

A STUDY OF EIGHT POST-WORLD WAR II
RESETTLEMENT VILLAGES ON GUAM

By

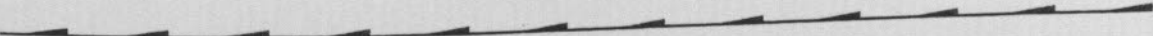
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considered a separate parish of Guam and was connected administratively with Umatac (Rogers 1995). Guam's 1710 population was only 1,551 plus 187 in Rota; the total Mariana archipelago population was 3,590 (Lévesque 1998:58). Deadly epidemics continued to decrease the native population in these early years of the Spanish conquest so that by 1722 there were but 1,936 persons recorded in the Marianas. As can be seen in Fig. 3, compiled from data in Lévesque (2002), Guam's Chamorro population hovered well below 2,000 persons for almost a century, when it climbed back up to that point in the early 19th century.

Depictions of Chamorro dwellings from the 1800s and during the following century are rare, since visiting artists focused upon drawing Spanish government structures made from stone and lime plaster (*mampostería* construction; see examples in Rivière 1996, Lévesque 2002). However, during the Freycinet Expedition (Freycinet 2003), a drawing was made of the ruins of the royal farm at Tachungna in 1819, which shows some wood and thatch structures – presumably occupied by Chamorro families who were present at the abandoned farm when the French scientists visited the site (Fig. 4).

In addition to the hints provided by drawings in the Freycinet collection, the ethnographic record of Micronesia suggests that on Guam too, most of the islanders lived in extended family groups and built thatch-roofed, slightly elevated wood post-supported houses. Variations on this simple house design can be found throughout the tropical islands, as it is well-adapted to the climatic conditions. Such structures are used primarily for sleeping and storage, and were likely so used in prehistoric Guam, perhaps as had latte stone-supported houses, with most daily activities conducted out of doors. As we will see below, the preference for an outdoor living area is a persistent Chamorro trait that survives until today.

In 1819, Rose Freycinet (Rivière 1996:84), the young wife of the captain of the expedition, stayed in the governor's residence at "Agagna," the Spanish capital and described the town as follows:

"Built on a very low plain by the sea, this town is flooded during the wet season by heavy rain and high tides. That is why the houses are built on pillars; a few have ground floors built of stone, but it is impossible to live there because of the dampness. Most of the streets are wide and quite well aligned. The majority of houses are well-screened from each other and, in the space between them, people usually grow a little tobacco. That separation is useful, because in the event of a fire it prevents the flames jumping from cabin to cabin, almost all of which are built of wood, matting and straw."

It is not clear just how the houses in Agana were "screened from each other," especially if there were not many trees in the town (see below). Freycinet's (Rivière 1996:85) remarks on her surroundings in the capital include puzzlement at the apparent lack of ornamental or vegetable gardens:

"Throughout Agagna, there is not a single garden. Nor are there many trees, except for a few which grow near the river banks. Opposite the Governor's palace is an enclosed field where he grows maize; it is the only plantation, I think, which produces any crop other than tobacco. Thus, there are no flower beds and no flowers—how sad! Nor are there any of the vegetables which lend such a delightful variety to our gardens. Whatever flowers one sees are on trees. Of the vegetables commonly known to us, here one finds only onion, purslane and tomatoes, which come from the country, where the Governor has some land under cultivation."

Freycinet's disappointment at not finding beds of flowers like one finds in the formal gardens in European cities perhaps is not surprising, nor is the fact that Agagna's flowers were mostly seen on trees, since flowering trees are typical in the tropics, a part of the world the Frenchwoman was visiting for the first time during the voyage of the *Uranie*. The governor's land under cultivation which she mentions may have been the site of the abandoned and deteriorated royal farm at Tachungna.

The kinds of structures and their building details used by early 19th century Chamorro families at their own *lanchos* have not been recorded in the literature. Probably they were less elaborate than the houses in Agana and were made of locally available materials rather than *mampostería*. Depending upon changing family size and food requirements, these structures would have varied in size, shape, durability, and number at the same site over time. It is also likely that inland caves and rock shelters were used occasionally, for shelter during typhoons and when small groups ventured into the bush on collecting or hunting forays.

Lee's (1997:79) survey of Guam architectural changes depicts the early Spanish district villages as basically linear in layout, with small thatch-roofed, rectangular houses elevated on wood posts aligned in parallel rows along a main road (Fig. 5a). Lee notes that in Inarajan the church was located at one end of the road, toward which religious processions marched. Other village churches have prominent positions as well, such as on a high hill or promontory that can be seen from all parts of the village. Lee suggests that the linear settlement pattern with a main street created a series of narrow activity zones. It should be kept in mind that not all villages were and are sited on level ground, and that linearity in street layout was probably limited to such areas. According to Lee, there was a central *zone of events* (Fig. 5a,b) defined by the main road along which public processions passed.

On both sides of the main road were *zones of engagement* where people from their open verandas could engage with participants in the processions along the main road. The "in-between spaces" at the backs and sides of the houses were zones of production, expansion, and utility, supporting household tasks and small expansions of the house, such as elevated cooking areas (Fig. 5c-e). These zones served as pathways between houses as well. Here people produced copra, cooked (sometimes in lean-to kitchens), and hung laundry to dry. Note the thatched-roof extension of the main roof to shade the zone of engagement in Fig. 5d. The pattern of extending the dwelling's roof to shade outdoor activities was carried through the resettlement period as will be shown later.

The second row of houses faced the zones of production, expansion and utility of the first row of houses. The porches or verandas of the second row of houses thus constituted another *zone of engagement* from which a variety of domestic activities that were conducted by occupants of the first row of houses could be viewed by occupants of the second row of houses. This conception is slightly at odds with Rose Freycinet's observation that in Hagatna each house was "well screened" from its neighbors. Different housing layouts, perhaps less crowded than Hagatna, may have occurred in other villages, for example, more winding streets where terrain was hilly and larger lots where some subsistence gardens were planted.

