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#### **Authors**

Castleton, Kenneth B  
Madsen, David B

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# The Distribution of Rock Art Elements and Styles in Utah

KENNETH B. CASTLETON  
DAVID B. MADSEN

UTAH is a veritable treasure house of prehistoric rock art, with literally thousands of sites, panels, and element/style variations of petroglyphs and pictographs. The purpose of this paper is primarily to plot the locations and distribution of the various elements and styles of the art and, secondarily to see if any patterns emerge which might be of value in determining relationships between the prehistoric groups which produced it.

The determination of the age of rock art and the identification of the culture that produced it are usually difficult, and often impossible. This is primarily due to the lack of a direct method of determining age of either petroglyphs or pictographs. Radiometric dating techniques are of little value and the newer methods of absolute dating are difficult to apply on a large scale. Some idea of age may be obtained by the presence of lichens, the degree of patination, and the amount of weathering, but these are at best of limited utility and generally produce only relative age estimates on panels with superimposed styles.

As a result, most rock art must be dated by other techniques. For example, if a panel is found associated with ruins that contain

datable timbers or other organic artifacts then one might make an unverifiable assumption that the site and the panel are contemporary and thus ascribe a date to the rock art. Often it is not that simple, however. The site may contain several components indicating the presence of several cultures or time periods. In such cases it may be impossible to know with certainty which of these time periods is related to the rock art. Moreover the rock art panel may show signs of more than one time period by superimposition of figures over older ones, by differential patination, or by a mixture of different styles.

Another even more indirect method of dating is the association of the rock art with chronologically well controlled artifacts such as pottery. In many cases, pottery may be dated with considerable accuracy by style, temper, decoration, and corrugation. In single component sites it may be used not only in determining the approximate time but also in determining the culture. Again this is not exact since the rock art panel and the site cannot usually be directly correlated.

Probably the best method of dating rock art by association occurs when unique and readily identifiable elements are found within or on dated artifacts. In the Great Basin, engraved stones *within* dated contexts have been used to date rock art not directly

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Kenneth B. Castleton and David B. Madsen, Antiquities Section, Utah State Historical Society, 300 Rio Grande, Salt Lake City, UT 84101.

associated with archaeological sites (Thomas and Thomas 1972). In the Southwest, design elements on plastered dwelling walls may provide dates on similar elements on rock art panels.

### PREVIOUS RESEARCH

In 1929 Julian Steward charted the location of 28 rock art elements in California, Nevada, Arizona, and Utah. Although the number of sites that he charted in Utah was very small compared with the number that are now known to exist in this state, the geometric elements that he terms Curvilinear are in many cases similar or identical to many described here. There are, however, many differences between some of his figures and those listed here; primarily in the number and styles of anthropomorphs in Utah. In Steward's series the vast majority of elements are geometric although there are some anthropomorphs and animals.

Heizer and Baumhoff (1962) charted the distribution of rock art in Nevada. They identified 58 design elements in 71 sites. The areas of greatest concentrations were in the west central and the southeast portions, although others were scattered in virtually all parts of the state. They proposed a classification of five styles as follows: (1) Great Basin painted; (2) Great Basin scratched; (3) Pit and Grooved; (4) Puebloan painted; and (5) Great Basin pecked. They also divided them into four groups: (1) Curvilinear; (2) Rectilinear; (3) Representational; and (4) Great Basin Abstract. We prefer to use the terms Geometric, Representational, and Bizarre; the latter term being used mainly to describe certain anthropomorphs and animal figures of a weird and bizarre type.

Christy Turner's "Petroglyphs of the Glen Canyon Region" (1963) is of especial interest to this study. It describes the rock art of Glen Canyon and San Juan Canyon, and adjacent territory, and was an outgrowth of the Glen

Canyon Project. Age determinations are based on ceramic associations and rock art deterioration by weathering, patination, and lichen growth on the figures. Turner identifies five styles — Style 1 being the most recent, extending from A.D. 1850 to the present, and Style 5 the oldest, covering the period from Archaic time to A.D. 1050. Style 5 consists almost exclusively of rectilinear outline forms: sheep with large rectangular bodies and small heads and legs, and anthropomorphs with elongated bodies, elaborate headdresses, cross hatching, and "squiggle maze"—an interlocking network of lines. As would be expected, this style shows the greatest amount of weathering and patination. Style 4 (dated to A.D. 1050-1250) is the most abundant and includes birds, flute players, hunting scenes, anthropomorphs with enlarged appendages and genitals, bird-bodied sheep, concentric circles, spirals, solid triangular anthropomorphs, large hands, bows and arrows, footprints, and complex pottery and blanket designs. Although the area involved in Turner's study is included in our study, it constitutes a relatively small part of the entire state of Utah, albeit an area with an abundance of rock art.

