

PROPOSAL FUNDED BY THE NATIONAL SCIENCE FOUNDATION

COLLABORATIVE RESEARCH: POWER AND ECONOMY AT THE MARANA MOUND SITE: STRUCTURE OF AN EARLY CLASSIC CENTER NEAR TUCSON, ARIZONA

Introduction

The Hohokam and other more complex prehistoric societies of the Southwest have not figured in theoretically formulating or testing the initial processes leading to complexity and inequality. Regional archaeologists have tended to rely heavily on ethnographically derived kinship in reconstructing past social organizations. Adding to their peripheral position with regard to mainstream social evolution of the past several decades, these societies conform poorly to classic criteria for chiefdoms; moreover, their comparatively abbreviated trajectories never culminated in states. Nevertheless, societies of the late prehistoric Southwest were undeniably middle-range and regional sequences exhibited increasingly largescale and complex configurations over time.

New approaches that transcend comparison against poorly applicable ideal types offer fresh opportunities to examine the emergence of complexity and inequality among Southwestern middle range societies within a context of broader evolutionary issues. The Hohokam of southern Arizona are particularly appropriate for such studies. Along with developments surrounding Chaco Canyon on the Colorado Plateaus and Casas Grandes in Chihuahua, Classic Period Hohokam socio-political organization is usually considered among the most advanced instances of Southwestern complexity (Cordell 1997: 340; Plog 1997: 179). Hohokam attributes contributing to this perception include maximally dense and permanent populations for the Greater Southwest, the largest prehistoric canal systems north of Peru (Doolittle 1990) and other intensive forms of agriculture (e.g. Masse 1991, Fish et al. 1992), multi-site political and territorial entities known as "communities" (e.g. Crown 1987; Wilcox 1991; Fish 1996), and the erection of relatively massive public architecture in the form of platform mounds at community centers (e.g. Elson 1998; Lindauer and Blitz 1997; Doelle et al. 1995; Gregory 1987).

The Marana Mound site in the Tucson Basin embodies the optimal setting for understanding societal differentiation within a community center during the early portion of the Classic Period (AD 1150-1300), when processes of centralization and integration accelerated throughout the Hohokam domain. The layout of the surrounding community and the position of this center with a platform mound are clearly defined by full-coverage survey (Fish et al 1992). This single component site spanning approximately one century is unique in its undisturbed condition without earlier settlement, later Classic overlays, or modern urban and agricultural intrusions. Previous Marana Mound site studies and intra-community comparison

have defined ritual, political, and economic variables by which inhabitants of this center were set apart from other community members (e.g. Bayman 1994, 1995, 1996, Fish et al. 1989, 1992, Fish and Fish 2000, Harry 1997). The present proposal seeks to investigate a further level of differentiation among the primary social and residential units at the site as well as the actors and activities associated with the platform mound.

Theoretical Perspective

A prominent and productive theme in current conceptual frameworks for understanding the forms and dynamics of increasing complexity is an emphasis on agency—the motivations and machinations of existing and aspiring leaders and elites. Southwestern societies present a particular challenge to agent-based approaches because the pivotal actors, the leaders and elites, are not readily visible in the archaeological record. Although there is unequivocal evidence for centralization and massive coordinated effort in some spheres, leaders are not distinguished by easily recognized indicators such as lavish wealth, obvious prestige goods and exclusive insignia, evidence of political coercion, or individualized prominence in art and iconography.

The absence of visible powerholders has posed a problem in uniformly applying the chiefdom category to highly variable middle-range societies in other world regions as well. Colin Renfrew (1974), for example, distinguished individualizing chiefdoms in which markers of leadership were well represented and group-oriented chiefdoms in which they were not. He attributed these differences to contrastive rationales for institutions of centralized action and authority. Stein (1994) similarly contrasted the economic bases for power between staple finance, in which surplus staples were mobilized by the elite and local exchange was most significant, and wealth distribution in which the elite circulated special items as prestige goods and to amass staples and external exchange was most significant. Blanton and others (1996) and Feinman (1995) also have noted polar modes in power strategies. In the networking strategy, prestige and influence depend primarily on external ties and success in brokering related goods and services. In the corporate strategy, leaders primarily manipulate the corporate structures of their own society. The corporate mode corresponds to relatively suppressed economic differentiation, while the networking mode emphasizes individual prestige and wealth.

