Abstract

This article focuses on a newly created subdivision in the Territory of Guam made up mostly of migrants from the Federated States of Micronesia (FSM). It aims to discover how migrants, particularly those from Chuuk, interpret cultural and social change within a process commonly known as urbanization and modernization. This research looks to the built environment, in particular, the housing, as an important element in the study of migrant communities. I also explore gendered ideologies and how migrants conceive of their spatial arrangements and household dwellings. Through a consideration of ethnographic data on households and house forms, and organizational features of the origin islands of Chuuk, I argue that urban housing and space is socially produced. [urbanization, household, house form, gendered space, Guam]

Gill-Baza is a recently formed subdivision on Guam, where many citizens of the Federated States of Micronesia (FSM) bought undeveloped land and constructed homes. Most came after the Compact of Free Association was passed in 1986 which allowed for open immigration between the FSM and the United States and its territories, including Guam. FSM citizens make up slightly over seven percent of Guam’s population of 155,000 and constitute the fastest growing migrant community. The FSM is comprised of four island nation-states: Yap, Chuuk, Pohnpei and Kosrae (Figure 1). Nationals from Chuuk, the focus of this research, make up the largest proportion or 72 percent of the FSM migrants to Guam (US Bureau of the Census 2000).

Examining experiences of settlement and urbanization, this article looks at households as an important element in the study of migrant communities. Studying Dominican international migration, Grasmuck and Pessar (1991:56) looked at households in both origin and destination to analyze fragmentation or consolidation of family holdings, changes in land use, levels of investment, tenure patterns, and the demand for wage labor. Wood (1982) noted that households act as social organizations that mediate transformations through a variety of “sustenance strategies” like labor power and monetary and nonmonetary income, often influenced by the division of labor and lifecycle of the household. The focus on the household also allows for an examination of its members’ ideas, norms, and values (Wilk and Netting 1984). These are important for gendered ideologies among migrant women who often experience changes in domestic life within the household (Silvey 2004).
Many FSM residents are in the process of creating enclave communities making the exploration of the relationship between the built form and culture, or spatial forms and values, highly visible. Although household typologies can be described with reference to size, kinship composition, coherence, and locational permanence, activities which take place in the household are equally important (Wilk 1983:100). Household membership is usually based on kin relationships of marriage and descent, and is simultaneously a combination of dwelling unit and a unit based on economic cooperation, where most reproduction and childhood socialization takes place. I define household as a group of people sharing a common residence and engaging in shared activities of consumption and socialization.

The term housing, as defined by Low and Chambers (1989), denotes a physical structure that shelters people and also has meanings that transcend its physical reality. Rapoport (1982) characterized a home as a codified culture where a patterned set of cues to proper behavior channels action and meaning. Observing the house form can reveal culturally specific definitions of privacy, territory, and personal space (Altman and Chemers 1984). The everyday, taken for granted nature of urban life and urban housing reflected in the study of the built environment, however, has often given housing a “relatively passive role” (Lawrence and Low 1990:457). Some research on the relationship between the built environment and sociocultural behavior “suggests that built form may be still considered an expressive product of culture rather than a principal stimulus” (Lawrence-Zuñiga and Pellow 2008:4). Rodman noted that few studies have looked at “the social construction of buildings to make certain kinds of experience possible.” Yet she added that “we can best apprehend relationships between buildings and the communities they foster or inhibit, create and house by approaching them through the experience of place and its social production” (1993:137). Pellow stated, “people create the life typical of a given area and they do it socially and spatially” (2001:61).

The literature on urban Micronesian households focuses primarily on socioeconomic issues through census materials that describe demographic growth, wage labor, household size, educational levels, and remittances (Hezel and Levin 1990; Hezel and McGrath 1989; Rubinstein and Levin 1992). Of particular importance are migration and household densities. Connell (1983:22) reports that women and men migrate in approximately equal numbers, but men are more likely to travel longer distances. Micronesian households in the early stages of settlement on Guam in the early 1990s were described as crowded (Smith 1994:17), with nearly eight persons per household with 2.4 occupants per room (Hezel and Levin 1996:101). Rubinstein (1993) characterized migrants as having high rates of “nomadic residence patterns” in households that gradually evolved from peer-group to more stable kinship relations reflected in the origin island, such that a majority core of people are related through the male or female head. Guam’s proximity to Chuuk (about one hour by plane) allows visiting relatives to circulate back and
forth between Chuuk and Guam (Marshall 2004), encouraged by Guam’s expanding Japan focused tourism industry and recent plans for construction projects generated by military expansion (Cagurangan 2007).

Urban Micronesian households tend to be large and complex. The newest wave of Pacific Island migrants to the United States and its territories comes from the FSM and the larger region of Micronesia (see Figure 1). About 60,000 Micronesians live in cities in the Pacific region (Hezel and Samuel 2006) and the continental United States (Franco 1993). They are often the fastest growing migrant group, especially in Hawai‘i (Pobutsky et al. 2005) and the Territory of Guam (Rubinstein and Levin 1992). Micronesians from the Marshall Islands living away are increasingly engaged in household arrangements which include the foster parenting of young people for education (Allen 1997; Hess et al. 2001). Among Marshallese living in Orange County, California, sixteen percent of those under the age of 22 live in households with relatives other than their parents (Hess et al. 2001:100–101). In Enid, Oklahoma, about 27 percent live in non-nuclear households that sponsor one or more students. (Allen 1997:131–132).