As might be expected there are major differences between the rock art described by Turner and that reported by Heizer and Baumhoff, and Steward. The Nevada and California studies consisted largely of geometric (abstract or curvilinear) figures with few human or animal figures. Turner reported large numbers of anthropomorphs and animals and many of the anthropomorphs that he reported were of a different style than those of the other investigators. A minor difference between Turner's study and ours is simply one of areal extent. Turner's study was restricted primarily to the southern portions of the state and hence the number of elements he identified is considerably less than this study. A major substantive difference is

that Turner found relatively few pictographs in comparison to petroglyphs in the Glen Canyon/San Juan area, while substantially higher proportions of pictographs were identified for the same area in this study. Turner dated many panels by association with pottery. This has not been done here, although we essentially agree with many of his conclusions.

Schaafsma (1971) analyzed the frequency of elements and attributes of rock art in several areas of the Uintah Basin in northeastern Utah, the northern San Rafael area, Barrier Canyon, the Clear Creek Canyon of south central Utah, and western Utah. She did not include in her study the southeast quarter of the state or the southern strip from St. George and the Virgin River in the west to the lower Colorado River or the San Juan River area on the east. In the Dry Fork area she found that anthropomorphs constituted 45 percent of all figures, animals 19 percent, other representational elements 3 percent, and abstract (geometric) figures 24 percent. In the Dinosaur Monument area these figures are 50 percent, 28 percent, 8 percent, and 14 percent respectively, and for the northern San Rafael area which consists of Nine Mile Canyon, the Price area, Desolation Canyon, etc., showed 20 percent anthropomorphs, 34 percent quadrupeds, 7 percent other representational figures, and 39 percent abstract elements. The corresponding figures for the Barrier Canyon style show 79, 12, 9, and 1 percent. For the Clear Creek Canyon area these are 11, 28, 5, and 52 percent. For curvilinear style sites in western Utah the percentages are 5, 11, 1, and 83. These figures are interesting since they show great variation in the incidence of the various elements even in those areas that are culturally relatively homogeneous. The difference in the figures for the western part of the state is consistent with our findings, those of Steward (1929), and Heizer and Baumhoff (1962).

The rock art of Nine Mile Canyon in eastern Utah was evaluated by Hurst and Louthan (1979). They identified six styles within the canyon and suggested ethnic affiliations with four of the six, including the Desert Culture, Fremont, Ute, and Historic American. The styles identified by Hurst and Louthan all contain elements of the three styles described in this report and are not comparable.

### CULTURAL AFFILIATIONS

The number of specific elements of rock art is very large indeed. In our study we have included about 60 types, but this is essentially a sample and does not include all of the known types. We have charted their location as accurately as possible. Some elements are common to all parts of the state and apparently were produced by all cultures.

The principal prehistoric cultures that inhabited what is now Utah were the Desert Archaic, the Fremont, and the Anasazi (Jennings 1978). All of these produced rock art, as did some of the historic people such as the Utes, Paiutes, and the Navajos. The Archaic people lived here as early as 9000 B.C., and archaeological evidence of their presence has been found in all or most parts of the state. The Fremont left evidence of their presence in many parts of the state, with especially heavy concentrations in the Uinta Basin, the Capitol Reef area, the Richfield area, around the Great Salt Lake, the San Rafael area, the south-central area around Richfield, Parowan, and near Escalante. The Anasazi were concentrated in the southern part of the state especially along the San Juan, the Virgin and the Colorado rivers, and south of the Henry and La Sal mountains. It seems reasonable to assume that the rock art found in these areas is most likely to be a product of these cultures, although there is much evidence of overlapping of the cultures, especially that of the Archaic with the other two.

Desert Archaic occupation sites are found throughout the state, but most of the rock art sites that we believe are Archaic sites occur on volcanic boulders in the western part of the state. The Fremont are known to have lived in Utah from about A.D. 400 to 1300 (Marwitt 1970). Five Fremont subareas are now recognized: (1) Uinta Fremont; (2) San Rafael Fremont; (3) Great Salt Lake Fremont; (4) Sevier Fremont; and (5) Parowan Fremont. These five subareas can be combined into two major variants that conform basically to the Great Basin and the Colorado Plateau (Madsen 1979, 1980). None of the major rock art sites that have been associated with the Fremont (e.g., Schaafsma 1971) has been subjected to extensive archaeological study. These include such sites as Dry Fork northwest of Vernal, the very large number of rock art sites in Nine Mile Canyon (although a few have been explored scientifically, e.g., Hurst and Louthan 1979), and the many sites near Moab. The best Fremont rock art sites are Dry Fork-Ashley Canyon, McKee Springs and Cub Creek, Hill and Willow Creek, and the Pleasant Valley Escarpment near Myton in the Uinta Basin; Nine Mile Canyon; Emery County south of Price; the Moab area; Sevier County, especially Clear Creek Canyon; Capitol Reef National Park; and some sites near Escalante-Boulder in Garfield County. There are no major Fremont rock art sites in San Juan, Kane, or Washington counties in southern Utah on record at this time. Rock art sites identified with the Anasazi are abundant along the San Juan and lower Colorado rivers, in the Virgin River drainage in Washington County in the southwest, along Johnson Canyon and the Paria River in Kane County, and abundantly in the Montezuma Creek area in the southeast corner of the state.