In distinction to both the Southwestern tradition of relating prehistoric sociopolitical organization to ethnographic kinship and the linkage of inequality with genealogical ranking in the chiefdom model, current theories on the emergence of complexity highlight an interplay among multiple and often competing sources of power (e.g. Runciman 1982; Yoffee 1993; Brumfiel 1992). Although Feinman (1995: 268) identifies the importance of kinship affiliation as a basic tenet of the corporate mode, kinship relations undoubtedly do not account for all significant corporate political behavior in middle range societies. Indeed, scholars of social

evolution have suggested that political roles separated from real or fictive kinships are critical thresholds (Yoffee 1993; Arnold 1996). Processes of differentiation in Hohokam society have yet to be examined in light of competitive strategies among aspiring constituencies.

Hohokam Organizational Trends

Beginning in early Hohokam villages, two to six pit houses opening onto a common courtyard are considered residential aggregates linked by kinship (e.g. Henderson 1987; Howard 1985; Wilcox et al: 1981). Various authors attribute the greater size and continuity of some clusters to the success of a prominent household head in maintaining the cooperation of other nuclear families. Larger residential groupings with several house clusters are designated suprahousehold units or village segments (Henderson 1987; Howard 1985; Doyel 1991; Doelle et al. 1987; Wilcox 1987). Pit houses were largely replaced by Classic Period adobe rooms, but arrangements often resemble earlier groupings (Sires 1987). Adobe room clusters, especially in larger sites, were enclosed into walled compounds. Large compounds including several room clusters recall the higher-order suprahousehold units or village segments.

Formerly open residential space was partitioned by Classic compounds that segregated and secluded activities and possessions. This was a time of aggregation among the Hohokam and other populations throughout the Southwest (Fish and Fish 1991: 100-101; Adler 1994). Increasing heterogeneity and higher densities must have strained the efficacy of kinship as a mechanism for comprehensively regulating social relations. Under such conditions, physical enclosure in compounds may have emphatically demarcated co-residential and economically conjoined groups and reinforced the cohesiveness of members with dissimilar origins or conflicting kinship loyalties (Crown and Fish 1996). Walled compounds also provided social and architectural privacy conducive to individualized economic motivations and accumulation, thus creating a heightened potential for societal differentiation.

The Hohokam trajectory is marked by changing civic-territorial institutions that parallel developments in residential and kinship organization. These institutions are subsumed by the Southwestern concept of the community, which has archaeological expression in spatial patterns and symbols (e.g. Adler 1994; Doyel and Lekson 1993; P. Fish and Fish 1994; Wilcox and Sternberg 1983). A Hohokam community consists of a set of interrelated sites within a bounded territory and contains a center with public architecture of a kind and/or magnitude not duplicated in other community sites (S. Fish and Fish 1994). The integration of population and settlements throughout is symbolically embodied in the communal structures for observances on behalf of all members.

Although Hohokam political ideology engendered little tolerance or support for the personal aggrandizement of leaders, it was compatible with highly

centralized community functions such as the construction of unique public architecture, communal ceremonies, concentrated storage in many mound precincts, and probably some degree of coordination of external affairs. A trend toward increasing exclusivity in communal functions can be traced from the end of the pre-Classic era (ca A.D. 1150) through late Classic times. Direct participation and even observation of centralized activities became accessible to fewer and fewer as platform mounds were restricted first by palisades and then thick adobe walls and internal divisions. Simultaneously, roles and activities became more diverse and specialized, culminating in the elaborate mound precincts of large late Classic centers (e.g. Bostwick and Downum 1994; Jacobs and Rice 1995; Wilcox and Shenk 1977).

A lively Classic Period trade in exotic raw materials and finished craft items was widely evidenced among settlements and their residents. Material inequalities are detectable primarily in terms of the upper tiers of sites in settlement hierarchies (particularly mound centers) rather than unusually advantaged residential districts or households (e.g. Teague 1989; Neitzel 1991; Harry 1997; Bayman 1994). Remarkably wealthy burials and elaborate residences with lavish domestic assemblages have not been encountered (Brunson 1989; Mitchell 1991, 1994). Systems of prestige goods circulating among elites are not readily apparent; however it is likely that higher value items concentrated in centers were broadly manipulated to reinforce obligations in goods and services (Bayman 1995, 1997).

