

IMPORTANCE OF DEFINING A MORE COMPLETE CONTEXT OF ENGRAVED STONE FOUND ON SURFACE SITES

by

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Gunn (1975:4) states that various technological lineages arrived and exploited the unique resources at Hogup Cave at different points in the environmental-cultural trajectory, and then left the evidence of the solutions of their adaptive shifts. On surface sites, we can also (though to a lesser degree) show evidence of some of these adaptive shifts, and how or to what degree mobiliary rock art played a part in the process.

In Skull Valley a rough time frame for the making of the engraved stones found there was suggested, based on context (Warner 1979). Sites producing engraved pebbles were located close to naturally occurring outcrops of the preferred types of stone. It was also interesting that very few stones were found outside of spring areas or areas of naturally occurring stones; all but one engraved pebble site had lithic accumulation.

In the Skull Valley archaeological sites, the order of predominance of artifacts is first Fremont, next Shoshoni, and last Archaic. Which of these groups produced the Skull Valley engraved pebble styles? Most of the engraved stone occurred in sites with both Archaic and Fremont remains. The remainder of the engravings occurred in sites with only Fremont remains. The few sites we studied with only late prehistoric remains produced no engraved pieces.

The only engravings from sites with solely Archaic remains were produced on a utilitarian-type of artifact; chipped and abraded knife-like fleshers similar to those described as marking the Promontory Culture (Steward 1937:77-79). The stone from which both engraved knife fleshers and the engraved pebbles of other sites were made is the same greenish to tannish- brown slate, found only at the northeast end of the valley.

Engraved and non-engraved knife-like fleshers occur in sites with both Fremont and Archaic remains, in sites with only Archaic remains, and sites with only Fremont remains, but percentagewise to a larger extent in Archaic sites. Since the type of stone used in these areas is so diagnostic, and the style and content of the subject matter from Skull Valley is so different from other known styles, engraved pebbles of this style should be very easy to identify if occurring at sites elsewhere. So far, only one similar example was found. That piece supposedly came from a surface site above Deadman's Cave, not that far from Skull Valley.

There was a definite preference for the green slate, but why? Other usable types of stone were found in the area but at a great distance.

The makers of the Skull Valley type of engraved pebbles did have at least a minimal choice but other suitable stones do not occur in the sites, so the answer seems to be that the green slate was the easiest to obtain and most available stone in the area. No special trips or out-of-the-way movements were made to obtain it.

The preferred black slate used in Utah and Rush Valley, however, was moved from Cedar Valley, from the vicinity of sites containing higher amounts of engraved black slate pebbles to areas near Vernon, Utah, and to sites around Utah Lake.

Only two patinated pebbles engraved with the Salt Flats technique of rocking line, were found in Skull Valley. These occurred some distance from each other. Both the Salt Flats rocking line and patinated pebbles are uncommon to Skull Valley and must be imported.

One of these patinated technique engraved pebbles was found in a small blow-out half way down the valley. This was in close association with three engraved non-patinated slate pebbles and four other non-engraved pebbles. With them were found a one-handed mono, and two noticeably different-sized clusters of chips. One of these chip clusters was the local coarse quartz chips ubiquitous to most Skull Valley campsites, the other was of smaller, variegated, tannish-orange jasper chips. There was minimal measurable deterioration on either material. The blow-out was on a hard-based mudpan with slim chances of future wash-up.

The second patinated, engraved pebble was found at the south end of the valley, approximately 25 miles distant. It was in a total Fremont campsite with no naturally occurring slate or patinated stone, and no other engraved material. Chances of wash-up are great here, but over the five years this site was hunted by one informant and also surveyed by our team no other engraved stones were located. About 130 yards from this site is another Fremont site mixed with a small percentage of Fremont and Late Prehistoric remains. This last, mixed site contained 96% corner-notched points, though 85% of the points from the Fremont site 130 yards away were side-notched.