The large amount of research in the southern areas of the state has produced a relatively large quantity of information on Anasazi artifacts and the association of rock

art with those artifacts. The same can be said to a lesser degree about Fremont archaeology and Fremont rock art, although here the comparative lack of ceramics as compared with the Anasazi pottery makes conclusions regarding Fremont rock art less certain. Nonetheless, the large anthropomorph with head-dress, ear bobs, necklaces, flat, bucket, or inverted bucket-shaped head and facial features is widely recognized as the product of the Fremont people. In the case of the Archaic, however, the problem is very unclear. Although many Archaic sites have been reported in Utah, few were occupied during the Archaic period exclusively, many having been occupied at later dates by other groups. Moreover, few, if any, were closely associated with rock art of any type. We consider the geometric figures so plentiful in western Utah and Nevada, and sometimes associated with a few simple sheep and anthropomorphs, as probably Archaic in origin, but definitive proof is limited for this position (but see Heizer and Baumhoff 1962; Thomas and Thomas 1972). Some consider the Barrier Canyon Style figures as Archaic in origin (Schaafsma 1971), but we know of no strong evidence to support this view.

### ROCK ART STYLES

We have divided the 60 elements into three basic styles. *Geometric Styles* (Table 1-A) include non-representational forms such as circles, wavy lines, and triangles. *Representational Styles* (Table 1-B) include elements which appear to represent actual objects such as anthropomorphs, animals, hand prints, and bows and arrows. The third group of styles consists of those designated as *Bizarre* (Table 1-C). We have used the term to apply mostly to representational figures of a bizarre type, but ones almost surely intended to represent human forms. We have also used it in the same manner to apply to animal forms that are weird and surely do not accurately repre-

Table 1  
ROCK ART STYLES AND ELEMENTS

|                                  |                            |
|----------------------------------|----------------------------|
| <b>A—Geometric Styles</b>        |                            |
| Circles—all kinds:               | Dots                       |
| simple                           | Rectilinear maze           |
| dots in center                   | Wavy lines                 |
| concentric                       | Parallel vertical lines    |
| tailed                           | Sun discs                  |
| joined                           | Wheels                     |
| grouped                          | “Dumbbells”                |
| etc.                             | Blanket figures            |
| Rake figures                     | “Candelabra” figures       |
| Triangles                        | Rectangles                 |
| Zig-zag lines                    | Miscellaneous figures      |
| <b>B—Representational Styles</b> |                            |
| Animals                          | Hand prints                |
| Atlats                           | Bow-and-arrows             |
| Ear bobs                         | Bear tracks                |
| Bird tracks                      | Human footprints           |
| Sandals/moccasins                | Necklaces                  |
| Plants                           | Insects                    |
| Human figures:                   |                            |
| horns/feathers                   | stick figures              |
| square/rectangular heads         | triangular trunks          |
| large hands/feet                 | Barrier Canyon style       |
| shooting bow-and-arrow           | combat                     |
| with earbobs                     | holding “heads” or “masks” |
| with shields                     | with necklaces             |
| humpbacked                       | flute players              |
| solidly pecked                   | “duck headed”              |
| birth scenes                     | outline pecked             |
|                                  | copulation                 |
| <b>C—Bizarre Styles</b>          |                            |
| Bizarre human forms              | Weird animals              |

sent any animal that existed then or now. Besides charting a great many specific elements, we have charted some more than once. For example, we have listed hand prints that are petroglyphs, those that are red pictographs, and those that are white pictographs.

#### DISTRIBUTION OF GENERAL STYLES AND SPECIFIC ELEMENTS

The charted elements have been divided into four groups and examples have been plotted on small-scale maps of the state (Figs. 1-4). (Plots of the remaining elements and styles are on file at the Utah State Historical Society.) These state maps are divided into

the two major physiographic regions of the state, the Colorado Plateau and the Great Basin, principally because of the distinct distributional patterns which emerge. The four groups are: (1) those that seem to have a fairly *general distribution* (Table 2-A); (2) those that have a *somewhat restricted distribution* (Table 2-B); (3) those that are *tightly restricted* (Table 2-C); and (4) those with a *Colorado Plateau* distribution (Table 2-D).

In studying the charted maps some interesting patterns emerge. In general there are more rock art sites on the Colorado Plateau portion of the state than in the Great Basin portion. While this may be due to any number of factors, such as cultural differences or differences in population densities, the presence of a greater number of rock art sites on the Colorado Plateau may simply be due to the greater number of smooth cliff and rock faces that were favorite sites for the art. These blank rock art “canvases” are especially prevalent in the Uintah Basin, the Moab area, the Capitol Reef region, and the Glen Canyon/San Juan Canyon area. Another factor may be that many of the rock art sites in the Basin are located on small isolated boulders and are not readily identified. However, a specific effort was made to photograph and record all sites regardless of “spectacularity.”

