Abstract:
Preliminary analysis of the large and somewhat atypical Pueblo III basketry assemblage from Antelope House suggests the possibility of isolating individual basketmakers and groups of basketmakers within the Antelope House population. Observations are offered on the methodology of distinguishing individual basket-makers at this site. The assemblage as a unit is compared to other Pueblo III basketry collections.

Article:
Some 469 specimens of basketry were recovered during the excavations of Antelope House. In the present context, the term basketry encompasses several distinct kinds of items, including rigid and semi-rigid containers or baskets proper, matting, bags, and a variety of miscellaneous fiber constructions, including figure-eight braiding, three and four strand braiding, etc.

Matting includes items which essentially are two dimensional or flat, while baskets are three dimensional. Bags may be viewed as intermediate forms because they are two dimensional when empty and three dimensional when filled. As Driver (1961:159) points out, these artifacts may be treated as a unit because the overall technique of manufacture is the same in all instances. Specifically, all forms of basketry are woven manually, without any frame or loom. Since all basketry is woven, it technically is a class or variety of textile, though that term sometimes is restricted to cloth fabrics.

The basketry recovered at Antelope House includes representatives of the three major subclasses of basketry weaves; coiling (Figure 1), twining, and plaiting (Figure 2) (Adovasio 1974). Plaiting is by far the most abundant subclass of basketry (301 specimens) present, followed by coiling (60 specimens) and twining (19 specimens). The remaining basketry items (89 specimens) are assigned to the "miscellaneous" category.

Since the Antelope House coiled basketry as a subclass appears to possess a greater number of highly standardized, culturally determined, technical attributes than any other subclass, the remainder of this article will treat the coiling industry at that site.

THE COILING INDUSTRY
Coiling denotes a subclass of basket weaves manufactured by sewing stationary horizontal elements with moving vertical elements. The Antelope House coiled basketry assemblage includes 60 specimens allocated to 10 major structural types, some with minor subtypes based on the kind of basket wall or foundation technique utilized and the type of stitch employed. Further, all specimens were analyzed, where feasible, for type of rim finish, acting decorative patterns and mechanics, form wear patterns, possible function and type of splice. Dimensional measurements were taken on all complete specimens and four sets of motor skill measurements were taken on all complete specimens and structurally intact fragments. The motor skill measurements include width of stitch, width of coil, stitches per centimeter, and coils per centimeter.
The structural types established by the above procedures are summarized below in a highly abbreviated fashion. Perhaps it should be noted that the term “type” herein is used purely as a classificatory device. Whether or not these types represent "ideal" mental templates per se is a question beyond the limits of the immediate discussion. The descriptive terms used are those employed by Adovasio (1970a, 1970b, 1974, in press). Those unfamiliar with these terms are advised to refer to the aforementioned references.

**TYPE 1: CLOSE COILING, TWO ROD AND BUNDLE FOUNDATION, NON-INTERLOCKING STITCH.** *Number of specimens: 27. Type of specimens: rim fragments, 4; wall fragments, 15; base fragments, 4; whole, 3; unknown, 1 Number of containers represented: 27. Type of containers represented: bowl, 4; tray, 11; carrying basket, 3; unknown, 9. Work direction: left to right, 1; right to left, 25; unknown, 1. Technique:* two decorticated whole rods surmounted by a fiber bundle are sewn with non-interlocking stitches which pierce or wrap the bundle.

**TYPE 2: CLOSE COILING, WHOLE ROD FOUNDATION, INTERLOCKING STITCH.** *Number of specimens: 24. Type of specimens: rim fragments, 4; wall fragments, 3; base fragments, 15; whole, 2. Number of containers represented: 24. Type of containers represented: bowl, 5; tray, 11: unknown, 8. Work direction: left to right, 1; right to left, 23. Technique: decorticated whole rods are sewn with interlocking stitches which wrap, rather than pierce the foundation.*

**TYPE 3: CLOSE COILING, BUNDLE FOUNDATION, STITCH TYPE** *OWN. Number of specimens: 1. Type of specimens: base fragments, 1. Number of containers represented: 1. Type of containers represented: unknown, 1. Work direction: unknown, 1. Technique: a grass bundle foundation is sewn with highly fragmentary stitches whose type is not ascertainable.*