Continuing to generalize regarding Spanish period village dwellings, Lee (1997:83) depicts an "early Spanish house" and contrasts it later with a "later Spanish house" (Fig. 6a,b). In the early Spanish house (Fig. 6a), the entry stairs are roofed but open-sided and lead to the enclosed floor space of the house, which is mostly an open, unfurnished level floor (half of it used for sleeping at night); a small portion is devoted to elevated storage on a table or shelf. A small lean-to kitchen is attached to the back of the house.

Lee's "later Spanish house" (of the kind occupied by Chamorro families c. 1900) was more elaborate and designed to accommodate large families (Fig. 6b). Census data do not contradict this inference regarding Chamorro family size, which shows a sustained rise in the early 20th century. Underwood (1973:Table 8) found that in 1897, there were c. 597 children per 100 adult females (almost six children per adult female on average). By 1940 the child-woman ratio was 798, and by 1950, it was 974, or almost 10 children per adult female.

In the later Spanish house, according to Lee, production, e.g., animal slaughter, chicken raising, processing corn and rice, and storage of farm products took place underneath the house, in the dirt-floored *bodega* or working basement. Those families who could afford to do so built their houses with *mampostería* walls, wood sidings and a wood floor in the living room above the *bodega*. The rectangular interior space was subdivided but flexibly used, as before, for sleeping at night and for other purposes during the day, including areas for the display of religious icons and prayer. *Mampostería* walls defining a house lot may have been a late addition to this pattern, as seen at the Martinez-Notley property in Agaña (Photo 1).

The front of the house, with a long open veranda, faced the main road and thus perpetuated Lee's earlier-defined *zone of engagement*, while the rear of the house gave onto an activity area that included a sheltered oven and a sitting area surrounded by trees. This outdoor arrangement under the trees partially screened the family's activities from the neighbors' view, reducing or eliminating the *zone of engagement* with those in adjacent houses. Lee suggests that the house can be divided into two kinds of space,

"which can be analyzed in terms of formality, informality and as two separate houses...

The interior is the memory box, a display of tradition, ancestry, faith, and western commodities. It represents artifacts from the three cultures which it has come in contact [with]. Their own, the Spanish, and the American. It is a museum, used for formal meetings, and as a space to entertain guests from the mainland. It is a meditative space used mainly as a container for these relics... The exterior space is the container being opened, it is one of freedom" (Lee 1997:96).

This analysis helps us to understand how much the architectural designs brought by the Americans (especially the "Western block" concept) were at odds with local building customs of openness to the outdoors and to neighboring houses. On the other hand, Lee's descriptions also show that Chamorro families, through modifications to these designs, have maintained their core cultural values of extended family and outdoor orientation in daily life throughout the centuries following colonization, despite all the changes foreign occupations entailed.

Lee proposes that exterior space is "the living space of the culture" where families "occupy space traditionally, while at the same time, take advantage of modern commodities (Fig. 7). It is a participatory space of interaction and immediacy, where traditional customs are acted out by "doing" rather than reminiscing (Lee 1997:96-97). Lee illustrates here theory of how vertically packed space in prehistoric and historic houses became horizontally packed space in modern housing (Fig. 8).

Lee (1997:97) explicates her model of Chamorro architectural changes in the American-influenced modern era as follows.

"This exterior space supports the activities that do not fit within the American box. The activities which once occurred in the utilitarian space below the raised structures, is now flipped and housed in the exterior space out back. Thus, this space becomes the place for storage, raising chickens, and production.

"The exterior space, complete with the outside kitchen is their rural "ranch" house, while the interior space is their urban "town" house. This pattern of living has precedent, it continues to offer two places of existence on the same piece of land."

According to Lee, Guam's architectural development has proceeded in a zig-zag fashion (Fig. 9). The sequence was from a single rural residence during "pre-contact time" (that is, during the time when people built latte stone-supported houses), to a dual residence pattern (village and *lancho*) during the Spanish-imposed parish-village system, and back to a single urban village residence with an outdoor living component added during American times.

Actually, archaeological support for the idea that during the Latte Phase all people lived in latte stone-supported houses is not strong (see Graves 1985; Craib 1986). From the anthropological standpoint, i.e., based upon the likelihood of a dispersed settlement pattern of small, relatively mobile groups continually adjusting to fluctuating environmental conditions of droughts and typhoons, families probably used a varied

repertory of structures to accommodate changing needs over time and space, including latte stone houses and several out-buildings or shelters.

Lee's theory that the dual residence pattern of Spanish historic times has now collapsed into one architectural complex is probably unnecessary as an explanation, being rather an observation of the changed geometry of residential space from vertical stacking of residential space to horizontal packing of residential space within unambiguous boundaries (certainly obvious from modern house plans). Put more simply, over time, Chamorro house designs on Guam evolved first in response to the physical realities of Guam's climate and other geographic conditions as well as to prevailing social and demographic factors.

With colonization by the Spanish, house designs responded to radical land use restrictions and related settlement requirements, i.e., the parish village pattern. Land use restrictions continued under American rule. From wide-ranging, large territories, the Chamorros became restricted parish villages and nearby farms (inter-island exchanges of people and materials were precluded due to the loss of ocean-going canoe technology early in the Spanish regime). Farm animals and new crops bridged the transition from a combined pelagic and inshore fishing and farming subsistence to one that emphasized land resources and from a wider network of social obligations extending across the islands to a narrower one focused upon the village church and nearby family members.

