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A STUDY OF URBAN MORPHOLOGY OF JAPANESE COLONIAL TOWNS IN NAN’YO GUNTO

Part 1 Garapan, Tinian and Chalan Kanoa in Northern Marianas

The impacts on urbanisation in the Pacific from the short-lived Japanese occupation of most of Micronesia in the first half of the twentieth century was substantial. Over a period of three decades island economies were transformed and, in the case of the Northern Marianas, small islander populations resettled in modern towns together with many thousands of Japanese migrants. Racial segregation was not enforced as such and economic and social distinctions stratified the urban populations. New maps derived from wartime aerial photography have been drawn-up for Garapan and Chalan Kanoa on Saipan and for Tinian Town, and are reported here together with some reminiscences of repatriated former residents. Boundaries of different land use activities are revealed here for the first time. Some conclusions are reached about the land use pattern of Japanese colonial towns and their key components.

Keywords: Colonial towns, Japanese Micronesia, Nan’yo, Northern Marianas, Saipan, Tinian, sugar plantations, urban morphology.

In this town [Garapan], there were not only public facilities such as a town hall, post office, auditorium, police station, court house and various schools but also shops, from department stores to vegetable, tofu, clothing and electric appliance stores, pharmacies and sushi restaurants. Public bathhouses, inns, brothels, cafes and bars and other facilities were also fully arrayed. There were two movie theatres and two daily newspapers that competed with each other vigorously. There were as many as 113 automobiles on the streets in 1937. Such a street scene was continuous as if a newly developed town in mainland Japan had been transplanted (Nomura 1987: 117, translated from Japanese).

1. INTRODUCTION

As described in Nomura’s documentary novel, ‘Umi no hate no sokoku (Hometown Far Away Across the Sea)’ (1987), Japan became involved in the intensive settlement of the Northern Marianas in the two decades before World War Two. This was to have a huge impact on an oceanic region of small and sparsely populated islands characterised up to this time by little more than subsistence farming and small-scale trading. Substantial Japanese migration transformed a part of the Pacific where urbanisation, except of the most minor kind, was unknown until after 1914 when Micronesia was occupied by Japan who was subsequently given a League of Nations trusteeship (Nan’yo Gunto) to govern the region. Eventually 96,000 Japanese nationals were to live and work there, easily outnumbering the 52,000 indigenous islanders. The Northern Mariana islands was where the main weight of migration was concentrated and where economic and infrastructure change was greatest, as they were the closest part of Micronesia to the home country and became the site of a successful sugar industry (Figure 1).

Figure 1 Japanese Mandated Micronesia (Nan’yo Gunto), Saipan and Tinian.

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*** Assoc. Prof., Dept. of Civil Engineering and Architecture, Faculty of Engineering, University of the Ryukyus, Dr. Eng.

Shidoin daigaku jishokugaku bunko boshokuryoku
Daigaku jisho・shissho (gijutsu, batteisyu)
Shidoin daigaku jishokugaku bunko bdjyoukou・bosho (gijutsu, shigaku)
Kagawa daigaku jisho torenbu kigensetsu kogakko・bdjyoukou・bosho (gijutsu, kagaku)
Unlike European powers in the South Pacific who managed their possessions and enterprises as plantation colonies with small numbers of expatriate officials, the Japanese imported the entire apparatus of colonial development to its tropical territories, from the lowest labourers to top management. The development of Micronesia included an additional agenda item for Japan who saw in it the resolution of economic depression in overpopulated rural areas like Okinawa from where 60 per cent of the migrants originated.

Colonial urbanisation has been actively studied in the last few decades (King 1990), but international discussions have rarely included information about patterns of Japanese colonialism, largely due to a lack of access to sources in the Japanese language. Whilst much has been written about colonial urbanisation by European powers in South Pacific, particularly by Australian scholars (for an overview, see Connell and Lea 1993, 1995), little is known about how the Japanese brought urbanisation to the Western Pacific. In part this is due to the severe physical destruction during World War Two and partly due to the wholesale repatriation of the Japanese urban population at the close of the war.