In this last site with mostly corner-notched points, part of an engraved, green slate, knife-flesher was found. Side-notched points have not been reported from the north end of the valley, where corner-notching is prominent. Both of these two Fremont campsites contain only shards of Great Salt Lake Gray, while shards of both Promontory and Salt Lake Gray are found at sites at the north end of the valley.

Often a multi-cultural site will display differing degrees of usage. This was obvious at another site near the Salt Flats, where three cultures were represented on a long, 25-foot-high dune. The remains of each culture were completely segregated. In several spots on the top of the dune in small blow-outs were Shoshone remains. On the face of the dune was an extensive Fremont campsite. At the base of the dune and extending out onto the flat is an Archaic site with more evidence of occupation than the Shoshone but not as much as the Fremont. According to informants, this is a typical Salt Flats site. The engraved pebbles only occurred within the Fremont section of the site, as did the non-engraved pebbles. Two

smaller adjacent dunes did not contain any pebbles or lithic waste. The closest naturally-occurring source for the pebbles was about 30 yards away at the edge of the flat, near the edge of a lava outcrop on the foothills.

In another location, on the edge of the Salt Flats in a blow-out, both Fremont and Archaic remains occur, with a small area of overlap. The Fremont remains occurred mainly at one end and slightly higher, and the Archaic remains mainly at the other end and slightly lower. Here the engraved pebbles only occurred at the Fremont end.

After considering such information, it is possible to make generalizations which with the additional evidence mentioned in Table 1 will tend to become more specific. At Skull Valley it was possible to conclude that the abraded knife-flesher was used in late Archaic times. Earlier Archaic sites did not contain these particular tools. This absence does not, however, totally exclude the possibility of this tool's existence in an earlier time period. This knife-like flesher continued, though with a notable decline in frequency, into Fremont times. The evidence indicates a gradual change, without an abrupt break in the sequence.

There is no evidence of a continuation of this abraded knife-like flesher into Late Prehistoric or Historic times, as exhibited by its absence in the Shoshone remains. The opposite case occurs with the engraved pebbles. Almost all engravings occurring in Archaic sites (about 79%) occur on the abraded knife-like flesher blades, while most of the Fremont engravings (about 86%) occur on slate pebbles. Thus there is evidence that the abraded knife-like flesher decreased in popularity while the engraved pebble increased in popularity (Warner 1979:8-10).

All engravings found to date in solely Archaic sites are on the abraded knife-like fleshers, while most of the Fremont site engravings are on pebbles. It is suspected that given no illegal collecting that at some time engraved pebbles will be found in a site which is totally Archaic.

On the Salt Flats similar conclusions were made. In only two sites on the Salt Flats were engraved pebbles found which possibly could be attributed to Archaic times.

One site was at a spring stripped of any evidence of chipped artifacts by arrowhead hunters. But from the size and the surface oxidation of remaining chips in that area, it was assumed to be an Archaic site. This was later verified by personal communication with a collector of that site. A Fremont site on the other side of the hill had a totally different assemblage of materials and artifact types, with no engraved or non-engraved stone.

The other Salt Flats example of engraved pebble was found on a flat with strictly Archaic remains, but within throwing distance of a dune that contained Fremont remains.

Both these pebbles have naturalistic snake-like representations. Other pebbles found at approximately 15 sites around the Salt Flats are, by their context, assumed to be Fremont in origin (Warner 1981). A very interesting fact is that nearly all engraving tools, however, as

well as many of the excavated examples of engravers or burins come from Archaic layers or sites.

Conclusions about specific technological activities, such as maintenance, manufacture, preparation of various tools and material, when at mobiliary rock art sites have been noted. Since most engraved stones occur at springs and at well-occupied sites, it seems that the type of site where engraved stones most often occur must have been on the order of a short-term camp of Gunn's Settlement III pattern or a base camp of Settlement II pattern.