After World War II, space use by families was restricted further by the rise of fully urban, commercially designed complexes dominated by paved roads, utility lines, and automobiles. Also influencing architectural changes have been new options for residential security and convenience through imported construction materials that became available as the island was increasingly "Americanized."

FIRST AMERICAN PERIOD TRENDS

Infrastructure Improvements and Land Takings

In keeping with the designation of the entire island of Guam as a naval station (Rogers 1995:224-225), one of the first priorities of the American naval administration upon assuming the island's governance in 1898 was to improve basic infrastructure, especially roads and fresh water supply in areas where naval personnel were stationed. Thus, early efforts focused on Agana and the port area of Piti, Agat and Sumay (Moore and Hunter-Anderson 2001:14-16). The island's water sources were investigated and evaluated, and by 1910 a small concrete dam at the headwaters of the Fonte River had been built. The Fonte dam soon failed due to seasonal droughts and silting, and Asan Spring and Agana Spring were developed. Soon government engineers had produced a topographic map of Guam in four sheets (U. S. Army Corps of Engineers 1913-1914), which formed the basis of several later topographic maps used by government planners and the military (e.g., see U. S. Marine Corps Schools 1922, 1936, and 1942).

A piped water conveyance system to supply fresh water to Sumay on Orote Peninsula and to Agat and Piti was begun in 1917 (Hunter-Anderson and Moore 2002:22-23). Over time, the system was upgraded as demand continued to increase, but comparable piped water systems were not extended to outlying farming areas. Rivers and springs were sources of fresh water for Guam's southern villagers, as they always had been, supplemented by small concrete dams, while private catchments, wells, and reservoirs were used in the north. The first drilled water well constructed by the navy in the north came into operation in 1937 in Barrigada (Hunter-Anderson et al. 2001:50-51).

Like water supply upgrades, road improvements tended to be concentrated in areas where the naval government was most active. The 1913-1914 map indicates the different qualities of roads at that time, and it is clear that the better roads served the Agana area, the Agana-Piti corridor, and Orote Peninsula. From the Agana area short road segments led north and east into Sinajana, and the only road to cross the island at the time, destined to be Rt. 4 after the war, had been established in Spanish times (possibly from a prehistoric trail). In the early decades of the 20th century, the government extended and improved roads into agricultural areas and by the 1930s, several such roads had been built (Yoklavich and Craib 1996). These road extensions were related to the government's attempts to encourage Chamorros to produce more local food on their *lanchos* (see below and Thompson 1947:128-136).

Road, power, telephone and water extensions were implemented in the late 1930s (Sanchez 1988:144). Electric power was supplied by a coal-fired plant in Agana that was built in 1898; the boilers ceased operation for the first time during a very severe typhoon in 1940 (Carano and Sanchez 1964:262). Siting the power plant at Agana necessitated transporting coal from the port at Piti by lighter and then from the loading dock in Agana on rails to the power plant. Presumably the demand for power in densely populated Agana had favored this location over Piti, where the island's main power plants now are located.

According to Carano and Sanchez (1964:335), the prewar naval government had been acquiring land throughout the first three decades of American administration. In 1898 the government owned about 25 percent of the island (former Spanish crown lands), but the best farm land was in private hands. In the next several years the government acquired more private land, from purchase and from tax defaults. In 1937, the local and federal governments owned a combined total of 35 percent of the island (much of this increase was land around Apra Harbor and Agana) and involved infrastructure expansion and upgrades.

Shifts Toward Wage Work and Imported Food

Another important trend providing context for the resettlement process is the shift away from subsistence agriculture, which had characterized Guam's economy during the Spanish period. During prewar American times, civilian wage work was performed mainly for the government and in the private copra trade (Carano and Sanchez 1964;

Nelson and Nelson 1992; Rogers 1995), and many Chamorros still farmed and fished, even if employed.

As noted by Thompson (1947) and others, the common practice of families maintaining a home in the village and a *lancho* in the countryside continued during the early 20th century. Nonetheless, a significant proportion of the Chamorro labor force was working for the naval government, enjoying relatively high wages. Rogers (1995:134) described this situation as follows.

“By 1912, ... government jobs with the prospect of retirement benefits became the mainstay of Guam’s economy. By this time, the Chamorros were no longer growing as much food on their *lanchos* as before. Governor Maxwell noted unhappily, ‘The whole population is now almost wholly maintained directly or indirectly by the allotments from Appropriations, Navy, for the maintenance of the Naval Establishment.’”

Thompson (1947:128-129) averred that the shift towards paid labor as against subsistence farming was encouraged by the fact that people were able to earn wages c. 20 times higher than had been paid for work under the Spanish government:

“To supply the large administrative force of naval personnel, imports increased tremendously, and as the natives became aware of and began to desire the things money could buy, they left their farms and went to work in Agana. By 1911 nearly one-fourth of the able-bodied men of Guam were working as laborers in government employ. And by 1919 about one-third of Guam’s 3,000 able-bodied males were working for the government or in trade in town. The remainder were engaged in agricultural pursuits.”

In this context Thompson (1947:129) quotes “a prominent businessman in Guam” who characterized the first five to ten years of American rule thus:

“Many farmers came to Agana from their ranches to work for high government wages. They didn’t return to the land because they wanted to earn money. Formerly many lived on their ranches all week and came to town only for mass and market on Sundays. Now they want to go to the ‘movies’ and drink beer, and they must have shoes and clothes.”

Thompson (1947:129) states that by 1911,

“four-fifths of the population lived in part or wholly on imported food... The problem in Guam was no longer how to lure laborers from their farms to work in towns for money, but how to draw wage earners back to the farms.”