There are no indications that community roles and power were generated through pervasive systems of ranked kin as in traditionally defined chiefdoms. Public architecture does not repeat elements associated with lower-order kin groups and their integration, nor is there any evidence of ancestral symbols or ceremonies among the constituent units of Classic Hohokam society. Unlike kin-based chiefdoms, the architectural symbols of Hohokam integration would have been comprehensible within an ideology of community identity and territorial affiliation, communicating the cohesiveness and prominence of the community rather than the paramount position of a leader and his highly ranked lineage. Nevertheless, limited numbers of men, women, and children buried in mound precincts during the late Classic Period suggest that successional principles had been articulated by the final part of the Hohokam sequence, if not firmly established. This burial regime is compatible with an integrative ideology in which ultimate status was expressed through a privileged association with communal architecture rather than by genealogically ascribed insignia and wealth.

Integrative ideologies emphasizing civic-territorial principles and community identity would not be immune to manipulation by competing subdivisions of Hohokam society. Performers of rituals and other central functions on behalf of the entire community at platform mounds are the most obvious candidates for persons possessing ideological and economic power during the Classic Period. Heads of kin groups were also probable political actors, with roles intensified by the challenges of aggregation and heightened heterogeneity. Considerable influence

would have been wielded by irrigation and other water-use coordinators (Crown 1987; Gregory and Nials 1985; Nicholas and Feinman 1989), who may have attained leadership outside both kin and civic-territorial networks, in view of ethnographic Piman allocation of irrigation rights based on participation in canal construction rather than social affiliation. Prominent roles in the production and exchange of subsistence products, exotic raw materials, or crafts (e.g. Abbott 1996; Fish and Donaldson 1991; Bayman 1995, 1996; Harry 1997) represent yet another source of influence and inequality. Competition and efforts to accrue, convert, or consolidate different sources of societal power may well have been the dynamic behind a convergence between platform mound precincts and resident family lines, as indicated by exclusive mound burial during the later Classic Period.

Previous Research at the Marana Mound Site

The Marana Mound site in the northern Tucson Basin represents an unusual opportunity to examine variables that offer insight into early expressions of Classic Period complexity and inequality. The internal structure and distributional profiles of community centers are key elements in elucidating the emergence of hierarchy and political economy. Because this site was newly settled at the beginning of the Classic Period and of finite duration, its architectural and artifactual configurations should represent tangible correlates of the social and ideological concepts appearing at that time.

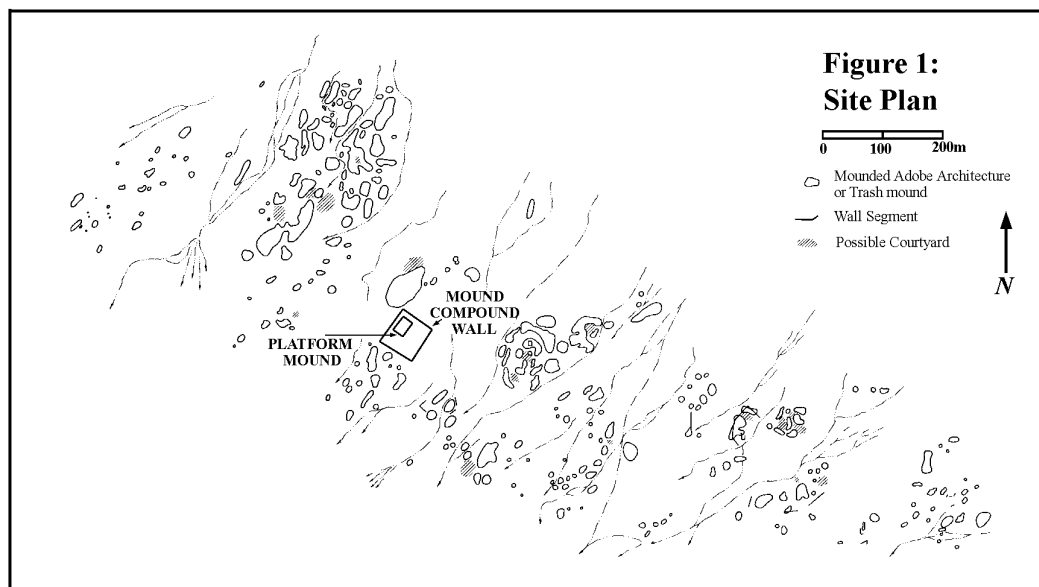
Two smaller and discrete pre-Classic communities coalesced to form the Marana Community of the early Classic period covering 146 square kilometers and including nearly 400 Tanque Verde phase large and small sites. Six zones of differentiated habitation and subsistence production encompass all environmental settings of the basin. Total area in residential sites increased by a factor of three over pre-Classic times, indicating an influx of population in addition to existing residents. The Marana Mound site was constructed at a central point. About 1.5 kilometers long and 0.5 kilometers wide, it constitutes the apex of three-tiered residential settlement hierarchy (S. Fish et al. 1989, 1992).