Because of the extensive chipping activities, it is obvious that a considerable amount of tool manufacture took place at all of these sites. Due to surface hunting in recent years, a true artifact inventory is impossible. However, with previous collections and by observing what remains at the sites, a relative percentage of tool types can be postulated. The order of abundance for both Salt Flats and Skull Valley sites with engraved pebbles is roughly projectile points, chipped knives, abraded knives, choppers, scrapers, and (two) chipped burins. No knife-like fleshers have been identified from the larger Salt Flat area. No preformed engravers have been identified from Skull Valley. By point fractures, it is possible to tell that many of the points were shot, broken, returned, and replaced. There is also considerable evidence of re-chipping. Both these facts, and the abundance of chipped litter, indicate that much time was spent in tool manufacture and maintenance.

Because of the little pottery and few milling stones, more than minimal but not an extensive period of habitation is indicated. Since pottery was probably not manufactured at these sites (no kiln or firing spots have been identified), energy was expended to bring it from more permanent sites. Milling stones indicate that meals consisting of foraged materials were prepared, possibly by the women while the men were away hunting or fishing. Some sites are profusely covered with cooking stones and hearths, intermingled. Other sites with possibly a greater concentration of engraved pebbles contain no locatable hearths and no cooking stones or fire spots. Manufacture of lithic materials occurs in both areas. This indicates that cultural situations differ from the former to the latter.

That the main purpose for human presence at these sites was to hunt, forage, or fish seems unquestionable. However, one must consider that to a lesser degree the people came for other reasons. One possibility may have been to obtain materials to manufacture the abraded knife. It seems reasonable that since a certain amount of energy went into their production they would have been transported and used at other sites. However, so far no transportation of knives of this material has been found, indicating that they may have been cached at the site where they were used. Remember, though, that one engraved slate pebble was found near Deadman's Cave.

Knife-like fleshers of a similar nature found at other, more permanent, habitation sites are of a different material. It seems logical to assume that for the most part the abraded knife-fleshers were made and used locally. The function of these tools seems to be related to the preparation of an animal after it had been brought back to camp. If this is the case, these

temporary habitation sites would have interwoven Gunn's habitat with the stone, food, textile (skin), and possible wood industries in his study.

The significance of the engraving on knife-fleshers seems to be indicated by the type of engraving, and the orientation of the element to the object's chisel-like nose. In some places with sites the association of abraded knife-fleshers with such a large concentration of non-utilitarian engraved pebbles implies that the engravings were associated in some way with the hunting or preparation process, or at least with activities engaged in at such sites and during those periods of time. This would have been exhibited, in part, in the associated lore of Skull Valley and Salt Flats Fremont and Desert Archaic cosmology. The Skull Valley pebble sites and the pebble's designs differ to a certain degree from engraved stone from the Salt Flats. One marked overlay does occur however, on the Salt Flats. Those designs share a surprising similarity to entoptic (phophenic)-like designs. Figure 1 illustrates a general category of designs from the Salt Flats published in 1981. Figure 2 illustrates common entoptic designs. The former looks as if it could be out of a medical journal and the latter looks as if it could be another sheet of engraved pebble designs without any question.

Since mobiliary rock art forms are found in larger sites around springs, and not in small sites in juniper clearings and blow-outs in the higher mountains, or out on the valley floor, even in areas where suitable natural stone occurs, it appears that both leisure and also a specific social context were necessary for their production. Further research of the internal evidence of element analysis of the engravings, an aspect of study which is absolutely necessary, will add to and help further explain their function within their respective societies. It will also further elucidate the mental activities of these hunters and gatherers while at the site. That will be accomplished when these collections are returned from Alexander Marshak at the Peabody museum who now has them under his study.

CONCLUSION

Because attitudes and actions follow patterned behaviors, repeated cultural activities are the result of traditions acquired in the process of making a living. This is the basis for the premise that physical evidence left in the archaeological record provides the clues for those activities. The problem exists in identifying, recording, and interpreting them correctly. With enough repetitions of significant physical evidence expressing various types of activities, certain cultural values, e.g., the cultural preference for certain types of activities, can be reconstructed (Chartkoff 1976:2).