On Guam, the majority of FSM citizens live in rental apartments or low-income housing. They also rent and sometimes squat in jungle areas or on ranches typically owned by Chamorro families (Chamorros are the indigenous people of the Mariana Islands which includes Guam) where small crops and a few animals may be kept. Lastly, they make up a large proportion of the homeless population and are often displaced by damaging typhoons that frequently hit Guam.

Observers attribute changes in household and house forms to acculturation and assimilation. Traditional and indigenous materials, namely, thatch and wood give way to corrugated tin, sheet metal, and cement. Simultaneously, extended units give way to “nuclearization.” Hezel explained, that the Micronesian family residence has evolved from a compound, with several simple dwellings housing an extended family, to a single self-contained unit. As the family’s membership has shrunk, it has become identified with a single residential dwelling, often housing not much more than a nuclear family (2001:8).

Acculturation is descriptive, not explanatory. “It fails to specify the direction of diffusion, or the reasons why cultures change or why some aspects of a culture change while others do not” (Wilk 1990:41).

Ethnographic research on Micronesian households makes important contributions to the analysis of household dynamics and migration as related to marriage patterns among Micronesian females. Flinn’s (1994) research among Pollap migrants in Weno, the urban center of Chuuk, records gender differences in migration related to employment opportunities for men and out-marrying patterns for women. Nero and Rehuher (1993) noted that out-marrying patterns among Micronesian women from Palau make return to the home island difficult. Return is complicated by gender and lifecycle differences in customary exchanges that
place greater demands on young women than young men. In previous research on the atoll of Satowan (Chuuk), I discovered that for women, a key feature of mobility (and immobility) was the relationship between lineage sisters and sibling hierarchies (Bautista 2010:138–140). In concert, women moved and stayed while maintaining a conscious strategy of household mobility to emphasize two interlocked processes. First, the moral economy of members that stresses social solidarity and income pooling; second the collective unit that plays a role in evolving scenarios for atoll survival.

For the current research (conducted between January 2006 and December 2007) I used participant observation, a socioeconomic census, and personal interviews to understand how spatial interpretations and cultural concepts of spatial mobility operate among migrants from Chuuk. I assembled life histories to examine how individuals narrated experiences of inhabited dwellings in the process of the enclave settlement. As Rodman notes, “understanding what domestic space is symbolic of, for local people allows us to see into their world and glimpse processes of change through the dwelling they construct (1985:269; emphasis in the orginal).” Housing involves meaning and interpretation not only by those who occupy it, but it is materially and symbolically shaped by and responds to changes in the island and larger global political economy. To gauge these broader forces, I took a socioeconomic census of the enclave community and included details of household members’ mobility patterns. Finally, it helped that I lived just two miles from the research site on my father’s farm in the village of Yigo and shared “ways of being” with Pacific Islanders from Chuuk as a fellow Pacific Islander indigenous to Guam.

Shortly after I entered the Gill-Baza subdivision, an event occurred that provided the foundation for this research. In January 2006 the residents were issued a Notice of Violation from the Guam Environmental Protection Agency (EPA), threatening to evict them for failure to use proper sewage disposal. Although subdivisions are normally provided with an infrastructure by the developer, Gill-Baza was essentially undeveloped land. The residents’ struggle was further complicated because the developer who failed to build the proper infrastructure was now trying to evict them. Together, the residents and I organized and sought legal assistance and they are currently engaged in a civil suit against the developer. On behalf of the residents, I provided a report on the dimensions of one hundred structures as litigation proof, since many residents lacked receipts for purchased materials or proof of sweat equity they had invested in building their homes.

In the first section of this paper, I describe the types of households and house forms prevalent on the Gill-Baza subdivision. Members of households share a cooking unit and socialize children. Variations in household typologies are based on size and kinship composition. Many households cooperate within larger “household clusters” defined by Richard Wilk (1983) as joined households that occasionally share labor, production, consumption, and child care. A household thus can consist
of a married couple’s dwelling, a place for single or widowed males, a separate cooking area that draws together several family units (Burton et al. 2002) and other dwellings that are part of a domestic space that extends out of doors (Rodman 1985:271). To capture multilevel and multiple dwellings, I began by identifying the physical aspects and boundaries on quarter acre lots of roughly a hundred by hundred feet. I measured the three-dimensional size of each dwelling and noted the composition of floors, walls, and roofs. I video-taped and photographed the interiors and exteriors of almost all dwellings. Finally, I used computer drafting software to feature dimensional measurements for each lot, and spatial divisions and allocations within and between dwellings.

The second section of the paper focuses on how residents from Chuuk create and find their behavior influenced by their dwellings in urban settings. First I consider how the design and use of doors reveal culturally specific definitions of privacy, personal, and gendered space as integral aspects of emerging urban spaces. To understand the influence of house form as a social construct, it is useful to consider organizational features of the home island of Chuuk and how “cultural mingling introduces [migrants] to different lifestyles, practices and modes of expression” (Lawrence-Zuñiga and Pellow 2008:4). For example, Flinn (1997) described the use of padlocked doors with a heightened desire for privacy in the urban center of Chuuk, in relation to thatch and shared structures in the origin atoll of Pollap. Macpherson (1997) observed among Samoan migrants in New Zealand that garages provided spaces for Samoan social arrangements and culturally specific conditions whereby young unmarried men were required to sleep separate from married adults, young children, and unmarried women who slept in the house. Organizational features of Chuuk culture involving avoidance behaviors among related kin (mainly cross-siblings and cross-gender) shape the built environment and make for significant configurations of being close, yet distant, in spatial behaviors.