There has also been significant research into Japanese colonial urban planning and architecture in the Japanese language literature in recent years, but the main focus has been on mainland Asian locations, including Taiwan, where much more urban development took place than in the Pacific (see for example, Koshizawa 1989). No elite architects were employed to design grand buildings in Micronesia. For many Okinawans, Micronesia was a primary destination before 1945 and their presence was a factor underpinning the speed and economic success of the colonial settlement process and, as a consequence, led to the rapid formation of urban centres in the region.

Details about urban living conditions in the colonial towns of Micronesia are found in various contemporary reports (Price 1936, 1944; Yamahara 1935; British Naval Intelligence Division 1945). Among postwar investigations by modern scholars are Peattie's (1988) study of Japanese colonial rule of Micronesia which provides the most detailed historical account and is based on English and Japanese sources. Nomura's (1987) novel about migrant families from Yamagata paints a valuable picture of urban living conditions in Garapan. But these works do not describe how the colonial towns of Micronesia were established and how their characteristic urban morphology evolved. In particular, little is known about the urban circumstances of the Okinawans who comprised the majority of Japanese in Micronesia.

This paper thus focuses on the pre-war urban morphology of the towns, with the main objective of improving the state of knowledge about a significant period of urban development in the Pacific and our understanding of how Japanese colonial urban settlement operated in practice. Three urban centres in the Northern Mariana Islands that were substantially expanded, or newly built, during the 1920s and 1930s were chosen for closer examination: namely, Garapan, Chalan Kanoa and Tinian Town. Garapan was administrative centre of the Nan'yo Cho Saipan Branch (Northern Marianas) and the largest town in Micronesia during the Japanese colonial period (Figure 2). Chalan Kanoa, located 6 kilometres to the south, was a sugar company town designed to service the new plantations, as was Tinian Town on neighbouring Tinian Island. In part two of this paper, Koror in Palau, the capital city of Nan'yo Gunto, is examined and, in part three, the origins of modern Japanese sugar settlements in Taiwan and Minamidaito Island in Okinawa are investigated.

The main challenge in rediscovering the urban morphology of the Japanese colonial towns of the Northern Marianas was to discover the extent and features of urbanisation prior to the destruction of World War Two. As there are no accurate maps remaining to show the configuration of the built environment in the three towns, new ones were drawn with the aid of US Navy aerial photographs taken prior to bombing over the period February to June 1944 (Bishop Museum, Honolulu; Okinawa Prefectural Archive). The reminiscences of 15 former residents now living in Okinawa are also recorded to portray the actual use of land and buildings and the distribution of social and cultural groupings in the towns. Statistical data, including the Japanese Population Census of Micronesia, provided additional evidence about the features of urban life.

2. GARAPAN

2-1 Colonial Heart of the Northern Marianas

Garapan had its beginnings as the village of Arabwal established in the 19th century during the Spanish occupation. The indigenous population of Saipan had been removed in the previous century and the island was not resettled until occupied by Caroline islanders escaping from storm damaged Truk (Chuuk) in the 1820s. The small town grew progressively through further migrations of Caroline Islanders and Chamorros from Guam, with the population reaching 1,900 by 1899 (Russell 1984). In the short succeeding German period (from 1899 to 1914) little changed physically in Garapan itself and few new settlers arrived (Russell 1991).

In sharp contrast to the early colonial occupations, Japanese control brought with it thousands of new migrants and substantial physical expansion (Figure 3). The population of Garapan grew from some 2,500 in 1920 to 6,600 in 1930 and by the mid-1930s it had doubled again to almost 13,000, of which only 3,000 were islanders (Japanese Census of Population 1920-1935). By the end of the 1930s the population is estimated to have grown over 15,000. The total population of Saipan reached 28,000 by the end of the 1930s as a result of intense economic activity. By then urban services sufficient to support daily life at Japanese standards were fully developed, and by 1939 some 324 retailers were established in the town (Table 1). There were also eight inns, 28 ryotei (restaurants, mostly brothels), and 51 café/bars and other eating/drinking places (Japanese Special Census 1939). The town also housed various factories producing consumer goods, such as miso paste, soy sauce, various liquors (Okinawan awamori, sake, whisky, and pineapple wine), soap, coffee (grown locally), tapioca starch and various fish products. These were exported as well as being locally consumed (Japanese Special Census 1939; Nan'yo Cho 1941).