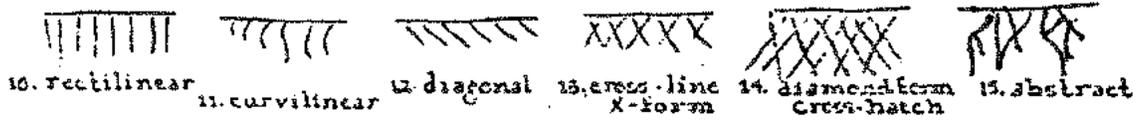
There may be various reasons for the types of repeated activities performed in culturally prescribed manners. These reasons may be alluded to, based on the exactness in both observation and interpretation of the external evidence, with support of insights gained by an analysis of the internal evidence.

1-9
Grid forms



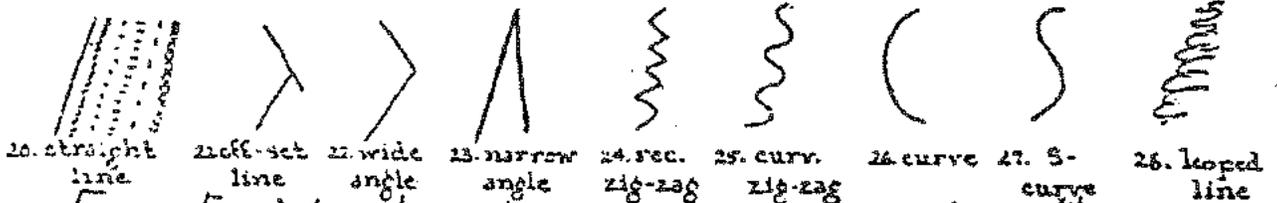
1. rectilinear 2. rectilinear divergent 3. diagonal wide angle 4. diagonal narrow angle 5. brick form 6. abstract 7. diamond

10-19
Fringed lines



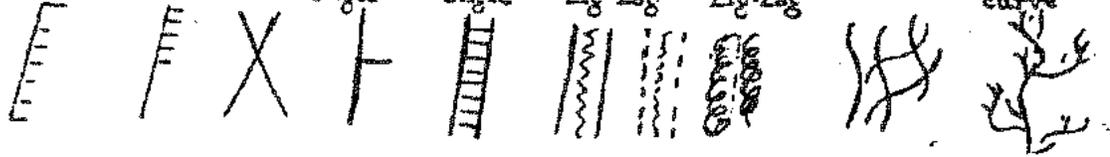
10. rectilinear 11. curvilinear 12. diagonal 13. cross-line X-form 14. diamond form cross-hatch 15. abstract

20-39
Single simple lines

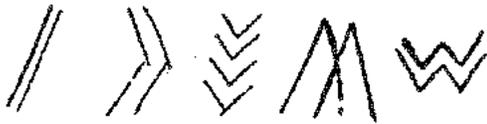


20. straight line 21. off-set line 22. wide angle 23. narrow angle 24. rec. zig-zag 25. curv. zig-zag 26. curve 27. S-curve 28. looped line

