## THE ABAJ TAKALIK SITE MAP

by

## Colin I. Busby and Mark C. Johnson

The mapping of Abaj Takalik was undertaken with the object of obtaining a preliminary planimetric view of the site and to determine the locations of the numerous stone monuments in relation to the various terraces and structures present. Due to the great extent of the site and the limitations of time, the survey was confined to but one portion of the total site. With this in mind, the map should be viewed as only a <u>tentative</u> and temporary reconstruction of this single portion. <sup>1</sup>

The plane table method of survey (cf. Bouchard and Moffitt 1959; Spier 1970 for a discussion of this survey technique) was chosen for the site because of its ability to produce an accurate and reasonably complete map while in the field. In this case this was a prime factor; while a closed traverse survey could be made utilizing the road network surrounding the site as a boundary, access and a reasonably clear view of the various structures and monuments was obscured by the heavy growth of economically valuable coffee trees. Once the traverse was completed and other features and details that could be mapped in from the roads were recorded, the structures and monuments were located on this map using the previously mapped roads and other known features as controls.

A structure's dimensions -- base measurements, width and length of top platform, length and percentage of grade of the faces -- were measured after the survey crew members had determined the extent of the mound or terrace boundaries by visual inspection. The procedure was often an extremely difficult and frustrating experience because of the heavy undergrowth, the effects of erosion on the structures and the fact that portions of the site had been disturbed by road construction and/or the agricultural techniques used in the planting of the coffee and shade trees. Measurements of each structure were made with standard taping techniques. The average percentage of grade was determined for each face with the clinometer of a Brunton Pocket Transit, and the orientation of the mound, in regard to magnetic north, was found with a standard compass. All of these data were entered in a survey notebook for future use.

After several structures in close proximity had been measured and their orientation checked, measurements were taped on a compass bearing between various mounds, the road network and features of a known location to allow the accurate plotting of each structure on the plane table sheet from the notebook data. Terraces were similarly plotted except that the terrace faces were measured at regular intervals in order to determine if any variations were present over their length. The locations of the various monuments and other features were plotted based on their orientation to the various mounds and other elements. After each "group" had been located and plotted on the map, a field check was conducted utilizing additional taped measurements and observations from different high points on the site to determine if the plotted items were Since only a planimetric view of the site was required because of the preliminary, exploratory nature of the project, no topographic mapping was attempted. The contour line representing the gradations of a slope of the barrancas which border the site on the east and west, were made utilizing the data supplied by topographical map No. 1859-II, a map of the 1:50,000 series published by the Direccion General de Cartografia de Guatemala in 1962. The height of each structure and terrace was calculated using the data obtained from the field survey and standard trigonometric calculations. Several of these determined elevations were checked by the hand levelling method and found to be within  $\pm 1.0$  meter of the field check. Both calculated and field determined measurements were used as a basis for the profile.

It should be stressed that as the structures and terraces of the site were primarily of earthen construction, the erosion of their surface features was quite extensive in most instances. The reconstruction of these features for mapping purposes was, therefore, based on a close, visual inspection of surface remnants followed by the measuring procedure previously described. Every attempt was made to insure that the survey was conducted to the highest standards of accuracy possible under the field conditions present. In certain areas, however, qualitative judgments or interpretations had to be made in estimating the extent of structural features and the general layout of several mounds and terraces. The area south of Mound 5 is one of these areas. Past road construction has obliterated the edge of the mound and substantial portions of the two terraces which lie just to the south. Our reconstruction was determined through the application of the measurements from the intact faces of the respective mound and terraces under the assumption that all three structures were regular in form. Similar confusion existed in the determination of the original extent of the eastern faces of Mounds 2, 7 and 13. The road from El Asintal to Colomba, a much traveled thoroughfare, runs along the eastern edge of these mounds, and in some cases, has cut into various portions of the structures, considerably altering their configuration. Those portions of each mound face which seemed not to be damaged by the encroachment of the road were used to establish an approximation of the original extent. This procedure was employed in several other instances where a similar problem of erosion existed, as well as in cases where the density of vegetation made it impossible to obtain a clear view of a structure's surface.

It is clear, therefore, that our reconstruction is simply an attempt to approximate, to the best of our ability, the original architectural features visible on the surface of the site. In closing, it is re-emphasized that this map is only a preliminary version. Further field work is required to improve the accuracy of the map and to determine the full extent of the ruins of Abaj Takalik.

## Notes

1. Survey crew members participating at various times in the mapping were Brian Dillon, Edgar Torres and Steven Wegner. They deserve our special thanks for their observations and able collaboration.

## Bibliography

Bouchard, H. and F. L. Moffitt 1959 Surveying. Fifth Edition. Intext.

Spier, R.F.G.

1970 Surveying and Mapping: a Manual of Simplified Techniques. Holt, Rinehart and Winston.