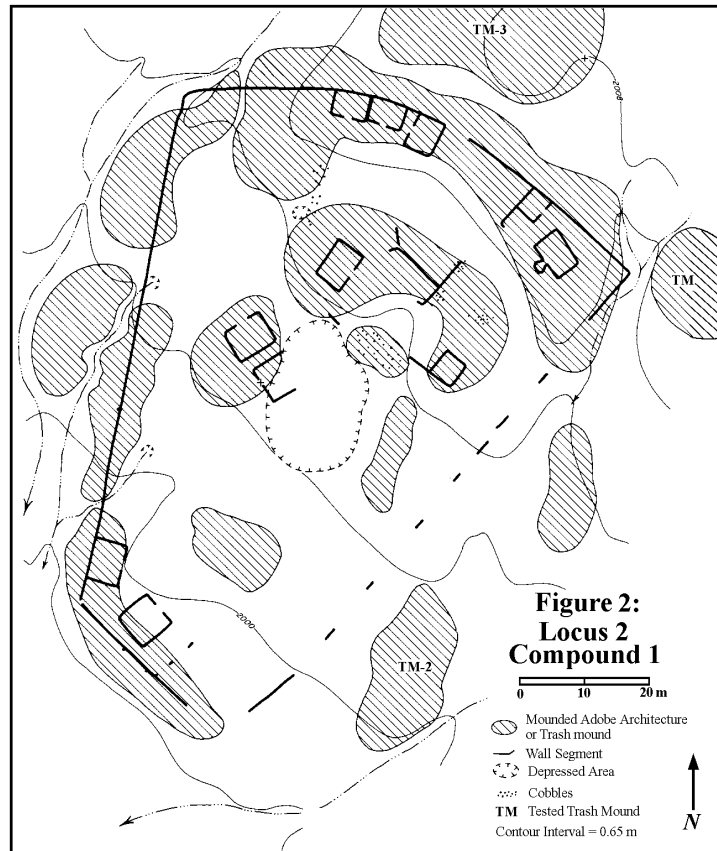
The mound site was not situated in the most favorable riverine or upland locales, but in a recently settled and agriculturally secondary area that also necessitated a 10 kilometer canal from the Santa Cruz River for domestic water. Adjacent farming opportunities consisted of floodwater fields on small alluvial fans and limited downslope irrigation. Huge rockpile fields for agave cultivation on dry slopes just above the mound site reflect specialized agricultural production (Fish et al. 1985, 1992). The advantages enjoyed mound site inhabitants cannot be attributed to a prime productive base. By the same token, it is unlikely that immediate agricultural production solely underwrote its prominent occupants; contribution in some form by outlying community members is probable. Pan-community functions are the obvious rationale for selecting this central location, but positioning for intra-community exchange is a corollary. The role of mound site

residents in intra- and inter-community exchange appears to be a fundamental factor in Marana political economy.

