PROPOSAL FOR IDENTIFYING SAN DIEGUITO SITES IN BAJA CALIFORNIA

ANTONIO PORCAYO MICHELINI
CENTRO INAH BAJA CALIFORNIA

The objective will be to offer some criteria and hypotheses to test in future site recording and excavations. These will be used to confirm that the people we identify as belonging to the San Dieguito Complex did indeed behave in ways that distinguished them from other groups that were earlier, contemporaneous, or later, as evidenced in their material remains.

One of the main problems that Mexican archaeologists who work in the northern part of the state of Baja California currently face in trying to identify the recovered archaeological materials is to use these to determine chronology and cultural affiliation. Traditionally, this has been done by comparing the materials found with those already documented in California, almost always primarily on the basis of the chronologies proposed by the archaeologists Malcolm Rogers and Claude Warren, both for the Pacific coast and the deserts.

Recently in the northern part of the state of Baja California two sites have been found with lithic artifacts that, when identified in the traditional way, are similar to the tools of the San Dieguito Complex. In addition, recent archaeological work on the Pacific coast between the cities of Rosarito and Ensenada as well as inland has continued to find isolated artifacts that “it is assumed” could be San Dieguito, although doubt always remains. Are they indeed San Dieguito, similar to the artifacts documented in California? Could they be San Dieguito, although mixed and associated with later materials? When is a site San Dieguito, and when is it not? What, ultimately, is “San Dieguito”? Is it a series of artifacts with similar characteristics in a region with sites where it sometimes predominates in the sample, but at other times it occurs only as isolated artifacts?

In this paper, the term San Dieguito is used as a very preliminary criterion to identify a series of artifacts. We will not go deeply into the question of whether or not it is the most suitable term to define this series of artifacts.

The objective of the present study is to propose a series of hypothesis to be tested by investigators in the field and during the analysis of materials. It is not to attempt to identify artifacts in literature already published on the subject, but to identify a very characteristic behavior that, independently of its age, is seen in the evidence, and that distinguished one human group from others at diachronic and synchronic levels. This is seen in its lithic industry, understood as:

a broad process consisting both of manufacturing techniques by means of which human beings transform natural rock with the objective of obtaining a tool, and also of intermediate processes, from acquisition of raw material to the quantity, quality, and use of the finished artifacts, as well as other activities articulated through “operational sequences” [González and Mirambell 2005:11].

PROPOSAL

The San Dieguito Complex has been defined mainly by means of its artifacts. Almost all of the publications include classifications of the most diagnostic and frequently recurring artifacts, and this generally is the basis for determining whether or not a site has a San Dieguito occupation. However, one of the most important matters concerning this complex has been omitted, which is that the artifacts were made by human beings with patterns of behavior that are seen in their material culture, understanding behavior to be the set of repetitive, deliberate actions with which a living being responds to a set of circumstances.
Therefore, based on analysis of lithic materials from the Ignacio Zaragoza site and from Cerro Colorado or Cerro Pinto, two sites with abundant “San Dieguito” materials, and on observations at several sites on Baja California’s Pacific coast, I understand the San Dieguito lithic industry as behavior characterized by commitment to a specific manufacturing technique and to the systematic replication of lithic artifact forms. These are based on generalized archetypes, but with innovations or variants of the archetypes at each of the sites, which adopted ever more complex and specialized activities of production and use than in the original case, perhaps as a response to the environmental conditions that prevailed in its ancient setting. This behavior took place around 8,000 years ago, as documented at dated San Dieguito sites, and it would not be repeated in such an evident, deliberate, and complex way in other contemporary lithic industries, in subsequent ones, or by other human groups, at least in Baja California.

The emergence of this lithic industry must be characterized by observing and defining the manufacturing technique, form, and function of the archetypes that were used and that would later be systematically repeated and perfected. If in the future these events are adequately identified, I believe that it may be possible to distinguish phases, although it is possible that this industry did not emerge in the region of Baja California.