Building houses and households:

The Gill-Baza subdivision

The Gill-Baza subdivision is located in northern Guam in the village of Yigo, an important settlement for FSM migrants (Figure 2). The subdivision consists of 84 quarter acre lots inhabited by nearly 300 people, mostly from Chuuk and Yap, and some from Pohnpei and Kosrae. I will focus on the 22 lots where 181 people from Chuuk reside. Many FSM citizens hold labor intensive jobs with low capital investment and can only purchase property that requires little or no down payment. On the Gill-Baza subdivision, lots sell for about $40,000, usually financed at twelve percent interest for a period of 20 to 30 years. The growing discrimination among owners (Smith 1994) reluctant to rent units to large families with low wage jobs, and the rising cost of rent coincided with the sale of land in the subdivision. Many FSM migrants
opted for subdivision lots, with mortgages that are owned and financed by the developer which are substantially less expensive than apartment rents. The Gill-Baza is unimproved land (Figure 3). There are no bus shelters or sidewalks, no manholes, no containment for run off water, and no generator shed or force main to pump out sewage. The subdivision is without telephone or cable lines. There are no street signs and only three
streetlights for nearly 23 acres. Bad roads prevent access for public transportation, buses, and garbage trucks. They delay responses to calls for police, firefighter, or ambulances. The site, known among residents as the “ranch” is carved out of a jungle once known as Chaguian. It is one of four subdivisions in areas zoned for agriculture that were newly created in 1999. Most residents live in self-constructed rudimentary houses consisting of tin and wood with occasional running water and electricity.

Close to Gill-Baza is another new subdivision known infamously as Zero Down (see Figure 2). Zero Down and Gill-Baza have become the focus of recent debate and controversy regarding development and housing policies. Zero Down, as the name indicates, did not require any down payments. Many prospective residents chose Gill-Baza regardless. From the beginning the land grading and resurfacing on the Gill-Baza gave it an improved look over the “jungle” of Zero Down. Some were encouraged by relatives to purchase adjacent or nearby lots and took advantage of periods when land was sold for less than at Zero Down. Many lots sold quickly which gave the impression of an up-and-coming subdivision, especially since there were land purchase agreements promising, among other things, the installation of a sewer line.

At Gill-Baza many structures are made of combinations of new and used wood and tin. All structures have tin roofing. Expensive concrete, when used, is reserved for foundations and walls. Most structures were constructed by residents, except for a few who moved into existing structures built by previous owners. Some residents hired Filipino H workers. A few residents live in forty by eight feet shipping containers. Many lots have septic or holding tanks for raw sewage, which are dug below the ground and capped with a ten by ten feet concrete slab. Due to the use of septic tanks, cesspools, or the occasional use of the surrounding jungle as toilet areas, there have been cases in Gill-Baza and Zero Down of sewage and water related infectious diseases such as tuberculosis, dysentery, and cholera (Pieper 2006). Septic tanks and cesspools are considered improper types of sewage disposal by the Guam Environmental Protection Agency, which seven years after the creation of the subdivision, mandated that residents place portable toilets on their lots.

As is standard for census enumeration in the Pacific, I defined the household as a group of people sharing a common residence and engaging in common activities of consumption and socialization. Of the 22 lots with groups originating from Chuuk, there are essentially nineteen household units of 181 people (Table 1). Members of a household share a cooking unit and socialize children. Household heads, defined by the residents, are usually those who provided the down payment and meet the monthly mortgage. Normally, this is a married couple but there are exceptions, including people who do not live on the subdivision lot but continue to have membership rights to a particular lot. Other important members living elsewhere include those who previously lived on the lot, helped to build or contributed materials, planted trees, and provide transportation. For this analysis, I have included only regular residents of the household or a de facto count and excluded de jure members.
All households are based primarily on kinship. The nuclear household consists mostly of a young couple (in one case, a woman), their children, and occasionally children of the couples’ siblings. The vertically-extended household consists of three or four generations: primarily of a couple (in one case, a woman), their married and unmarried children, their grandchildren, and occasionally aging parents. The last household, the laterally extended, consists of two or more sets of siblings, some married, their children, and occasionally grandchildren that span two and three generations.

On the lots whose residents originate from Chuuk, there are a total of 93 structures averaging 4.8 per household. Household structures typically consist of one or more main dwellings of mostly sleeping rooms, a separate cook house or outside kitchen, shower, and toilet. A few have storage houses, unfinished structures, and men’s houses where young or unmarried men sleep and socialize. Often makeshift tents or canopies provide shaded areas for sitting and eating, sleeping spaces for males, and shelter for cars. Concrete slabs lying on the ground without structures give clues of previous structures that were very damaged by typhoons. Concrete slabs also provide places for drums holding water where women scrub clothes and wash dishes. As a result mainly of the dilapidated roads, there are many nonworking vehicles too expensive to remove. They become play structures for children, storage spaces, table-like structures, or are kept for spare parts.