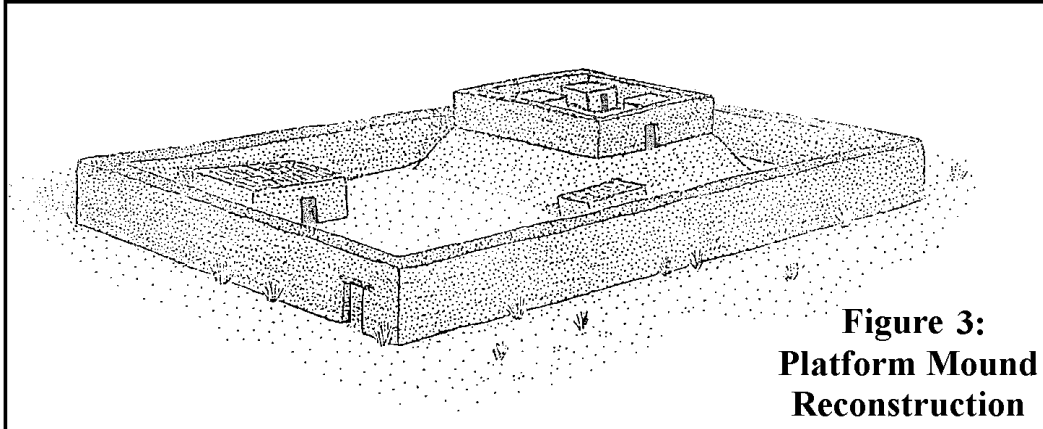
The site has never been subjected to significant disturbance nor have features been deeply buried by natural processes. A permanent grid of 50 meter squares served for systematic collections of surface artifacts and architectural mapping. The results consist of a total site map of a micro-topography of melted structural adobe, cobble wall alignments, and trash mounds in patterned arrangements (Figure 1). The map can be justified as an accurate approximation of site layout, with clusters of adobe melt corresponding to 22-25 compounds divided among six residential loci. Backhoe tests between remains of compounds confirm all site inhabitants lived in these walled units.

The ability to discriminate compounds has been demonstrated by completely exposing the wall outline of one that encloses 5500 square meters and approximately 20 structures within four or five internal subunits (Figure 2). At a conservative ratio of 20 to 30 persons to a compound, site population would range between 500 and 750, if all compounds are similarly large and occupied simultaneously. These excavations also clarified the association of multiple exterior trash mounds. Trash mounds are often cited as one of the facilities shared by households (e.g. Henderson 1987; Howard 1985; Gregory 1984); each of these features should represent the discard profile of a household subunit of the compound.





Excavation of three rooms in the mound precinct (Figure 3), six in the outlined compound, and one in another compound provide data on construction styles and artifactual contents. Mound proveniences yielded unique items related to ritual such as mountain sheep horn cores and sherds of effigy pots of *Datura*, an hallucinogenic plant. Rich assemblages in most residential rooms variously revealed generalized habitation functions, specialized storage in the form numerous large jars, craft production tool kits and debris, and ritual activities in the form of sets of antler headdresses (Fish and Fish 2000). Excavation of about two cubic meters at 18 trash mounds in all parts of the site permit comprehensive intra-site comparisons among associated compounds and in a few cases among member households of the same compound (Bayman 1994). The resulting large artifact assemblages also monitor access to exotic materials and participation in craft manufacture. Along with survey and site surface collections, these data sets provide the basis for a preliminary comparison between the mound site and other community settlements.



The Marana Mound site stands out from other contemporary community settlements in a variety of ways. On the basis of survey, it can be distinguished as the largest site, one of the few with compound architecture, and the only one with so many compounds. It produced almost the only distant trade wares and, along with three other large sites, significantly more decorated pottery. A neutron activation sourcing study suggests that these largest sites participated in a common exchange network that differed from the acquisition patterns and ceramic sources of other community settlements (Harry 1997; Harry et al. in press). Marana Mound site residential floor assemblages on the whole are distinctive in the number and variety of items, and the high frequency of artifacts linked to craft production and personal ornamentation (Fish and Fish 2000). Comparison of trash mound contents showed greater consumption and production of exotic items such as obsidian and shell and tools associated with agave production and crafts (Bayman 1994, 1995; 1996, 1997). There is marked concentration of imported items and manufacturing activities at the mound site compared to other settlements.

The scale of exotic materials and craft production at the Marana Mound site does not indicate an advanced degree of specialization according to current conceptualizations (e.g. Tosi 1984; Costin 1991; Rice 1981; Brumfiel and Earle 1987). However, the concentration of these items and activities at the center help elucidate the political economy of the community and the competitive strategies of resident groups. These groups played a key role in importation and external exchange within the community even though true prestige goods are not evident. Higher status individuals may not have directly or fully controlled the production, consumption, and redistribution of valued goods, but they undoubtedly manipulated their circulation through use in integrative rituals, intra-community exchange, and the creation of social obligations (Earle 1982; Hodder 1982; Clark and Blake 1994). It is also likely that these items concentrated at the platform mound figured strongly in the circulation of agricultural products needed to bolster mound site subsistence and to underwrite communal events, stores, and hospitality.

