

# Chapter Four

## Research Design and Methodology

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The research at Homol'ovi IV was guided by the typical concerns of space and time, but also origins and migration, village organization and growth, and relationship to other Homol'ovi villages. These concerns will be addressed separately below.

### SPACE AND TIME

Since the time of Colton (Colton 1956; Colton and Hargrave 1937), archaeologists believed that Homol'ovi IV was occupied only during the early, or Tuwiuca Phase, occupation of the area, or about 1250-1300. Surface evidence of pottery collected by HRP from the village prior to its excavation revealed no Jeddito Yellow Ware with yellow hues, confirming Colton and subsequent (Hantman 1982) evaluations of these general dates. HRP work at Homol'ovi III (Adams 2001) had suggested that the pottery at Homol'ovi IV looked even slightly earlier with few polychromes and dominated by black-on-orange types. This raised the possibility that Homol'ovi IV was earlier than Homol'ovi III and possibly the earliest of the Homol'ovi villages. Determining the relative date of its founding became a priority. If Homol'ovi IV was the earliest village, HRP was curious as to whether or not it predated other villages or its occupation overlapped with Homol'ovi III and others.

Related to its occupation was determining the spatial extent of the village and its related features, including pit structures, or kivas, and pla-

zas. Just how large was Homol'ovi IV? Estimates had ranged from less than 100 rooms to 250 rooms by HRP alone. Therefore, in addition to systematic excavations, a complete wall-tracing project was planned for Homol'ovi IV. Not only was the wall tracing beneficial to estimating village size, it was also expected to inform on village growth through tracing abutment and bonding relationships.

### VILLAGE ORGANIZATION AND GROWTH

A natural product of the investigation of time and space at Homol'ovi IV is village growth and organization. Just how large was Homol'ovi IV at the beginning, how did it grow during its occupation, and how large was it at abandonment? Also, what can we learn about social, political, and religious organization at Homol'ovi IV. Investigations at other Homol'ovi villages have revealed the existence of spinal room blocks, which are sets of rooms constructed at the same time and presumably by a work group composed of related individuals (Adams 2001, 2002; LaMotta 2003). If spinal room blocks represent social units at other Homol'ovi villages, how are they manifest at Homol'ovi IV? Is village growth at Homol'ovi IV punctuated or continuous? Does it represent small social groups the size of the family or larger social groups the size of multiple families or lineages? How was village growth "managed" by village leaders? How were the various social groups in-

tegrated to allow village cohesion and cooperation in tasks such as constructing irrigation ditches?

As noted above, an important component of the fieldwork at Homol'ovi IV was tracing as many walls as possible and noting abutment and bonding relationships. This process enabled HRP to determine the nature and pace of village growth during the occupation of Homol'ovi IV. Additionally, the mapping project allowed HRP to determine room size, the location of open or public spaces, and the location and number of kivas and other possible ritual structures. These are important architectural components of village organization.

### ORIGINS AND MIGRATION

Because Homol'ovi IV was considered one of the first, if not the first, village occupied in the Homol'ovi settlement cluster, HRP viewed research there as an opportunity to understand the source of the village population. Survey and excavation of pre-Homol'ovi villages (Adams 1996; Lange 1998; Young 1996) had determined that for all intents and purposes, the landscape where the Homol'ovi villages were established in the later half of the 1200s was devoid of human settlements. This ensured that Homol'ovi IV was settled by immigrants. What was the source or sources of these immigrants?

To address the possible sources of Homol'ovi IV population, the expectation was that architecture and pottery would be the best indicators. The organization of space is a strong cultural expression and differs in regions believed to be most likely sources of immigrants who established Homol'ovi IV (Hillier and Hanson 1984). Numerous ceramic analyses can be used to assess the location of manufacture of pottery found at Homol'ovi IV, including paste and temper analysis and neutron activation analysis (Colton and Hargrave 1937; Lyons 2003). Complementary to chemical and paste analyses are studies of

vessel form and design (Lyons 2003, Rice 1987; Shepard 1955). These analyses are complementary and if all point to a single source area are powerful indicators of the source of immigrant populations.

Related to origins is abandonment of Homol'ovi IV. What were the causes and where did the population move? Did it leave the vicinity, move into another existing Homol'ovi village, or did the occupants establish another later Homol'ovi village? Numerous lines of evidence can be brought to bear on studying abandonment and emigration. At Homol'ovi IV we looked at how rooms were abandoned. The presence and nature of floor assemblages indicate whether or not abandonment was systematic and organized or hasty (Schiffer 1976). The nature of the assemblage also indicates whether the move is short or long distance. If Homol'ovi IV occupants moved a short distance to another village or another location that evolved into another village, the expectation is that most material culture will be removed and taken to the new location. If the move is long distance or rapid, the expectation is that more material will be left behind due to the limited ability to transport large or heavy objects. Items, such as pottery, flaked and ground stone could generally be easily replicated at new homes and would be left behind.

### RELATIONSHIP TO OTHER HOMOL' OVI VILLAGES

Relationship to other Homol'ovi villages is potentially complex. The foremost critical variable is to determine whether or not Homol'ovi IV was contemporary with any other of the Homol'ovi villages. If not, the next important question is did the Homol'ovi IV occupants migrate to another village and, if so, what is the evidence? If Homol'ovi IV's occupation overlaps with other villages, then the nature of those relationships can be evaluated in terms of exchange of material goods.