Most households on the subdivision have several structures, fewer for the nuclear (3.0) than the vertically (4.8) and the laterally extended ones (7.5). Although the number of people occupying vertically and laterally households are nearly alike (11 versus 13, see Table 1), on average, the latter have almost double the number of structures than the former. This is based in life histories of domestic units. Justina, the head of a vertically-extended household lives in a dwelling constructed piece-meal in four stages over the period of one year. When she and her boyfriend first moved to the subdivision in 2000, they lived in a tent while a 16 by 16 feet dwelling was constructed. Shortly after, they were joined by Justina’s daughter and her children who slept in the same unit. When her single, adult son arrived, the existing door was sealed, an identically sized room attached, and separate doors positioned facing the back of the lot. Justina’s son then constructed another room separated by

<table>
<thead>
<tr>
<th>Type of Household</th>
<th>Number of Households (Number of Lots)</th>
<th>Average Number of People (Number of People)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>8 (9)</td>
<td>6 (49)</td>
</tr>
<tr>
<td>Two-generation</td>
<td>5 (5)</td>
<td>11 (56)</td>
</tr>
<tr>
<td>Vertically Extended</td>
<td>6 (8)</td>
<td>13 (76)</td>
</tr>
<tr>
<td>Three- and four-generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laterally Extended</td>
<td>6 (56)</td>
<td>13 (76)</td>
</tr>
<tr>
<td>Two- and three-generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>19 (22)</td>
<td>9.5 (181)</td>
</tr>
</tbody>
</table>

Table 1: Household Type and Occupancy, Gill-Baza Subdivision, January-May 2006
a eight feet wide hallway. Some months later, the house now rectangular in shape was enclosed with a fourth room and a small kitchen. Vertically extended households become larger when rooms are added to the existing main dwelling, thereby increasing the number of people under one roof. Usually a separate main dwelling is built only when children marry, though more often for sons.

Contained within the main dwellings are mostly sleeping areas of one to six rooms for a total of sixty, fourteen living rooms, ten kitchens, four toilets and showers, and three extended porches. Interior kitchens and toilets/showers are much more likely to be found in nuclear households. Married couples with young children conduct much more family activity indoors, in living rooms where children socialize, study, eat, and watch television. Low or makeshift walls of furniture and shelves are also arranged to allow easy viewing and supervision of children (Figure 4).

In larger households living rooms are used to hold family meetings and provide temporary sleeping areas for visiting relatives. Freezers and refrigerators are often kept in the living room sheltered from the weather and to safeguard and manage food resources. Family mementoes, pictures, and certificates are arrayed on the walls among little furniture, televisions, and video players. Morning and evening prayers are conducted among religious icons (nenien nios) resting on small tables with laced coverings (Figure 5). Emblems of Jesus on the cross and a statue of the Virgin Mary are displayed with small jars of holy water, blessed palm leaves, beaded rosaries, silk flowers, the Bible and prayer books, candles, and pictures of saints.5

Many residents consider Sundays (Raninfel) holy days of rest. On Saturdays (Raninamon), a time of preparation, residents busily dump

Figure 4. Nuclear household with open space to allow easy viewing of children. Photo by author, 2007.
trash, wash clothes, and clean cars. They collect wood from empty lots and the surrounding jungle for open fire cooking where food is prepared in cook houses with tin roofs and semi-open tin walls (Figure 6). The low-lying walls provide ventilation for open fires and also allow easy viewing from any vantage point on the lot. Most have dirt floors or use layered carpets swept after eating by young girls in the early morning and evenings. On lots that have indoor and outdoor kitchens, indoor kitchens are usually reserved for preparing simple meals over propane stoves for fewer people. Large pots, basins, utensils, and food are kept in the outside kitchen. Special items like pounding stones (po) and graters for
breadfruit (pwiin) are occasionally placed in living rooms for security or, more likely, in storage houses amongst generators and tools: machete, rakes, hammers, and bush cutters.

Housing, in a material and symbolic sense, is shaped by and responds to changes in the island of Guam and the larger economy, as particularly reflected in household incomes. Chuuk residents are mostly employed in low wage jobs as drivers, security guards, custodians, clerks, groundskeepers, caregivers, housekeepers, stockers, bakers, and in fast food restaurants. A few men and women earn incomes selling fish, traditional skirts, doughnuts, and local medicine. A difference of roughly $10,000 in the annual income for each household type reflects mostly the greater number of contributing workers in larger households (Table 2). Most nuclear households consist of a couple working full-time for the minimum wage ($5.15). Adult unmarried children account for higher earnings in vertical households. Lateral households have both couples and adult children contributing wages.

One influential aspect of settlement on the Gill-Baza subdivision is that nearly all households engage in activities with other households. Often these “household clusters” (Wilk 1983) are groupings of more distantly related households on adjacent lots. From time to time, the members provide inter-household exchanges such as child care, transportation, loaning money, building and celebrating new dwellings, preparing and eating food from the same cook house, and providing places for young and unmarried men to sleep. Household clusters also pool income for major family events, especially funerals, birthdays, and christenings. They also contribute to broader commitments for church fundraising, cultural affairs, campaign funding, and remittances to send to Chuuk homelands. At times, extension cords and water hoses criss-crossing adjacent lots symbolically link shared electricity and water sources.