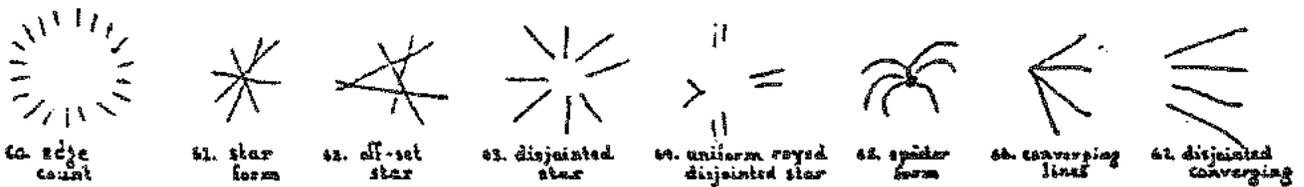
40-49
Complex line forms



50-59
Double lines
&
Mult. Repetitions

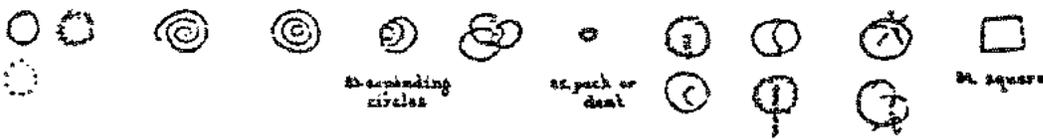


60-79
Rayed forms



60. edge count 61. star form 62. off-set star 63. disjointed star 64. uniform rayed disjointed star 65. spider form 66. converging lines 67. disjointed converging

80-99
Circle forms



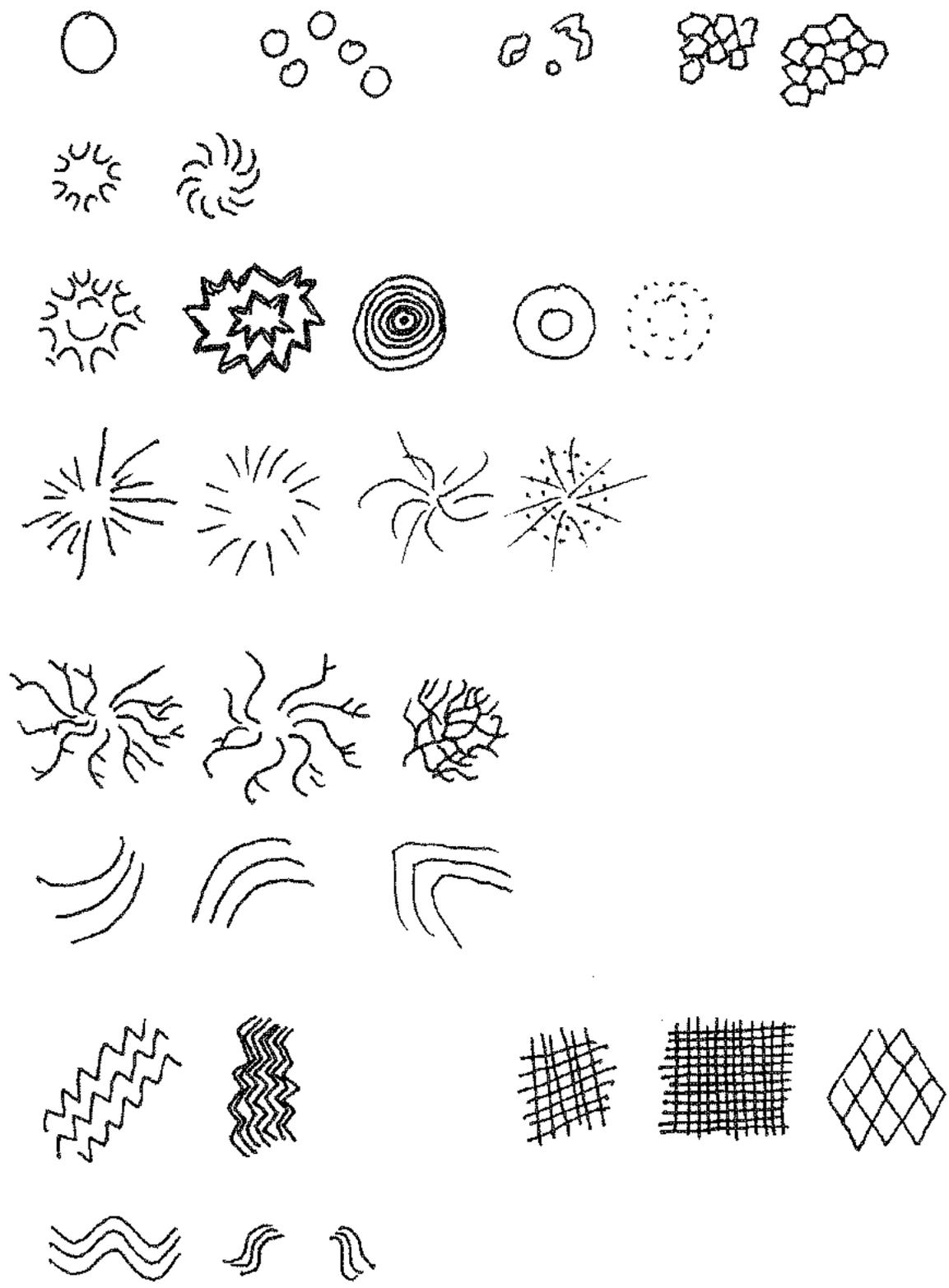
80. circle 81. spiral 82. concentric circles 83. ascending circles 84. overlapping circles 85. half-hatched circle 86. bisected circles 87. abstract circles 88. square