**TYPE 4: CLOSE COILING, TWO ROD AND WELT STACKED FOUNDATION, NON-INTERLOCKING STITCH.** *Number of specimens: 1. Type of specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: tray, 1. Work direction: right to left, 1. Technique: two decorticated whole rods surmounted by a flat welt or splint are sewn with non-interlocking stitches which rap, but do not pierce the welt.*

**TYPE 5: CLOSE COILING, FIVE ROD BUNCHED FOUNDATION, NON-INTERLOCKING STITCH.** *Number of specimens: 1. Type of specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: unknown. Work direction: unknown. Technique: a bundle of five small decorticated rods is sewn with non-interlocking stitches which engage a rod or rods of the preceding circuit without piercing it/them.*

**TYPE 6: CLOSE COILING, TWO ROD STACKED FOUNDATION INTERLOCKING STITCH.** *Number of specimens: 2. Type of specimens: wall fragment, 1; handle, 1. Number of containers represented: 1. Type of containers represented: unknown. 2. Work direction: right to left, 2. Technique: two decorticated rods arranged vertically are sewn with non-interlocking stitches which wrap, rather than pierce the foundation.*

**TYPE 7: CLOSE COILING, HALF ROD AND BUNDLE FOUNDATION NON-INTERLOCKING STITCH.** *Number of specimens: 1. Type of specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: unknown. Work direction: unknown. Technique: a single decorticated halved rod, flat side down, surmounted fiber bundle is sewn by non-interlocking stitches which pierce the bundle.*

**TYPE 8: CLOSE COILING, TWO ROD HORIZONTAL FOUNDATION NON-INTERLOCKING STITCH.** *Number of specimens: 1. Type of specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: unknown. Work direction: right to left; Technique: two decorticated whole rods, laid side by side, are sewn with non-interlocking stitches which wrap the foundation.*
TYPE 9: CLOSE COILING. THREE ROD BUNCHED FOUNDATION NON-INTERLOCKING STITCH.  
Number of specimens: 1. Type specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: tray, 1. Work direction: right to left, 1. Technique: two small decorticated whole rods surmounted by an even smaller decorticated whole rod are sewn with non-interlocking stitches which wrap the apex rod.

TYPE 10: OPEN, COILING, INTRICATE STITCH.  
Number of specimens: 1. Type of specimens: wall fragment, 1. Number of containers represented: 1. Type of containers represented: unknown. Work direction: right to left, 1. Technique: a single decorticated whole rod is sewn with intricate, interlocking stitches. The individual circuits of the coil are separated via the use of a false knot in the middle of each stitch.

Internal Correlations
All technical, motor skill, and provenience data for each specimen of coiled basketry from Antelope House was computerized for analysis. Initially, all basic data simply were tabulated and sorted by type per architectural segment of the site. The partial results of this tabulation and sorting are presented in Table I. As this table indicates, two close coiling types, whole rod, interlocking stitch, and two rod and bundle stacked foundation, non-interlocking stitch, account for 45 and 40 percent of basketry sample, respectively. All of the remaining types are statistic insignificant. No single type is found in all five segments of the site, though the two major types each are represented in four of the five units. Further, each is present in a single unit where the other is absent. All of, numerically minor types, with one exception, are restricted to a single section of the site. Interestingly, all minor types found in the southern sections of site are absent from the northern sections and vice versa. Likewise, the types found in the central section are lacking from the north and the south. This differential distribution of minor types alone suggests temporal or cultural separation of basketmakers within the Antelope House population.

![Diagram](image1)

**Figure 3.** Plot of component scores, Components I (horizontal) and II (vertical): Two rod and bundle foundation, non-interlocking stitch coiled basketry. \(N\) = specimens from North Roomblock/North Area; \(S\) = specimens from South Roomblock/South Plaza; \(C\) = specimens from Central Roomblock. **Note:** This key is applicable to Figures 3-6.

![Diagram](image2)

**Figure 4.** Plot of component scores, Components I (horizontal) and II (vertical): Whole rod foundation, interlocking stitch coiled basketry.
In order to further isolate possible clusters of basketry and, ideally, basketmakers within the Antelope House sample, the motor skill or idiosyncratic measurements of all structurally intact specimens of the two major coiling types were subjected to principal components (modified version of BMDO 8M; J. Gunn) and stepwise discriminant function analyses (BMDO 7M; Dixon 1968). The results of these analyses are presented in Figures 3-6.