Toward this end, the U.S. Dept. of Agriculture established an agricultural station with tracts at Piti and Cotal, and farmers were encouraged to enlarge the areas under cultivation for export. After the destructive 1918 typhoon, a ‘back to the soil’ campaign was begun by the government, involving a compulsory labor law for able-bodied males whose occupation was farming—they had to cultivate at least one hectare of land. Later the law was modified to make the land amount commensurate with family size. Other

measures used to stimulate agriculture and animal husbandry included a marketing system by which the government bought produce and sold the products at fixed prices in a regular market at Agana (Thompson 1947:130-131).

Near the end of the Japanese occupation in 1944, there was a massive campaign to produce get the Chamorros to produce more food. The reason for the push was to feed the thousands of troops that had arrived to defend the island against an American invasion, just as the ocean supply lines were being cut by American bombing. Much of the agricultural labor in this effort was supplied by the Chamorros on their ranches and in government-run farm plots. According to Higuchi (2000), The *Kaikontai* (the agricultural branch of the occupation government) established sixteen farms, and students from Japan were imported to work on them. Rice was a major crop in the river valleys of southern Guam in the 19th century, and its cultivation became highly intensive under Japanese.

WORLD WAR II AND ITS AFTERMATH: ACCELERATED TRENDS AND CHANGES

World War II interrupted, and then accelerated, trends established in previous decades. For example, postwar infrastructure investment and land takings proceeded at a faster rate (again, focused upon military rather than civilian needs) as did the percentage of Chamorros engaged in wage work, particularly on government construction projects and for the local government bureaucracy. Increased military spending on Guam during the Vietnam War in the late 1960s and 1970s, federal assistance for housing (both after typhoons and for urban renewal projects), and other economic subsidies over the years helped sustain the shift toward a wage economy begun a century ago.

With nearly complete dependence upon imported food and other materials, there was no postwar return to rice cultivation, nor a serious return to other types of farming (Carano and Sanchez 1964:337). By 1950, agriculture had become a truly rare occupation on Guam; only 6% of the workforce was so engaged (Rogers 1995:218). In 1960 just 2% of the workforce was employed in agriculture, fishing and forestry combined. The downward trend in employment in agriculture, fishing and forestry continued; in 1980, less than 1% of the work force was so engaged, as shown in Table 11.7 in *A Statistical Profile of the Territory of Guam, 1920-1980*. The vast majority of Guam’s present population of over 150,000 persons (Guam’s total was 154,805 in the 2000 Census) is dependent upon wage work and government services paid for by taxes and federal grants.

It was not until well after World War II that significant road improvements were made on Guam, and again mostly they provided access to areas needed by the military, while rural civilian-occupied areas were relatively underserved. A map of the roads of Guam in 1948 shows that roads led out of Agana to Northwest Field, Andersen AFB and vicinity (Commander Naval Forces Marianas 1948). The present Rt. 16 in Barrigada was still not paved in 1955 (U. S. Army Map Service 1955), whereas the Atate road, linking the naval magazine at Fena with the port was already paved in 1947, and Rt. 4 was paved as far as Asanite Pt., which provided access to a military camp in Talofof, and another

short arm of what became Rt. 17 led to Camp Witek on the Yona plateau (Commander Naval Forces Marianas 1948).

A second cross-island road, connecting Yona and Agat-Santa Rita (Rt. 17), was finally completed in 1950 (Rogers 1995:215); this was still an unpaved but "all weather" road in 1955 (U. S. Army Map Service 1955).

Utilities were upgraded in the late 1940s and early 1950s. According to Yoklavich and Craib (1996:29), in 1949, most telephone distribution lines had been installed in underground conduits, and by 1950, twelve miles of sewer line and several lift stations were in place and c. 100 miles of electrical lines had been installed. Water systems continued to be upgraded, and the Fena reservoir was finished in 1951 (Yoklavich and Craib 1996:29). Temporary power generating facilities built immediately after the war were replaced with more substantial power plants in the early 1950s.

In contrast to these trends, changes in population growth and village composition were not simple projections from earlier times. Continually high labor demand in the construction trades along with supporting legislation, resulted in the immigration of thousands of foreign workers, mainly from the Philippines. These families settled in the vicinity of former work camps in the villages of Dededo and Agat, as will be discussed further below.

A Housing Crisis Arises

In the immediate post-invasion period, several factors culminated in an acute civilian housing crisis, or, more accurately, a community crisis, since some villages, especially those on the west-central coast, experienced total destruction and people were not able to return to them. First there had been the three years of occupation by Japanese forces, becoming increasingly brutal in the final six months before the American invasion; then the hugely destructive American assault in retaking the island that caused economic hardship and massive community disruption. These events were followed by frenzied military construction activities to convert Guam into a forward base in support of an invasion of Japan. Forward base construction and then maintenance of a strong U. S. military presence on the island were directly associated with land takings that permanently displaced thousands of Guamanians.

According to Yoklavich and Craib (1996:27-28), although most housing for military personnel was Quonset huts or tents during the time of forward base construction, houses built for high ranking military officers at this time were more substantial, and were sited on the Naval Hospital installation and at Flag Circle on the Fonte Plateau (later named Nimitz Hill). They were wood-framed and had horizontal wood siding and concrete foundations, a design based on standard construction drawings used at other naval bases. During the 1950s, the senior officers' houses built in 1944 in the Naval Hospital area served as interim headquarters for the civilian governor or Guam and the federal judge of the U. S. Circuit Court (Yoklavich and Craib 1996:27-28).

During the six-month period beginning in February 1944, the Japanese Army-administered agricultural support group, the *Kaikontai*, pushed local especially hard to produce food. It was a time of arduous labor for the Chamorros (Carano and Sanchez 1964:287-290) and of destruction of their property too (Thompson 1947:160). Guam residents over the age of twelve years were forced to work in the fields, and the government drafted labor battalions composed of local males over the age of twelve years with the aim of fortifying the island further. Two air fields were completed and a third started in Dededo, and the laborers (who included Koreans brought by the Japanese, as well as Guam Chamorros, men and women) worked on paving roads, digging air-raid shelters, and making concrete pillboxes and gun emplacements on the beaches. The alteration of Guam's land for modern war had just begun, and was to increase over the next several decades.