2-2 Land Use in Colonial Garapan

Garapan exhibited a complex pattern of land uses reflecting not only its primary function as the centre of regional government and services but also the presence of several tiers of Japanese and indigenous residents. Marked distinctions existed between the governing mainland Japanese elite and migrants.
Figure 2 Garapan in the 1930s (Source: Nan'yo Cho Saipan Shieho n.d.)

Table 1 Shops by Category in Garapan, Tinian and Chalan Kanoa in 1939 (Source: Japanese Special Census 1939)

<table>
<thead>
<tr>
<th>Food/goods sold</th>
<th>Garapan</th>
<th>Tinian Town</th>
<th>Chalan Kanoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Vegetables and fruits</td>
<td>27</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td>Milk, Fish and Fruits</td>
<td>8</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>Beverages</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Alcohol (excluding tea)</td>
<td>3</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Restaurants</td>
<td>3</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Market food</td>
<td>3</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>General shops</td>
<td>3</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Tobacco and medicine</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Shoes and bags</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>General merchandise</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Joinery</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Other accessory products</td>
<td>1</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Medical goods</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Corset and jewelry</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Charcoal and carbon</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Other goods</td>
<td>2</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4 Land Use Pattern of Garapan

Figure 5 Government Housing in Garapan (Source: Belau National Museum)
from other prefectures like Okinawa. Similarly, the residential circumstances of the Chamorros reflected their status in relation to that of the immigrant Caroline Islanders.

**Government Precinct/Housing Areas (A1 and A2: Figure 4)**

To the east of the government administration building, originally built by the Germans, was the district known as Katori-cho (Area A1), containing government housing and other public facilities such as a primary school for islanders, a boys' business high school (originally built as a Japanese primary school), a modern hospital possessing a monumental concrete dome, martial arts hall, a park, jail and shinto shrine. Residents here were mostly the government elite originating from mainland Japan, though there were also a few Okinawans in professional occupations.

By the beginning of the 1930s, as the size of the population swelled, a large forested area on the northern side of Garapan was developed to provide more building land to accommodate the growing needs of the town. This site was called Pontamu-cho New Town and provided generous sized building blocks developed at low densities (Area A2). It was the only explicitly planned area and contained various Japanese schools (kindergarten, primary, and girls' high school), modern-looking government and company housing, factories and other businesses (Figure 5).

**Commercial Areas (B1, B2 and B3: Figure 4)**

North Garapan formed the centre of town (Area B1). Here, legacies from the Spanish and German eras were particularly visible in the street pattern, and building densities were substantially higher. North-south main streets were much wider than found in most comparable Japanese small towns at this time, ranging from 8 to 14 meters (Ogimi 1941), and were numbered according to the Japanese custom from Ichome Dori (first street) to Yonchome Dori (fourth street). Department stores and other larger shops conducted flourishing businesses along the main streets, particularly on Nichome Dori (second street), which was often called the 'Nun'yō Ginza.' In general, the most established businesses in north Garapan were owned by mainland Japanese. The Saipan auditorium, or kokaido, on Yonchome Dori, was the most modern building in the town with its three-storey concrete structure ornamented with Spanish colonial columns. A pleasure quarter formed at what had been the town's northern outskirts at the beginning of the 1920s and was soon surrounded by newly developed blocks.

Smaller businesses mainly run by Okinawans were located in south Garapan (Area B2), where the width of the town narrowed to only two main streets (second and third). Houses of Caroline islanders were found here, as well as their abai (community hall) on Nichome Dori. Towards the southern end another pleasure quarter developed mostly run by Okinawans. The Association of Okinawans (Okinawa-kenjinkai) was also located here, as was the popular Minami-za Okinawan theatre, making this the Okinawan quarter of colonial Garapan.7

In the proximity of the old road that connected Garapan with the northern villages were strips of smaller shops, a popular movie theatre, and one of the most expensive ryotei (Area B3). Residents here were a mixture of mainland Japanese and Okinawans, plus some Chamorros living in small clusters of houses often situated in inner blocks behind buildings facing the streets. Their existence was unnoticed by most passers-by.