Figure 3 represents the plot of component scores of Components I and II for two rod and bundle foundation, non-interlocking stitch basketry. The component scores represent the collapsing of the four idiosyncratic motor skill variables into two statistically independent dimensions. The central roomblock specimens (C) tend to cluster in the upper left-hand portion of the plot, while the north roomblock/north area (N) and south roomblock/south plaza (S) specimens tend toward the lower right hand portion of the plot. N's appear as a tighter cluster, or subset, within the S cluster. A similar situation is apparent in Figure 4, in which the component scores of whole rod, interlocking stitch specimens are plotted. N's again occur as a subset within the S cluster. The single C specimen is outside the main plot.

Stepwise discriminant analysis of the two rod and bundle and whole rod specimens more or less duplicated the results achieved in the principal components analysis (Figures 5, 6). It did, however, succeed in separating the C's from N's and S's with a somewhat higher degree of resolution.

Two alternative explanations are possible for the apparent clusterings observed in Figures 3-6. The clusters may represent discrete cultural subgroupings of basketmakers within the Antelope House population or they may represent temporal differences in a culturally homogenous population. If the first alternative is correct, then N represents a tighter grouping of basketmakers fortuitously located within the range of variation of the S population, while C apparently is distinguishable from both S and N. Further, if S, N, and C represent individual groupings of basketmakers, then the range of motor skill variation in S is greater than that encountered in N or C. Also if this alternative is correct, the motor skill variation within groups is greater than the variation between groups, accounting for the inability of numerical measures to positively separate these clusters.

If S, N, and C are more or less equivalent to temporal differences within a culturally homogenous population, then each cluster would correspond to the known temporal occupation of each area and would represent a gradual tightening up of motor skills from the beginning of the Antelope House sequence to the end. In this case, Figure 3 would depict a time gradient which, on the basis of dates from sectors S, N, and C, would run from the lower right to the upper left of the plot.

At present, it is impossible to ascertain which of the two models presented above, if either, is correct. It is expected, however, that the addition of the analytic data on plaited, twined, and miscellaneous basketry will provide the necessary resolution to make a selection between the competing alternatives.

Whichever alternative ultimately proves to be correct, it should be stressed that within each cluster certain groups of specimens are so similar both in quantitative (motor skill) and qualitative attributes, that they must have been produced by the same hand. Careful examination of such attributes as splice manipulation, diameter of interior rods, rim finish, and method of starting suggest that within groups C, N, and S, at least six and possibly seven individual weavers can be distinguished. In the interests of brevity, further discussion of this aspect must be postponed.

**External Correlations**

In many respects, the Antelope House coiled basketry assemblage is consistent with others reported from Pueblo III sites. The high frequency of non-interlocking stitches, the near absolute predominance of right to left work direction, the high incidence of normal centers and the range of vessel forms and decorative designs are typically Pueblo III. There are, however, certain anomalies not usually encountered in basketry collections of the period.
The high incidence of whole rod coiling with an interlocking stitch is not paralleled in any published Anasazi site, nor is the very low frequency of three rod bunched coiling at Antelope House explainable by contemporary trends (Morris and Burgh 1941). Moreover, the dominant splice types usually associated with Pueblo III coiled basketry (Morris and Burgh 1941: Figure 9) are either not present in the Antelope House assemblage or are exceedingly rare. Conversely, the dominant Antelope House splices, with fag ends and moving ends bound under, generally are rare to absent at other Pueblo III sites. Whether the divergences from standard Pueblo III coiled basketry norms represented by the Antelope House coiled basketry are paralleled in the remainder of the basketry assemblage is not yet known. If they are (and we suspect this is the case), then the high degree of typological standardization attributed to Pueblo III basketry is either inflated or entirely artificial.

Figure 5. Plot of Canonical Variables I (horizontal) and II (vertical): Two-end bundle foundation, non-interlocking stitch coiled basketry.

Figure 6. Plot of Canonical Variables I (horizontal) and II (vertical): Whole rod foundation, interlocking stitch coiled basketry.
References:
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