When the American air raids began in earnest in July, people were force-marched to remote concentration camps in Maimai, Tai, Manenggon, Talofofu, Inarajan, and elsewhere (Carano and Sanchez 1964:291). While living in the muddy camps amidst summer rains, flies, and only makeshift shelter was terrible, at least the civilians in the camps were away from the bombing and fighting zones and this probably spared many lives:

"If the people had been permitted to remain on their farms or in their homes, especially in Agana, Asan, Agat, Sumay, and Piti, and the northern communities of Barrigada, Dededo, and Yigo, large numbers of them might have been killed or wounded in the heavy fighting which occurred in those areas (Carano and Sanchez 1964).

Although much of the south had been spared violent invasion and bombing, the wartime devastation of the island was huge. According to Thompson (1947:160), the American bombardment "wrecked practically all installations and commercial developments, and damaged plantations, gardens and jungle resources."

After the assault phase, the post-invasion military government's civilian administrative problems were multiple and complex. Among them was providing for the basic needs of food, shelter, and medicine for thousands of traumatized civilians who found themselves actually interned in refugee camps, unable to return to their devastated villages. The physical destruction to the west coast villages had been enormous; also, there were Japanese snipers and stragglers about, threatening soldiers and civilians.

Planning for such difficulties proved insufficient in execution if not in intent. A Civil Affairs team of naval and marine personnel had been assembled in Honolulu as early as April 1944, to make plans for civilian life once Guam was in American hands. However, the post-invasion on-the-ground reality was quite different than anticipated by these planners. As Souder (1965a:24) noted from a review of the Civil Affairs Report—29 April to 15 August 1944,

"Destruction from Naval gunfire and aerial bombing was so complete in Agana, Asan, Piti, Sumay and Agat, which formerly housed about 15,000 of the island's population,

that the resulting shelter problem, not foreseen to that extent in planning, was a serious one."

Although the Civil Affairs planners in Honolulu had formulated organization charts and placed requisitions for supplies of food, clothing, transportation equipment, agricultural implements, fertilizers, insecticides, seeds, fishing gear, medical supplies, trade goods, office equipment, etc., none of these goods was available as of August 15, nearly a month after the invasion (Souder 1965a:24). How such a situation came about is explained in the Civil Affairs Report, p. 6, as follows:

"For the assault phase, higher authority decided that Civil Affairs supply during Division and Brigade control would be drawn from the quarter master of these units. With Corps would come in 40 tons of staple foods assigned to Civil Affairs for relief purposes. Delay in the landing of this supply forced Civil Affairs to continue to call upon the 5th Field Depot, which responded nobly. Food requisition at Pearl Harbor is in such a late shipping echelon that none has arrived to date."

On the ground, the Civil Affairs Supply Officer and his three assistants faced the overwhelming task of providing relief to several thousand displaced civilians without any supplies and equipment. Guam's needy coped bravely with the conditions they found themselves in with the resources at hand. Along with the soldiers assigned to assist them, they scavenged cached Japanese food and building supplies, reworked wood pallets into lumber, wove coconut palm thatch, and used the materials to erect houses in the areas permitted by the military. Some tin was salvaged from the ruins of Agana but most of the first houses were made from wood, bamboo and thatch and salvaged wood that had to be planed and smoothed by hand. During salvage forays, joint patrols of Guam Insular Guards and U. S. soldiers attempted to counter the danger from sniper attacks.

The U. S. military controlled the entire island in the early post-invasion months and Chamorros were not allowed to freely move about. Making matters worse, Agana and Agat were off-limits to civilians and would remain so for many months. Anxious to leave the crowded refugee camps, some families defied military orders in 1944 and under the leadership of Simon A. Sanchez built a wood and canvas community center and school in an area that later became the center of the postwar municipality of Tamuning" (Rogers 1995:200-201).

Victory in the Marianas provided the Americans with a close-by land base from which to launch an invasion of Japan, and the preparations for this event began immediately after the battle for Guam. Land takings associated with this effort created a tremendous labor demand, borne by the thousands of troops who believed they were destined to invade Japan, and by the Chamorros who were eager to earn wages. Many worked in civilian labor camps were set up near construction sites, such as the Fifth Field Depot in Toto, and other workers were bused to job sites from their refugee camps.

The military took large tracts of land for airfields, weapons and ammunition storage and for positioning all sorts of vehicles, equipment and fuel. Vast areas were

covered with Quonset huts used as warehouses and to house troops, officers, and operations and government offices. As the troops were demobilized and sent back to the mainland, many of the Quonsets and military facilities were abandoned, Excess war materials and equipment were dumped and buried, leaving a toxic legacy and much destroyed farmland (for similar problems in Saipan, see Bowers 2001). Other land was taken to support military recreation, such as the Nimitz golf course in Barrigada, and other facilities, such as the expanded naval magazine and Fena reservoir. Still other land was simply retained undeveloped. As Carano and Sanchez (1964:336) note,

"By 1948 the government, federal and local, owned or controlled about 42 percent of the total land area of the island. Much of the land was not used by the military and was permitted to lie idle. This was cause for bitter resentment among the Guamanians. Agitation soon developed for return of some of the land to private ownership" (Carano and Sanchez 1964:336)."

Naval Government Again

In May 1946, wartime military government ceased and naval government was restored, with Rear Admiral C. A. Pownall in command. In addition to his extensive military duties, Pownall was also the governor of c. 23,000 Chamorros, and 136 other civilians. Under Pownall the government had 12 departments, all headed by naval officers. The problems of civilian housing persisted, and the remit of the Dept. of Public Works was to oversee all civilian engineering and construction. They also built and operated public utilities, including bus lines (cars and trucks were far from prevalent at this time).

