nevada shows the Elko series marking the beginning of the deposit, and being succeeded by Rose Spring, Eastgate, Cottonwood, and Desert Side-notched forms. A similar succession is present at South Fork Shelter (Heizer et al., n.d.) in northeastern Nevada.

The projectile point sequence reported by Jennings (1957) from Danger Cave does not seem to agree with that found at the above sites. This problem has been discussed elsewhere (notably by Baumhoff and Heizer 1965:704) and will not be dealt with here. One should, however, note the similarity between EE/ECN and Danger Cave types W18, 19, 21, 28, 29, and 30. These types occur most frequently in Danger Cave III and decline in importance thereafter.

The EE/ECN type point is notably rare in central California and seems not to have been of overwhelmingly great importance in the Columbia Plateau. There is some evidence that points closely similar to the EE/ECN occur in areas to the east of the Great Basin; for example, in surface collections from the southern Great Plains (Suhm and Krieger 1954:pls. 93, 100).

Having presented some data on type definition, areal distribution, and relative temporal position in terms of other projectile point types, I will now consider the problem of absolute time of occurrence. Though the data are somewhat limited, they are sufficient to suggest a solution. Beginning in the eastern Great Basin, I have already noted the importance of EE/ECN points in Danger Cave III. At South Fork Shelter, the earliest occurrence of EE/ECN points is just above a level radiocarbon dated at 1370 B.C. $\pm$ 200 years (sample LJ-212). Although the most recent forms have not yet been radiocarbon dated, I suggest that EE/ECN points were no longer present at South Fork after the period 200-500 A.D. At Wagon Jack Shelter, approximately 150 airline miles to the southwest, the Elko series made its appearance at about 980 B.C. $\pm$ 200 years (sample LJ-203). Elko series points became less abundant after about 500 A.D.

For Lovelock Cave, which is about the same distance from South Fork as is Wagon Jack Shelter, Grosscup (1960:11) has proposed a time scale for the deposit based on extrapolation from two radiocarbon dates secured from Harrington's stratigraphic pit. Application of this time scale to the problem of dating the Elko series is hampered by lack of points recovered from known stratigraphic contexts. One fragmentary specimen (Lowie Museum No. 13-4895) closely resembles the Elko Eared type point. It was found in the lower portion of the Transitional culture level which Grosscup dates between 980-505 B.C.

Nearby Hidden Cave, in the Carson Sink, has been reported by Roust and Grosscup (n.d.) as having yielded approximately sixty projectile points. Three of these came from a stratum called the "32 Inch Midden" which is radiocarbon dated at 1100 B.C. $\pm$ 200 years (sample L-289BB). The bulk of the points occurred in a context stratigraphically superior to the 32 inch midden and separated from it by a series of striated mud flows. Most of the points occurring above the 32 inch midden are Pinto or Pinto-like forms. Only one or two of the specimens from the upper midden could be termed EE/ECN types.

Lanning (1963:273) has ruled out the possibility that the absence or low frequency of these types is a local anomaly, noting their presence in large numbers in surface collections from open sites in the Humboldt and Carson Sink areas. Thus it is likely that the EE/ECN points did not appear in this area prior to 1100 B.C.

The Karlo site in northeastern California has yielded points of the EE/ECN series. A single radiocarbon date of 400 B.C. $\pm$ 150 (sample LJ-76) from the Karlo site is said by Riddell (1960:90) to date the Transitional Lovelock phase at Karlo, a phase marked by the presence of EE/ECN points.

At the Rose Spring site, Lanning (1963:268) has noted the appearance of EE/ECN points in his Early Rose Spring phase and their continuation in the Middle Rose Spring. His absolute dating of the phase relies heavily upon correlations with other sites, some of which have been noted above. Lanning's dates (1963:281) are 1500-500 B.C. for the Early Rose Spring phase and 500 B.C.-500 A.D. for the Middle Rose Spring phase.

In summary, it was found (1) that EE/ECN points are relatively consistent in form over a broad geographical area, and (2) that their position in relation to other point types is also consistent. They were often preceded by Pinto types and usually succeeded by the Rose Spring, Eastgate, and Cottonwood triangular forms. In terms of temporal range, it was noted that EE/ECN points appeared after 1300 B.C. in the eastern Great Basin,

were present in central Nevada at Eastgate by 900 B.C., and at Rose Spring during the period 1500-500 B.C. Further, at each of the sites noted above, EE/ECN points apparently declined in importance after the period 200-600 A.D.

The evidence therefore seems sufficient to justify the hypothesis that EE/ECN points constitute a useful time marker in the Great Basin. Should this be more fully demonstrated by further study, these types may be helpful as a means of suggesting approximate temporal position for contexts in which they occur, and as such will be useful tools in gaining an understanding of the cultural relationships of western North America.

Published References to EE/ECN Projectile Points

California

Bare Cave: Brown n.d.; cf. Elko Eared, Elko Corner Notched.
Death Valley: Hunt 1960:figs. 24d, e, h, i; 30d-f.
Wallace 1958:12-13, fig. 1f, g, i.
Huntington Lake: Hindes 1962:13, B 10, pl. 1B u-w; 16, C 15, pl. 2A p,q
Karlo Site: Riddell 1960:16-17, pl. 2A2c, d, 3c, d.
Lower Klamath Lake: Cressman 1942:pl. 98c.
Mono Lake: Davis 1964:306-307, types 1b-c, pls. 2, 18-21.
Meighan 1955:pl. 3-33, 35.
Newberry Cave: Smith 1957:pl. 13.
Rose Spring: Lanning 1963:251, pl. 13i, k.
Tommy Tucker Cave: Fenenga and Riddell 1949:fig. 58a, b.
Vermilion Valley: Lathrap and Shutler 1955:fig. 67v-y.
Yosemite: Bennyhoff 1956:type C-15, fig. 6m, n.