The formation of households, the types of house form and structure require an understanding not only of broader socioeconomic conditions but also the collective actions of clusters of more distantly-related households. In the next section I examine how some organizational features of

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**Table 2: Household Type, Incomes*, and Contributing Wage Earners**, Gill-Baza Subdivision, March 2006-January 2007

<table>
<thead>
<tr>
<th>Type of Household</th>
<th>Average Household Income (Number of Households)</th>
<th>Average Number of Contributing Wage Earners (Number of Wage Earners)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>$25 153</td>
<td>2.1</td>
</tr>
<tr>
<td>Two-generation</td>
<td>(8)</td>
<td>(17)</td>
</tr>
<tr>
<td>Vertically Extended</td>
<td>$35 115</td>
<td>3.8</td>
</tr>
<tr>
<td>Three- and four-generation</td>
<td>(5)</td>
<td>(19)</td>
</tr>
<tr>
<td>Laterally Extended</td>
<td>$46 870</td>
<td>4.3</td>
</tr>
<tr>
<td>Two- and three-generation</td>
<td>(6)</td>
<td>(26)</td>
</tr>
<tr>
<td>TOTAL Average</td>
<td>$34 632</td>
<td>3.2</td>
</tr>
</tbody>
</table>


** Included both full- and part-time workers that sometimes held more than one job.
Chuuk are in the process of being spatially and symbolically inserted in the landscape.

Domestic structures and spatial organization

On Chuuk, as described by the Goodenough (1966:31), social organization is made up of property-holding groups composed of siblings. These are largely matrilineal descent units called lineages whose members, “above all else . . . must nurture and sustain each other and their shared resources” (Marshall 1981:212). Within a sibling set, older siblings have authority over younger ones of the same sex; brothers have considerable authority over sisters; and the firstborn male (muánichi) and female (fínichi) are given special privileges (Goodenough 1986). One key organizational feature of Chuuk culture influential to aspects of both settlement on the Gill-Baza and mobility to Guam is the special status accorded to the eldest brother (muánichi). Of the nineteen Chuuk households nearly two-thirds (13) were initiated by firstborn men. In Chuuk society, the eldest male is the spokesperson for the descent based unit and the protector of his sisters, guards the “secrets of his father’s land” which means land brought to the lineage by the father, and supervises the gathering of food for major events. Firstborn men speak with more authority and are able to be more openly critical of clan affairs. As children, firstborns are rarely given out for adoption, even temporarily, and any disrespect or lack of deference is acknowledged by being presented with pieces of property. Even on Guam, the muánichi contracts the business of the land on Chuuk, supervises labor for major events like funerals, and is called upon for permission when elderly parents travel abroad to Hawai‘i or the continental United States. In comparison to younger siblings, firstborn men are more versed in Chuuk culture and lore, receive more formal education, have longer mobility experiences outside of Chuuk, and speak more fluent English. This is reflected in more stable careers, higher incomes, and their leadership positions in Chuuk and on Guam. Because of their privileged positions, they are able to request support from other Chuukese in the form of money, construction supplies, and labor from related men to build structures in settlements.

On Chuuk, there are other considerations of sibling relations that give insight into aspects of settlement on Guam. For example, although women and men often describe their wellbeing in terms of their siblings (Goodenough 1966:100), the closeness of personal relationships does not necessarily reflect intimacy. In fact, brothers and sisters are not intimate in most aspects of their collective behavior, yet consider themselves emotionally close. Anthropologist Donald Rubinstein (1979:96), who researched an outer island of Yap named Fais, describes behavioral gestures found throughout Micronesia that vary according to kinship relationships which connote a constellation of avoidance behaviors among related males and females, especially the extended kin, like “brothers,” and cross-siblings. These include behaviors such as not sharing food, drink, tobacco, perfume, or other personal items, and
avoiding personal contact or even each other’s presence. Many of these behaviors are related to transitions in life involving age, marital status, childbirth, and gender specific activities (Bautista 2010). For example, when young men and women reach an age considered to be biologically mature, they are encouraged to respect a complex set of avoidances: bodily and gestural boundaries, boundaries with the matrilineal lineage and relations with the clan of their father, boundaries with non-kin, and acceptable forms of boundaries between men and women. During this time, young men leave the household of their sisters and sleep in a nearby bachelor house. In this manner, young men elicit harmony with others by avoiding sexual topics among members of the opposite sex. Similarly, Chuukese women frequently remain distant from men considered to be their brothers. The most common deferential gesture occurs when young women stoop (ópw̃pw̃oro) in the presence of their “brothers” and avoid places where the latter congregate.

Upon arrival to Guam, many migrants from Chuuk find themselves physically residing in apartments among both brothers and sisters. Frequently, women describe these experiences as unbearable. For some, it is difficult to sleep. For others, it is awkward deciding how to move around. Out of respect, they stay in their bedrooms until brothers have left the dwelling. More difficult is having to maneuver around brothers when women need to shower or relieve themselves, to the extent that it is sometimes easier to leave the dwelling and frequent a nearby public facility. Women also have trouble occupying vertical spaces or apartment units that are located above places where their brothers reside (Ulesugum 2007). Being close, yet distant, in aspects of spatial behavior among “brothers” is a key feature of descriptions by Chuuk women in Gill-Baza.

Kiwin, who is in her mid-20s and affectionately nicknamed Queen by her father, is a recent graduate from the University of Guam. She states,

> There are times that I want to be a boy—and to always be with my brothers. I always dream about if I was a boy, they would treat me like the prince. I would be the favored beyond their wives. Especially my youngest brother, he loves me more than his wife. [But] as a girl, I cannot live so close to them. And it’s difficult to follow them around because I’m grown up.