#### ARCHAEOLOGICAL IMPLICATIONS

As noted above, associating a particular rock art style, element, or technique with a particular prehistoric group is fraught with difficulties. Dating problems, multi-component sites, sites with no material culture remains, etc., make any conclusions drawn from rock art distributional studies tentative at best. However, the patterns which emerge from the study of the elements described here are highly suggestive and have significant implications for existing archaeological interpretations.

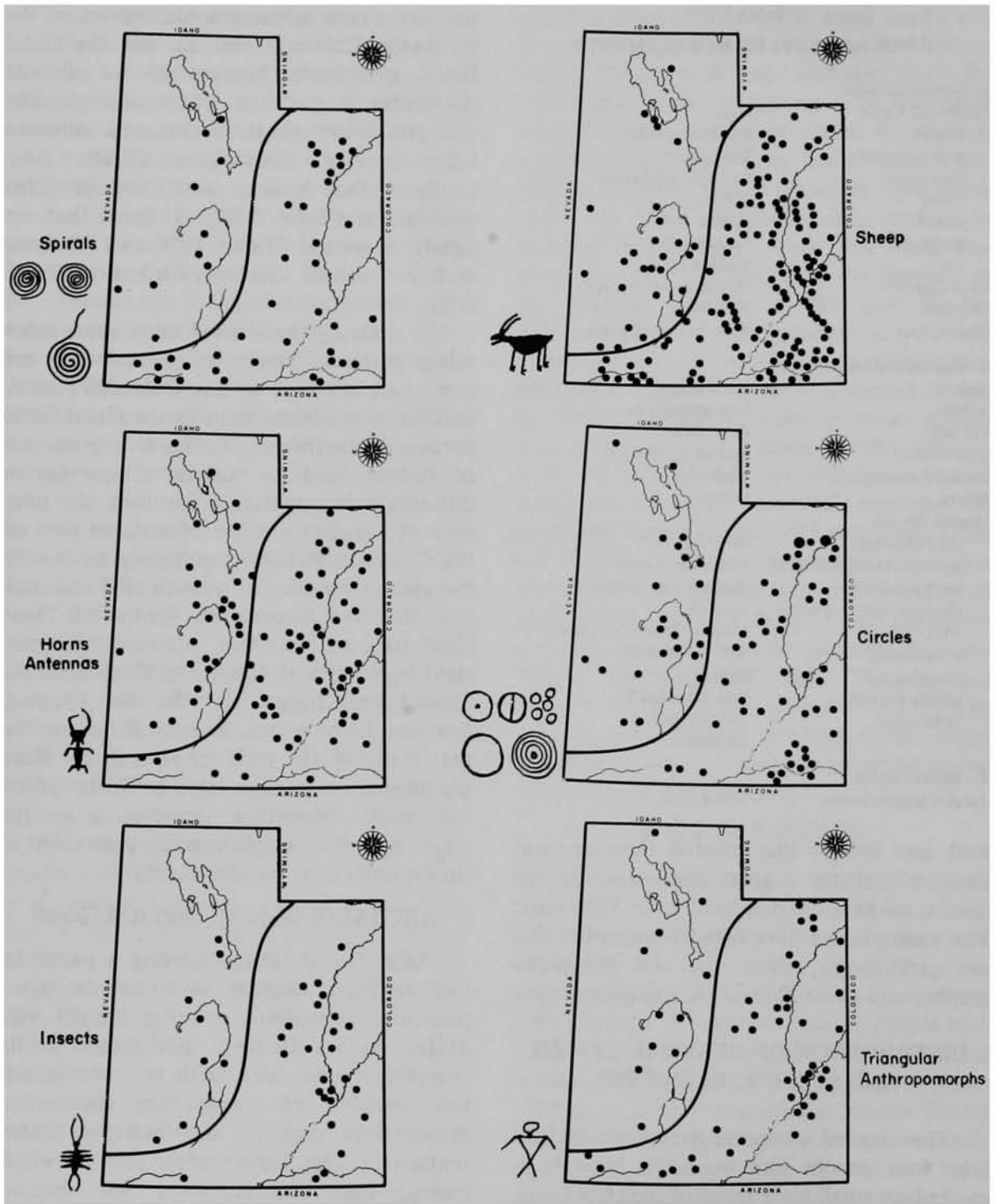


Fig. 1. Examples of rock art elements with generalized distribution in Utah.