Idaho

Birch Creek: Swanson, Butler and Bonnichson 1964:pls. 36w-z, 37b-e.
Southern and central Idaho: Swanson, Tuohy and Bryan 1958:types 60, 62, 73, 79, 86, 91.

Nevada

NV-Do-12: Elsasser 1960:type 5D, pl. 2Aa'.
NV-Do-36: W. A. Davis and R. Elston, University of Nevada, personal communication.
Hidden Cave: Roust and Grosscup n.d.
Lovelock Cave: Grosscup 1960:fig. 5, 13/4895.
Parker n.d.
Smokey Creek: Layton n.d.
South Fork: Heizer et al. n.d.
Wagon Jack Shelter: Heizer et al. 1961:figs. 3n-u, 4.

Oregon

Cougar Mountain: Cowles 1959:pl. 5.
Fort Rock Valley: Weld 1959:4, 6, 7.
Guano Valley: Cressman 1936:pl. IX.
Roaring Springs: Cressman 1940:fig. 10 1/8844, 1/8841.

Utah

Danger Cave: Jennings 1957:types W18, 19, 21, 28, 29, 30.

Additional sites are recorded in the files of the University of California Archaeological Research Facility, Berkeley.

Explanation of Figure 1

Elko Eared projectile points from site NV-Ch-15 (actual size)
[Accession numbers are those of the Lowie Museum of Anthropology]

a. 1-65631
b. 1-65620
c. 1-65632
d. 1-17465
e. 1-17545
f. 1-65622

Elko Corner-notched projectile points from South Fork Shelter (actual size)
[Field catalogue numbers shown]

g. S-28
h. S-40
i. S-129
j. S-38
l. S-26
m. S-83

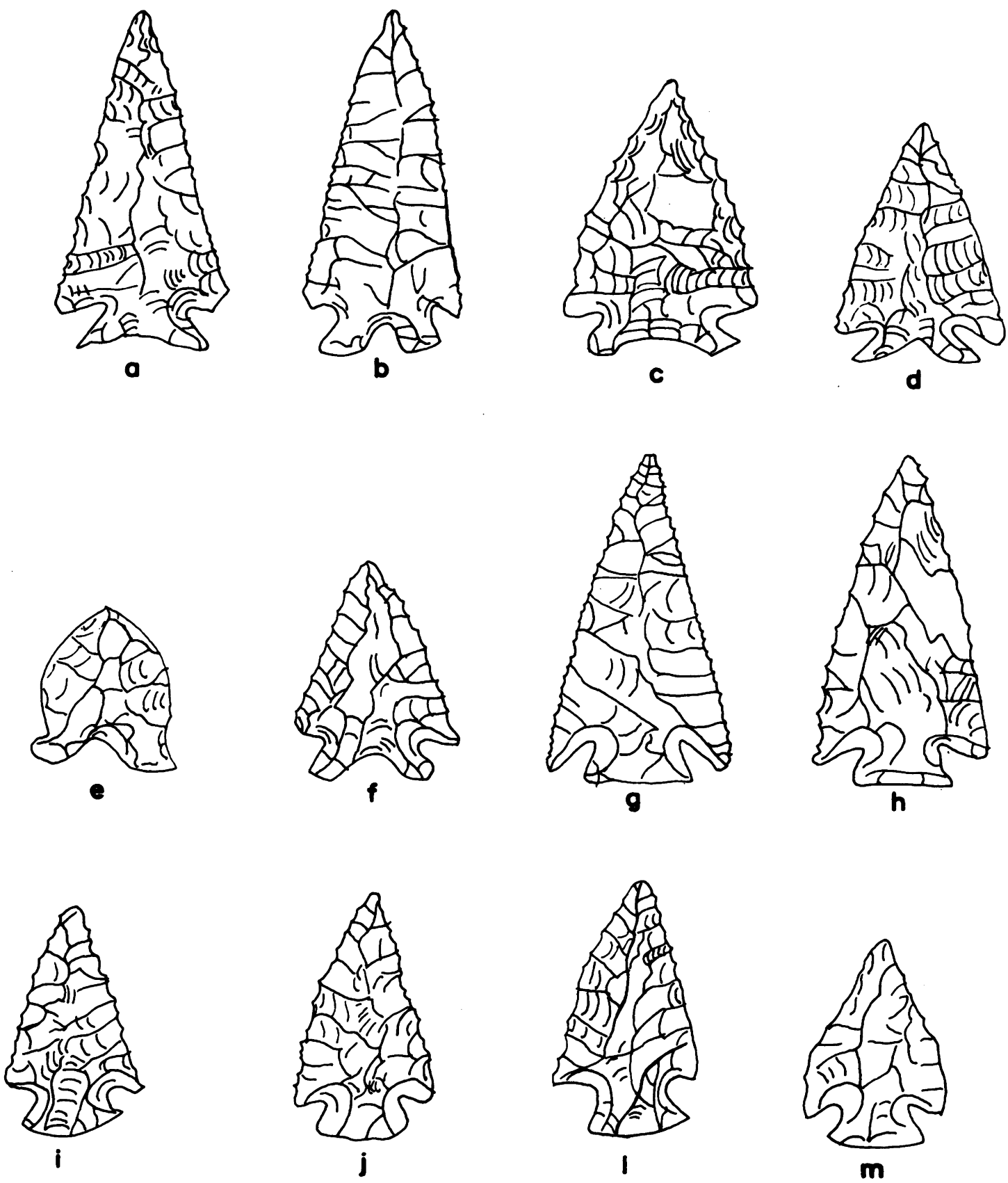


Figure 1

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