Unlike Kiwin who spent her formative years in Chuuk, Lulu, who is nineteen years old, came to the subdivision during middle school. For two years she lived in a small shack built by her father and relatives of her mother. It was destroyed by Typhoon Chata’an (2002) and rebuilt six months later with relief funds provided by FEMA (Federal Emergency Management Agency). Her new home has cement foundations, three sleeping rooms, a small kitchen, and a living room that leads to a porch. In enclosed spaces like the living room or the single, front seat of a truck, Lulu describes moments with her older brother in a gesture illustrating physical discomfort: eyes cringed, teeth clenched, with fists tightened at chest level, quivering slightly. She struggles to understand how to explain her
discomfort and refers to a relative next door who, to her amazement, teases her own older brother about his girlfriend. Things are not so easy for Lulu. For instance when her brother returns home and she is on the couch, if he sits down next to her because the other couch is occupied, she waits a few seconds, stands, does a quick and slight bow, says tiro (excuse), and heads for her sleeping room. If her brother is sitting on the living room couch when she comes home, Lulu either goes directly to her sleeping room or pulls up a chair behind him to watch television. If a romantic scene comes up on the screen, one or the other leaves. When there are only children present, Lulu laughingly tells them to close their eyes. “I can joke with everyone,” she adds, “except my brother and my father.”

Gender relations and gendered space can also be discerned from the positioning and use of doors. In Justina’s main dwelling, the entrance door opens to a four feet wide hallway. Her adult daughters and their families share the area on one side, which is divided by an interior wall with separate entrances from the hallway. Across the hall are two separate doors: one for Justina’s room and another for her grandchildren. Justina describes how a wide hallway intersected with interior doorways allows for easy viewing and hearing, since sounds travel down the corridor from the outer door to the entrance of her room. She also is able to be aware of other activities on the lot by leaving open her back door which is the only other one leading outdoors to the outside shower and toilet, used only by Justina and the grandchildren.

Other residents report of building structures with many doors to accommodate avoidance behavior or, as they put it, to prevent potentially “embarrassing” situations. Many structures have several doors to allow different ways for women to enter and exit, especially important for going undetected to the privy. One semi-cement unit, where Kiwin sleeps, has four exterior doors: one to a sleeping room and three to a living room where important family meetings are held. Having several doors to enter and leave makes it easier for women to carry food or children without passing in front of seated men. Although described as the “girls’ house,” the sleeping room with the outer door was made temporarily available to Kiwin’s brother, who recently married.

Young men and women are often sheltered differently. After a series of typhoons in 2002, all Gill-Baza residents were displaced temporarily and moved to nearby shelters. On their return, temporary structures were built with whatever materials could be recovered from the surrounding jungle. Resident had to sleep in cramped conditions. As rebuilding slowly progressed, young and unmarried women were the first to be sheltered while men slept in flimsy structures and tents issued by FEMA. In Gill-Baza, it is common to see padlocked doors to the sleeping rooms for young women, who are often entrusted to care for valuables and important documents like passports, birth certificates, medical records, and land deeds. Women also describe the use of padlocks as attempts to discourage “brothers” from touching personal items.

Most fluid are sleeping spaces for young or unmarried men who can be found in many places, including outside in open spaces, on porches,
under tents, and even in vehicles. Gill-Baza lots with men’s houses were not structures originally built or set aside for men to socialize and sleep, but became available as other members left or when all married couples occupied main dwellings. Except for sleeping places for young women, nearly every other type of structure is adapted and adjusted to changing household memberships, especially visiting relatives. Occasionally, porches are enclosed for kitchen space, storage houses become sleeping
rooms, sleeping rooms transform into eating areas, and living rooms return to storage.

One spatial arrangement that allows related males and females in lateral households to dwell together is illustrated in Figure 7. The central, open landscape and outside kitchen are places where all household members gather daily. Wide-open spaces simultaneously link and provide distance for spheres of activity. On one side, a female sibling, her husband, children, and grandchildren live in several tin dwellings whose floors consist of layered carpets. They have their own cook house, separate toilet and shower. At night, the outside kitchen is converted to a sleeping area for the grandchildren. Opposite lies a separate toilet and shower, a semi-concrete home for a brother and his wife, and a men’s house for their unmarried son. On both the Gill-Baza and other new subdivisions, another alternative allows brothers and sisters to dwell in a household that is bounded but not enclosed. In this case, one structure is separated at its center by a dividing wall, with doors on opposite ends, one the entry to where a brother and his family live and the other for a sister and her family.

Although socializing outdoors is a common pattern among Pacific Islanders (Franco and Aga 1997; Rodman 1985), the question arises whether open space can be considered an aspect of the built environment that affects and guides behavior? One way to investigate the desire for open space is to compare areas of covered space. Table 3 illustrates that greater household size and higher income account for the lesser areas of space under cover (i.e. roofed space per person). This relates to the circumstance that nuclear households build larger structures because of more in-house activity by couples with young children. Hence they have more indoor spaces. Important is the difference of covered space between household types. Although lateral households average slightly more than twice the number of occupants than nuclear households and have nearly double the latter’s income, there is minimal difference in the amount of roofed space per person (31 square feet). Between vertical and nuclear households, there is even less difference (25 square feet). The limited shift in expanses of covered space among household types suggests a conscious effort among larger households to refrain from building larger structures even when they have the means to do so. Instead, they opt for more open space.