The Land and Claims Commission was an arm of the government that functioned "as a real estate agency for the governor" and administered the Meritorious Claims Act and the Land Acquisition Act (Thompson 1947:78). A 1947 map of Guam (Fig. 10), the second in a series, shows the land claimed by the naval government and that "reserved for Guamanian use" for "rehabilitation purposes and development of the island economy" (large hatching and labeled "B" and "A"). It is not clear just what or who was going to be rehabilitated nor how the island's economy was going to be developed especially in the rural south which was unconnected by roads to the rest of the island. Also shown are resettlement village areas, both "urban" (gray, fine hatching) and "suburban" (gray, coarser hatching).

Another arm of the naval government was the City Planning Commission. Presumably maps such as Fig. 10 were consulted by the Commission in drawing up their plans. According to Carano and Sanchez (1964:323 and see Thompson 1947:78),

"The City Planning Commission was responsible for drawing up plans for the rebuilding of Guam's war-torn towns and villages. It was also assigned the task of planning for new military bases and installations... Besides these duties, the commission prepared plans for houses and buildings. These structures were designed to withstand the rigors of Guam's

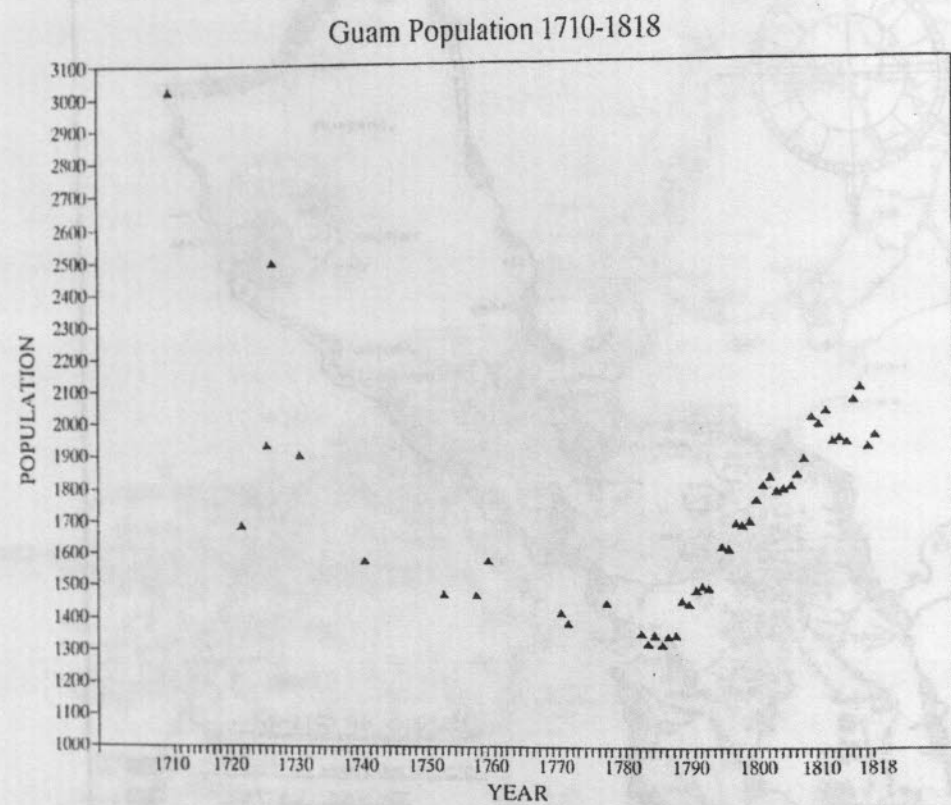


Figure 3. Graph of Guam's population from censuses beginning in 1710 and ending in 1818 (data from Lévesque 2002).



Figure 4. Drawing of former Jesuit "royal farm" at Tachugna showing Chamorro houses surrounding ruins (stairs, center) (after Freycinet 2003).