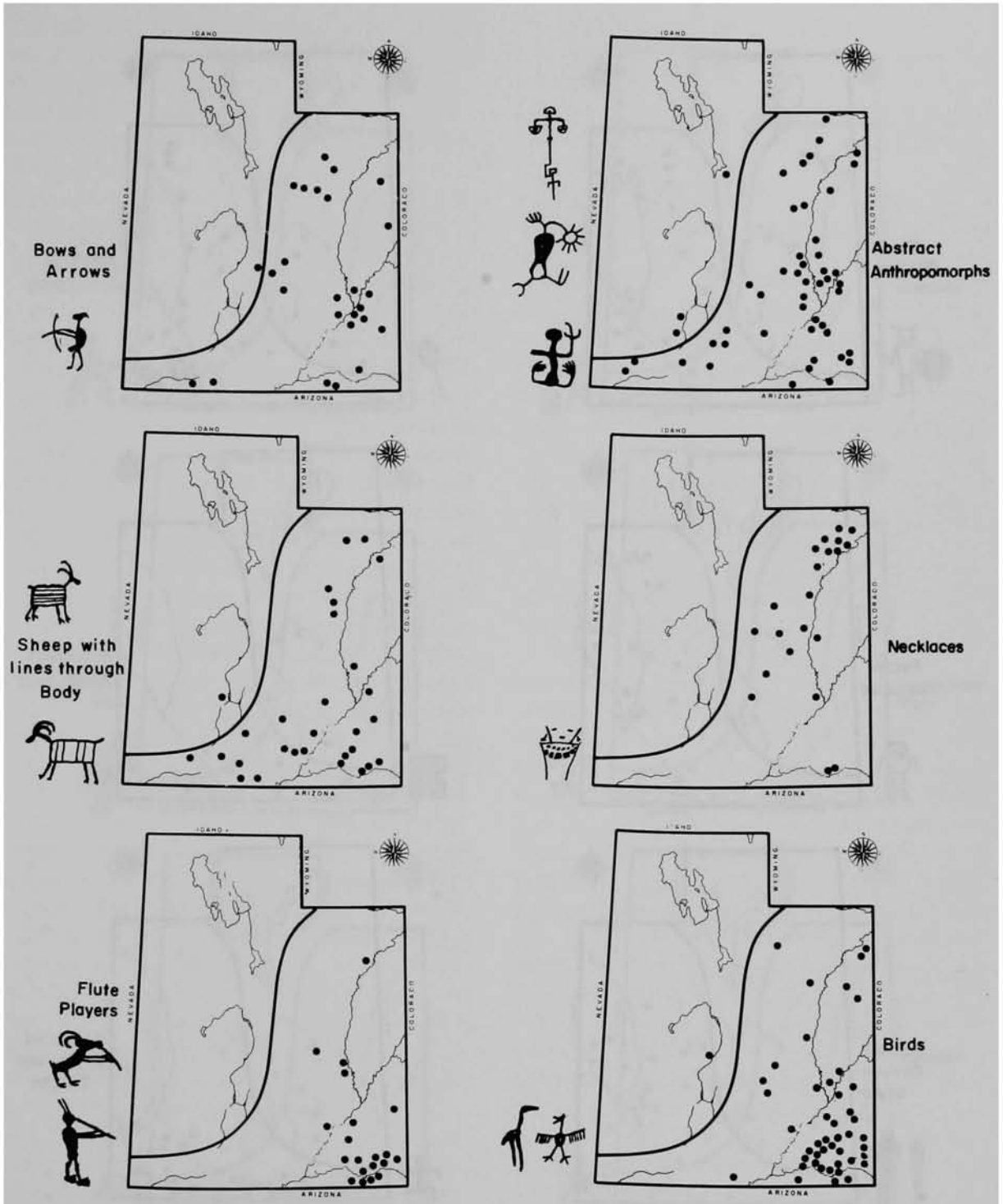


Fig. 2. Examples of rock art elements which are essentially restricted to Fremont and Anasazi areas of the Colorado Plateau.