<table>
<thead>
<tr>
<th>Type of Household</th>
<th>Average Num. of People per Household</th>
<th>Average Household Income</th>
<th>Square Foot of Roofed Space per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear (n = 8)</td>
<td>6</td>
<td>$25 153</td>
<td>149</td>
</tr>
<tr>
<td>Two-generation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertically Extended (n = 5)</td>
<td>11</td>
<td>$35 115</td>
<td>124</td>
</tr>
<tr>
<td>Three- and four-generation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laterally Extended (n = 6)</td>
<td>13</td>
<td>$46 870</td>
<td>118</td>
</tr>
<tr>
<td>Two- and three-generation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Average (n = 19)</td>
<td>9.5</td>
<td>$34 632</td>
<td>128</td>
</tr>
</tbody>
</table>
The significance of open space can be seen in how it is enhanced by the alignment of structures (Figure 8). Unlike standard urban housing, with front doors uniformly facing the street, Gill-Baza residents often build structures whose doors face open, central spaces where household members, visitors, and children gather, sit, and talk throughout the day. The few dwellings with doors facing the street, or dirt road, act as a physical and exterior façade, since they are hardly ever used. Additionally, although the number and kinds of structure vary by household type, nearly all are segmented to enhance wide-open landscapes. For larger households, various structures are aligned along three sides of the lot perimeter. For nuclear households, several structures are erected near the side or back boundary, except for one where the main dwelling was built close to the street but with an entrance door at the back. One nuclear household created a more typical front-and-back yard space because the home sits in the middle of the lot on top of an existing cement foundation left by a previous Filipino owner. There is another lateral household (of two adjacent lots) with seven structures that line the perimeter and one storage house at the center. With two other household lots that sit back-to-back, they collectively use an open space located at the center.

There are others explanations for open spaces that reflect aspects of collective well-being and culture, expressed by residents: “It’s welcoming.” “When you can go around, you can see what we are intending for the family.” “In our culture, if you hide your house from people you are (considered) a stingy person!” One person compared open space to meeting houses “without walls” in Chuuk where there is not much privacy. She explained, “The only thing that is private is where brothers
and sisters do not go into each other’s place.” Most importantly, open spaces allow for the accommodation of visiting relatives, large gatherings, especially daily prayers for funerals, and for events like volleyball, basketball, and cock fighting.

Some dwellings have been constructed either very near to, straddled over, and sometimes completely breached lot boundaries, because actual boundaries were determined only after a recent aerial photograph and resulting survey maps. Many residents could not afford to survey the land formally and planted trees at the apparent lot boundaries as indicated by the seller. Some were unaware of building codes requiring a minimum distance from lot boundaries. Occupants explains this with a common practice on Chuuk of building structures to encroach, “to claw” (eteti), or to shoulder one’s way (afarafar) onto a bordering neighbor as a way to both guard and make claims on land which is highly valued but increasingly scarce.

On the Gill-Baza subdivision, spatial meaning and experiences often are expressed in variants of the “ranch.” It was once a jungle, now it is a place of wide-open spaces with trees and fresh air. It was once a migrant group made vulnerable to housing conditions, now they are land owners attempting to grow roots. In stark contrast to apartment living, the ranch evokes feelings of relief, relaxation, freedom from harassment, and happiness in new island spaces to gather family members. One woman noted:

“I’m more relaxed here . . . people don’t bother me. It’s so different, just feel good here. Besides, our neighbor, we really like close to each other, we share things, nobody bother us . . . We enjoy everything . . . fresh air, fresh plants . . . Before [we] stay in the renting house, we have fan or air con, but since we move here we never buy any fan or air con because over here it’s just like fresh air just coming in our house. We don’t need those kind.

Attachment to the ranch is symbolized in planted trees that mark boundaries and mark the landscape with retrievable memories. Standing at the border between two lots is a large breadfruit tree that is a piece of bittersweet history for Kiwin. It was planted by her father and his “brothers” when they purchased the property in 1999 while she and her family lived in an apartment awaiting an eventual move. Some months later, while cleaning around the breadfruit tree, her father suffered a heart attack and left to Hawai‘i for medical attention. During his absence, Kiwin’s family fell back on their apartment rent and were forced to leave. Another year passed before they were able to stabilize themselves and began building on the lot. Kiwin’s family was one of the first Chuukese migrants to purchase property on Gill-Baza in 1999 and is now one of the largest households whose breadfruit tree produced for the first time in 2006. “When we plant trees on the land,” Kiwin states, “we feel like that we belong to the land. We feel that sense of belonging because we have something rooted on the place.”

Trees serve other purposes. Some are strategically placed near runoff water from sinks, showers, and tin roofing to ensure their survival in the
Dry season. Large breadfruit trees are used for hanging signs, hoses, bags, fishing nets, children’s bicycles, and also to tie hammocks, clothes lines, canopies, dogs and chickens (see Figure 8). Smaller, fruit trees can be found nearby houses to keep the area cool. Ornamental bushes or flowers create a border with the dirt road and prevent cars and passersby from encroaching. More hardy trees that are difficult to remove from the coral-like soil provide branches for firewood.