Internal differentiation within the community center, on the other hand, is much less readily apparent. An obvious model for the spatial partitioning of the site according to residential group status is the location of compounds nearer and more distant from the platform mound (c.f. Craig 1995; Craig and Clark 1994). None of the measures for higher value and exotic items, craft manufacture, basic ceramic shapes and sizes (Bubemyre 1993), and gross design elements (Doolittle 1992) revealed patterned inequalities in consumption and production between near and distant compounds, or among other site segments. These analyses of broad material categories produced parallel results, but do not begin to exhaust potential variation related to social distinctions and competitive strategies.

Although at one level generally uniform access and participation were found for broad material classes, distributions also suggested inequalities requiring larger samples and finer focus for satisfactory definition (Bayman 1995, 1997). Given expectations adjusted for samples, there were outlier values for obsidian or shell consumption in five trash mounds and for obsidian production in another. Exotic sherds and decorated pottery showed similarly elevated representation in two trash mounds, overlapping outlier proveniences for shell and obsidian. Indications of obsidian and shell production were comparatively low in the mound precinct, on the other hand, suggesting that manufacture was primarily connected with the economic strategies of compound groups. For most relevant materials and artifacts, larger samples would permit more meaningful typological comparison, for example the distribution of disk versus modeled spindle whorls, knife-like implements for agave harvesting versus fiber extractions, consumption and production of shell tinklers used on ceremonial garb rather than shell in general. Larger samples would also be likely to illuminate the significance of rare items such as spiked effigy sherds outside the mound precinct and manufacturing debris from turquoise and pipestone ornaments.

Proposed Research Methodology

Refining Site Chronology

Proposed excavations at the Marana Mound site will take advantage of a recent breakthrough in extending tree ring dating to the desert basins of the southern Southwest. Collation of a late prehistoric master chronology for this area and the examination of upland wood from excavated sites has resulted in several dates for two other Tucson Tanque Verde phase settlements (Dean et al. 1996) and a single date for the Marana Mound site. There is now the opportunity to broadly extend such determinations to track the chronological development of a Hohokam mound site. Preliminary analysis of structural wood from the frequently burned Marana Mound site rooms demonstrates that upland species including Douglas Fir, White Fir, and Ponderosa Pine were present in almost every case.

Jeffrey Dean of the University of Arizona Laboratory of Tree Ring Research, who will oversee this study, is confident that a relative chronology can be

established with burned beams and that a sequence of rooms can be developed even though many individual specimens are likely to contain too few rings for absolute dates. With increasing numbers of timbers that meet laboratory threshold criteria, this relative sequence can then be firmly anchored in absolute time. Hohokam dendrochronological determinations so far have required the examination of large numbers of specimens. Fortunately, the Laboratory of Tree Ring Research will be able to undertake routine analysis of all recovered tree ring samples as part of its Southwestern Archaeological Tree-Ring Dating Project funded by NSF Archaeometry Program Grant SBR-9805413.

The possibility of comprehensive tree ring dating throughout any site is an exciting new direction in Hohokam archaeology. At the Marana Mound site, it will begin to allow chronological discrimination for the first time within the single component resolution of the Tanque Verde phase. It will permit us to address basic questions such as the process of site growth, contemporaneity and duration of architectural units, maximum contemporary population, and the temporal relationship between construction of compounds and the platform mound.

A Four-Tiered Sampling Program

Differentiation among social constituencies at the Marana Mound site will be approached through a four-tiered sampling design focusing on residential loci or compound clusters, compounds, rooms, and trash mounds. Anticipated evidence for differential material advantages and competitive strategies will be sought in four realms. Excavation of compounds, rooms, and trash mounds will contribute differentially to these four realms, but evidence bearing on each realm has been identified and encountered in previous work.

1. Access to and consumption of exotic or high value items, including value created through application of labor such as architectural investment.
2. Economic activities beyond ordinary subsistence production and consumption, such as specialized agricultural production and craft manufacture.
3. Involvement in external exchange, whether with regard to the Mound site, the community, or the region.
4. Participation in communal or integrative observances as signaled by ritually-related items and features or associated activities such as feasting and the preparation of fermented beverages.