After the analysis of the materials from the Ignacio Zaragoza site, it was observed that, to a certain extent, the San Dieguito artifacts were mixed with later ones. However, once they were classified, differences between two distinct lithic industries were evident. Several diagnostic traits form the basis of this proposal:

1. Raw material. Among the San Dieguito artifacts, high-quality raw material was always used, characterized by not having intrusions of other crystals, in order to avoid unnecessary fractures and to do excellent retouch. The raw material of most later and non-San Dieguito artifacts in the northern part of the state of Baja California is characterized by haphazard selection of the rock, without the procurement of good material for making high-quality artifacts. Except in the case of late-period projectile points, for which good-quality materials like obsidian were used, the later lithic industries were negligent in this respect.

2. Manufacturing technique. On all San Dieguito artifacts, there was complete removal of cortex from the cores and flakes that would be used to make the tools. Although some artifacts with cortex do exist, they are rare and are distinguished from the others by their retouch, or else they are artifacts that were discarded during the manufacturing process because they broke before reaching their finished form. San Dieguito retouch is generally bifacially or unifacially invasive (or marginally invasive), combined with a great variety of forms. Intentionally sharp edges were always produced by retouch.

Later and non-San Dieguito artifacts are characterized as mostly unifacial, with only the amount of retouch necessary to make them useful with a sharp natural edge, or to give them the most basic shape for use. Very little time was invested in working them, and this is reflected in the fact that these artifacts were made from primary flakes on which cortex is seen.

It is probably only in the case of large artifacts, such as the choppers or axes, that the San Dieguito lithic industry is found to be less sophisticated. For this type of artifact, it would be necessary to analyze the raw material, which was certainly of good quality regardless of the manufacturing technique.

3. At all known San Dieguito sites, great variation is evident in each form, from the projectile points and knives to scrapers. This makes clear the high degree of specialization with respect to the use of each artifact.

4. This leads us to the following matter, which is very important. For each artifact form produced by the San Dieguito people, there were archetypes or conventions concerning what they ought to be like, and these had to be repeated and manufactured as closely as possible according to the archetype. This suggests two things. First, once again, is the high level of specialization in activities to obtain food by hunting and processing of animals and vegetables with diverse devices, shown by systematic repetition in the working and the forms of the tools, each of which
had a specific use. On the other hand, this also suggests a pattern of behavior that would not be repeated nor found to be reflected in the later lithic industries, at least in Baja California, in that these “conventions” were established and accepted by a group, and the individuals of each group had to respect them or to come as close as possible to repeating a give mode of production and subsistence, specialized and spread through much of northwestern Mexico and the American Southwest.

As seen in the case of the Ignacio Zaragoza site -- although this is also evident at other “San Dieguito” sites -- there are 20 varieties of artifacts unique to the site. This also makes it evident that in the occupants’ behavior, one of the main characteristics of the people who developed this sophisticated lithic industry was, I think, innovation and adoption of new artifact forms for work that they themselves were making more complex and specialized. On the other hand, I think that these innovations can confuse investigators when the latter try to identify their materials, because they are certainly going to encounter varieties that were not previously documented. Nevertheless, we will always find the commitment to the archetypes, although perhaps also with innovations, associated, as has been noted, with a good selection of raw material and a sophisticated manufacturing technique.

In the later artifacts from northern Baja California, this pattern does not exist, because those were made in the simplest ways possible, without any archetype, without any sort of finish or refinement in manufacturing technique, except in the cases of the projectile points, milling tools, and ritual items such as pipes.

5. Another interesting aspect of the artifacts of the San Dieguito industry that is very important, and that also differentiates them from others, is that the artifacts that compose it are highly ergonomic, meaning that they reflect extensive knowledge of a range of anatomical and technological data that their makers applied to problems of mutual adaptation between themselves and their tools. Later artifacts do not present clear evidence of this phenomenon. Resulting from this is one of the main characteristics of San Dieguito artifacts, their bifacial and unifacial shaping with invasive or covering retouch, which was also done for this purpose.

In a general way, we can say that the contextual characteristics of the three most representative groups of San Dieguito artifacts at Zaragoza and other Baja California sites that confirm this particular behavior are the following:

Projectile points. Most of the complete projectile points are found on the surface and are not found at sites, from which it is evident that they were used away from the settlements where they were manufactured. At sites like Zaragoza, most of the projectile points are fragments that form part of the manufacturing residues produced there. There is considerable variety of form shown in the fragments, which indicates specialization or a specific function in hunting a particular type of fauna. The points are always made with material from the nearest source, which is the same high-quality material used to make the rest of the tools. The points, in spite of their sophisticated retouch and form, are of a substantial size and weight, which would have permitted their hafting only on wooden shafts, not on reeds like the later points, which are lighter and smaller (Figure 1).