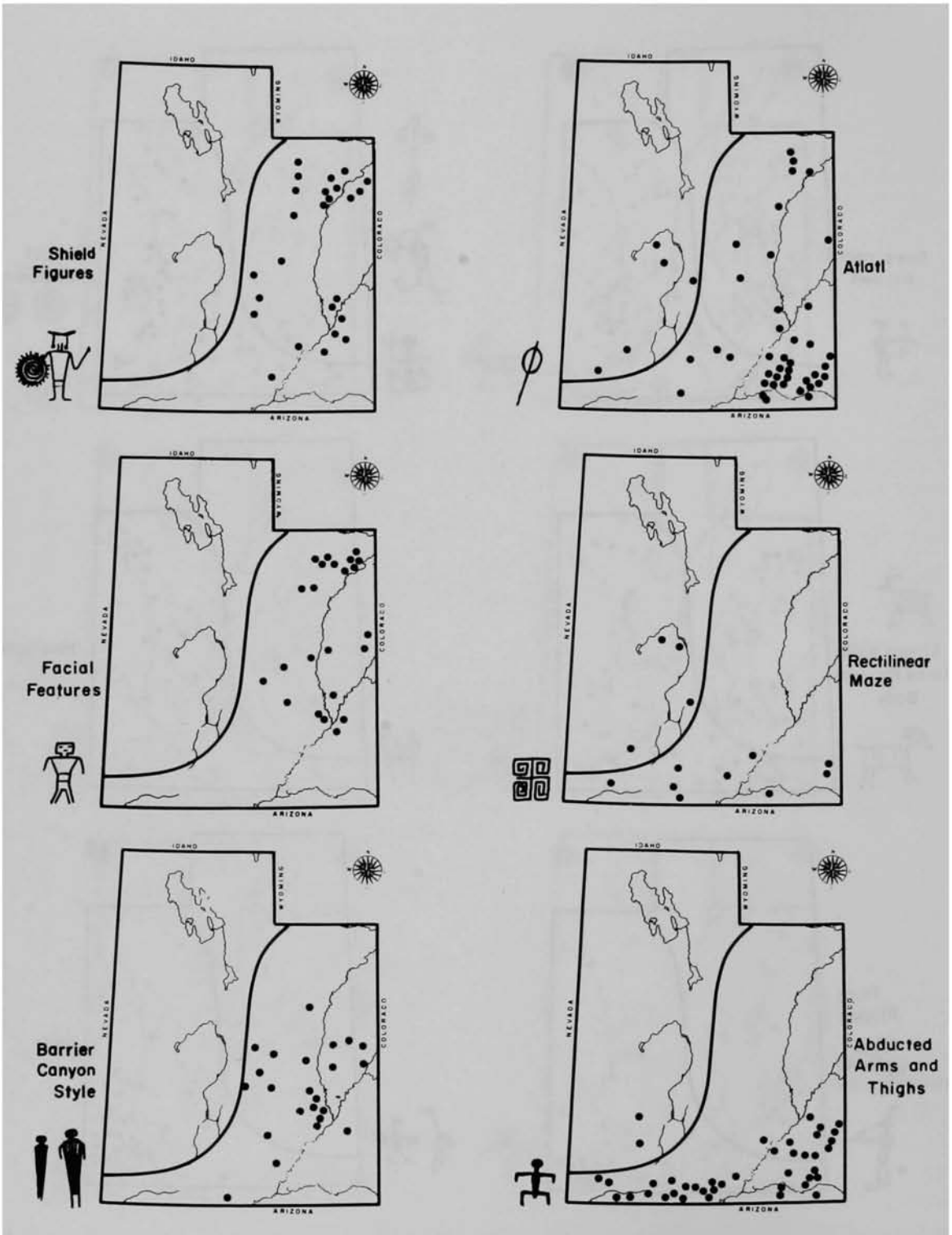


Fig. 3. Examples of rock art elements which are relatively restricted to the Colorado Plateau.