Compound Outlining

Although probable political actors can be suggested based on a general knowledge of Hohokam society, it is difficult to isolate the archaeological signatures

of different roles such as ritual specialists, heads of kin groups, and irrigation officials. In fact, it is likely that the most prominent individuals simultaneously held more than one of these roles. The tangible divisions of Marana Mound site society that can be operably compared and contrasted are the social groups residing in different compounds, which appear to embody conjoined aspects of kinship, co-residence, and economic coordination. It is possible to ask whether the members of different compounds were differentiated in terms of economic strategies, consumption of material categories, and ritual participation and whether the households of each compound were uniform in this regard or somewhat variable internally. In addition to positioning with respect to the mound, several variables relevant to differentiation among compounds can be measured by outlining the enclosing wall and attached rooms. These are relative size, estimated number of households, and the degree of architectural investment as gauged by wall thickness, construction techniques, and amount of calcium carbonate additive in adobe.

Sixteen of the 22-25 compounds at the site will be completely outlined. This is a relatively rapid and efficient operation which is accomplished by shovel scraping to remove from 10 to 20 centimeters of soil in a narrow swath overlying the intact base of the enclosing adobe wall. Lines of stones on the surface that have eroded from original positions between adobe wall segments, the configuration of melted adobe, and limited previous wall exposures at a number of compound loci provide logical starting points throughout the site. This outlining technique has proved particularly straightforward and successful at Marana where wall stubs are shallowly buried, and the Tanque Verde architecture is undisturbed by subsequent occupations or modern land use.

The sixteen outlined compounds provide the means for further sampling of architecture and artifacts. Junctures of rooms attached to the compound wall typically reveal a majority of enclosed structures, which can then be outlined in the same manner. Locations of some free-standing interior rooms will be indicated by concentrations of melted adobe and additional alignments of wall stones. Compound wall outlines also serve to clarify the spatial association of surrounding trash mounds. Particular attention will be directed toward discerning the placement of doorways in compound walls in order to confirm the relationship between constituent households and adjacent exterior trash mounds. At least two compounds will be outlined in each of the six compound loci. The four remaining compounds will be discretionally selected to encompass the greatest variability in compound size and construction investment.

Room Testing and Excavation

Rooms will be excavated in each of the sixteen outlined compounds, providing coverage across all site loci. Recovery of tree ring samples is one of the primary goals. The field schedule allows excavation of 22 rooms. This number will be apportioned so that two rooms rather than one will be excavated in one

compound in each of the six site loci. Selection of two rooms in separate parts of these six compounds may furnish information on construction episodes and compound duration. In addition to dating compounds and loci, room excavations will reveal floor features and assemblages characterizing the range of variability in function and content for the mound site as a whole. In turn, this set of information can be used for enhanced comparison with floor assemblages in other contemporary sites of the community and region. At present, such comparisons have been based primarily on rooms in a single compound. Trash mound samples associated with compounds provide the broadest array of consumption and production data; room assemblages, however, complement insights from refuse by encapsulating location-specific evidence such as specialized tool kits, room functions, and in situ production debris including micro-debitage.

Burned rooms will be targeted. They are the most likely to contain burned beams in datable condition as well as intact floor assemblages. Rooms defined by outlining in each of the 16 compounds will be initially tested with one by one meter excavations to identify burned features. Previous work suggests that up to 80% of rooms at the site burned, necessitating minimal testing to locate one or two appropriate rooms for full excavation per compound.

Trash Mound Excavations

The most comprehensive artifactual information about compounds will be retrieved from their associated trash mounds. Comparison of frequencies of common artifact types in Marana Mound site surface remains, trash mounds, and room contents has shown that all three contexts register generally the same proportions (Fish and Fish 2000; Bayman and Sanchez 1998). Trash mounds offer the advantage of incorporating refuse from outdoor activities as well as those undertaken in structures. Additionally, separate trash mounds arranged around the exterior of the compound represent the most efficient means of sampling internal residential subdivisions (presumably households) within them. As compounds are dated through wood construction materials in room excavations, a series of earliest to latest will be selected for thorough trash mound sampling. In these cases, several or all of the exterior trash mounds will be sampled both to very fully characterize debris from the compound as a whole and to examine variability among subdivisions.

Previous sampling of 18 trash mounds was undertaken at a rate of one by two meter units, yielding densities of artifacts (e.g. 500 to 2,500 sherds) sufficient to compare standardized ratios of broad material categories such as shell, obsidian, decorated ceramics, trade sherds, and types of manufacturing tools, and to ascertain the presence of debris related to craft production (see Bayman 1994, 1995, 1996, 1997; Harry 1997). Although these categories showed clear contrasts between mound site trash and trash from other excavated community settlements, they did not reveal internal mound site patterning among compounds nearer and farther from the platform mound. However, sample sizes of rarer items such as

shell and obsidian were inadequate to meaningfully examine finer scale differences among mound site compounds within these material categories. The major objective of currently proposed trash mound operations is to increase sample sizes by a factor of three, incorporating the previous smaller samples where they coincide with the present sampling design. We will then be in a position to address differences among compounds and in some cases among their constituent households at the level of specific artifact types and attributes.