The projectile points and knives of this type found at coastal sites could well represent missed shots that were left at locations where the hunting was abundant and where other human groups subsequently settled, becoming mixed in with later materials, or they may simply be reused artifacts.

Knives. Two types exist: those that end in points, and those with rounded ends. The first, like the projectile points, were used off site and could have been hafted to serve in lances or hand-held knives. Like the projectile points, the knives of this type found at the Zaragoza site are only represented by discarded fragments, indicating that they were evidently used in finished form off site, which also suggests to us that game was butchered away from the camp (Figure 2).
Rounded-tip and oval knives are generally complete at Zaragoza, and hence it is very probable that they were used in very specific activities at the site, for the processing the foods that were acquired and consumed (Figure 3 and 4).

Scrapers. These artifacts are almost always complete at the sites, as was also observed at Cerro Pinto. There are several forms, such as narrow scrapers, that attest to a high degree of specialization in the use of this type of artifact (Figure 5).

Based on the preceding, it may be proposed that a site should be considered San Dieguito only under the following conditions:

1. The settlement is at or near sources of good-quality raw material that was used in making most of the artifacts. This has been observed in the case of the Ignacio Zaragoza and Pinto Cerro sites in the state of Baja California.

2. At sites with only a few San Dieguito artifacts, it is necessary to consider first their proportion with respect to the rest of the materials; to consider whether they are artifacts, such as projectile points or knives, that were used away from camps, or artifacts that were used at camps for processing and consuming food; and to take into account whether a travel camp or a permanent settlement is involved. At some sites, isolated scrapers or points attest to very ephemeral or casual activity, mixed with abundant later material. This is the case at several Pacific shell
middens in the state of Baja California, which, on this basis and because of the low percentage of artifacts of this type, do not constitute “San Dieguito” sites.

3. Forms of artifacts such as projectile points, knives, and scrapers that are typical of the Harris and Zaragoza sites must be present.

4. Artifacts that were used off site but which they were discarded during their manufacture for various reasons should be found. San Dieguito camps like the Zaragoza and Harris sites leave evidence of prolonged stays and intensive lithic flaking that was carried out there.

Thus it is clear that if a site is not found to contain evidence for all the activities related to the acquisition, processing, and consumption of foods, as well as of behavior very specifically oriented toward the manufacturing of lithic artifacts according to established archetypes, then the site simply is not San Dieguito, since the people were not behaving as the San Dieguito people did, and they evidently must be seen as reflecting very different lithic industries. It is one thing to find a casual presence of San Dieguito artifacts, or something that appears to be similar, at a site with several occupations by other human groups, and it is another to have a site where the San Dieguito people lived their daily lives during very long stays, with all that implies in the archaeological record.

**FINAL CONSIDERATIONS**

This proposal has been based on observation and analysis primarily at two sites, Ignacio Zaragoza and Cerro Pinto, but also on observations of materials from several sites on the Pacific and Gulf of California coasts, as well as in the Mexicali desert, during more than two years of investigations in the northern part of the state of Baja California.

In the end, this proposal is a series of hypotheses to be tested by the concerned investigators. It has as its objective to orient the identification of lithic materials in order to assign a cultural affiliation to them, understanding by this a very characteristic set of behavior that is reflected throughout a named lithic industry,
such as San Dieguito. On this basis, materials can be identified that agree with this behavior, independently of their quantity, transience, and associations with other materials. In this way, we seek to set aside the traditional way of identifying materials, comparing them with others that have already been documented or published. This was achieved, however, through a typology based on materials from the Ignacio Zaragoza site, taking into account that in a lithic typology, we seek to define the artifacts that are the object of our study, and for this it is necessary to investigate, not to base ourselves on what others have said and done. We must establish our own hypotheses, and for that it is necessary to be intuitive in order to arrive at valid deductions and to take a step forward [Mirambell 2005:33].

REFERENCES CITED

González Arratia, Leticia, and Lorena Mirambell

Mirambell, Lorena
Figure 4. Rounded tip knives.
Figure 5. Scrapers.