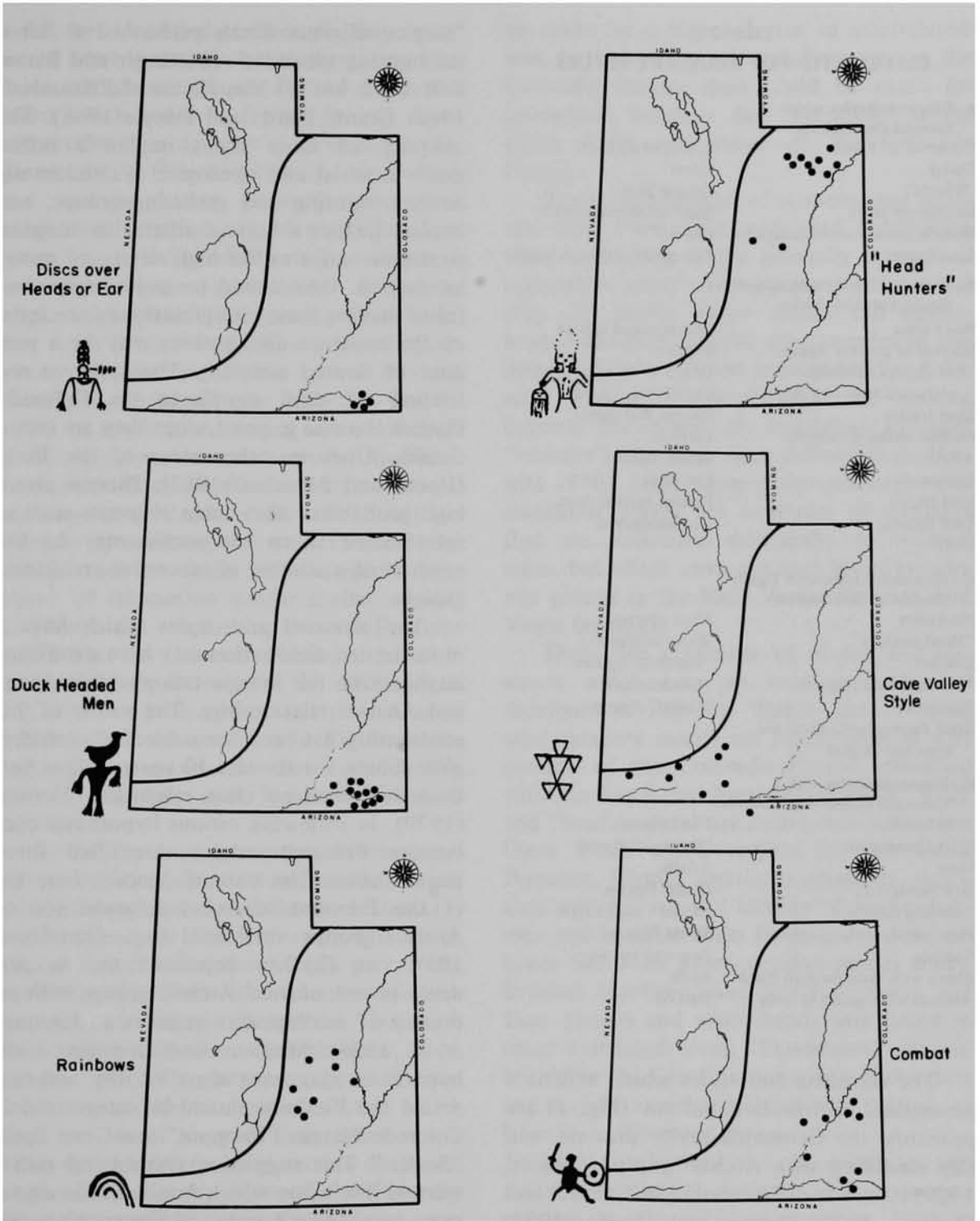


Fig. 4. Examples of tightly restricted rock art elements within the Fremont and Anasazi areas of Utah.

Table 2  
DISTRIBUTION OF ROCK ART STYLES

|  |                           |
|--|---------------------------|
| <b>A—Elements/Styles with General Distribution</b>             |                           |
| Circles of all kinds   | Spirals of all kinds      |
| Sheep  | Horns                     |
| "Wheels"   | Zig-zag lines             |
| Rectilinear Maze   | Solid anthropomorphs      |
| Miscellaneous geometric figures                                | Insects                   |
| Line figures   | Triangular anthropomorphs |
| <b>B—Elements/Styles with somewhat Restricted Distribution</b> |                           |
| Wavy lines   | Humpbacked figures        |
| Blanket or pottery figures                                     | Rakes                     |
| Stick figures (without abducted arms and thighs)               | Deer                      |
| Deer tracks  | Copulation                |
| Outline anthropomorphs   | Human footprints          |
| Atlats   | Earbobs                   |
| Snakes   | Phallic figures           |
| Bird tracks  | Sun discs                 |
| Leaf figures   | Parallel vertical lines   |
| Dots   | Red handprints            |
| <b>C—Elements/Styles with Tightly Restricted Distribution</b>  |                           |
| Necklaces  | Flute players             |
| "Head hunters"   | White handprints          |
| Combat   | "Baseball" figures        |
| "Duck-headed" figures  | "Candelabra"              |
| Rainbows   | "Collar" figures          |
| Stick figures (with abducted arms and thighs)                  |                           |
| <b>D—Elements/Styles with a Colorado Plateau Distribution</b>  |                           |
| Necklaces  | Flute players             |
| White handprints   | "Baseball" figures        |
| Deer   | Atlats                    |
| Red handprints   | Phallic figures           |
| Shooting figures   | Barrier Canyon style      |
| Hand prints (petroglyphs)                                      | Shield figures            |
| Sandals  | Bow-and-arrows            |
| Sheep with lines through trunk                                 | Birds                     |
| Animals with spears in body                                    | Buffalo                   |

The elements and styles which exhibit a generalized distribution pattern (Fig. 1) are primarily the Geometric styles that are usually identified with Archaic groups (Steward 1929; Heizer and Baumhoff 1962; Heizer and Clewlow 1973; Thomas and Thomas 1972; Castleton 1978, 1979). Rock art of this type is usually assumed to be the result of

"magico-religious rituals performed at habitual hunting locations" (Bettinger and Baumhoff 1982; but see also Heizer and Baumhoff 1962; Grant, Baird, and Pringle 1968). The ubiquity of these styles implies a rather uniform social and ideological system among Archaic hunting and gathering groups, and implies further a basic similarity in adaptive strategies and a rather high degree of group interaction. One should be exceedingly careful in making these interpretations since some of the apparent distributions may be a product of limited sampling. The apparent restriction of atlatl motifs to the Colorado Plateau is a case in point, since they are found outside Utah in other areas of the Basin (Heizer and Baumhoff 1962). There is also a high probability that some elements such as solid-bodied sheep zoomorphs may be the product of a number of successive prehistoric groups.