Excavations in the Platform Mound Precinct

A few recent studies in the Hohokam domain and concentrated research in the Tonto Basin on its eastern border have documented considerable variability in the configurations and functions of platform mounds over the course of the Classic Period. Former assumptions that mound precinct rooms routinely coincided with residences of elites have been questioned, with some scholars rejecting this notion altogether (Howard 1992; Bostwick and Downum 1994). Some investigators (Doyel 1974; Elson 1998; Gregory 1987, Lindauer 1995; Rice 1992; Jacobs and Rice 1997) have concluded that particular mound precincts served solely for communal events while others included resident households of related leaders and specialists. It is clear that this issue must be addressed on a case by case basis and that final resolution will not be attained in the immediate future. Traditional evidence cited for residence, including the presence of potentially domestic floor features such as hearths, subsistence remains, and trash resembling that of residential compounds, remain ambiguous if communal observances were marked by activities such as food preparation and consumption and the temporary occupation of mound rooms by officiants living elsewhere. Burials in mound precincts, denoting a more formalized and permanent linkage for individuals or families, do not occur until the later part of the Classic Period.

Investigations of the Marana platform mound precinct will generally echo operations directed toward the other site compounds, but are of unique significance due to the mound compound's status as the center of communal and integrative events. All sampling contexts at the mound are likely to increase our ability to recognize the material correlates of communal activities and the ideology underlying them. At the same time, any contrast with activities largely confined to the domestic sphere should emerge through the suppressed representation or absence of resulting residues in this precinct. A single large exterior trash mound is associated with the platform mound and its compound. A previous sample will be augmented by several magnitudes.

Two of the four rooms atop the mound that resemble residential rooms elsewhere have already been excavated. The probability of assemblage recovery is low for the remaining two due to erosional damage. Half of an unusually large structure in the compound has been excavated; the remaining half will be completed. The locations of two additional burned rooms with abundant contents are known at the east edge of the mound and these will be fully investigated. A

previous test also revealed a burned surface on an earlier mound stage below the present summit. An enlarged exposure will be undertaken to recover burned beams known to be present and to investigate this earlier construction and its assemblage. Together, these proveniences should provide data revealing the tempo of mound precinct constructions and the chronological relationship of these episodes to residential compound construction at the site. In particular, mound chronology should help answer the question as to whether groups already resident at the site initiated the mound to promote and achieve a central role in the community or whether the mound was an integral part of the original settlement plan and layout.

Plan of Work

A three year schedule of field and laboratory operations is summarized in Table 1. Field operations will generally consist of a preliminary five week session during each of the first two years, followed by intensive fieldwork during the entire spring. Laboratory efforts will be continuous during the initial two years and will be the exclusive activity during the third year of the project. A final unbudgeted fourth year will be a sabbatical year for each of the three principal investigators and devoted to preparation of a monograph-length manuscript on the project.

Project Staff

The project field staff consists of the Project Directors (Bayman, Fish, and Fish) and excavation crew chiefs from the University of Hawaii and the University of Arizona

Permits and Agency Review

Approximately 50 percent of the Marana Mound site is located on Arizona State Trust Lands; therefore an Arizona Antiquities Act permit through the Arizona State Museum and research design review by the Arizona State Historic Preservation Office are required. These review and application processes have been initiated; earlier investigations are widely reported and no permit complications have arisen in the past. The remainder of the site is privately owned and permission has been obtained to conduct the proposed investigations. Consultation with representatives of the Cultural Resources Committees of the Four Southern Tribes (Gila River Indian Community, Tohono O'odham, Salt River Indian Community, and the Maricopa Community) and the Hopi Tribe as a potential sacred site has previously been completed and the research proposed herein falls within its scope. An outcome of this consultation is a standing burial agreement calling for avoidance of known cemeteries at the site and cessation of excavation with tribal notification in the event of any unanticipated exposure of human remains. Continued close cooperation and information sharing with these Indian communities will be observed.