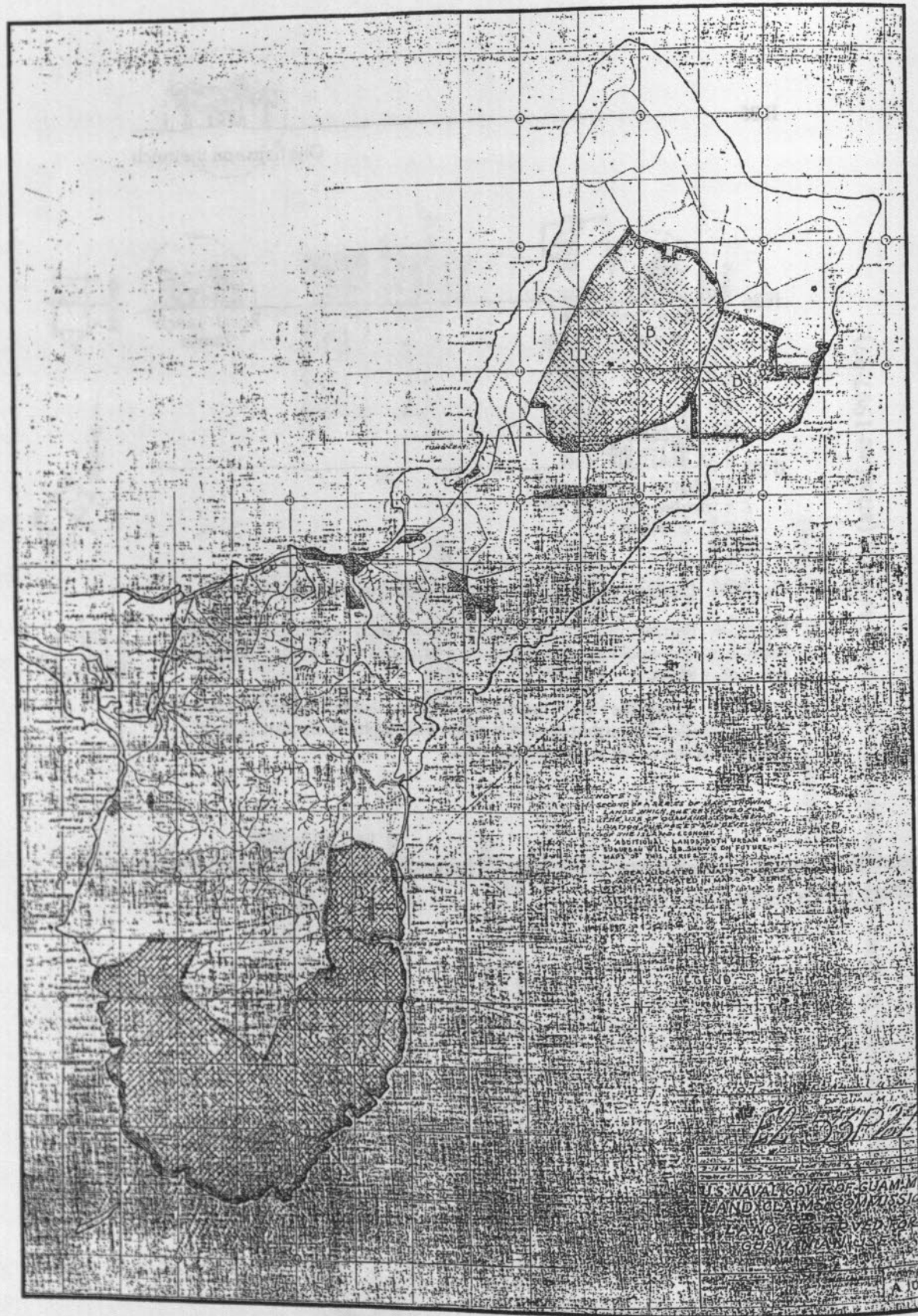


Figure 10. Drawing A 102, 1947 map of Guam showing areas "reserved for Guamanian use (A, B) and resettlement villages (after U. S. Naval Government of Guam 1947).

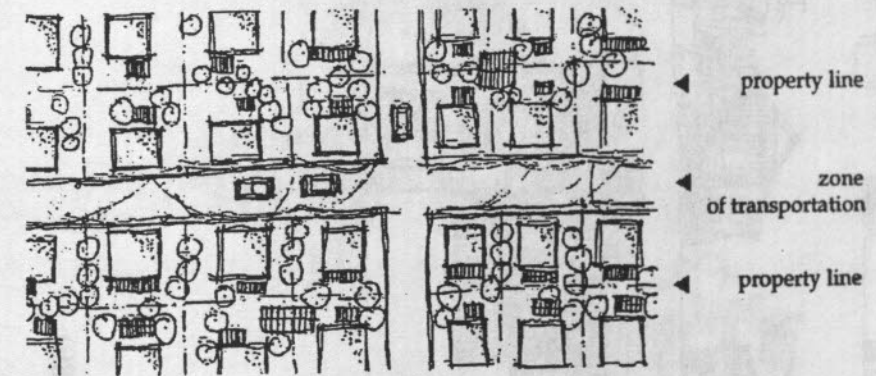


Fig. II.14. The western block complete with electricity and property lines.

Figure 11. Sketch of "western block" street and house layout (after Lee 1997:86).

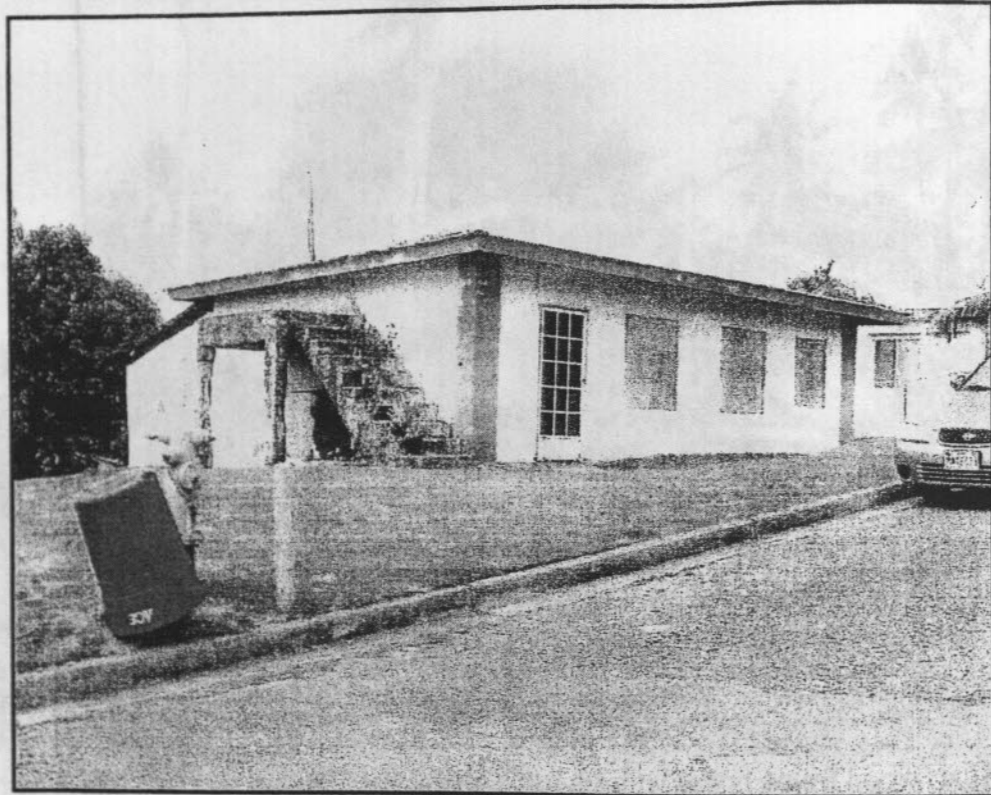


Photo 6. Agat: single-story house formed by roofing the former *bodega* after a typhoon destroyed the upper story; note stairs and landing to former first floor.