100-139
Single Occurrences



individually occurring elements

Figure 1



A few common phosphene-like forms or Entopic patterns
 Figure 2

Because of the traditional approach to reporting the features of the archaeological record, few have attempted to add additional analysis. Additional information would allow us to go farther toward the limits of research. The next step for those who are problem-oriented and desire to find answers related to mobiliary rock art is to learn the techniques of these methodologies, add to them, test their application, and make modifications as necessary. Then comparisons should be made to other types of mobiliary media symbols.

Marshack seeks response to the questions he poses and the procedures he used. He states "the posing of such questions at this stage of research is intended merely to open up areas for inquiry and theoretical discussion, with the possibility of future validation or invalidations ...there has been no wide use or discussion of the principles of fundamental cognitive modes operating in Homo Sapiens symbol manufacture and usage. It is this, if valid, that makes the analysis possible and the data important. In addition, there has been almost no usage of the methodology that has been developed for studying the artifacts themselves--the rigorous, intense, and systematic first hand analysis of each artifact and the equally rigorous study of the tradition within which the artifacts were made and functioned...the methodology requires evaluation and the theoretical base of the research need discussion before ideas derived from them can be used in other research and theory" (Marshack 1979: 290,294,295).

I am not prepared at the moment to comment on his methodologies until they have been fully applied, but it is interesting that this research has led in somewhat similar directions to his. To the degree with which such techniques have been used, I have established to my satisfaction the necessity for such application, and have been testing various procedures for interpreting the data. Because of this experience and the statements of Marshack, I too submit this study for evaluation of these methodologies and discussion of theory. This study can contribute to subsequent research, on information which can be gathered and reconstructed from excavations, and more especially surface sites, where mobiliary rock art is found.

REFERENCES CITED

Chartkoff, Joseph

1976 Sampling in Excavation, or, How Much Sand is in Your Basement Cement?
The Artifact 14 (1)

Gunn, Joel

1975 An Envirotechnological System for Hogup Cave.
American Antiquity 40 (1) Steward, Julian

Marshack, Alexander

1979 Upper Paleolithic Symbol Systems of the Russian Plain: Cognitive and Comparative Analysis. *Current Anthropology* 20 (2)

Steward, Julian

1937 Ancient Caves of the Great Salt Lake Region, Bureau of American Ethnology, Bulletin No. 116. Washington, D.C.

Warner, Jesse E.

1979 Engraved Pebble Style from Skull Valley, Utah. *La Pintura* V (3): American Rock Art Research Association, San Miguel, California.

1981

Engraved Pebble Style Of The Salt Flats Of Western Utah. *American Indian Rock Art.* American Rock Art Research Assoc., San Miguel, Calif.