**Other Areas (C1, C2 and C3: Figure 4)**

The 'old town' section of north Garapan was located to the west of Ichome Dori along the Kaiga Dori (coast street) (Area C1). This is also where the stone houses of well-to-do Chamorros were located. Okinawan fishermen from Itoman (the southern part of Okinawa's main island known for its fishery) also lived here, forming the highest density neighbourhood in the town. Other Okinawans lived near a ship dock and a slaughterhouse located near the shore at the southern edge of Pontamu-cho (Area C2). The outskirts were occupied by numerous Japanese small holders of whom a high proportion were Okinawans (Area C3). Their fresh vegetables, fruit, meat, eggs, milk and tofu met the daily needs of the urban population. Physical infrastructure here, including the streets, was not well established and housing generally comprised very simple structures.

3. CHALAN KANOA: A SINGLE PURPOSE SUGAR TOWN

Chalan Kanoa was where the Nun'yō Kohatsu Kabushikigaiisha (NKK) company headquarters were located and the centre of the sugar industry on Saipan (Figures 6 and 7). It was a special purpose Japanese company town built around a sugar refinery and had a population of approximately 3,400 in 1935, only a handful of whom were of islander extraction (Japanese Population Census 1935).

Financial difficulties experienced by the company in its early years on Saipan was possibly a reason why its office buildings in Chalan Kanoa were not well laid out. But it was a different matter with the company housing which showed plenty of evidence of careful planning. The idealistic company president, Haruji Matsue, believed it necessary for the quality of a modern settlement to be reflected in the modernity of its design. Closest to the main offices was the detached housing of the company executives (Figure 8). These dwellings possessed a western-style sitting room built of concrete attached to a traditional wooden Japanese house, which followed a popular practice used in upper-middle class residences in mainland Japan at this time. The emphasis on building design seems to have been to achieve a modern and European appearance, rather than dealing successfully with the impact of the tropical climate. No grand verandahs were found here but waist-high windows set in concrete buildings symbolising modernity and advancement. The only features showing any sympathy for tropical conditions were the raised floors with arched ventilation openings provided in the concrete structures. The occupants were the management elite from mainland Japan. Larger semi-detached houses were provided for the company's salaried employees (shain). They were also predominantly mainland Japanese together with some Okinawans. Four and six unit row-houses followed for lower class employees (gengyo'in) who were paid on a daily basis and who mainly came from Okinawa (personal communications, Okinawa, February 2001). It should be noted that some of the row houses for lower level employees were built in modern reinforced concrete. In general, the quality of company housing, particularly that built in the early years after sugar production became successful, were of better quality than government housing in Garapan or the regional capital of Koror in Palau, thus supporting Matsue's idealism.

A former resident, visiting from Garapan, recalls Chalan Kanoa being...
'like a resort' with many trees and gardens among which the houses could be glimpsed (personal communication, Okinawa, March 2001). Special facilities, such as tennis courts, NKK clubhouses, and a NKK-run kindergarten, created a modern atmosphere that felt unusual for most residents, even at home in Japan. There were few commercial activities in Chalan Konoa as most everyday needs could be found at the NKK company store where employees could purchase things on credit at reasonable prices via a direct deduction from their salaries. For other needs they could walk, bicycle, or ride on the narrow gauge train to Garapan. Many Okinawan employees preferred not to live in the company housing suburbs, enabling them to earn additional income by running small farms and raising cattle (personal communications, Okinawa, February 2001).

4. TINIAN TOWN: A MODEL COLONIAL TOWN

Development of Tinian island was started by NKK at the end of 1920s, allowing the prior experience gained on Saipan to result in a more systematic and organised model of urban development. The almost totally Japanese population of the island jumped from 199 in 1925, to over 15,000 by the end of the 1930s (Nan'yo Cho 1941). Tinian town was the only urban centre on the island apart from a few small rural villages (many tenant farmers and field workers also lived on farms), and accommodated some 4,500 residents by the end of the 1930s. It was the last of the main colonial towns established in the Northern Marianas and was better planned and more systematically organised than Chalan Kanoa (Figures 9 and 10). Indeed, Matsue proudly described it as...
'resembling the latest urban planning', and that 'one can sense a fresh feeling of a modern cultural city' (Matsue 1932: 188-189). The layout was an orderly grid pattern with the western half being occupied by the NKK compound (Figure 11), the sugar refinery, and company housing. In order to improve the look of the its own housing areas, NKK ran annual competitions for those with the most beautiful gardens (personal communication, Okinawa, March 2001). The eastern half formed the town proper, with the government housing area located higher up the slope on the northern side. The larger stores were situated on the main street along with the public buildings but the pleasure quarter was relegated to the far-eastern end of the town. By 1939 there were 211 retailers, three inns, 14 ryotei and 37 cafe/bars and other eating/drinking places, forming an impressive total when compared with Garapan (Japanese Special Census 1939).