The original expectations were that Homol'ovi IV predates the other Homol'ovi villages and, therefore, did not have any social or economic relationships with them. The second expectation was that the occupants of Homol'ovi IV did not leave the Homol'ovi area, but instead were incorporated into one of the later large villages, most likely Homol'ovi I or II. Homol'ovi I and II were suspected because they are closest and clearly later than Homol'ovi IV. Homol'ovi III, although closer, was, at 50 rooms, too small to absorb Homol'ovi IV occupants. The only other Homol'ovi cluster village large enough to absorb the Homol'ovi IV population is Chevelon and it is 16 km (10 miles) southeast of Homol'ovi I.

When excavations were conducted in 1989, HRP believed the most likely candidate for absorbing the Homol'ovi IV population was Homol'ovi II. It was known that Homol'ovi II had over 1000 rooms and had been built in a brief period of time, probably less than 10 years. The size and rapid growth of Homol'ovi II supported this possibility. Subsequent research by HRP has proven that Homol'ovi II was founded much later than when Homol'ovi IV was abandoned. This leaves Homol'ovi I as the best local candidate for absorbing the Homol'ovi IV population. Evidence for migration to Homol'ovi I is based primarily on ceramics because Homol'ovi I was occupied for at least 100 years after Homol'ovi IV was abandoned and much of the original village configuration was obscured by subsequent construction to its final size of about 1100 rooms (Adams 2002). Detailed arguments for and against Homol'ovi I as the migration home for Homol'ovi IV will be explored later.

## METHODOLOGY

Homol'ovi IV is a difficult village to excavate because of the extreme relief of the settlement. Most of the village lies along the south and east slopes of a 15 m high butte that average 50% grade. Such

a steep slope has fostered erosion that has been accelerated by persistent vandalism of the site since the late 1880s symbolized by its local name of "Pottery Hill." With the expectation of only one season of fieldwork, it was decided to focus excavations on the lower slopes of the village, but to attempt to map the entire village using a theodolite and EDM. These two approaches promised to give us the variety of data needed to answer the research questions posed above.

## EXCAVATION STRATEGY

The extensive vandalism of Homol'ovi IV enabled HRP to determine the general layout of the village prior to excavations. The village seemed to be laid out in seven arcs of rooms along the slopes of the butte with rooms on top of the butte and scatters of rooms at the base of the butte below the arcs (Figure 4.1). The lower rooms were discontinuous around what seemed to be a large open space, or plaza, that apparently was bounded by rooms on the north, east, and west sides, but was unbounded to the south. Additionally, an isolated structure on the southwest edge of the village appeared to be a kiva, suggesting the limits of plaza space.

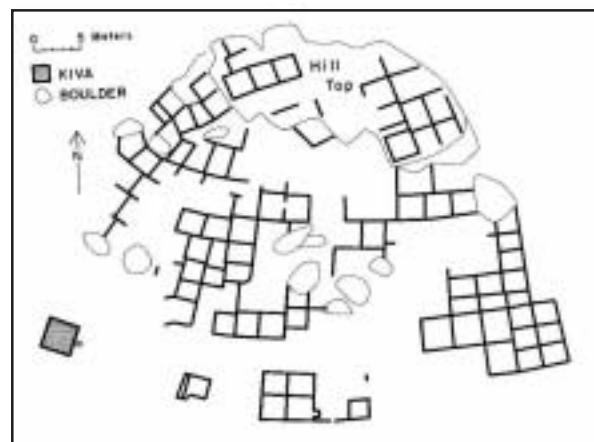


Figure 4.1 Homol'ovi IV

Sampling of this array of architecture and open space was designed to maximize HRP's understanding of spatial and temporal variability of

Homol'ovi IV. To accomplish these goals it was decided that it was not possible to excavate in every part of the village and make meaning of such disparate information. Given the difficulty in accessing the higher parts of the village and the damage that would be done in hauling wheelbarrows and other excavation tools up the slope, it was decided to focus on the lower arcs of rooms while doing detailed mapping of the upper arcs and rooms on top of the butte. The added advantage to working in the lower rooms is their proximity to the plaza and potential ritual structures, perhaps gaining perspectives on spatial organization and village growth.

As a result, excavations began in the isolated kiva, designated structure 1, on the southwest edge of the village, in the lowest three arcs of rooms above the plaza, and in the plaza itself. Excavations in three different arcs would provide a sense of whether they were built at the same or different times. The expectation was that the top or highest arcs of rooms were built first. Secondly, what were social relationships between arcs of rooms? These could be investigated by whether doors or other indications of connections occurred just within arcs

or between arcs as well. Similarly, room use differences between arcs of rooms could be investigated and evaluated as to whether or not there were patterns, such as had been found at Homol'ovi III (Adams 2001).

Initial excavations within the plaza adjacent to the lowest arc of rooms indicated that the lower slopes of the butte had originally been the midden for the upper arcs of rooms. As a result, the lower arcs of rooms were built over considerable depths of trash and in effect sealed these layers from additional disturbance. This discovery led to two additional sampling strategies. First, excavations progressed below floor levels of rooms to bedrock or noncultural soils. Second, excavations in the plaza became much more complex because numerous plaza surfaces were built as the midden raised the level of the surface during the village's occupation. This led to expanded excavations in the plaza and to testing of isolated late structures, such as structures 4 and 5, that were built over plaza surfaces. So, the relationships of rooms to specific plaza surfaces became an important tool to investigate the length and nature of village occupation.