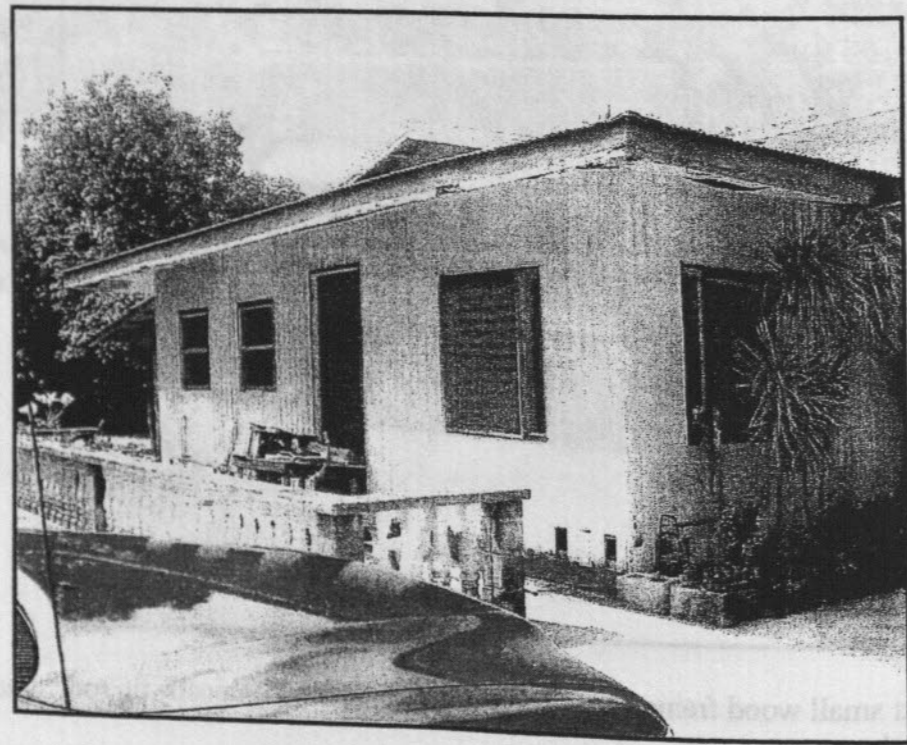


Photo 7. Agat: single-story house built in the 1950s with tongue and groove wood walls, tin roof, and louvered windows.

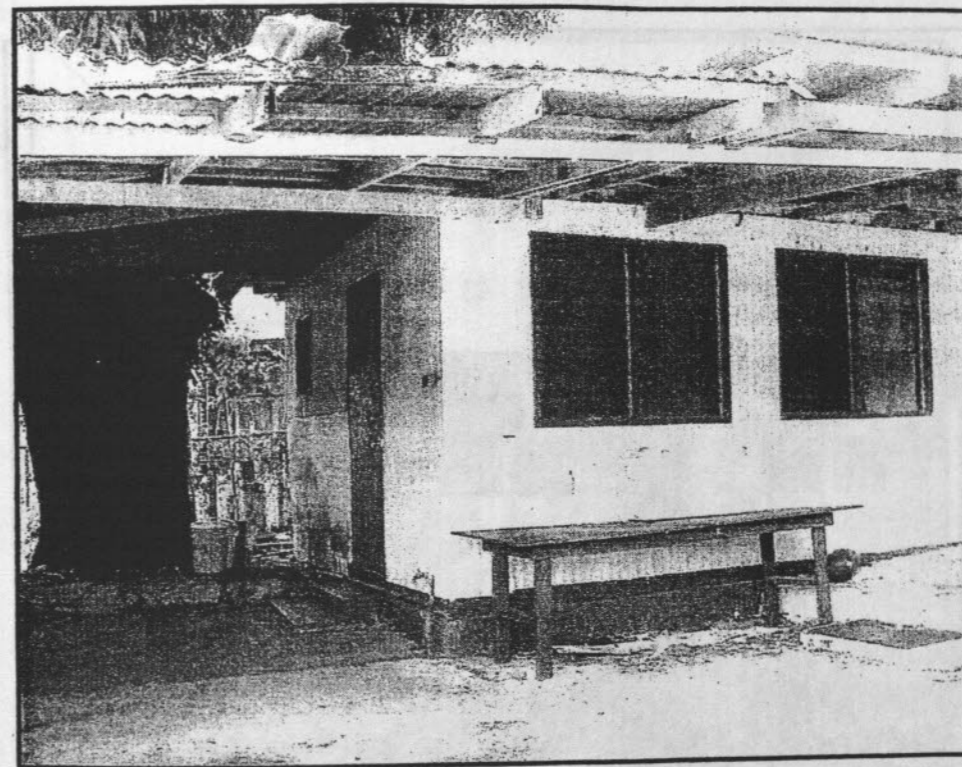


Photo 8. Agat: wood frame house with tin roof and walls and glass louvered windows; roofed space extends from side of house (to left).



Photo 9. Agat: two story house with tin roof, eaves, and stairs to second floor. The first floor has concrete walls while the second floor walls have horizontal wood siding.