Tinian town is a good illustration of a comprehensively planned Japanese colonial sugar town, comprising all the key elements found in Garapan and Chalan Kanoa but in a more compact arrangement. Interestingly, the basic urban components had already been established in the late 1920s in a small company town on the Japanese Minamidaito Island in the Ryukyu group. The island had been developed by Han'emon Tamaki in the Meiji era but was later taken over by a Japanese sugar company based in Taiwan. Unlike the Japanese sugar industry in Taiwan, the entire labour force was brought to this inhabited island and although much smaller in scale, Minamidaito can be considered as a model for the Japanese colonial sugar industry of the Northern Marianas (field research by Ono and Ando, October 2000).

5. CONCLUSION: DISTINCTIVE URBAN FEATURES OF JAPANESE COLONIAL SETTLEMENT

An important question arising out of these findings is whether there was a distinctive pattern characterising Japanese colonial urban settlement in the Northern Marianas in the twentieth century. Three key components of the towns do stand out as worthy of further discussion.

First, is the presence of an exclusive precinct symbolising modernity and advancement represented by the government and/or company housing areas. It was the only planned area and equipped with modern facilities and amenities that embodied the idealism appropriate for Japan to be seen as a newly emerging colonial power.

Second, is the commercial area comprising numerous shops, from department stores to street vendors, providing urban services to support the town's daily life. Commercial activity in the towns was labour intensive as was the main economy of the sugar industry. Unlike their European colonial counterparts, Japanese towns in Nan'yo Guoto were migration settlement colonies required to resolve problems of over population and rural economic depression at home. A labour intensive urban settlement process was therefore rational.

Third, is the presence of a pleasure district that played a crucial role in Japanese social and economic life. Ryotei were also where business negotiations were performed and decisions made by both government officials and business people. This tradition continues to this day in contemporary Japan. Such key components of urban life were also found on Minamidaito Island, providing a domestic Japanese example of modern sugar industry development operating at a smaller scale but in a similar fashion.

The colonial towns of the Northern Marianas were primarily commercial and industrial...
centres serving the sugar industry. Garapan was the largest and contained numerous activities catering for the needs of the whole population. Chalan Kanoz was a pure company town located as a satellite of Garapan. These two urban centres complemented each other and should be viewed as one extended town. Tinian Town, on a separate island, was the most systematically built model colonial town that emerged during the 1930s. Overall, they were designed to fulfill functional needs and prestigious appearance was of a lower concern. Even housing for the government elite and company executives was small and modest when compared with that of its European counterparts in the South Pacific.

The whole spectrum of the colonial labour force was brought from Japan to the new colonies in the Northern Marianas and the towns became socially and physically stratified as if they had been built in Japan. It was the Okinawan migrants that formed the basis of the labour force, unlike in the European colonial settlements in the South Pacific where colonial populations from other continents were brought in to work the sugar fields (Raiston 1977). While European colonialism routinely separated the races ‘as an object of urban policy’ (Home 1997:117), the local islander population was physically integrated in the Japanese colonial town except in government and company housing precincts. More westernised Chamorros were not entirely relegated to a low position on the social and economic ladder, being on the same level as some of the Okinawan migrants. The presence of large numbers of Okinawans was a significant feature of the Nan’yo Gunto towns giving them a unique urban social structure. The examples we have examined relate to an unprecedented wave of construction and development during the period when Japan sought to incorporate the Micronesian islands into its empire.