The elements and styles which have a more limited distribution may have significant implications for interpretations of Fremont and Anasazi relationships. The nature of this relationship has been the subject of considerable debate for the last 40 years and, as yet, there has been no clear resolution. Madsen (1979), in reviewing various hypotheses concerning Fremont origins, identified three major theses. The two of concern here are (1) the Fremont represent an extension of Anasazi groups northward (e.g., Gunnerson 1969); or (2) they represent the *in situ* development of local Archaic groups with an overlay of southwestern traits (e.g., Jennings *et al.* 1956). Madsen concluded that both hypotheses may have some validity and suggested the Fremont should be categorized as Colorado Plateau "Fremont" and Great Basin "Sevier." This suggestion engendered rather spirited discussion which resulted in a symposium involving a number of Fremont specialists whose basic consensus was that there was indeed an overall "Fremont" entity which

could be identified (although they were unsure what it was), but that there were two major subdivisions (on the Plateau and in the Basin) which could be further broken down into smaller variants (such as those defined by Marwitt 1970). The majority of traits considered, such as pottery, projectile points, and architectural styles, were of a technological nature; and traits which might exhibit a somewhat closer relationship to socio-religious aspects of society, such as rock art, have never been included in any classification scheme. We feel that while such taxonomic classification schemes may have only limited utility, it is worth discussing several of these classification problems in terms of the distribution of rock art elements and styles. Several major questions can be addressed: (1) Is there a degree of similarity between Fremont and Anasazi rock art which would suggest a large degree of interaction and/or similar origins? (2) What is the relationship between Fremont rock art on the Colorado Plateau and that in the Great Basin and what is the difference, if any, between both groups and their Anasazi neighbors to the south? and (3) Are there rock art elements or styles that might identify more integrated and localized Fremont variants?

By far the most interesting distributional pattern is that of elements and motifs that are found throughout the Colorado Plateau, in both Anasazi and Fremont areas, but which are not found in the Great Basin part of the state (Fig. 2). There are a number of these elements including footprints, bow-and-arrow, sheep with lines through them, birds, earbobs, etc. The large number of these elements and the number of sites in which they are found suggest that there was a relatively high degree of interaction north and south along the drainages of the Colorado River, and somewhat more limited interaction between the Great Basin and Southwest generally. In terms of rock art alone, a case could

be made for a higher degree of interrelatedness between Anasazi and Fremont on the Colorado Plateau than could be made for interaction between the "Fremont" of the Great Basin and those of the Colorado Plateau.

There are a number of elements and styles that have a somewhat restricted distribution which conforms to the generally recognized occupation areas of the Fremont and Anasazi (Fig. 3). Shield figure motifs and square-headed anthropomorphs are examples of elements which are found throughout the Colorado Plateau Fremont area and extend beyond the range of individual Fremont "variants" that have been defined (e.g., Marwitt 1970). Stick figure anthropomorphs and rectilinear mazes are examples of elements that are restricted principally to Anasazi areas, but which cross-cut such lower taxonomic groups as the Mesa Verde, Kayenta, and Virgin branches.

There are a number of motifs and elements which have an even more limited distribution (Fig. 4). Within the Fremont area, rainbow motifs are found only in that portion of the Colorado Plateau identified with the San Rafael Fremont (Marwitt 1970), and "head-hunters" are found only within the Uinta Basin area occupied by the Uinta Fremont. Tightly restricted elements associated with the Anasazi include "duck-headed" men and head/ear disks found only along the lower San Juan River, combat motifs found between the Green and San Juan rivers, and flute players and white handprints found in other restricted areas. "Candelabra" are restricted to the Great Basin portion of the state and may be associated either with Archaic or later Sevier/Fremont groups.

The distribution of rock art styles and motifs seems to support the consensus reached by the 1980 symposium. That is, within the general Fremont area there seems to be a basic difference between elements and

styles on the Colorado Plateau and in the Great Basin, while within these two areas there seems to be regional subdivisions containing unique rock art motifs. The distributional patterns also seem to suggest that the division between the Anasazi and Fremont on the Colorado Plateau is somewhat fuzzier than their taxonomic placement might suggest. While some elements are clearly restricted to one area or another, a number are found all across the Colorado Plateau. Whether or not this distributional pattern is the result of extensive interaction between two separate groups or is the result of common origins cannot be determined from the information at hand.

### SUMMARY

Sixty rock art elements and styles found in Utah can be grouped into *Geometric*, *Representational*, and *Bizarre* categories. The distributional patterns exhibited by these motifs range from generalized to tightly restricted. Many are tentatively associated with particular prehistoric groups. During the Fremont/Anasazi occupation period there appears to have been a higher degree of interaction between areas north and south along the Colorado River than between the Great Basin and the Colorado Plateau.

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