Shortly after Kiwin’s family came to the subdivision, Justina arrived after moving seven times on Guam. Unlike most other residents, Justina’s mortgage is paid by her oldest son who lives away from the subdivision. Still, she worries about what would happen if her son was unable to keep up with payments. She asks, “what would happen to my grandchildren? What would become of my trees?” She estimates the value of her breadfruit, lemon, banana, coconut, mango, and mountain apple trees at $10,000, quite considerable when set against the cost of her dwellings ($20,000).

A common and growing attachment to land on Guam is best captured in the term wurufutuk derived from the words wuru to separate with difficulty and futuk meaning meat or flesh. Futuk is also used to describe close kin members who are nourished from the same land and consider themselves “one flesh with oneself” (Goodenough 1966). For a sensory image, wurufutuk is the pain experienced when fingernail and skin are ripped or torn apart. To the people from Chuuk on the Gill-Baza, wurufutuk represents the terrible possibility of being “ripped from land” that they struggled for, built their houses on, covered with planted trees, and brought their families to live on.

Conclusions

The newest wave of Pacific Islanders to the United States and its territories comes from the FSM. They can be found in urbanized places in the Pacific region, especially in Hawai‘i and the Territory of Guam. Since the Compact of Free Association (1986), this is the first large-scale movement of FSM residents from rental and low-income housing to land ownership. Though undeveloped and without infrastructure, land made available without the need to qualify for bank loans appeared opportune for many FSM migrants who faced rising rents, overcrowding, increasing evictions, and claims that FSM citizens displaced the indigenous people from Guam from access to public housing.

Interpretations of settlement and spatial organization are enhanced when we consider how urban space is socially produced through a consideration of both socioeconomic and sociocultural factors. This article discussed the built environment and examined how organizational features of Chuuk are in the process of being spatially and symbolically inserted in the Guam landscape. Through an analysis of household and house forms, I explored gendered ideologies and culturally based avoidance behavior and how migrants conceive of their spatial arrangements and dwellings. In this manner, “spatial meanings are cultural produc-
Residents constructed multilevel and multiple dwellings that foster cross-gender avoidance through the placement and positioning of doors and open spaces that provide symbolic thresholds. Additionally, border alignments of structures, inward facing of doors, and consistent areas of covered space (despite significant differences in household size and income) suggest that open space reflects collective well-being and culture. Although Gill-Baza is still a young community, the findings caution the “conventional wisdom that as modernization and urbanization proceed, there is a tendency toward nuclearization of the household” (Kunstadter 1984:300). To understand whether the creation of open space is a conscious manipulation requires more research, but it does engender questions about the possibility of considering open space as a product of consumption decisions based on various options (Wilk 1990:35).

Notes

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1There are a few residents originating from Guam and other islands in Micronesia (Saipan, Rota, and Palau) and a very small number from American Samoa and the Philippines.
2More specifically, of the 22 lots on the Gill-Baza, fifteen groups originate from places in the lagoon, one from an outer island, and six from both the lagoon and outer islands.
3Figure 3 shows 34 lots for Chuuk, Yap, and Pohnpei households only. Ten lots with structures are not featured.
4Many H2 or temporary laborers from the Philippines are skilled in construction.
The display of religious icons is frequently found in Catholic households. Of the nineteen households on the Gill-Baza, eight are Catholic, seven are Protestant, three Catholic and Protestant. One is Mormon.

For details on the role of firstborn males and females in Chuuk, see Bautista (2010).

The children of two same-sex siblings or the children of sisters.

The children of two cross-sex siblings or the children of a brother and sister.

References Cited

Allen, Linda

Altman, Irwin and Martin Chemers

Bautista, Lola Quan

Burton, Michael L., Karen L. Nero, and Jim Hess

Cagurangan, Mar-Vic

Connell, John

Flinn, Juliana

Franco, Robert

Franco, Robert and Simeamativa Mageo Aga

Goodenough, Ward H.

Grasmuck, Sherri and Patricia R. Pessar

Hess, Jim, Karen L. Nero and Michael L. Burton
Hezel, Francis X. 

Hezel, Francis X. and Michael J. Levin 


Hezel, Francis X. and Thomas B. McGrath, SJ 

Hezel, Francis X. and S. Eugenia Samuel 
2006 Micronesians Abroad. Micronesian Counselor Issue 64, Kolonia, Pohnpei, FSM: Micronesian Seminar.

Kunstadter, Peter 

Lawrence, Denise L. and Setha M. Low 

Low, Setha M. and Erve Chambers 

Macpherson, Cluny 

Marshall, Mac 


Nero, Karen L. and Faustina K. Rehuher 

Pieper, Mark-Alexander 
Pobutsky, Ann M., Lee Buenconsejo-Lum, Catherine Chow, Neal Palafox, and Gregory G. Maskarinec

Rapoport, Amos

Rodman, Margaret C.

Rubinstein, Donald H.

Rubinstein, Donald H. and Michael J. Levin

Silvey, Rachel M.

Smith, Kyle D.
1994 A Survey of Micronesian Immigrants to Guam: Predictors of Coping and Access to Life Essentials. (Available from the Micronesian Language Institute, University of Guam, Mangilao, Guam 96923).

Ulesugum, Samuel

United States Bureau of the Census

Wilk, Richard R.

Wilk, Richard R. and Robert McC. Netting

Wood, Charles