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END NOTES
1 In addition to the economic depression and population pressure, migrants from Okinawa were recruited because they were considered most appropriate as being accustomed to tropical climate and sugar cane production (Matuse 1932: 82).
2 For example, Garapan was almost completely destroyed. Not only were the buildings but most street layouts were removed and redeveloped under a newly mandated U.S. regime in the post-war years. The most densely populated central urban area in the whole of Micronesia became a grassy field dotted with trees and a few buildings.
3 The name of the urban centre on Tinian Island was Tinian. To avoid confusion between the names of the island and the town, we use the term ‘Tinian Town’ for the town in this paper.
4 Nan’yō Gunto tōri cho, from 1920 to 1939. However, the 1939 census was a special census (Rōji ssei cho) about economic and consumer activities and was not a population census.
5 Field research was conducted in the following locations and dates: Northern Marianas (Saipan, Tinian, Rota and Guam), December 1999; Honolulu, Hawaii, March 2000; Minamidaito Island, October 2000; Okinawa, February and March 2001. Archival research in Japan was conducted in Okinawa, Tokyo and Kyoto from August 1999 to March 2001. Field research in the Northern Marianas included site visits, documentation of built structures from the Japanese era, and archival research.
6 The islander population of Saipan was always concentrated in the town of Garapan except for a small settlement in the north. The last total population figure for Garapan was 12,827 in the Census of 1935. The entire island population kept growing in the second half of the 1930s, from 23,859 in 1935 to 27,525 in 1939 (Nan’yo Cho 1941).

end of the 1930s.
7 Okinawa formally became a part of Japan in 1879 and possessed a distinctive culture of its own. The language is a dialect of Japanese but communication between Okinawa and mainland Japan was difficult, as pointed out by many contemporary observers. Being a distinctive social group who were the poorest and most culturally distinct in the islands, the colonial towns of Micronesia, the Okinawans were informally referred to as ‘second class Japanese’ and often faced discrimination by the mainlanders. However, former Okinawan residents recall that life was generally good and everyone was content (personal communications, Okinawa, February and March 2001).
8 Calculation based on the population figure for Tinian Town in 1935, and total for the whole island in 1939 (Nan’yo Cho 1941).

REFERENCES
British Naval Intelligence Division (1945) Pacific Islands vol 5, Western Pacific (New Guinea and Islands Northward), London: HMSO.
Hosokawa Shashin-kan (n.d.) Wanagawa uno ni seiemonen: Nan’yo photo shashin-cho (Our Lifelines at See: Photographs of Islands of the South Seas), Tinian: Honohiwa Shashin-kan.
Matine, Haruuji (1932) Nan’yo kaitaku jounen shi (A Record of Ten Years of Development in the South Seas), Tokyo: Nan’yo Kochara, K.K.
Nan’yo Saipan Shincho (n.d.) Saipan shichou-nai shashin-cho (Photographs of Saipan Branch), Garapan: Saipan Shincho.
Ogini, Chotoku (1941) Kiraikan! Nan’yo Saipan no zenshu (Making Rapid Progress! Overview of Saipan in South Seas), Garapan: Nan’yo jijino taishannin.
Raiston, Careline (1977) Grass Huts and Warehouses: Pacific Beach Communities of the Nineteenth Century, Canberra: Australian National University Press.

和文概要
日本統治下ミクロネシア（旧南洋諸島）では10万人近く大半の日本人
が移住し糖業をはじめとする各種産業に従事した。特に Marianas
諸島には最も集団数が集中、地域の中心的な役割が形成されたが、第二
次世界大戦時に破壊され、さらに人口の大幅を占めた日本人が強制労
役となったため、戦後都市の格付けは戦前の形にかかわらず復活し
なかった。この論文は、ガラパン、チランチンノア（旧イライラ島）
及びテニアン（テニアン島）の3つの日本植民都市の都市構造を顕微
鏡及び国別取り扱いを基に地域再現し、その特徴を分析したものであ
る。これらの都市の共通的な構成要素は、以下の3つである。第一は宗
教街・住宅地の近代を象徴した居住地で、各種の近代的施設を編
まれ、植民地国家としての先進的特性を形成する「非日常世界」を
形成していた。第二は日本人的日常生活を支える商店街であり、デパートや雑
荷市場の無数の小売市場がひらめいていた。零細な店舗が多く、当地
の産業構成に相当重要な役割を果たした。第三は宗教的機能を有する公共施設
であり、教会や神社関連の施設が含まれている。しかし、これらの建
設・修繕は、時代と共に変化し、一部は戦時下のものと異なり、戦後の
都市計画と連携されると考えられる。